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Simon Nguva Musyoki
School of Management and Commerce (SMC)
Strathmore University

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**ASSESSMENT OF THE INFLUENCE OF CORPORATE RISK
DISCLOSURE DETERMINANTS ON THE SHARE RETURNS OF LISTED
COMPANIES IN KENYA.**

SIMON NGUVA MUSYOKI

**A research submitted in partial fulfillment of the requirements for the Degree
of Master of Commerce, at Strathmore University.**

**School of Management and Commerce,
Strathmore University,
Nairobi Kenya.**

MAY 2017

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Name: Simon Nguva Musyoki

Signature:

Date:

Approval

The thesis of Simon Nguva Musyoki was reviewed and approved by the following:

Dr. David Wang'ombe,
Senior Lecturer, School of Management and Commerce,
Strathmore University.

Dr. David Wang'ombe,
Dean, School of Management and Commerce,
Strathmore University.

Professor Ruth Kiraka,
Dean, School of Graduate Studies,
Strathmore University.

DEDICATION

This thesis is dedicated to my family, the late dad, Joseph Musyoki, mum Maria and close friends who are my source of inspiration and dedication to work hard at all times.

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ABBREVIATIONS AND ACRONYMS

AC	Audit Committee
BR	Board Reports
CBK	Central Bank of Kenya
CMA	Capital Markets Authority
CRD	Corporate Risks Disclosure
FiRe	Financial Reporting
GARCH	Generalized Autoregressive conditionally heteroscedasticity
IAS	International Accounting Standards
ICAEW	Institute of Chartered Accountants in England and Wales
ICPAK	Institute of Certified Public Accountants of Kenya
IFRS	International Financial Reporting Standards
IRA	Insurance Regulatory Authority
MD& A	Management Discussions and Analysis
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Square
RBA	Retirement Benefit Authority
VIF	Variance Inflation Factors

DEFINITION OF TERMS

Corporate risk disclosure is defined as communications of information concerning firm strategies, characteristics, operations, and other external factors that have the potential to affect the expected results (Beretta & Bozzolan, 2004).

Corporate risk is defined as information disclosing to readers any opportunities, prospects, hazard, harm, threat or exposure that have already impacted on or may give an impact on the company or management in the future (Linsley & Shrives, 2005).

ABSTRACT

Despite corporate risk disclosures (CRD) being widely encouraged and gaining increasing concern by regulators and market participants, the determinants of those disclosures remains relatively unknown. Concerns have been raised by scholars, practitioners and other market participants regarding the relevance of increasing CRD by listed companies in Kenya. This study sought to assess the influence of CRD determinants on share return of listed companies in Kenya. This study used descriptive research design and multiple regression analysis to determine key determinants of the level of CRD and the influence on share return. Using a disclosure index comprising 37 information items, the study employed content analysis of audited financial reports to determine the level of CRD by 36 listed companies in Kenya over the period 2008-2014. To corroborate the results, questionnaire data obtained the managers' perspective. Six hypothesis were tested from the regression results. The findings revealed a relatively low level of CRD with listed companies disclosing more business risk and less credit risk. The finding revealed a positive relationship between the level of CRD and stock returns of listed companies in Kenya. The study highlighted the need for companies to increase the level of disclosures by revealing the factors influencing the level of corporate risk disclosures. The findings revealed that the level of corporate risk disclosure is significantly and positively influenced by the type of auditor, institutional equity ownership concentration and negatively influenced by existence of audit committee and the board composition. The study highlighted the need for degree of caution in choosing the type of auditor. Since the study relied extensively on disclosures provided by companies in the audited financial statements as established using content analysis, a study of disclosures using other publications like internal management reports may be necessary. Further study may also be necessary to assess the relevance of corporate risk disclosure involving more listed companies over an extended period of time. Despite the study assessing relevance of CRD in a single country setting, it contributes to the extant literature on relevance of CRD in a developing country.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Corporate risk disclosure (CRD) is the reporting of information in whichever media concerning companies future plans, features, operations, and other factors that have the capacity to influence the expected performance and business continuity (Beretta & Bozzolan, 2004). CRD comprises of qualitative or quantitative information presented in annual reports and disclosures as well as MA&D, future forecasts and other reports on companies. CRD disclosures maybe mandatory or voluntary communications about internal and external uncertainties and other supplemental information such as social responsibility, environmental reporting, supplier information and other social communications (Khlif & Souissi, 2010).CRD whether mandatory or voluntary provides information that informs the investment decisions of investors and need to be sufficient and appropriate.

According to Quayes & Hasan (2014) the quantity and quality of CRD enhances financial transparency and are important aspects of good corporate governance .Firms reporting activities should therefore provide more information to the market which reveal the risks and uncertainties of a company's future cash flows and any significant doubts surrounding their timing and amount (IASB, 2014). The need for more CRD has drawn the interest of global (IASB) and national regulators (ICPAK) by issuing additional mandatory disclosure guidelines (Quayes & Hasan, 2014) and encouraging additional voluntary CRD .The increasing need for more CRD either voluntary or mandatory has led to regulatory reforms to enhance the levels of disclosure .

The regulatory reforms involved the revision of existing disclosure standards and issue of additional accounting standards (IAS 32, 39, IFRS 7, 9) to ensure more disclosures to the market. According to Tsamenyi *et al* (2007) more disclosures enhances the efficiency of capital markets despite there being different determinants of the disclosures .The different determinants are the unique firm characteristics that determine the objective and extent of CRD (Quayes & Hasan,2014).Globally , there has been notable studies on the level and determinants of disclosure and their influence on company performance in recent years (Uyar & Kılıç, 2012 in Turkey ;Wallace *et al* 1994 in Spain ; Campbell & Slack, 2008 in UK; Davies *et al* , 2010 in UK; Moxey

& Berendt, 2008 in US). Hossain (2008) studied CRD disclosures by banks in India as determined by age and found out that the level of disclosure for banks which had been incorporated for many years was high than for newly incorporated banks. Further, the bank size as measured by asset base was positively related to the level of disclosure. Quayes & Hasan (2014) studied the influence of financial disclosures on the performance of MFIs. The study found out that the disclosure level for profitable MFIs was more than for less profitable ones. Owusu-Ansah (2005a) studied the factors influencing corporate compliance with financial reporting in New Zealand and found that the type of auditor was positively related to the level of disclosure while the age of the company from the year of listing was not found to be related to the level of disclosure. Additionally, the study found individual ownership to be related positively with the level of disclosure using the stakeholder's theory. Using stakeholder's theory, Rouf & Al Harun (2011) found individual ownership not to be related to the level of disclosure for Bangladesh annual reports. The difference in the findings may be due to location despite same theoretical base.

Globally, few studies have examined the level of CRD. Linsley & Shrive (2006) studied the risk disclosures of UK companies. The study established that board size as measured by the composition of non-executive directors was not directly related to the level of CRD. The study also found that the level of disclosure depended on the time of the event studies with CRD disclosures being highest near filing periods. The influence of the CRD disclosures determinants on future price determinant was found to be positively related to future earnings. Caldarelli *et al.* (2013) found low level of CRD by Italian Banks and positive relation between the returns and the level of disclosures. However the study observed that the level of influence of the CRD on the return was depended on the specific risks within the spectrum especially credit risk information among banks. Other prior studies have established significant determinants such as type of the auditor (Wallace *et al.*, 1994; Khelif & Souissi, 2010), age of the company (Jameel & Weerathunga, 2013; Hossain, 2008), profitability (Hossain, 2008; Li, 2008; Owusu-Ansah, 2005a; (Hooks, Coy, & Davey, 2002) while some studies have inconsistent findings such as age of the company (Akhtaruddin & Haron, 2010), profitability (Johnson & Natarajan, 2005) and individual ownership (Bauwhede & Willekens, 2008). These global studies majorly considered developed markets and at different timings.

Regionally, a considerable studies have been done on the level of disclosures in Africa ((Tsamenyi *et al.*, 2007; Kribat & Burton, 2013; Quayes & Hasan, 2014). The focus of the studies was mainly

on voluntary disclosure determinants with minimal focus on CRD .Notably few have addressed the level of CRD (Moumen *et al.* 2015).

Moumen et al. (2015) used evidence from MENA emerging market and concluded that positive relationship between share prices and CRD existed. However the study observed that the relationship may vary from one market to another. The study was limited to only voluntary CRD of market risks for a sample of 809 observations over three year period. Tsamenyi *et al.* (2007) found a low level of disclosure as determined by ownership structure, equity dispersion and firm size for listed companies in Ghana.

Disclosure studies in Kenya have found different factors motivating the increasing disclosures mainly looking at voluntary disclosure (Barako, 2007; Barako & Brown, 2008; Bova & Pereira, 2012).However the studies highlights different levels of disclosures and disclosure determinants at different times on voluntary disclosures. According to Barako (2007),voluntary disclosures have increased to justify performance of profitable companies with declining disclosures by less profitable companies. Barako & Brown (2008) observed that their relationship with stock return is plausible from one study to another with positive and negative relationship being observed at different timing of the study. The current study builds on previous studies in determining the level of CRD as explained by determinants established from previous literature including age, profitability, type of the auditor, audit committee and also includes institutional equity ownership. Finally the study contributes to the extant literature by assessing the influence of CRD determinants on the share return of listed companies in Kenya.

1.2 Problem Statement

CRD disclosures informs the risk and return investment decisions of investors .Despite the importance of CRD in investment decision making, concerns have been raised of the level of disclosures by listed companies in Kenya (Barako & Brown, 2008; Barako, 2007; Bova & Pereira, 2012).Barako (2007) specifically noted that though the level of voluntary disclosures have increased overtime, the specific risk disclosures are significantly very low despite increasing concern and significant attention on examining risk disclosures. The study also observed that the low level may be because managers chose the extent of unfavorable news to report. Bova & Pereira (2012) concurs that the low risk disclosures mirrors managers' intention to comply with the minimum reporting requirements .Further, the study observed that the low level of disclosures may

be explained by different determinants. Specifically the determinant of CRD have varied findings including their relationship with the share return , regionally as well as in the global markets (Moumen et al., 2015).Different studies postulate that corporate risk disclosures, as they are, do not have much meaning information as they are at the discretion of managers as cited in (Moumen et al., 2015),others argue for their lack of progress (Abraham & Shrivies, 2014a),and others found them unnecessary and meaningless (Campbell & Slack, R., 2008; Davies, Moxey , & Welch, 2010; Moxey & Berendt, 2008).Other scholars (Kravet & Muslu, 2013; Campbell, Chen, Dhaliwal, Lu, & Steele, 2014) show that risk disclosures have influence on investment decisions as they reflect the uncertainties of cash flows and reduce information asymmetry as reflected by share prices. The studies concurs that there may be indifference in determining the level and determinants of the disclosure and the influence on share returns depended on the timing of study and the place of study.

Due to the low level of disclosures for the specific risk in the spectrum, concerns have been raised by the users and practitioners in the NSE on the reliability of the investments decisions that have to be made by the investors ,notably Bova & Pereira (2012) has identified this as the reason for few investors in the market who probably can afford the services of a professional advisor. The present study sought to determine the determinants of CRD that may explain the level of risk disclosures not only limited to the voluntary disclosure but all risk disclosures .Given the importance of risk and return in decision making, the current study sought to determine the influence of CRD on the share return of listed companies in the NSE in Kenya.

The present study was motivated by the unexpected delisting and proposed liquidation of public entities that appeared financially sound at face value of their financial statements. Following these, the question of the level and meaning of CRD gained increasing attention among the users and practitioners. The study was also motivated by concerns from the regulator and the accounting professional body in Kenya (ICPAK) on relevance of financial information provided by such companies.

1.3 Research objectives

1.3.1 General objective

To assess the influence of CRD determinants on the share price return of listed companies in the Nairobi Securities Exchange in Kenya.

1.3.2 Specific objectives

- I. To determine the level of CRD by listed companies in Kenya
- I. To examine factors explaining CRD by listed companies in Kenya
- II. To determine the influence of CRD on the return of listed companies in Kenya.

1.3.3 Research questions

- I. What is the level of CRD by listed companies in Kenya?
- II. What factors explain the level of CRD by listed companies in Kenya?
- III. What is the influence of CRD on return by listed companies in Kenya?

1.4 Scope of the study

The study sought to assess the influence of CRD on return among the listed companies in Kenya. The scope of the study was 252 observations from 36 listed companies in the NSE, from 1st January 2008 to 31st December 2014. The study also obtained responses from the management of these companies.

1.5 Significance of the study

The duality perspective of risk in modern time as positive and negative calls for more information for the stakeholders to make investment decision and better understand the position of a company both financially and non-financially (Nur Probohudono, Tower, & Rusmin, 2013). This study is beneficial to different stakeholders including the following :

1.5.1 Investors

Information on CRD has drawn the attention of well-informed investors because of their significance in decision making. Risk informs the return expectation by investors and therefore this study adds insights in decision making by the various potential investors especially the listed companies in NSE in Kenya. CRD are a means to bridge information gap between management and investors concerning business risks and opportunities by reducing the risk perception hence resulting to better assessment of firms' future performance.

1.5.2 Management

The managers benefit in setting the strategic goals of any entity. Transparency in underlying business risk signifies effectiveness and efficiency in identifying and managing risk hence isolating the entity from other entities which may be perceived to measure and disclose risk less effectively. Information asymmetry between the shareholders (principals) and the management (agents) creates the agency conflicts especially if the consequences of non-communication is a fiduciary loss on the owners of the company. This study contributes to management reducing the information gap by highlighting various factors contributing to risk disclosures by the companies. The information gap is exacerbated by the risk in non-disclosure and therefore the need for the shareholders to understand the various motives behind the risk disclosures by the companies.

1.5.3 Researchers and other scholars

This study contributes to extant risk disclosure literature in different dimensions. Further areas of researches have been revealed from this study as well as contributing to the inadequate debate on relevance of risk disclosures especially in Kenya. Scholars have argued that risk reporting satisfies an early warning function especially in forecasting but this is mainly in developed markets and therefore this study has extended into developing markets.

1.5.4 Regulatory bodies and market participants

This study help regulators and other parties in the market by understanding the extent and the manner in which risk reporting affects investors' capacity to forecast future earnings in a market where general country-level investor protection is relatively low. The participants appreciate the unique factors determining disclosures and therefore the diversity in risk reporting.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses both the theoretical and empirical literature on influence of CRD determinants on share price return with emphasis on listed companies. Four theories of disclosure were considered: agency theory, proprietary cost theory, institutional theory and signaling theory. The chapter also discusses the determinants of corporate risk disclosure considered from the theoretical and empirical literature. The chapter concludes with critique of literature and the research gap.

2.2 Theoretical literature review

The influence of CRD determinants on share price return has drawn increasing attention due to the importance of risk and return in investment decisions. The current study sought to determine the level of CRD and the key determinants of the disclosures. This helped establish the influence of CRD in determining the share returns for listed companies in Kenya. The study was informed by agency theory and borrowed from proprietary cost theory, institutional theory and signaling theory. These theories helped in establishing six determinants of CRD and the formulation of the dependent variables. Agency theory guided in the formulation of the dependent variable and drawing across the four theories the independent variables were formulated – age, profitability ,type of the auditor ,audit committee ,equity ownership concentration and board composition.

2.2.1 Agency theory

Agency theory postulates the association between the agent and the principal with deferring goals and risk appetite. Jensen & Meckling (2000) considers agency relationship as a contractual relationship under which one or more persons (the principal) engage another (agent) to perform some responsibilities on behalf of the principal which mainly involves delegating some decision making authority to the agent. In a company setting the agents are the managers who acts on behalf of the principals who are the shareholders (Eisenhardt, 1989;Jensen & Meckling, 2000; Barako, 2007).Agency theory addresses firstly the problem that arises when the desires or goals of the principal and the agent creates conflict of interest and the principal is unable to verify the cause of the conflicts maybe because it is difficult or too costly to do so. This conflict of interest

arises probably because of different in goals expectation by the principal and what the agent is actually doing .Secondly the agency theory addresses the problem that arises between the principal and the agent due to different risk appetites or risk strategies (Eisenhardt, 1989).According to Haniffa & Cooke (2000) the managers who are the agents acts in the interest of the principal (owners) and other stakeholders .The satisfaction and motivation of the managers as the agents only arises when the principal being the shareholders are also satisfied and this is when the organizational value has been achieved.

In CRD the agency relationship arises due to corporate risk information differentiation between management and users of financial information. According to Barako (2007) , the managers are the insiders who have all the information advantage and the discretion to disclose, while the users especially the shareholders are the outsiders who rely on the discretion to disclose by the managers. The outsiders faces the dilemma in decision making since they cannot accurately and correctly evaluate and determine the value of their decision because of lack of complete and reliable information. A number of efforts to bridge the gap between the managers' and the users have arose as a result of the increasing level of conflict of interest. Formal contracts pegging the performance of the managers on their reward have been formulated as a result (Eisenhardt, 1989). Other monitoring costs have had to be incurred by the owners such as external audit cost and cost of non-executive directors to ensure independence of the management board. This informed the choice of board composition and type of auditor as the independent determinants.

According to agency theory, management should be accountable for their actions to principal .For then to be accountable, there is need to provide information to the users to minimize the conflicts of interest. Corporate risk disclosure can be used as a mechanism to discharge the agent responsibilities. Management of publicly listed company discharge this responsibilities by publishing financial statements that faithfully represent performance and are relevant.

In this study, CRD represents an avenue for the agency theory to be used to explain the conflict of interests created by the different risk appetites in the sense that the insides (managers) who have unrestricted access to corporate information can make relevant and reliable communication to the market to inform investment decisions on risk and return and hence reducing the information asymmetry. This study found agency theory relevant in guiding the formulation of the CRD index being the dependent variable.

2.2.2 Proprietary costs theory

Proprietary cost theory argues that the capacity and willingness to disclose unfavorable (bad news) sentiments is depended on the eventual costs to the disclosing entity. According to Abraham, Marston, & Darby (2012) eventual costs are the unexpected and unavoidable costs that have to be borne by a company when any loss of future cash flows results from a given reporting and arises in numerous ways. This theory asserts that reporting of risk (bad news) results in loss as potential investors and the current investors are discouraged. Where the disclosure of the risk (bad news) creates entry barrier to potential or existing competitors the future cash flows will increase and the opposite is true for favorable news though it will attract new competitors and hence reduce those cash flows. Proprietary cost theory can therefore explain CRD to users because it embodies the cost and benefit of disclosures. According to Abraham & Shrives (2014a), managers are in a dilemma of which approach to use in reporting risks from a company especially in the annual report. Additionally, while most companies have a detailed risk management systems, they may be unwilling to disclose unfavorable information which they perceive is negatively and adversely revealing their weaknesses either commercially or politically (Marshall & Weetman, 2007). This fact arises because the competitors and pressure groups which are outsiders to the organization tend to take advantage of the information to their benefit and to the disadvantage of the disclosing company (Cormier, et al. 2005). There is a probable chance of different risk reporting in the documents internal to the company such as the risk register and the external documents available to the public such as annual reports and their accompanying discussions (Abraham & Shrives, 2014a). Consequentially, the owners of the company have to incur monetary costs such as audit cost to compel disclosure.

Furthering the proprietary cost theory (Abraham & Shrives, 2014a) argues that managers are in a state of confusion of the quantity and quality of information to disclose. When managers withhold too much of risk information from the users they are termed to have a weak and non-existent risk management strategy and this is seen as a source of conflicts by the users. On the other hand, when the managers disclose a lot of risk information that are too detailed and reflect the risk registers and other internal management reports that are used in the organization risk management (sometimes referred to as 'inside out' approach (ICAEW, 2003)), the managers perceive this to create unnecessary eventual costs. Therefore according to Abraham & Shrives (2014a) managers have to weigh in the option of disclosing more information that may result to eventual costs and

disclosing less information at the expense of the users decision need though according to Cormier et al. (2005) cost should not be the only critical factor in decision of how much to disclose or not to disclose.

Therefore this study provides an excellent opportunity to apply proprietary cost theory in corporate risk disclosure since managers may be forced to avoid disclosure or manipulate risks reported to avoid any eventual costs arising from the information. This may result to less meaningful or boilerplate information that are irrelevant for decision making. This fact make companies to incur monitoring cost such as audit fees and compromise on the profitability level. This theory informed the choice of type of the auditor and profitability as a variable of study.

2.2.3 Institutional theory

This theory postulates that disclosure is not merely informed by the costs and benefits associated with reporting especially where communal, political and economic interest have to be considered. In justifying institutional theory, DiMaggio & Powell (1983) and Oliver (1991) argues that the cost related to risk disclosures and the benefit of CRD lures some managers into mimicking other companies' disclosures. The renowned companies are usually identified as the bench for mimicking given their good reputations' which may have arisen because of the ownership structure and therefore signaling to the market that their risk management strategies are effective and therefore set the expected market standard. The industry ends having the same information being disclosed without any substantial communication in the reporting. Similarity in risk disclosures may be expected in the same industry, however, the ways in which they affect individual companies may be very different depending on the unique features of each company in terms of business operations, location of business and other factors concerning customers and supplier risk management strategies (Abraham & Shrivess, 2014a). Their study revealed that the unique features may have same risks but differently reported depending on the nature of the company and therefore mimicking what a given company has disclosed results to symbolic disclosures that lack substantial communication. Accordingly the disclosures though similar should be embedded in the unique features of each company despite being in the same industry.

Additionally, in supporting this theory, Cormier et al. (2005) observes that there exists institutional demands that may make a company to assume an established routine way of risk reporting. This routine may therefore make an entity reluctant to change the established way of disclosing in fear that any change may call for unwarranted attention. These are perceived or actual institutional

pressures that consequentially drive organisation to engage into an established routine and social actions which hinder them from disclosing more risk information facing the entity. As a result the companies end up having standardized disclosures that have very little additional communication. This is due to having to maintain either the cost as low as possible or just to maintain the bare minimum mandatory requirements (Abraham & Shrives, 2014a).

In the current study, this theory was adopted to help understand the substantial disclosures as opposed to symbolic reporting's that are just mere mandatory compliance by listed companies in Kenya. This theory challenges the managers view that if the disclosures have been tested and tried there should be no need to change them but they should be retained hence just a tick the box approach (Abraham et al., 2012). This approach is not sustainable because risks are fluid and keep on changing in terms of the content and their intensity (Abraham & Shrives, 2014b) .This theory informed the choice of equity concentration and age as independent variable of the study.

2.2.4 Signaling theory

Signaling theory models the behaviour of signalers and the outsiders created due to information asymmetry. This theory was originated by Spence (1973) and stipulates that the asymmetric information surrounding organization and investors causes adverse selection .This may be addressed by information disclosures which sent signals to stabilize the market (Spence, 1973). The managers are insiders who have the information that is not publicly available and they can choose whether to disclose this information to the outsiders. According to Connelly et al (2011) signaling theory is important in explaining disclosure behaviour between the signalers and the outsiders .These disclosures could be positive or negative and this is determined by the signalers . According to this theory, when a company reports increased profits, this is a signal that in future it will pay more and hence promising increased returns to the investors. However, information is not always available in the market because managers control the information to disclose and therefore tend to weigh the implications of the disclosures.

According to Linsley & Shrives (2005) managers tend to disclose favorable information about the organization as opposed to unfavorable information because they benefit from the good news and to attract investors . Non-disclosure is also seen as a signal in the market and therefore, according to Campbell et al (2001), companies are forced to disclose both “bad news “ and “ good news” . This theory has been criticized for its intensive reliance on the adverse selection which is hard to

prove scientifically (Connely *et al.*, 2011). The disclosure level is higher for profitable organization as a caution against decline of the share price (Campbell & Slack, 2008).

Under the signaling theory, providing more information is viewed as a signal to the reliability of the earnings and hence the incentive for organization with higher performances to disclose more information (Connely *et al.*, 2011). In other studies this theory was very instrumental in explaining the increase in voluntary and mandatory risk disclosures by profitable companies as compared to less profitable companies (Kravet & Muslu, 2013). In the current study, signaling theory informed the choice of return and CRD as dependent variable to measure value and profitability as an independent variable in the determinants of CRD.

2.3 Review of empirical studies on disclosure

Previous studies on disclosure analyzed in this study helped in formulation of hypothesis on the determinants as informed by theoretical framework. The meaning of risk had varied interpretation by the existing studies and was seen to be contributing to the mixed findings. The current study sought to contextualize the meaning of risk from the extant literature and adopted the meaning as had been used in other studies (Linsley & Shrivess, 2005). However, no specific measurement tool has been unanimously agreed upon by scholars given the dynamic nature of risk. Different approaches of disclosure analysis have been used in prior studies. Beattie, McInnes, & Fearnley (2004) used two categories: subjective (analysts rating) and semi-objective (disclosure index studies, content analysis, readability studies and linguistic analysis). Measurement of risk from previous studies was found to have different approaches such as weighted and unweighted method, content analysis and word count (Linsley & Shrivess, 2006). The study adopted from previous study unweighted disclosure measurement and content analysis.

2.3.1 Definition of CRD

Risk has been defined as the uncertainty that may result to both potential gains and losses (Medin *et al.* 2000). The root of modern understanding of risk may be traced to as back as eight hundred years ago Vandemaele *et al.* (2009) when scientist used to develop methods of dealing with the unknown using measurements established from odds and accompanying probabilities. Risk disclosure has been defined by Beretta & Bozzolan (2004) as the reporting of information about a company strategies, operations, characteristics and other factors either internally or externally that may affect the expected performance of an entity. Linsley & Shrivess (2005) adopted a more inclusive definition of risk as being the communication of hazards, prospects, threat, harm,

opportunities and other exposures that have or may affect a company in the future .They adopted a modern perspective of risk by incorporating both positive and negative outcomes of an event in the organization. In comparison, finance text books have defined risk as a set of outcomes related to uncertainties within the organization (Linsley & Shrives, 2005) .Generally it has been observed that risk and uncertainty are synonymous and may be used interchangeably to address the unexpected outcomes of an organization .

All scholars agree that risk depends on the nature of the firm and business operations despite the different types of risks. According to ICAEW (2003) risk may be unique and should therefore be understood in the broader spectrum of the company's strategy but not in isolation .Risk communications must therefore reveal information about strategic actions and performance effects without just mentioning the exposure .Risk categories have been developed by different scholars such as Crouhy and Mark (2006) risk categorization model. The model identified eight categories of risks namely: market risk, credit risk, liquidity risk, operational risk, legal and regulatory risk, business risk, strategic risk and reputation risk. Studies by Linsley & Shrives (2006) further regrouped the risks into four types : financial risks ,operational risks ,legal ,tax ®ulatory risks and business risk and were agreed upon by ICAEW. All these broad definitions were adopted in the current study and specifically borrow from the four categorization as adopted by Linsley & Shrives (2006) and agreed thereto by ICAEW.

2.3.2 CRD measurement

Content analysis has been used in previous studies to assess the level of CRD across different companies' .Borrowing from related studies, the current study used content analysis to assess the influence of CRD on the return of listed companies in Kenya. According to Krippendorff (1980) content analysis can be repeated and valid conclusions drawn from the data depending on the context. Content analysis in for the current study involved obtaining data from audited financial statements which listed companies in Kenya issue to the public. According to Moumen et al.(2015) audited financial statements' provide the users with information that can reliably explain financial performance and forecast , despite their perceived decline in relevance. CRD could be quantitative or qualitative and therefore this study obtained both disclosures from the financial statements extracts and the notes accompanying them. Other qualitative information was obtained from narrative disclosures in the MD&A and BR. Management discussion and analysis and board reports provides further disclosures of management intentions and future plans about a company

strategy , risk management and intended capital resource commitments .These discussions serve to highlight significant changes such as earnings variations, liquidity changes ,capital investments and overall market risk assessment (Brown & Tucker, 2009) .

Current study adopted a broad definition of risk in line with Linsley & Shrives (2005). Any information that informed the readers about any prospect or opportunity or any danger and hazard, harm, threat and exposure that has impacted or may impact on the company was termed to be a risk disclosure. Strict decision rules were observed to eliminate biasness and to ensure consistency. Risk disclosures had to be explicitly reported and mentioned as opposed to being merely implied. Additionally risks that could be classified in more than one category was put in the class emphasized by the context .This approach helps minimize the level of biasness in application of content analysis in line with Linsley & Shrives (2006).

The study relied on disclosure index developed by in line with Linsley & Shrives (2006) and Hossain (2008) and amended accordingly, because these disclosures have the backing of professional accounting body ICAEW .Only risk related disclosures were considered and amended in line with ICAEW risk disclosure guidelines. These disclosures have been previously adopted by Financial Reporting (FiRe) awards for excellence together with IFRS compliance and S&P's transparency and disclosure scores.

Risk disclosure can also be quantitative and qualitative as may be presented in the annual statements of companies. However, no specific measurement tool has been unanimously agreed upon by scholars given the dynamic nature of risk. Different approaches to analysis of disclosures in the financial statements' have been previously identified and applied. Beattie et al. (2004) identified and distinguished two main categories namely: subjective (analysts rating) and semi-objective (disclosure index studies, content analysis, readability studies and linguistic analysis). Most of the previous studies have employed content analysis in addressing disclosures by listed companies and in line with the studies it was adopted in the current study (Appendix 4) .Content analysis involves coding a text on different categories given a certain minimum expected criteria (Milne & Adler, 1999) .According to Krippendorff (1980) content analysis is a research approach which involves making replicable and valid inferences from data to their context under a given suitable criteria. The criteria should be sufficient enough to be able to draw valid inference (Beattie et al., 2004).The content analyzed is captured with an index which could be a weighted disclosure index and unweighted disclosure index (Hossain, 2008).Studies such as (Wallace et al.,

1994;Cooke, 1991 ;Cooke, 1992) and (Karim, 1995) employed a dichotomous method in which an item scored one if disclosed based on the disclosure items and was awarded zero in the case of nondisclosure This approach does not consider the weighting of the disclosure but just establishes the disclosure. Weighted approach on the other side involves determination of weights ranging between one and zero for the disclosed items in the list of reporting. Previous study have concluded that the use of both the weighted and unweighted scores for the disclosure items in the annual reports and accounts can make little or no difference to the findings but only the aspect of biasness in the weighting method (Coombs & Tayib, 1998).Though Inchausti (1997) observed that weighted scores approach allows for distinction to be made based on the importance of the disclosure, the level of biasness need to be reduced to an acceptable low level since the weighting can vary from one user to another .Unweighted score were adopted in this study .This is because the unweighted scores helped determine the level of disclosure. If a company discloses an item of corporate risk in its annual report, then , ‘1’ was awarded and if the item was not disclosed , then ,(‘0’) zero was awarded. The study variable were operationalized as shown in table 2.1 below.

Table 2.1: Operationalization of key variables

Variable	Type	Measurement	Supporting Literature	Supporting Theory
Independent variable				
Age	Continuous	Number of years of existence of a company since incorporation.	Hossain (2008), Li(2008)and Jameel& Weerathunga, (2013)	Institutional
Profitability (net profit margin)	Continuous	The amount of profit after deducting operating expenses	Owusu-Ansah (2005a),Johnson &Natarajan(2005)	Proprietary cost/signaling

Type of the auditor	Dichotomous	1 if the auditor is one of the big four and 0 if otherwise	Deangelo, (1981b),Owusu-Ansah (2005b)	Proprietary cost
Audit committee	Dichotomous	1 if the company has audit committee and 0 if company does not have one	Owusu-Ansah, (2005a),Defond & Jiambalvo (1991)	Agency
Equity ownership concentration	Continuous	Total institutional equity ownership in the company	(Barako, Hancock, & Izan, 2006)Jensen& Meckling (2000),Owusu-Ansah, (2005a).	Institutional
Board Composition	Continuous	The number of non-executive directors in the board.	Akhtaruddin & Haron, (2010), Hossain (2008).	Agency
Dependent variable				
Return	Continuous	The percentage stock return as measured by share price changes.	Kravet & Muslu, (2013),Moumen et al.(2015), Campbell et al. (2014).	Agency /Signaling

2.4 Determinants of CRD

The study considered the variable that had mixed or inconclusive results from previous studies as operationalized above. These variables formed the basis of formulating the hypothesis of this study. Other variable found to have consistent results such as size (Barako & Brown, 2008 ;Hossain, 2008 and Kravet & Muslu, 2013) were eliminated from the analysis . The following determinants were considered age, profitability, type of the auditor, audit committee, equity ownership concentration and board composition.

2.4.1 Company age

Company age as a variable of study has focused on the stage of development and the existence as well as the period of growth (Jameel & Weerathunga, 2013; Hossain, 2008). Jameel and Weerathunga (2013) observed that the reasons that may contribute to these two are due to the fact that young companies face increased competition in entering an existing market compared to old companies .Secondly they observed that the cost and ease of disclosure involving the collecting ,analyzing and presenting of CRD were relatively high for newly established companies than for existing companies. Kakani, Saha, & Reddy (2001) revealed that newly established companies take to the market with the existing companies by disclosing more risk information as a means to caution against the competition and therefore they may be expected to have more disclosures than existing companies .However ,the study observed that their lack of capital may be a limitation to disclosing more risk information .Other reasons identified for lack of more disclosures were poor brand name and lack of an existing reputation compared to existing companies .Studies on relationship between age and corporate disclosure have inconsistent results. Jameel & Weerathunga (2013) and Hossain (2008) concluded that age is statistically significant as old companies tend to disclose more information than young companies due to economy of scale advantage while Li (2008) and Akhtaruddin & Haron (2010) observed a negative relationship between age and extent of disclosure. Most previous studies concurs that long established companies disclose more information than young companies .This leads to the following hypothesis:

H1: Company age has a significant positive influence on CRD.

2.4.2 Profitability

Agency theory advocates that business managers of profitable corporations have an incentive to disclose more information to increase their compensation (Shahid Ebrahim & Kai Joo, 2001). Most researchers have found a positive relationship between profitability and the extent of corporate disclosures (Hossain, 2008; Li, 2008; Owusu-Ansah, 2005a; Hooks et al., 2002). It is argued that profitability is a reflection of management performance and therefore the management of profitable companies tend to disclose more information to justify their performance. This argument is countered by Johnson & Natarajan (2005) who argued that less profitable companies have a greater need to disclose more CRD to justify their poor performance while Courtis (1998) concludes there is inconsistent and inconclusive evidence of relationship between profitability and level of corporate disclosure. In other studies Aras et al. (2010) were unable to find any significant relationship between corporate reporting and financial performance as measured by profitability. Empirical studies have concurred that companies with high profitability levels have more CRD than less profitable companies in their audited financial statements (Owusu-Ansah, 2005b; Naser et al. 2005). Accordingly the current study hypothesizes that :

H2: There is a significant positive relationship between the level of company corporate risk disclosure and its profitability.

2.4.3 Type of the auditor

Previous studies hold that entity's corporate financial reporting activities are mainly influenced by external auditors than by the internal auditors (Owusu-Ansah, 2005b). According to Deangelo (1981b), the level of influence depended on whether the auditors were one of the big four audit firms or their affiliates. Owusu-Ansah (2005a) observed that the big four audit firms are well-disposed to demand companies to report misstatement and ensure that client company comply with all relevant statutory and regulatory requirements for two reasons. Firstly the big four audit firms have an international base with a wide-world reputation of high quality audit and assurance services that they have to protect and secondly because of their international client base hence not depended on a specific audit client. These reasons offer them greater incentive to maintain economic independence from their clients (Deangelo, 1981a). This study hypothesized that companies audited by the international big four audit firms or their local affiliates are more likely to have higher level of CRD :

H3: The level of CRD of a company audited by the big four audit firms or their local affiliates is high.

2.4.4 Audit committee

Existence of an independent audit committee has been emphasized as a best practice in corporate governance of publicly held entities. The committee play a liaison role of strengthening corporate governance by enhancing the credibility of the external financial reporting process. According to Owusu-Ansah (2005b) existence of an independent audit committee ensures that management complies with all the relevant reporting requirements and statutory provisions by ensuring CRD are publicly released. Prior studies concur that the cost benefit analysis informing existence and non-existence of an audit committee has more benefit especially when composed of mainly non-executive directors. Defond & Jiambalvo (1991) observed that material errors and misstatements are less likely to occur in companies with an audit committee than in companies without an audit committee. However, existence of an audit committee has not been supported by all studies in ensuring increased CRD (Owusu-Ansah (2005a).Therefore it is expected that the existence of an audit committee among the listed companies in Kenya should result to more CRD in the audited annual reports. From the above expectation it is presumed that a company with an audit committee will disclose more information than a company without one and hence hypothesized as follows:

H4: The existence of audit committee has a significant positive influence on the level of CRD.

2.4.5 Institutional Equity ownership

Effects of ownership of shares of companies have been studied at different perspectives such a foreign ,state, public, institutional ,individual ,local (domestic) and insider ownership (top management and directors) (Owusu-Ansah, 2005a).According to Owusu-Ansah (2005a), insider ownership has a negative relationship with the level of CRD as companies with the directors owning more equity shares tend to disclose less information. This is explained by the fact that such companies have no agency cost to incurs compared to other companies which have to incur monitoring costs (Jensen & Meckling, 2000). Lang et al. (2003) argue that institutional investors are more professional investors; therefore, they can correctly interpret financial information. It is anticipated that the higher the proportion of institutional investors, the higher the level of CRD .Also institutional investors monitor management closely to protect their stakes in the firm hence reducing the associated cost and increasing firm value. Evidence relating to individual ownership

and its association with the level of disclosure is not conclusive. McKinnon and Dalimunthe (1993) and Bauwhede and Willekens (2008) found out that the extent of disclosure is higher for companies with individual ownership while evidence provided by Hossain and Adams (1994) and Barako et al. (2006) contradicts this. Regarding multinational ownership, Ajinkya et al. (2005) contend that foreign investors have more experience in regional and international markets and hence they are more likely to demand higher CRD standards. This study looked at ownership in terms of institutional ownership for companies in the NSE. Accordingly the following was hypothesized:

H5: Company with high institutional equity ownership has high level CRD

2.4.6 Board composition

Board composition as a variable of study usually considers the mix of executive and non-executive members and influence of their roles in decision making process. According to Haniffa and Cooke (2000) board composition is an interesting variable as it indirectly links to the role of non-executive directors as pegged on the agency theory. Akhtaruddin and Haron (2010) empirical results indicate that board ownership and composition is associated with low levels of corporate disclosures. The results are consistent with the notion that board ownership increases the agency costs resulting from information asymmetry between firm management and outsider investors. However the study concur that the negative relationship is weaker for firms with a higher proportion of independent non-executive directors. The premise of agency theory is that boards are needed to monitor and control the actions of directors due to their opportunistic behavior (Berle & Means, 1932; Jensen & Meckling, 2000). The studies reveal that non-executive directors have more opportunity for control and are seen as decision experts. The extent of disclosure in annual report may be influenced by the composition of the board of directors of the company (Hossain, 2008). When there are more independent non-executive directors in the board, it leads to greater monitoring and control over management performance and action. This will result to more management consideration of every aspect of the firm and hence more information would be expected to be disclosed. Caldarelli et al. (2013) affirms that a higher proportion of outside non-executive directors on the board would result in better monitoring of the activities by the board and limit managerial opportunism. A vibrant and more independent board with balanced mix of executive and non-executive board members can potentially increase the extent of CRD. Borrowing from

previous studies, this paper adopts the level of board composition as a potential factor explaining the positive relationship between CRD by proposing a directional hypothesis:

H6: There is a positive significant relationship between board composition and the level of CRD for listed companies in the NSE.

2.5 Level of CRD and Return

The relevance of risk disclosure as measured by share return remains largely unexplored and ambiguous (Moumen et al., 2015) despite regulatory efforts (IAS 32,39,IFRS 7,9) to require corporations to disclose risk assessment information and uncertainties reports in annual financial statements. The level of disclosure is left at the decision of management. Li (2008) when studying relation between annual report readability and firm performance and earnings persistence, concludes that, CRD as measured by counting the word risk and uncertainty in the corporate reports was directly related to low future share price returns and poor forecasted earnings. The study considered the influence of risk sentiments in financial information in terms of increasing use of risk and uncertainty for forecasted earnings and share return using the Fog Index and the length of document. The findings implied that forecasted share returns do not always reflect CRD disclosed in the financial reports. However, the results concurred that quality of disclosure was correlated with earnings' persistence and contained information regarding earnings quality. Similarly, Li and Short (2009) when studying economic consequences of CRD by corporations, financial analysts and business press on the firm's capital market participation, showed that CRD information was accompanied by a significant rise in the cost of borrowings, share return volatility and analyst earnings forecast deviation. In contrast favorable total risk disclosure were correlated to decrease in cost of capital, stock return and analysts' earnings forecast dispersion.

Kravet and Muslu (2013) examined the association between changes in companies textual risk disclosures in 10-K filings and changes in stock market and analysts' activity around the filing. The study found out that annual increase in risk disclosures are associated with increased share return volatility, volumes of trade, the deviations of the forecasts and the volatility of forecast before and after the filings. Moumen et al. (2015) concurred with the findings in determining market capacity to forecast 2-years forecasted earnings from voluntary risk disclosure in MENA markets. The study provided insights that risk disclosures reveals additional information about

corporate risk and uncertainty as well as serving to reveal forecasted uncertain outcomes hence widening users prediction of future performance .According to Campbell et al. (2014) CRD informs the investors of the risks inherent in a firm thereby reducing information asymmetry as it is timely incorporated into share prices. The study observed that qualitative CRD in 10-K filings are meaningful because they are directly and significantly related to low bid-ask spreads, high beta and share return volatility. The study concluded that CRD by managers provide useful information about uncertainties and investors incorporate this information in the market value. These findings were inconsistent with other studies (Kravet & Muslu, 2013; Campbell et al., 2014; Bao & Datta, 2014) who found out that CRD are lacking in significance and have no direct influence on investors' risk appetite. The studies found out that around two-thirds of risk types (22 out of 30 risk types) in 10-K forms are by and in large irrelevant in assessing corporate uncertainties and future cash flows. The current study aimed at assessing whether CRD determinants influences the return by listed companies in Kenya.

2.6 Critique of literature reviewed

A number of previous studies have investigated the extent of CRD especially voluntary, in the annual reports of listed companies and other companies, and the determinants with reference to company attributes such as age, size, profitability, board composition, the auditor but with differing results. However, most of the studies are in developed countries and only a small number look at developing countries. Such studies include : Italy (Beretta & Bozzolan, 2004);United States (Lajili, Dobler, & Zéghal, 2011);European Market (Michelon, Bozzolan, & Beretta, 2015); UK (Linsley & Shrivs, 2005) while this study considered Kenya a developing country. A study on another developing country Libya (Pratten & Abdulhamid Mashat, 2009) considered voluntary social disclosures while a study of determinants of disclosures in Kenya (Barako, 2007) considered determinants of voluntary disclosures This study considered the determinants in light of risk disclosures.

Some consistent findings in previous studies is that size is an important determinant of corporate risk reporting behavior. Other factors found to be significant are profitability, board composition while attributes such as age, equity ownership were found to be statistically insignificant in explaining the level of CRD. Barako (2007) affirms that size is a significant determinant of voluntary disclosure when studying listed voluntary disclosures by listed companies in Kenya .In contrast he found out that board composition, profitability and type of external audit firm are

statistically insignificant in determining level of voluntary disclosures in Kenya. Apart from size, findings concerning other firm attributes and CRD have mixed results. Jameel and Weerathunga (2013), concluded that age is statistically insignificant while size, profitability, board composition and market discipline are significant in explaining the level of disclosures. This study eliminated size given that all the previous studies found it to be significant while other determinants were adopted in light of CRD.

The influence of ownership structure on corporate risk disclosure has been extensively studied but with mixed results. Rouf & Al Harun (2011) investigated the relationship between ownership structure and voluntary corporate disclosure of 94 Bangladesh listed companies while Barako (2007) considered ownership in terms of foreign direct ownership in determining voluntary disclosure. This study considered institutional ownership for listed companies in Kenya.

2.7 Research gaps

A review of literature established that majority of corporate risk disclosure studies have focused on developed economies, less research has been carried out in developing economies such as Kenya. Additionally, the literature has revealed that CRD studies at different timings produced differing results. As a result the current study aimed at assessing the influence of CRD determinants on share return of listed companies in a developing market, NSE. The current study extended voluntary disclosure study of listed companies in the NSE by Barako (2007) by considering five categories of risk disclosures.

The current study used a disclosure index as adopted from Linsley & Shrives (2006) with 20 disclosure items and amended to 37 disclosure items per ICAEW (2003). These items were categorized into five risk categories. The determinants of CRD studied were from previous studies. Only determinants with mixed findings (Kravet & Muslu, 2013; Campbell et al., 2014; Bao & Datta, 2014) or inconclusive (Akhtaruddin & Haron, 2010) evidence were considered.

Li (2008) studied corporate risk disclosure by looking at the county of word “risk” and “uncertainty” while this study extended it by context analysis of the content disclosed. Kravet & Muslu (2013) considered risk disclosures before and after financial statements filing dates while this study extended into the full year for the seven years under consideration.

2.8 Conceptual framework

The conceptual framework is a network representation of the relationship between or among the dependent and independent variables (Sekaran, 2003). A conceptual framework helps give meaning to the operationalized study variables by diagrammatically presenting the interaction between the dependent and the independent variables (Kothari, 2004). According to Sekaran (2003), the dependent variable is the variable of primary interest. In this study the dependent variable was return and the independent variables were the CRD determinants.

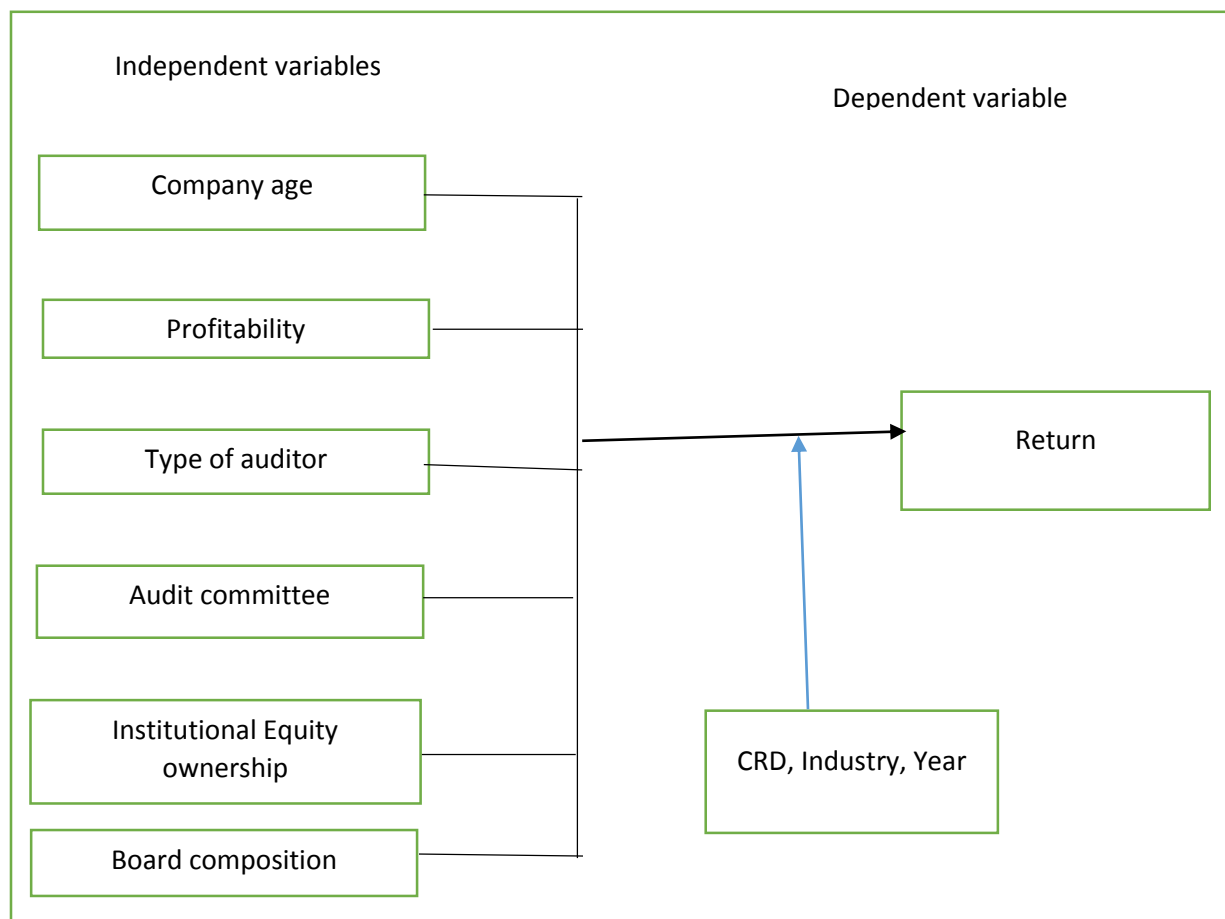


Figure 2.1: Conceptual framework

2.9 Chapter summary

The literature on CRD has mainly focused on large and multinational companies listed in different regimes and at different times. A growing body of literature has addressed developed economies with minimal attention to developing economies. Disclosure theories have been developed to

explain what determines disclosure by listed and non-listed organizations. This study discussed four theories that explain disclosure behavior in an organization and helped in deriving the determinants of disclosure as backed by the empirical literature. The empirical literature operationalized the determinants under the study. Based on the literature review, the influence of CRD on return was found to be a potential aspect for further research in different times and different markets. The disclosure theories were found to be replicable in different markets.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this study was to assess the influence of CRD determinants on the share return of listed companies in the Nairobi Securities Exchange in Kenya. In this chapter the research design, research philosophy, population and sample, data collection and analysis are discussed. The chapter discusses the primary and secondary data collection methods and how the data obtained was analyzed. According to Sekaran (2003) an appropriate research methodology should discuss the applicability of the data in addressing the research objectives. Finally this chapter discusses the regression models used in analyzing secondary data. In this study the influence of CRD on return was assessed.

3.2 Research philosophy

A research philosophy is a brief about the way in which data concerning a phenomenon should be gathered, analyzed and used (Kothari, 2004). The current study used an ontological research philosophy paradigm following a positivist epistemology assumption. Ontological philosophy is the study of reality which can be measured (Vandemaele et al., 2009). Positivist epistemological assumption applies methods of natural science to study social sciences (Bryman & Bell, 2011).

According to Vandemaele et al. (2009), in a positivism epistemology, a deterministic view of nature is adopted and a methodological approach is followed. Bryman & Bell (2011) concur that a nomothetic methodology for a deterministic view of nature enable the researcher to apply statistical techniques to analyze data. In a positivism assumption, conclusion is arrived at using inductive reasoning

3.3 The Research design

The study sought to assess the influence of CRD determinants on the share returns of listed companies in the NSE over the period 2008 -2014. In this study analysis was performed on the relationship between level of risk disclosure and possible determinants: age, profitability, type of the auditor, audit committee, equity ownership concentration and board composition. This is descriptive by nature since it assesses whether CRD has an influence on the share return as explained by some controlled variables. According to Kothari (2004), descriptive research design

is a description of state of affairs (that is CRD) as it exists at present. Barako (2007) used descriptive research in studying the determinants of voluntary disclosures in Kenya while McFie (2009) used same descriptive design in determining the quality of financial reporting in Kenya.

3.4 Population and sampling

According to Kothari (2004) population is the entire set of units or elements sharing common observable characteristics. For the purpose of this study, the target population was all listed companies in the NSE consistently and actively trading over the period 2008-2014. The population was therefore of 66 companies. These companies have a growing importance not only in the NSE in Kenya but also in the East African community in relation to commerce and foreign direct investment (KIPPRA, 2014).The period of study presents a time of recovery of the country GDP (African Development Bank Group & Government of Kenya, 2013) as well as a period in which major changes on international arena were enacted to combat any future risk catastrophes from the global financial crisis. This period has seen significant changes on CRD in different sectors notably the banking and insurance sector. In the same period market capitalization in the region has witnessed significant growth in tandem with the GDP (KIPPRA, 2014).

3.5 Sample and sampling process

The sample of this study comprised 36 companies which were consistently and actively trading over the period of study (Appendix 3). The sample was drawn from across the NSE companies' categorization subject to sampling criteria .The criteria considered consistency in trading over the study period and continuous publication of financial statements (Table 3.2). Therefore for a company to be eligible as a sampling unit must have been listed and consistently filing its annual reports with the NSE as per NSE listing requirements. Other filtering rules included data availability and homogeneity in the disclosure information. All the annual reports for sampled companies had to have been audited .Industry specific considerations were analyzed and adjustments done as per the context. The table 3.1 shows the sectors from which the sample was drawn.

Table 3.1: Sectoral distribution of companies in the sample

Sector	Number of companies	Percentage (%)
Agricultural	4	11.11
Automobile and accessories	2	5.56
Banking	8	22.22
Commercial and services	6	16.67
Construction and Allied	5	13.89
Energy and petroleum	3	8.33
Insurance	3	8.33
Investment services	5	13.89
Total	36	100

Source: NSE (2014)

Table 3.2: Final sample response rate

Category of companies	Number of firms	Number of firm- year observations
Total companies listed as of 31 December 2014	66	462
Less: Number of delisted companies	2	14
Number of companies listed after 2010	11	77
Number of companies suspended from trading	9	63
Company with missing data	8	56
Total number of companies in the final sample	36	252

Source (NSE 2014)

3.6 Data collection methods

Secondary quantitative data was the main source of data. Sample data was drawn from audited financial information that listed companies provide to shareholders in their annual reports and was triangulated with managers' opinion being primary data collected using questionnaires (Appendix 2) administered to sampled companies between January and April 2017. The annual reports were obtained from the CMA repository. Annual reports are a major means of corporate reporting and serves as a good proxy for the level of corporate financial disclosure because annual report

disclosure levels are positively correlated with the amount of disclosure provided via other media (McFie, 2009). Primary data was obtained using a questionnaire administered to the sampled companies.

A disclosure index is a detailed and comprehensive list of selected items which might be expected to be disclosed in an organizations' report (Hossain, 2008) .A disclosure index (Appendix 1) was developed to determine the level of disclosure in the sampled companies .Use of disclosure index began with Cerf (1963) and has since been used in different studies. The index for this study was consistent with Linsley & Shrives (2005) and Abraham & Shrives (2014b) and was filtered according to industrial specific disclosures . They observed that the index can contain information from different sources such as annual reports, interim reports and social reports. The disclosure indices were categorized into five categories of risks: business risk, operational risk, strategic risk, market risk and credit risk. Any disclosure was awarded a score of '1' and non-disclosure was awarded "0". Given the importance of the index in this study, a careful consideration was exercised in the disclosure items.

Biasness of the tool was addressed by, firstly, the disclosures were given unweighted index of "1" for disclosures and "0" for nondisclosures .This according to Kribat & Burton (2013), is because the level of relevance of each disclosure is not absolute and varies with the user, industry ,country and time of the study. According to Cerf (1963) ,unweighted index uses dichotomous scores that eliminates the need to assign varying weights to the disclosures .He observed that ,to avoid the application biasness, the disclosures have to be explicit and not implicit. Explicit disclosures are categorically stated quantitatively or qualitatively .Implicit disclosures are deduced from the information provided as they are not clearly stated. Use of explicit disclosures help ensure that there is no distortion of the intended communication in the deduction process. Moreover, explicit disclosures reduces the biasness as the researcher need not interpret the meaning (Linsley & Shrives ,2005). This study considered only explicit disclosures.

CRD was determined as:

$$\text{CRD} = \frac{\text{actual disclosure}}{\text{Maximum possible disclosure}} * 100$$

3.7 Data analysis

Data collected from primary and secondary sources was cleaned and sorted before further analysis were done .According to Sekaran (2003) data collected using primary and secondary tools should be coded, cleaned and sorted before further analysis. Descriptive statistics were used to analyze univariate relationship such as percentages, mean, kurtosis and skewness .This were relevant in determining the level of disclosures by listed companies. Multivariate analysis was performed using quantitative data obtained from audited financial statements.

According to Sekaran (2003) , multivariate analysis is done were the dependent variable is presumed to have one or more independent variables .In this study a multiple regression model was ascertained and used in establishing the relationship between the independent and the dependent variables. For the multiple regression analysis to be undertaken, the OLS underlying assumptions have to be ascertained and confirmed otherwise an alternative model would be used (Gujarati, 2003). According to Gujarati (2003), if the OLS assumptions do not uphold in the data ,other parametric models not based on OLS assumptions may be used such as GARCH model. In this study normality assumptions were ascertained using kurtosis, skewness, Q-Q plot and histogram. For the variable to be best linear unbiased estimators, the variance of error terms in the model should be constant. A test for homoscedasticity using test Glejser showed that heteroscedasticity was not a problem in the model. Absence of autocorrelation was shown by Durbin- Watson statistic and multi-collinearity problem was checked using the tolerance values and variance inflation factors (VIF) and none of all these posed a major problem in applying the regression model. To test the six hypothesis developed in the study the percentage disclosure scores calculated from the corporate risk disclosure index were panel regressed against the independent variables using equation 1 below.

$$CRD_{it} = \beta_0 + \beta_1 AGE_{it} + \beta_2 NETINCOME_{it} + \beta_3 BOARDSIZE_{it} + \beta_4 AUDITOR_{it} + \beta_5 AUDITCOMMITTEE_{it} + \beta_6 EQUITY_{it} + \gamma_{it} + \phi_{it} + \mu_t \quad (\text{Equation 1})$$

Where γ_{it} = Year control, ϕ_{it} = industry control and μ_t = error term

The influence of CRD on return was established by regressing return against CRD with holding other variables as controls. A test for control variable was done by regressing the model with and without the variables and the results were found not to be significantly different and therefore they were confirmed as control variables as shown in equation 2 below.

$$\text{RETURN}_{it} = \beta_0 + \beta_1 \text{CRD}_{it} + \beta_2 \text{AGE}_{it} + \beta_3 \text{NETINCOME}_{it} + \beta_4 \text{BOARDSIZE}_{it} + \beta_5 \text{AUDITOR}_{it} + \beta_6 \text{AUDITCOMMITTEE}_{it} + \beta_7 \text{EQUITY}_{it} + \gamma_{it} + \phi_{it} + \mu_t \quad (\text{Equation 2})$$

Where γ_{it} = Year control, ϕ_{it} = industry control and μ_t = error term

The following table 3.3 summarizes the measurement of the variable

Table 3.3: Measurement of variables

Variable type	Measure	Definition	Source
<i>Dependent variables</i>			
CRD _{it}	CRD	Percentage of actual item to total items in the disclosure index (Linsley & Shrives, 2006)	Corporate risk disclosure index per audited annual reports
RETURN _{it}	Share price return	Percentage share return.(Hossain, 2008; Kravet & Muslu, 2013)	NSE annual stock price count
<i>Independent variable</i>			
AGE _{it}	Number of years since incorporation	The natural log of age (Hossain 2008;Li,2008 and Jameel& Weerathunga, (2013)	Listed companies' annual reports
NETINCOME _{it}	Net profit margin	The natural log of net profit margin (Owusu-Ansah (2005a),Johnson &Natarajan,2005)	Listed companies' annual reports
BOARDSIZE _{it}	Number of non-executive directors	Number of non-executive directors (Linsley& Shrives, 2006,Beretta & Bozzolan 2004), Karim, 1995)	Listed companies' annual reports

Variable type	Measure	Definition	Source
AUDITOR _{it}	Type of auditor	Treated as dichotomous variable where 1 was scored if audit firm was Big four and 0 otherwise (Deangelo, 1981b,Owusu-Ansah ,2005b)	Listed companies' annual reports
AUDITCOMMITTEE _{it}	Audit committee	Treated as dichotomous variable where 1 was scored if audit committee existed and 0 otherwise (Owusu-Ansah,2005a,Defond & Jiambalvo 1991)	Listed companies' annual reports
EQUITY _{it}	Institutional equity ownership	Total institutional equity ownership in the company (Barako, Hancock, & Izan, 2006,Jensen& Meckling ,2000,Owusu-Ansah, 2005a)	Listed companies' annual reports

To determine the relevance of the CRD in explaining stock returns the regression model of the return against CRD was done. The significance of each independent variable was tested using p-values and t-values to establish how they fit in the model .In this study the critical p-value was 0.01.This formed the basis of rejection or fail to reject the null hypothesis. Following measures of central tendency were also used: mean, kurtosis and skewness for the descriptive statistics. Data obtained from questionnaire was analyzed using descriptive statistics such a frequencies and percentages.

3. 8 Research quality

3.8.1 Internal validity

Internal validity implies that there must exist cause and effect relationship in which certain conditions are seen to lead to other as opposed to a spurious relationship. This relation is hard to prove in accounting according to (McFie, 2009) .To ensure this a pilot study on the questionnaire was done that informed the choice of questions used.

3.8.1 External validity

External validity is the ability of findings to be generalizable. Yin (1994) cautions on the generalizability of findings in emerging and dynamic markets because forces for and against the area studied are very different in emerging markets. This study may be generalized to listed company in the NSE.

3.9 Ethical consideration

Research ethics is defined as the appropriate behavior according to the norms of the society expected from a researcher in the conduct of research (Sekaran ,2003). This study took into account ethical consideration and the privacy and confidentiality of the respondents firm was upheld. The study complied with the ethical code of conduct for researchers .The study ensured protection of intellectual property rights' by acknowledging all the sources of information obtained.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The objective of the study was to assess the influence of CRD determinants on return of listed companies in the Nairobi Securities Exchange in Kenya. Data analysis was carried out on 36 companies which were consistently trading in the NSE over the period 2008-2014 (Appendix 3). Secondary data was obtained from audited annual reports and primary data was obtained from questionnaire issued to the managers of the companies.

This chapter presents a discussion of the findings of data analysis. The chapter discussion is divided into two parts. First part addresses the results from secondary data analysis and second part addresses results from primary data. First part presents the descriptive statistics, diagnostic tests, correlation matrix and regression results for model 1 and model 2. Second part addresses the results from questionnaire.

4.2 Results of secondary data analysis

Secondary data from audited annual reports was analyzed using OLS regression methods. The following are the descriptive statistics.

4.3 Descriptive statistics for the level of CRD per the regression results

The table 4.1 below provides a summary for each variable considered in the study. The findings shows that on average CRD was at 2.2% for listed companies in Kenya. The maximum CRD was 3.8% with a standard deviation of 0.004. The findings shows that on average Kenyan companies have 9 non-executive directors in their board with a maximum of 13 members and a minimum of 3. These are relatively higher than in Indian (Hossain, 2008). The average return was 0.093 with average deviation being 0.039. Range of the data was $(4.556 - 0.918 = 5.474)$. The average age was 36 years with the maximum number being 74 years and minimum being 8 years.

Table 4.1: Descriptive results for the level of disclosure

Variable	Observations	Descriptive Statistics					Normality Tests	
		Mean	Median	Std. Dev.	Maximum	Minimum	Skewness	Kurtosis
Variable of interest								
<i>CRD</i>	252	0.022	0.022	0.004	0.038	0.000	- 1.561	12.187
<i>Other variables in the models</i>								
<i>RETURN</i>	252	0.093	-0.022	0.039	4.556	-0.918	2.783	21.115
<i>AGE</i>	252	35.841	41.500	16.442	74.000	8.000	0.097	2.442
<i>LOGNETINC</i>	252	5.429	5.961	1.919	7.388	0.000	- 2.155	6.507
<i>BOARDSIZE</i>	252	9.663	9.000	3.089	13.000	3.000	0.660	4.733
<i>AUDITOR</i>	252	0.829	1.000	0.377	1.000	0.000	- 1.751	4.066
<i>AC</i>	252	0.611	1.000	0.488	1.000	0.000	- 0.456	1.208
<i>LOGEQUITY</i>	252	6.782	6.828	0.650	8.298	4.558	- 0.632	3.391
<i>Other information (in Kshs)</i>								
<i>EQUITY (Kshs)</i>	252	14,155,032	6,736,912	20,068,388	199,000,000	36,117	4	31
<i>NETINCOME (Kshs)</i>	252	2,302,260	914,939	3,562,916	24,445,666	(5,284,000)	2	11

4.3.1 Descriptive results for level of CRD per disclosure index

The trend for the dependent variable (Table 4.2) shows that overall CRD scores overtime averages 14.29% .The findings shows a very low level of disclosure compared to Bova & Pereira (2012) who found a 40% level of disclosure on voluntary basis and Barako & Brown (2008) who found

a 60% level of voluntary disclosures in Kenya .This implies that the overall level of risk disclosures are lower compared to other general information disclosures by companies .The trend of disclosure has been increasing . It increases gradually from 2008 to 2014 with the business risk having consistently the highest disclosures. This results are consistent with Linsley & Shrives (2006) who found an increasing trend of level of CRD after the global financial crisis.

Table 4.14 shows that on average business risk disclosure (31.11%-29.56%) is the highest sub-category of risk disclosure over time while credit risk is consistently far lower (11.59%-9.69%) compared with the five categories of risk disclosure .Business risk disclosures increased in 2009 and from 2010 to 2012 before declining in 2013 and 2014.Comparatively credit risk disclosures increased from 2010 to 2012 while strategic and operational risks decreased relatively. These findings are similar to Barako (2007) who found an increasing trend of voluntary disclosures in Kenya. The periods 2008 to 2010 implies recovery time from the political instability experienced in 2007 and the declining trend in business risk disclosures (30.07% in 2012 and 29.56% in 2014) and operational disclosures (19.69% in 2012 and19.41% 2014) tending to 2013 and 2014 may be due to political uncertainty because of election period. Increasing credit risk disclosures (9.89% in 2012 and 11.14% in 2014) implies the increasing disclosure demands by lenders.

Table 4.2: Five categories of Corporate Risk Disclosure Index

Percentages	Average	2008	2009	2010	2011	2012	2013	2014
Business risk	29.92%	29.37%	31.11%	29.53%	29.87%	30.07%	29.93%	29.56%
Strategic risk	20.67%	20.16%	20.00%	20.73%	20.98%	21.04%	20.95%	20.84%
Operational risk	19.72%	20.48%	19.44%	19.58%	19.78%	19.69%	19.64%	19.41%
Market risk	19.26%	18.41%	18.75%	20.42%	19.68%	19.31%	19.18%	19.05%
Credit risk	10.43%	11.59%	10.69%	9.74%	9.69%	9.89%	10.29%	11.14%
Total	14.29%	9.65%	11.03%	14.63%	15.33%	15.94%	16.37%	17.05%

Figure 4.1 illustrates that risk communication categories changed over time. Business risk though consistently highest increased further in 2009 and decreased in 2010 with gradual increase in 2011, 2012 ,2013 and slight decrease in 2014.Strategic risk and market risk increased in 2010 while operational and credit risk declined up to 2011 and assumed an increasing trend up to 2014.

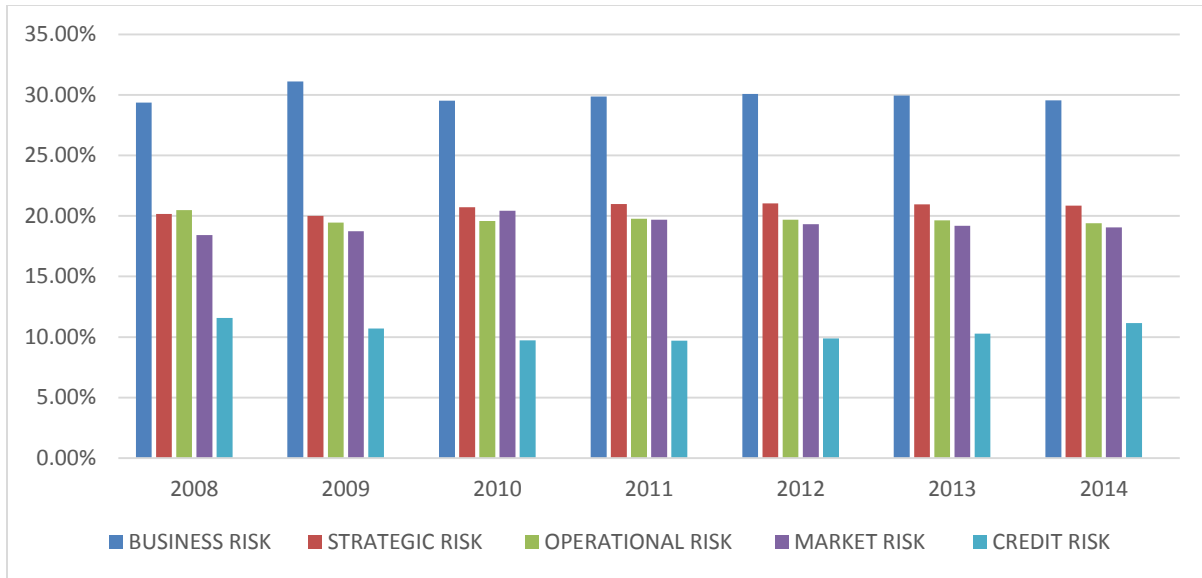


Figure 4.1 Disclosure of specific sub-categories

Overtime the levels of disclosures of the specific sub-categories have increased or decreased without any remaining unchanged. On average the level of disclosures have assumed an increasing trend as shown in figure 4.2

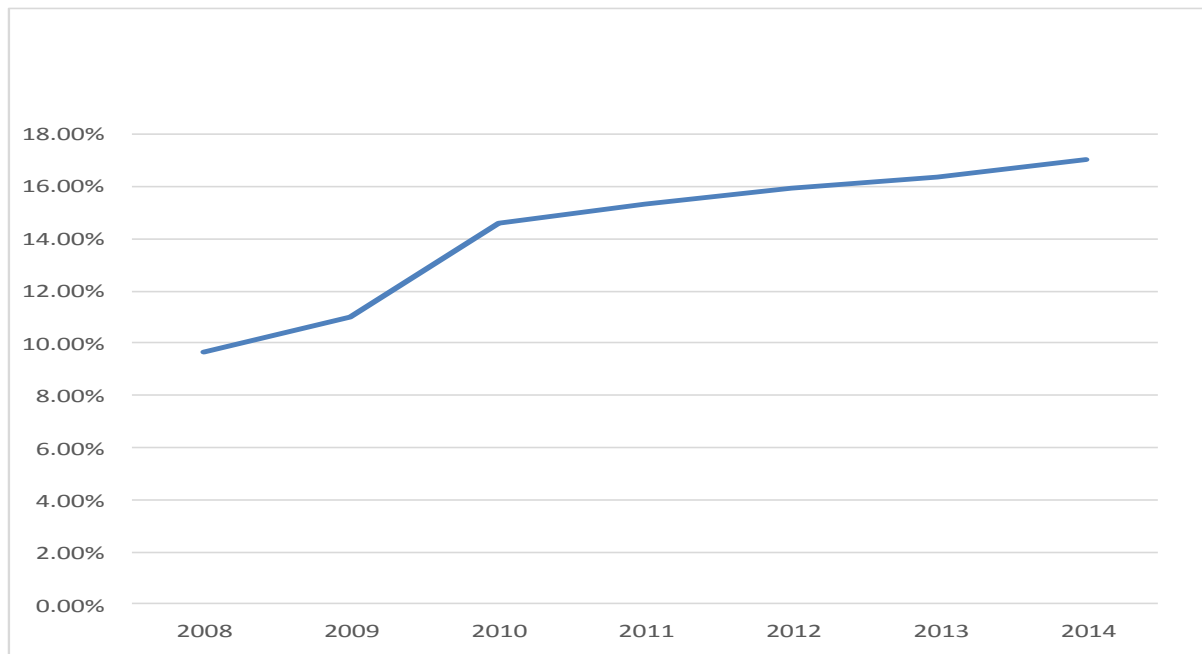


Figure 4.2: Average Total Risk Disclosure overtime

These findings are consistent with (Abraham & Shrivs, 2014b) that disclosures increases overtime with more business disclosures. The findings concur that the disclosures increase overtime with

the increasing mandatory disclosure requirements. The results are in tandem with Linsley and Shrives (2005) who found out that disclosure level increased with increasing IFRS disclosure demands. The combined effect of relatively low increasing credit disclosure and relatively high increasing business risk disclosure give the overall overtime disclosure of 14.29%. The variability in disclosures overtime presented an opportunity to examine the factors motivating the varying disclosures.

4.4 Diagnostic tests

Validity test was done to confirm the assumptions of ordinary least square (OLS) for multiple regression to be carried out.

4.4.1 Test for homoscedasticity

One of the assumptions of OLS is that the variance of the error term is constant (homoscedasticity). If the error terms are not constant (heteroscedasticity), the OLS estimators will still give unbiased (and also consistent) estimates, but no longer best linear unbiased estimators (BLUE) (Brooks, 2008). Test Glejser was used to test for homoscedasticity. Gujarati (2003) found out that for large samples different methods give generally satisfactory results in testing for heteroscedasticity. However, he observes that Test Glejser may be used for large samples and may also be used in small samples strictly as a qualitative device. The test is conducted by regressing the absolute residual value to the independent variables. The null hypothesis of no homoscedasticity was rejected if the p-value was greater than 0.05. Table 4.3 presents the results of the Test Glejser performed on the regression model used in this study.

Table 4.3 :Test Glejser for homoscedasticity

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
1 (Constant)	.000	.003	.136	.892
log_age	.001	.001	1.186	.237
log_equity	-3.196E-05	.000	-.066	.948
log_net inc	.000	.000	1.064	.288
No. of Directors	-2.993E-05	.000	-.320	.749
Type of auditor	.001	.001	.893	.373
Audit Committee	-8.792E-05	.000	-.187	.852
Return	.001	.000	1.593	.112

a. Dependent Variable: absut

Based on the output coefficients, the obtained values in the Sig. column is greater than 0.05 hence null hypothesis was rejected and concluded that there is no heteroscedasticity problem.

4.4.2 Normality test

Kurtosis and skewness were used to perform this tests. Skewness measures the extent to which a distribution is not symmetric about its mean value and kurtosis measures how fat the tails of the distribution are (Gujarati, 2003). A normal distribution is not skewed and is defined to have a coefficient of kurtosis of 3 (Brooks, 2008). From table 4.4, the skewness of CRD, AUDITOR, LOGNETINC, LOGEQUITY and AC is negative which indicates a slight skewness to the left. RETURN, AGE and BOARD SIZE have positive values confirming presence of skewness to the right. For kurtosis we failed to reject the null hypothesis which indicated that the data was not normal since the coefficients were not equal to 3 (Gujarati, 2003). The Jacqbera statistics from the table below confirms that the data is not normally distributed since we reject the null hypothesis of normal distribution.

Table 4.4: Skewness and Kurtosis for the dependent variables

Variable	Observations	Normality Tests		Jarque-Bera	Probability
		Skewness	Kurtosis		
Variable of interest					
<i>CRD</i>	252	-1.561	12.187	988.590	0.000
<i>Other variables in the models</i>					
<i>RETURN</i>	252	2.783	21.115	3770.924	0.000
<i>AGE</i>	252	0.097	2.442	3.668	0.160
<i>LOGNETINC</i>	252	-2.155	6.507	324.176	0.000
<i>BOARDSIZE</i>	252	0.660	4.733	49.843	0.000
<i>AUDITOR</i>	252	-1.751	4.066	140.717	0.000
<i>AC</i>	252	-0.456	1.208	42.453	0.000
<i>LOGEQUITY</i>	252	-0.632	3.391	18.360	0.000
<i>Other information (in Kshs)</i>					
<i>EQUITY (Kshs)</i>	252	4	31	9,006	-
<i>NETINCOME (Kshs)</i>	252	2	11	966	-

Further, normality checks using histograms and normal probability plots were done. In order to determine normality graphically, the output of a normal Q-Q Plot was used. If the data is normally distributed, the data points will be close to the diagonal line (Wooldridge, 2013). If the data points stray from the line in an obvious non-linear fashion, the data are not normally distributed (Brooks, 2008). The normal Q-Q plot (Appendix 6) depicted some slight deviations from the Q-Q line. For the histogram the bars should be within the curve for normality to hold (Brooks, 2008). The histogram confirmed that the data was near normal with slight deviations (Appendix 7).

4.4.3 Test for autocorrelation

Durbin- Watson statistic is used to test for first order serial correlation in the errors of a time series regression model under the classical linear model assumptions (Wooldridge, 2013). In consistent with prior studies (Barako, 2007), the study used Durbin –Watson statistic to test for presence of autocorrelation in the residuals. The null hypothesis of no autocorrelation cannot be rejected if the Durbin-Watson statistic was equal or close to 2. For model 1, the Durbin-Watson statistic was

2.184 (Table 4.7), which was close to 2, implying that autocorrelation did not pose a major problem. The same findings were also observed in model 2 where the Durbin-Watson statistic was 2.008 (Table 4.9). Therefore autocorrelation was not a major problem.

4.4.4 Multi-collinearity

An implicit assumption that is made when using the OLS estimation method is that the explanatory variables are not correlated with one another (Brooks, 2008). Multicollinearity is a problem which arises when two or more predictor (independent) variables in a multiple regression were highly correlated (Gujarati, 2003). Before performing the multivariate analysis, multi-collinearity problem was checked using the tolerance values and variance inflation factors (VIF). A tolerance value close to 1 meant there is little multicollinearity (Wooldridge, 2013), whereas a value close to 0 suggested that multicollinearity may be a threat. A VIF of more than 10 implies presence of multi-collinearity.

The findings in Table 4.5, shows the VIFs for the two models under the study. Model 1 had independent variables ranging between 1.201 and 2.740. According to the findings, the tolerance values ranged between 0.365 and 0.8328. Therefore, both the VIFs and tolerance values showed that multicollinearity was not a serious problem when interpreting the findings of the multivariate analysis. Similar observations were found in model 2. The independent variables ranged between 1.186 and 2.927 and the tolerance values ranged between 0.342 and 0.843.

Table 4.5: Collinearity statistics

Coefficients			Coefficients		
Model 1	Collinearity Statistics		Model 2	Collinearity Statistics	
	Tolerance	VIF		Tolerance	VIF
(Constant)			(Constant)		
LOGAGE	0.764	1.309	CRD	0.843	1.186
LOGNETINC	0.655	1.526	LOGAGE	0.763	1.311
BOARDSIZE	0.469	2.134	LOGNETINC	0.655	1.526
AUDITOR	0.833	1.201	BOARDSIZE	0.457	2.190
AC	0.827	1.210	AUDITOR	0.819	1.220
LOGEQUITY	0.365	2.740	AC	0.813	1.231
CODE	0.726	1.378	LOGEQUITY	0.342	2.927
Y09	0.577	1.734	CODE	0.720	1.388
Y10	0.574	1.743	Y09	0.577	1.735
Y11	0.573	1.745	Y10	0.574	1.743
Y12	0.566	1.765	Y11	0.573	1.745
Y13	0.548	1.824	Y12	0.566	1.765
Y14	0.547	1.829	Y13	0.548	1.826
MANUFA	0.584	1.711	Y14	0.547	1.829
INSU	0.758	1.319	MANUFA	0.566	1.766
COMMSERV	0.475	2.107	INSU	0.756	1.323
ENERGY	0.773	1.294	COMMSERV	0.471	2.124
AGRIC	0.514	1.947	ENERGY	0.772	1.295
a. Dependent Variable: CRD			AGRIC	0.490	2.042

4.5 Correlation analysis

Pearson's correlation coefficient is used to explain the relation between variables of interest (Gujarati, 2003) by determining the direction of the relationship and whether there exist multicollinearity (Brooks, 2008). Summary of the correlation matrix values is provided in the table 4.6. The study focused on the relationship between CRD and the other determinant independent variables and RETURN with CRD and other control variables. From the table the highest correlation coefficient was 0.674 which was less than 0.8, meaning there was no multi collinearity. CRD has positive relationship with all variables in the list except board size and audit committee. This implies that an increase in CRD is explained by corresponding increases of the period of existence of a company since incorporation, LOGAGE (coefficient 0.016, p-value 0.802) and the increase may not be significant. The income LOGNETINC (coefficient 0.019, p-value 0.770) also explains the increase which is not significant as well, the type of the auditor, AUDITOR (coefficient 0.067, p-value 0.289) and the equity ownership concentration, LOGEQUITY (coefficient 0.104, p-value 0.099). The increase is explained by a decrease in number of non-executive directors, BOARDSIZE (coefficient -0.092, p-value 0.144) and existence of audit committee, AC (coefficient -0.098, p-value 0.123) . The relationship between CRD and all independent variables is not statistically significant since the p - values are greater than 0.05.

For RETURN, a positive relationship was observed for the following variables; CRD, LOGAGE, LOGNETINC, AC implying an increase in return may be explained by an increase of these variables and negative relationship for BOARDSIZE, AUDITOR and LOGEQUITY. The relationship between RETURN and the other variables was not statistically significant at 5% level of significance.

Table 4.6: Correlation Matrix

Pearson correlations		CRD	RETURN	LOGAGE	LOGNETINC	BOARDSIZE	AUDITOR	AC
RETURN	Pearson Correlation	0.081						
	Sig. (2-tailed)	0.198						
LOGAGE	Pearson Correlation	0.016	0.080					
	Sig. (2-tailed)	0.802	0.203					
LOGNETINC	Pearson Correlation	0.019	0.102	-.161*				
	Sig. (2-tailed)	0.770	0.107	0.010				
BOARDSIZE	Pearson Correlation	-0.092	-0.023	-.369**	.338**			
	Sig. (2-tailed)	0.144	0.714	0.000	0.000			
AUDITOR	Pearson Correlation	0.067	-0.036	-0.008	-0.026	-0.115		
	Sig. (2-tailed)	0.289	0.568	0.903	0.682	0.069		
AC	Pearson Correlation	-0.098	0.116	0.001	.168**	-0.003	.352**	
	Sig. (2-tailed)	0.123	0.066	0.984	0.008	0.965	0.000	
LOGEQUITY	Pearson Correlation	0.104	-0.014	-.396**	.498**	.674**	-0.114	0.020
	Sig. (2-tailed)	0.099	0.830	0.000	0.000	0.000	0.071	0.747

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

4.6 Multiple regression results on the determinants of CRD

The main objective was to determine factors explaining the level of CRD by listed companies in Kenya. Multiple ordinary least squares regression was performed on the balanced panel data covering seven years to establish the specific and significant determinants of risk disclosure. This model was consistent with other studies such as Linsley & Shrivies (2006) and (Miller, 1992).

Table 4.8 shows results of the multiple regression of model 1. From the table, the coefficient of correlation ($R=0.396$) shows the changes in CRD that the current determinants can be associated with is only 39.6%. This is because CRD is influenced by many determinants with only a few having been incorporated in the model. Table 4.8 shows that 15.7% of independent variables can be used to explain the dependent variable and the rest is due to other factors not covered by this model. Adjusted R square 9.2% takes into account the number of estimated parameters hence it's more reliable than R squared. However, the overall model is significant as measured by the F statistic. The Durbin Watson statistic for the model was 2.184 which is close to 2, and this implied that autocorrelation was not a problem in the model.

After confirming that there is a relationship between risk disclosures, next was to determine whether the relationship is statistically significant. This was achieved by assessing the overall significance of the model using analysis of variance as shown in the Table 4.7 below. From the table, the ANOVA showed an F statistic of 2.406 that had a significance level of 0.001 which was less than 0.01 hence this meant that the null hypothesis was rejected and concluded that there was a significant joint influence of the independent variables when taken together.

Table 4.7: Analysis of Variance Model 1

ANOVA					
Model 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.001	18	0.000	2.406	.001
Residual	0.004	233	0.000		
Total	0.005	251			

a. Dependent Variable: CRD

b. Predictors: (Constant), AGRIC, Y14, AUDITOR, ENERGY, INSU, Y11, LOGNETINC, Y09, LOGAGE, Y12, MANUFA, AC, CODE, Y10, BOARDSIZE, Y13, COMMSERV, LOGEQUITY

An assessment of the significance of each parameter estimate in the regression model was done. From the table 4.8, BOARDSIZE, AUDITOR, AC, LOGEQUITY were statistically significant in the model. BOARDSIZE (t value = -2.465, p value = 0.014 < 0.05) had a negative coefficient which implies that the increase in non-executive directors resulted into significant reduction of CRD by 0.0003. AUDITOR (t value =1.952, p value = 0.052 < 0.1) had a positive coefficient implying that the use of big four audit firms resulted in a significant increase of CRD by 0.002. AC (t value = -1.995, p value = 0.047 < 0.1) had a negative coefficient which implies that the existence of an audit committee resulted in significant reduction of CRD by 0.001. LOGEQUITY (t value = 3.985, p value = 0.00 < 0.01) had a positive coefficient implying that increase in institutional equity ownership resulted in significant increase of CRD by 0.003. The other variables, LOGAGE and LOGNETINC were not statistically significant. The overall model with the significant variables was therefore derived.

Table 4.8: The coefficients of the independent variables model 1.

Dependent variable : CRD				
Model 1	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	0.002	0.005	0.425	0.671
LOGAGE	0.001	0.001	0.593	0.554
LOGNETINC	-6.916E-06	0.000	-0.039	0.969
BOARDSIZE	0.000	0.000	-2.465	0.014**
AUDITOR	0.002	0.001	1.952	0.052*
AC	-0.001	0.001	-1.995	0.047*
LOGEQUITY	0.003	0.001	3.985	0.000***
CODE	4.026E-05	0.000	1.301	0.195
Y09	0.000	0.001	0.230	0.819
Y10	-5.596E-05	0.001	-0.054	0.957
Y11	0.000	0.001	0.150	0.881
Y12	-4.905E-05	0.001	-0.047	0.962
Y13	0.000	0.001	-0.463	0.644

Y14	0.000	0.001	-0.214	0.831
MANUFA	0.002	0.001	2.715	0.007***
INSU	0.001	0.001	0.808	0.420
COMMSERV	0.001	0.001	1.362	0.175
ENERGY	0.001	0.002	0.290	0.772
AGRIC	0.004	0.001	3.363	0.001***
Firm-year controls				Included
Cross-sectional controls				Included
R				0.396
R-squared				0.157
Adjusted R²				0.092
S.E of regression				0.00435
F-statistic				2.406
p-value				0.001
Durbin-Watson stat				2.184
*** p< 0.01				
** p< 0.05				
* p< 0.10				

From the table 4.8 above, the overall revised model can be written as:

$CRD = 0.002 (0.005) - 0.0003(0.000) * BOARDSIZE + 0.002(0.0001) * AUDITOR - 0.001 (0.0001)* AC + 0.003(0.001) * LOGEQUITY$. The value in brackets are the p-values.

All variables are statistically significant in the model above at 90% significance level. The variance inflation factors for the independent variables were below 5, indicating absence of multicollinearity in the independent variables.

4.7 CRD and share price return

Table 4.10 shows results of the multiple regression of model 2. From the table, the coefficient of correlation (R=0.485) shows that the changes in return that can be explained by CRD is 48.5% while other changes are due to factors not related to CRD. R square which is the coefficient of determination tells of what percentage of the independent variables can be used to predict the

dependent variable RETURN. Table 4.10 shows that 23.5% of independent variables can be used to explain the dependent variable and the rest is due to unknown factors not in this model. Adjusted R square 17.2% takes into account the number of estimated parameters hence it's more reliable than R squared. The Durbin Watson statistic for the model was 2.008 which is close to 2, and this implied that autocorrelation was not a problem in the model.

After confirming that there is a relationship between CRD and RETURN, next was to determine whether the relationship is statistically significant. This was achieved by accessing the overall significance of the model using analysis of variance as shown in the Table 4.9 below. From the table, the ANOVA showed an F statistic of 3.749 that had a significance level of 0.001 which was less than 0.01 hence this meant that the null hypothesis was rejected and conclude that there was a significant joint influence of the independent variables when taken together.

Table 4.9: Analysis of variance model 2

ANOVA					
Model 2	Sum of Squares	df	Mean Square	F	Sig.
Regression	17.120	19	0.901	3.749	.000 ^b
Residual	55.769	232	0.240		
Total	72.889	251			
a. Dependent Variable: RETURN					
b. Predictors: (Constant), AGRIC, Y14, AUDITOR, ENERGY, INSU, Y11, CRD, LOGNETINC, Y09, LOGAGE, Y12, MANUFA, AC, Y10, CODE, BOARDSIZE, Y13, COMMSERV, LOGEQUITY					

An assessment of the significance of each parameter estimate in the regression model was done. From the table 4.9, AC, was statistically significant in the model. AC (t value =0.170, p value = 0.016 < 0.05) had a positive coefficient implying that a unit increase in the AC would results in increase of RETURN by 0.170. Although there is a positive relationship between CRD and RETURN, that is a unit increase of CRD would results in increase in RETURNS by 11.862, it is not statistically significant in the model since (t value = 1.605, p value = 0.110 > 0.05). From the table 4.10, the overall model can be written as

$$\text{RETURN} = -0.439 (0.567) + 11.862(0.739) * \text{CRD} + \text{Controls (AC)}$$

Table 4.10: The coefficients of the independent variables Model 2

Dependent variable : Return				
Model 2	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	-0.439	0.567	-0.774	0.440
CRD	11.862	7.389	1.605	0.110
LOGAGE	0.110	0.141	0.781	0.435
LOGNETINC	0.019	0.020	0.967	0.335
BOARDSIZE	0.004	0.015	0.242	0.809
AUDITOR	-0.131	0.091	-1.439	0.151
AC	0.170	0.070	2.425	0.016*
LOGEQUITY	-0.036	0.081	-0.439	0.661
CODE	0.001	0.004	0.280	0.780
Y09	0.515	0.116	4.427	0.000
Y10	-0.079	0.117	-0.678	0.498
Y11	0.289	0.117	2.481	0.014
Y12	0.443	0.117	3.778	0.000
Y13	0.278	0.119	2.333	0.020
Y14	-0.030	0.119	-0.250	0.803
MANUFA	-0.071	0.089	-0.793	0.429
INSU	0.206	0.129	1.606	0.110
COMMSERV	-0.017	0.108	-0.159	0.873
ENERGY	-0.072	0.214	-0.338	0.736
AGRIC	0.070	0.140	0.496	0.621
Firm-year controls			Included	
Cross-sectional controls			Included	
R			0.485	

R-squared	0.235
Adjusted R ²	0.172
S.E of regression	0.49029
F-statistic	3.749
p-value	0.000
Durbin-Watson stat	2.008
*** p< 0.01	
** p< 0.05	
* p< 0.10	

The above results shows a positive relationship between the return and level of CRD which is not significant. These findings resonate with Moumen et al.(2015) who found a positive relationship between share price future return for 809 observations of MENA emerging firms . According to Moumen et al.(2015) the positive relationship between return and CRD implies that increase in CRD by listed companies is associated with increasing share return Similar findings have been emphasized by Kravet & Muslu (2013) and Bao & Datta (2014) on the positive influence ,however the studies observed that the significance depended on the specific risks in the broad spectrum and the underlying event study. This study concurs with same conclusion, however the extent of the relationship remains insignificant. The findings implies that ,though the relationship is not significant, the level of CRD has a bearing on the return .This means that companies should consider then need for more CRD disclosure to improve on the return.

4.8 Hypothesis testing

Two hypothesis were not confirmed from the results of regression analysis in model 1 while four were upheld by the model. Therefore two determinants age and profitability were found not to be statistically significant is influencing the level of CRD. The study established the following order of determinant of CRD using size and significant of the beta coefficients: institutional equity ownership as measured by institutional shares owned (LOGEQUITY, 0.397), auditor type as measured by big four auditor (AUDITOR, 0.129), audit committee as measured by existence of audit committee (AC, -0.132) and board size as measured by composition of non-executive

directors (BOARDSIZE, -0.217).Table 4.11 presents a summary of the results of hypothesis testing.

Table 4.11: Summary of the hypothesis testing

Objective	Hypothesis	Predicted sign	Regression results	Status of the hypothesis
<i>Objective 1:</i> To establish the influence of company age on the level of CRD	<i>Hypothesis 1:</i> Company age has a significant positive influence on CRD.	(+)	B(NS)= 0.041	H ₀ not supported
<i>Objective 2:</i> To determine the influence of profitability on level of CRD by listed companies in Kenya	<i>Hypothesis 2:</i> There is a significant positive relationship between the level of company corporate risk disclosure and its profitability.	(+)	B(NS)=-0.003	H ₀ not supported
<i>Objective 3:</i> To examine the influence of auditor type on level of CRD by listed companies in Kenya	<i>Hypothesis 3:</i> The level of CRD of a company audited by the Big four audit firms (or their affiliates) is greater than of company audited by non-Big four audit firms	(+)	B(+)=0.129*	H ₀ supported

<i>Objective 4 :</i>	<i>Hypothesis 4:</i>	(+)	B(-)=-0.132*	H ₀ supported
To establish the contribution of audit committee on level of CRD for listed companies in Kenya	A company that has an audit committee has more CRD than a company that has no audit committee.			
<i>Objective 5 :</i>	<i>Hypothesis 5:</i>	(+)	B(+)=0.397*	H ₀ supported
To determine the influence of institutional ownership on the level of CRD by listed companies in Kenya	Company with higher institutional ownership has more CRD			
<i>Objective 6 :</i>	<i>Hypothesis :</i>	(+)	B(-)=-0.217*	H ₀ supported
To establish contribution of board composition on the level of CRD by listed companies in Kenya	There is a positive significant relationship between board composition and the level of CRD for listed companies in the NSE.			

*-Significant at the 0.1 level, NS- not significant

4.8.1 Hypothesis 1: Age of company and CRD

The findings revealed that the beta coefficient of the age of company was 0.041 with a t-statistic of 0.593. The p-value for company age was 0.553 which was greater than 0.05, implying that the

age of a company was not a significant determinant of the corporate risk disclosure. Therefore, the null hypothesis was not rejected and conclude that there is no difference between long-established companies and newly-established companies in terms of CRD. These findings are consistent with Akhtaruddin & Haron (2010) who used a sample of 124 listed companies in Malaysia and found age to be insignificant. However the findings contradict (Jameel & Weerathunga, 2013; Hossain, 2008) who found that age is significant determinant because newly established companies face competition and incur more cost in gathering and processing information for disclosure. The findings implies long established as well as newly established companies exhibits same level of disclosure and therefore concurs with Akhtaruddin & Haron (2010) that no sufficient evidence to support Jameel & Weerathunga (2013) and Hossain (2008) view.

4.8.2 Hypothesis 2: Profitability and level of CRD

The findings revealed that the beta coefficient on the net income was -0.002 which was less than zero with a t-statistic of -0.039. The p-value for net income was 0.969 which was greater than 0.05, implying that the net income was not a significant determinant of the CRD. Therefore, the null hypothesis was not rejected and concluded that profitability was not a significant determinant of the level of CRD. The results shows that listed companies profitability was associated with lower levels of CRD by 0.002 units. The findings contradicts (Hossain, 2008; Li, 2008; Owusu-Ansah, 2005a; Hooks et al., 2002) view that profitable companies have more CRD to justify their performance. The contradiction in Kenyan listed companies may be due to the type of investors who were found to be mainly institutional investors who need not be justified of performance as they are mainly professional investors. However the findings concurs with Johnson & Natarajan (2005) that unprofitable companies disclose more CRD in defense of the poor performance but only to individual investors.

4.8.3 Hypothesis 3: Type of auditor and the level of CRD

The findings revealed that the coefficient on the variable, auditor was 0.129. The t-statistic of this coefficient was 1.952 with a p-value of 0.052 which was less than 0.10. This implied that the coefficient on type of auditor was significant and that type of auditor had a significant influence on the level of CRD by listed companies. This meant that a company audited by any of big four auditors and their affiliates resulted in an increase in the level of CRD. The null hypothesis that the degree of CRD of a company audited by the big four audit firms or their affiliates is equal to a company audited by non-big four audit firms was therefore rejected. The findings demonstrated

that as the type of auditor changes to big-four, the level of disclosure increased too. These findings are similar to Owusu-Ansah (2005b) and Deangelo (1981a) who concluded that big four audit firms have an international reputation to protect and have wide client base and therefore more likely to report misstatement and ensure that client company comply with all relevant statutory and regulatory requirements. The non-big four audit firms may not have the resources and the power to influence the quantity of CRD.

4.8.4 Hypothesis 4: Audit committee and the level of CRD

The coefficient on the variable, audit committee was -0.132 which was less than zero. The t-statistic of this coefficient was -1.995 with a p-value of 0.047 which was less than 0.10. This implied that the coefficient of audit committee was significant and that audit committee had a significant influence on the level of CRD by listed companies. This meant that a unit increase in the audit committee resulted in a decrease in the risk of disclosure by 0.0015 units. The null hypothesis that there is no difference between companies with audit committee and those with no audit committee was therefore rejected. The findings demonstrated that as the value of audit committee increases, the level of disclosure decreases. These findings are inconsistent with Defond and Jiambalvo (1991) and are consistent with Owusu-Ansah (2005a) on the significance of existence of audit committee. The negative relationship could imply that the existence of audit committee is not sufficient but there is the need to strengthen its deterrent role among the listed companies in Kenya.

4.8.5 Hypothesis 5: Equity ownership concentration and level of CRD

The coefficient of the variable, equity ownership concentration was 0.397 which was greater than zero. The t-statistic of this coefficient was 3.985 with a p-value of 0.000 which was less than 0.01. This implied that the coefficient of equity ownership concentration by institutions was highly statistically significant and that equity ownership concentration had a significant influence on the level of CRD. This meant that a unit increase in the institutional equity ownership resulted in an increase in the CRD level by 0.397 units. The null hypothesis was therefore rejected. The findings demonstrated that as the value of institutional equity ownership concentration increases, the level of disclosure increases too. These findings were consistent with Lang, Lins, & Miller (2003) who concluded that institutional investors are more professional investors; therefore, they can correctly interpret financial information and closely monitor the management to protect their stake in the

companies .However, these findings contradicts Bauwhede & Willekens (2008) who argued that majority individual ownership has no agency cost and therefore able to have a higher level of CRD.

4.8.6 Hypothesis 6: Board composition and the level of CRD

The coefficient on the variable, board size was -0.217 which was less than zero. The t-statistic of this coefficient was -2.465 with a p-value of 0.014 which was less than 0.10. This implied that the coefficient of board size as measured by the number of non-executive directors was significant and that board size had a significant influence on the level of CRD. This meant that a unit increase in the number of non-executive directors resulted in a decrease level of CRD by 0.0004 units. The null hypothesis was therefore rejected. These findings demonstrated that the composition of directors influences the level of disclosures. These findings are consistent with Akhtaruddin and Haron (2010) that board ownership and composition is associated with low levels of corporate disclosures .The results are consistent with the notion that board ownership increases the agency costs resulting from information asymmetry between firm management and outsider investors. Additionally, the findings concur with the conclusion that the negative relationship is weaker for firms with a higher proportion of independent non-executive directors. These findings contradict Hossain (2008) that more independent non-executive directors in the board , leads to greater monitoring and control over management performance and action and hence higher level of CRD. The findings affirms Caldarelli et al. (2013) conclusions that a vibrant and more independent board with balanced mix of executive and non-executive board members can potentially increase the extent of corporate risk disclosures.

4.9 Results of the questionnaire

4.9.1 Response rate

In addition to the data obtained from the published financial statements, 47 questionnaires were issued to the companies which were listed over the period 2008 - 2014 excluding any company which had been delisted at any time in the period. Out of the 47 questionnaires issued, only 29 questionnaires were returned after follow-up procedures were undertaken. However, four questionnaires had incomplete information and were therefore not considered for the analysis and this resulted to 25 questionnaires analyzed representing a response rate of 53%. Kothari (2004) postulates that a response rate of between 40% - 50% was considered appropriate and reasonable for questionnaires issued while Babbie (2013) argued that a response rate of 50% was reasonable

to analyze and publish the findings. For this study a response rate of 53 % (table 4.10) was considered adequate to analyze the data.

Table 4.12: Final sample response rate

Category of companies	Number of Questionnaires	Percent
Total number of questionnaires issued	47	100%
Less: Number incomplete data	4	9%
Number of companies not considered	18	38%
Total number of respondent in the final sample	25	53%

The reliability of the questionnaire was established by Cronbach’s alpha test. Cronbach’s alpha test estimates the internal consistency by determining the coherency of the items and how items are interrelated in a questionnaire. According to Sekaran (2003) the internal consistency and reliability of a data collection instrument is higher as the Cronbach’s alpha tends towards 1. Table 4.12 below shows that the Cronbach’s alpha for the overall CRD index was 0.883 depicting a reasonable level of reliability. Cronbach’s alpha for disclosure level was 0 .599, motivation for disclosure 0.885, firm characteristics 0 .900 and the CRD index had .883.

Table 4.12: Reliability analysis for the questionnaire data

Section of the questionnaire	Number of items	Cronbach's Alpha based on standardized items
Section B: Disclosure level	2	.599
Section C:C1 Motivation for Disclosure	7	.885
C2 Firm Characteristics	6	.900
C3 Characteristics and rate of disclosure	6	.886
Section D : Disclosure and performance	5	.885
CRD Index	26	.883

4.9.2 Main occupation of the respondents

The expected respondents were managerial personnel involved in preparation and reporting financial information of the sampled companies .Target personnel was therefore those working in

the accounts or finance department of the companies .The findings in table 4.12 below shows the summary of job titles of the respondents .

Table 4.12: Job titles of the respondents

Job title	Frequency	Percent
Head of finance	11	44%
Accountants	8	32%
other managers	6	24%
Total	25	100%

From the findings, 76% of the respondent were personnel directly involved with preparation and presentation of financial statements. This implies that the information from questionnaire can be taken as a reliable triangulation of the secondary data as it came from personnel directly involved in the preparation of the secondary data.

4.9.3 Managers perspective of CRD

This study used descriptive statistics such as percentages and frequency tables to analysis the results of the questionnaire. The findings on the level of disclosure shows 24% of the respondents believed there was a significant change on CRD and 14.8 % least significant change in CRD (Appendix 5). The level of disclosure results concurs with the CRD index results .The questionnaire as well sought the respondents' opinion on the determinants of CRD. Table 4.13 below shows the summary of the results.

Table 4.13: Managers opinion on factor explaining disclosure

Determinant	Percentage perceived significant	Percentage perceived least significant
Age	3.7%	33.3%
Type of auditor	38%	5.6%
Audit committee	25.9%	22.2%
Institutional ownership	53.7%	2.8%
Board composition	40.7%	5.6%
Profitability	8.3%	37%

The type of external auditor auditing the company as being one of the big four audit firms was perceived to be very significant in explaining the level of disclosure at 38% with only 5.6% saying has no significant influence on the level of disclosure. The results were consistent with (Owusu-Ansah,2005a) that companies audited by big-four audit firms are more likely to disclose misstatements given the level of independence of external auditor .Additionally ,big four audit firms have an international reputation to protect and therefore their deterrent effect in the organization is not subject to compromise . Similar findings were revealed by the multiple regression results .The existence of audit committee was found to be relatively very significant in influencing corporate risk disclosure at 25.9% .These findings were similar to the multiple regression results. However the significance of the audit committee was perceived to be very close to those who perceived it not being significant. The regression results established a significant but negative relationship of existence of audit committee and level of disclosure.

4.10: Chapter summary

The chapter began by analyzing secondary and then primary data .Diagnostic tests were undertaken to test violations of the OLS assumptions and correlation and regression analysis was carried out .The reliability of the primary data and CRD index was tested using Cronbach’s alpha test and the data was analyzed with descriptive statistics. The six hypothesis were tested and the results discussed from the regression analysis.

Generally the findings revealed a low level of CRD overtime which showed an increasing trend in the seven years under the study. The findings showed a significant positive relationship between

level of CRD and institutional equity ownership and the type of auditor as measured by whether is one of the big four audit firms or their affiliates. This implies that the managers of listed companies should take caution in making a choice of the type of auditor being either one of the big four audit firm or other audit firms .The findings also found a significant negative relationship between level of CRD and the composition of board in terms of number of non-executive directors and the existence of an audit committee .This implies that the managers and owners of listed companies should not only emphasize on the existence of audit committee and having non-executive directors, but also focus on enhancing their effectiveness to the organization.

Finally the findings have revealed that there is positive relationship between the CRD and the share returns of listed companies. Though the relationship was not significant, the study emphasizes the need for more CRD as it implies increased returns.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion of the findings, conclusions and recommendations derived from the study and existing literature. The purpose of the study was to assess the influence of CRD determinants on the share returns of listed companies in Kenya. The summary of the findings is presented per the objectives stated in chapter one. Finally the chapter presents the limitations encountered, contribution to knowledge and possible further areas of research based on the analyzed data related to the objectives of the study.

5.2 Research purpose and methodology

The purpose of the study was to assess the influence of CRD determinants on the share return of listed companies in Kenya. The assessment of CRD determinants influence on return involved firstly, the determination of the level of CRD. This was achieved by analysis of data from questionnaire, CRD index developed for the study and the descriptive results from the regression model 1. The questionnaire responses were analyzed using descriptive statistics such as percentages and frequency tables and the results presented using tables'. The CRD index was analyzed using descriptive statistics such as percentages and mean and presented using tables, histogram and a graph. The regression results for the level of CRD was established using descriptive results from the regression. The results were presented in a table showing the mean, median, maximum, minimum and the standard deviation. The overall conclusion of the level of disclosure was summarized from across the findings of all these analysis.

Secondly, the determinants of the level of CRD were established from theoretical literature and operationalized using empirical literature review .From the literature, six determinants were established based on previous studies and hypothesis were developed .The regression model 1 was used to test the hypothesis and the summary of the results of hypothesis testing were presented in a table followed by a discussion of the findings.

Finally, the influence of CRD determinants on the share return was assessed using regression model 2.The regression model regressed share price returns against the level of CRD with the determinants controlled. The results were presented in a table and inferences were drawn.

5.3 Discussion of the findings

The purpose of the study was to assess the influence of CRD determinants on the share price return of listed companies in Kenya. The findings of the study were arrived at using secondary and primary data analysis. The following is a discussion of the findings based on the three objectives of the study.

5.3.1 The level of CRD by listed companies in Kenya.

The study sought to determine the level of CRD by listed companies in Kenya .This was achieved through analysis of descriptive data from the CRD index and was supplemented with managers' perspective from the questionnaire. From the analysis of CRD index, the study found an overall disclosure level of 14.29% comprising of business risk disclosures (29.92%), strategic risk disclosures (20.67%), operational risk disclosures (19.72%), market risk disclosure (19.26%) and credit risk disclosure (10.43%).The descriptive results from regression analysis showed an average disclosure level of 2.2% with the maximum CRD level being 3.8% with a standard deviation of 0.004. These findings are relatively low compared to disclosure in countries such as United states United States (Lajili et al., 2011) at 32%,Italy (Beretta & Bozzolan, 2004) at 40% and Libya (Pratten & Abdulhamid Mashat, 2009) at 29%. The lower level of disclosure by listed companies in Kenya may be due to different reasons for CRD such as, access to credit facility, credit rating needs or due to minimum mandatory requirements. More business risk disclosure than credit risk implies than the companies generally disclose general business uncertainties with credit uncertainties disclosed on demand. This affirms the managers' selective exercise of their discretion to disclose unfavorable information about the company. To improve the level of disclosures this study highlights the need for regulators to encourage more voluntary disclosures in addition to the minimum mandatory disclosures.

5.3.2 The determinants of CRD by listed companies in Kenya.

The study sought to establish the key determinants of CRD by listed companies in Kenya. The manager's perception per the questionnaire analysis was found to be similar with the regression analysis results. Following determinants of disclosure were used: age of company, profitability (net income), equity ownership, number of non-executive directors, audit committee and the type of the auditor. All the variables were found to have a correlation with the level of CRD using Pearson correlations coefficients and were used in the model.

The age of company as measured by the number of years from the year of incorporation was insignificant determinant of the level of CRD (beta = 0.041, p= 0.554).The study concluded that there was no significant difference between the level of CRD for long established companies and newly established companies. These findings were consistent with Akhtaruddin & Haron (2010) who used a sample of 124 listed companies in Malaysia and found age to be insignificant .This may be due to the location since most studies in the developed market have found age to be significant with the developing market having age as insignificant. It is expected that long established companies should have more CRD due to economies of scale benefits. The insignificant of the age of company in developing market may be explained by the period it takes to adopt disclosure reforms and therefore no economies to any entity. Additionally, the increasing changes on new disclosure requirements may explain why age is not a significant determinant.

The profitability of the company as measured by net income was also found to be an insignificant determinant of the level of CRD (beta= -0.003, p= 0.969).The study concluded that there was no significant difference between the level of CRD of the highly profitable and less profitable companies. It also revealed a negative relationship between the level of CRD and the profitability. The findings contradicted (Hossain, 2008; Li, 2008;Owusu-Ansah, 2005a; Hooks, Coy, & Davey, 2002) view that profitable companies have more CRD to justify their performance and concurred with Johnson & Natarajan (2005) that unprofitable companies disclose more CRD in defense of the poor performance .This may be explained by the type of investor in the companies .The institutional investors do not need more CRD to justify the profitability of the companies as they can afford more professional advice.The results implies that all companies listed in Kenya should consider CRDs despite the level of profitability.

Type of the auditor as measured by being one of the big four audit firms or their affiliates was found to be a significant determinant of the level of CRD (beta= 0.129, p= 0.052).The study concluded that there was a significant difference between the level of CRD for companies audited by one of the big four audit firms and their affiliates and those audited by other audit firms. The study found a significant positive relationship between the type of the auditor and the level of CRD. These findings were in tandem with Owusu-Ansah (2005b) and Deangelo (1981a) who concluded that big four audit firms have an international reputation to protect and have wide client base and therefore more likely to report misstatement and ensure that client company comply with

all relevant statutory and regulatory requirements. The findings implies that listed companies in Kenya should exercise caution in the choice of the auditor and highlights the need to consider one of the big four auditors or their affiliates.

The existence of audit committee was found to be significant determinant of the level of CRD (beta = -0.132 p= 0.047). The study revealed a negative relationship between the level of CRD and the existence of an audit committee among listed companies in Kenya. These findings were inconsistent with Defond & Jiambalvo (1991) and are consistent with Owusu-Ansah (2005a) on the significance but differed on the relationship. The findings highlighted the need to strengthen the role of audit committee among listed companies in Kenya to make them more effective.

The extent of institutional equity investment among the listed companies in Kenya was found to be highly statistically significant determinant of the level of CRD (beta= 0.397, p=0.000).The study identified the relationship to be positive. These implied that the level of CRD increased with the increase in institutional equity ownership concentration. These findings in tandem with Lang, Lins, & Miller (2003),that institutional investors are more professional investors who can correctly interpret financial information and can willingly incur monitoring costs .However, these findings contradicts Bauwhede & Willekens (2008) who argued that majority individual ownership has no agency cost and therefore able have a higher level of CRD . The results implies that the type of investors among listed companies in Kenya influence the level of CRD and therefore caution should be exercised on the choice of investors were possible.

Board composition as measured by the number of non-executive directors was found to be a significant determinant of the level of CRD (beta = -0.217 p=0.014).However the study found a negative relationship between the board composition and the level of CRD. These findings implies that the level of CRD decreases with increasing number of non-executive directors in the board of listed companies in Kenya. These findings are consistent with Akhtaruddin & Haron (2010), that board composition increases the agency costs resulting from information asymmetry between firm management and outsider investors and the negative relationship is weaker for firms with a higher proportion of independent non-executive directors. These findings contradict Mohammed Hossain (2008) that more independent non-executive directors in the board , leads to greater monitoring and control over management performance and action and hence higher level of CRD. The findings affirms Caldarelli, Macchioni, Maffei, & Aria (2010) conclusions that a vibrant and more independent board with balanced mix of executive and non-executive board members can

potentially increase the extent of corporate risk disclosures. The study implies that the balance of the board composition and effectiveness should be considered.

5.3.3 Assessment of the influence of CRD determinants on share return

This study sought to assess the influence of CRD determinants on share return of listed companies. Return was determined as the long term return as measured by changes in the market prices of the companies. Average annual prices were computed and used in this study. Other variables held as control, a regression model of return against CRD found out that the coefficient CRD was +11.862 which was greater than zero. The t-statistic of this coefficient was 1.605 with a p-value of 0.110 which was greater than 0.10. Meaning the relationship was not significant. The results showed a positive relationship between the return and level of CRD which is not significant. The findings resonated with Moumen et al. (2015) who found a positive relationship between share price future return for 809 observations of MENA emerging firms. The positive relationships signals the perception by the investors that an increase in CRD is an anticipation for future higher return in compensation for undertaking the risk of investing in the company. However, the return anticipation may not be assured as the relationship is not significant.

The positive relationship affirms that CRD by listed companies in Kenya are not boilerplate information but reflect the risk perception of the investors. The lack of significance in determining shares return may explain the increasing concern by the market participants and the regulator (ICPAK) of their substantial effect. The current study therefore highlights CRD disclosures as being symbolic rather than substantial. This may imply that CRD are for compliance purpose as companies may be seeking legitimacy in the disclosures.

5.4 Conclusions

The study using, theoretical literature and empirical studies, established a relationship between the level of CRD and independent variables and the influence of the disclosures on share return. The study found out that the level of disclosures has a positive influence on the long term stock returns. The study established that the level of corporate risk disclosure is determined by type of auditor being one of the big four and their affiliates, the existence of audit committee, the extent of equity concentration as measured by institutional ownership and board composition as measured by number of non-executive directors. The study did not find any significant influence of age as

measured by years of company since incorporation and profitability as measured by the net income on the level of CRD by listed companies .

The study found out that there is an increasing trend of risk disclosure over years with more business risk disclosures and less credit risk disclosure despite the increasing need for credit information in credit worthiness assessment.

The study also found out that the institutional equity ownership in companies influences the level of CRD .This may be due to the influence of institutional investors in the management by having representations in the board or due to institutions ability to invest in financial advisory services before investing in companies. Finally the study found a positive relationship between CRD and share return which was not significant. This underscores the appreciation by investors in investing in companies that avail more information for risk and return analysis.

5.5 Recommendations

5.5.1 Policy recommendations

This study established a very low level of CRD despite increasing disclosure requirements by regulators and the reporting framework. This could be attributed to companies disclosing general business information which is symbolic to comply with minimum requirements. This study recommends the need for regulator to have specific disclosure requirements that are sufficiently detailed.

The study found institutional equity ownership to be a major determinant of CRD. This is because the institutional investors can afford to incur cost such as professional fees and monitoring costs. This study recommends the need for individual investors' inclusion by mechanism such as cost facilitation.

5.5.2 Managerial recommendations

Given the influence of the type of auditor on the level of CRD depending on whether is one of the big four audit firms or their affiliates, a degree of caution should be exercised in choosing the type of auditor to ensure maximum benefit at any given cost consideration.

This study found out that CRD affects the returns for the ordinary shareholders. This implies that listed companies should aim at improving the level of risk disclosures by having clear and detailed explanation of the nature and extent of uncertainties in the financial statements. To achieve this

the choice of auditor has been highlighted as important and therefore companies should exercise caution in choosing one and not only consider the cost involved.

5.6 Contribution to knowledge

In advancement of agency and signaling theory, this study assessed the determinants of CRD in a developing country, Kenya. The study contributes to extant literature CRD by extending the literature to developing countries.

Additionally, the study contributed to the field of knowledge by incorporating institutional equity ownership as a determinant of CRD in developing market.

5.7 Limitations of the study

This study relied on data mainly from audited financial statements as triangulated with primary data from questionnaire. This data was not readily available for the companies and therefore the sample size could not be increased or census study could not be done given the number of listed companies.

The study had adopted a definition of risk from previous studies and adjusted it within the industrial context of the companies .Any risk disclosures which could not be adopted in the context were not considered as well as the disclosure had to be explicit with implicit disclosures not being considered.

The study considered variables that had inconclusive evidence or mixed results from imperial studies and eliminated those with conclusive evidence in other developed markets .This limited the variables of the study and contributed to the lower adjusted R-squared .These variables may not have same conclusive evidence in other developing market like in Kenya.

Further drawback of the study is that it used content analysis based on weighted index in determining disclosure or non-disclosure .The inherent limitation of content analysis is the assumption of similarity in content disclosure and this limitation called for information filtering and sorting.

5.8 Suggestions for further Research

The study relied on audited financial information as main source of disclosures. Further studies can examine other sources of disclosure such as internal management reports and other general publications by companies.

In determining the level of disclosure the study relied heavily on content analysis with weighted average index .Although this analysis is common, it has limitations and therefore other techniques such as word count and coding could be used.

The study considered companies that were listed and consistently trading over the period 2008 - 2014.Additonal study can consider all the listed companies over an extended period.

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APPENDICES

Appendix 1: Risk Disclosure Index (2008-2014)

Number	Disclosure item	2008	2009	2010	2011	2012	2013	2014
A.	BUSINESS RISK							
1.	Identifying , evaluating and managing significant risks							
2.	Future Prospects and management intentions							
3.	Effects of acquisitions /merger/expansion							
4.	Effects of disposals of investments							
5.	Impact of strategy/strategic actions and going concern							
6.	Safety policies and policy measures							
7.	Capital projects committed							
8.	Committed expenditure for capital projects							
9.	Impact of strategy on future capital commitments							
10.	Safety of products or service assurance							
11.	Information on litigations and future uncertainties							
12.	Cost of safety measures and safety actions							
B.	STRATEGIC RISKS							
13.	Specific external factors affecting company prospects							

14.	Risks and opportunities due to climate/political/economic changes							
15.	Major regional economic development/strategic investments							
16.	Risk control programs regarding business fluctuations and cash flows uncertainty							
17.	Risk for labour variations and Unions relations							
18.	Employee turnover and key management personnel turnover							
19.	Incidents of supplier relationships and key products and services							
20.	Risks related to corruption and resource misappropriation							
C.	OPERATIONAL RISKS							
21.	Internal control and the extent risks are acceptable/disclosed							
22.	Stock Obsolescence / Shrinkage Product And Service Failure							
23.	GAAP risks of the special purpose entity/financial risks							
24.	Impact of accounting policies changes							

25.	Internal control ,deliberation include the likelihood of the risk occurring							
26.	Internal control and likelihood of risks which do materialize							
D.	MARKET RISK							
27.	Major exchange rates used in the accounts							
28.	Effects of inflation on results – qualitative							
29.	Effects of inflation on results – qualitative							
30.	Supplementary inflation adjusted financial statements							
31.	Effects of inflation on future operations							
32.	Effects of inflation on assets- qualitative							
33.	Effects of inflation on assets- quantitative							
E.	CREDIT RISK							
34.	Provide consumer credit business information/lenders information							
35.	Extension of credits and credit worthiness evaluations							
36.	Current borrowing rates and capacity							
37.	Disclosure of long term and short term borrowings and maturity period							

Appendix 2: Questionnaire

Dear Participant,

My name is Simon Nguva Musyoki a Master of Commerce student at Strathmore University doing a research on the *“The influence of CRD determinants on share return of listed companies in the NSE”*. This questionnaire aims at collecting data to help in addressing the intended objectives and recommendations for the benefit of investors, regulators and other researchers. I humbly request for your contribution by filling in this questionnaire. It will take you utmost 20 minutes. I will be grateful for your time and assure you strict confidentiality of information provided .For any clarifications, contact me on: smusyoki@strathmore.edu or 0738440015

SECTION A: General Information

A1. Job Title:

A2. What is your organization’s main industrial sector per NSE listing (*tick where appropriate*)

- Agricultural
- Banking
- Automobile & accessories
- Commercial and Services
- Others (*Please specify*).....

SECTION B: Level of corporate Risk Disclosure

The purpose of this section is to determine the level of corporate risk disclosure by the company

B1: Please tick or mark with ‘X’ where appropriate

	1	2	3	4	5
	Least important	Less important	Important	More important	Very important

How important is corporate risk disclosure to your company?					
How important are shares return (as measure of performance) to your company					

B2: On average, how would you describe as the change in level of corporate risk disclosure in your company over the period 2008-2014? (*Tick where appropriate*)

Least significant

less significant

Significant

More significant

Very significant

B3: On average, how would you describe the change in content of the information (favorable or unfavorable) disclosed by your company in the same period? (*Tick where appropriate*)

No change

less change

Moderate change

Significant Change

B4: On average, how would you rate the change of the level of unfavorable information disclosed by your company in the same period?

No change

Decreasing rate

[] Increasing rate

[] Moderately increasing rate

SECTION C: MOTIVATION FOR DISCLOSURE

The purpose of this section is to examine factors motivating CRD by companies

C1: To what extent would the following have contributed to the change in the level of corporate risk (unfavorable information) disclosure in your organization? *(Tick or Mark with 'X' were appropriate)*

	1	2	3	4	5
	Least significant	Less significant	Significant	More significant	Very significant
Demand by the shareholders and users					
Compliance with mandatory requirements by NSE listing					
Compliance with existing standards (before 2008)					
Compliance with requirements of new standards issued (after 2008)					
Cost of disclosure is more than the benefit					
Disclosure has no benefit to the company					

Disclosure of what other companies in the sector only disclose					
--	--	--	--	--	--

C2: To what extent do you think the following firm characteristics influence the level of corporate risk (favorable or unfavorable information) disclosure by your company over the years (2008-2014?)

	1	2	3	4	5
	Least significant	Less significant	Significant	More significant	Very significant
The period of existence since incorporation of the company					
The level of performance as measured by profit over time					
The type of the external auditor carrying out the audit					
The existence of audit committee of a company					
The level of institutional to individual share ownership in a company					
The proportion of executive to non-executive board members					

C3: Kindly rate the extent of corporate disclosure (favorable or unfavorable) ranging from 1-least disclosures to 5-most disclosure (*Tick where appropriate*)

	1	2	3	4	5
	Least disclosure	Less disclosure	Significant disclosure	More disclosure	Most disclosure
Companies that have been incorporated for long (old companies) compared to newly incorporated.					
Highly profitable companies as compared to less profitable companies					
Companies audited by Big four audit firms as compared to those not audited by Big-4					
Companies with an audit committee as compared to those without one.					
Companies with majority shareholders being institutions compared to individuals					
Companies with more non-executive directors than executive					

SECTION D: RELEVANCE OF CRD

The purpose of this section is to assess relevance of CRD

D1: How important is corporate risk disclosure to your organization (*tick appropriately*)

Least important

less important

Important

More important

Very important

D2: On average, how would you describe the effect of corporate risk disclosure in your organization's performance in terms of profitability and share price?

Least significant

less significant

Significant

More significant

Very significant

D3: Fill in the table below by ticking where appropriate

	1	2	3	4	5
	Least important	Less important	Important	More important	Very important
How important is corporate risk disclosure to your company's share price changes (volatility)					
How important is corporate risk disclosure in explaining your company's share return					

How important is corporate risk disclosure to your company's future share price earnings					
How important is corporate risk disclosure to your company's cost of borrowings					
How important is corporate risk disclosure to your company's share trading volumes					

D4: Any other comments with regard to corporate risk disclosure and company performance (profitability and share price earnings)? *(Please explain in the space provided)*

THANK YOU

Appendix 3: Nairobi Securities Exchange Listed Companies

COMPANIES	TOTAL ISSUED SHARES
AGRICULTURAL	
Kakuzi Ltd	19,599,999
The Limuru Tea Co. Ltd	1,800,000
Sasini Ltd	228,055,500
Williamson Tea Kenya Ltd	17,512,640
AUTOMOBILES & ACCESSORIES	
Car & General (K) Ltd	40,103,308
Marshalls (E.A.) Ltd	14,393,106
BANKING	
Barclays Bank of Kenya Ltd	5431536000
Diamond Trust Bank Kenya Ltd	266321115
Equity Group Holdings Ltd	3773674802
Housing Finance Group Ltd	352416667
KCB Group Ltd Ord	3,066,056,647.00
National Bank of Kenya Ltd	308000000
NIC Bank Ltd	639945603
Standard Chartered Bank Kenya Ltd	343510571
COMMERCIAL AND SERVICES	
Express Kenya Ltd	35,403,790
Kenya Airways Ltd	1496469035
Nation Media Group Ltd	188542286
Standard Group Ltd	81,731,808
TPS Eastern Africa Ltd	182,174,108
Scan group Ltd	378865102

CONSTRUCTION & ALLIED	
ARM Cement Ltd	495,275,000
Bamburi Cement Ltd	362,959,275
Crown Paints Kenya Ltd	71,181,000
E.A.Cables Ltd	253,125,000
E.A.Portland Cement Co. Ltd	90,000,000
ENERGY & PETROLEUM	
KenGen Co. Ltd	6,243,873,779
Kenya Power & Lighting Co Ltd	1,951,467,045
Total Kenya Ltd	175,028,706
INSURANCE	
Jubilee Holdings Ltd	65,884,500
Liberty Kenya Holdings Ltd	535,707,499
Pan Africa Insurance Holdings Ltd	144,000,000
INVESTMENT SERVICES	
B.O.C Kenya Ltd	19,525,446
British American Tobacco Kenya Ltd	100,000,000
East African Breweries Ltd	790,774,356
Mumias Sugar Co. Ltd	1,530,000,000
Unga Group Ltd	75,708,873

Appendix 4: Previous studies using content analysis

Author(s)	Method and sample	Main Results
Kajüter and Winkler (2003)	<ul style="list-style-type: none"> • Content analysis • 247 management reports of German listed non-financial companies 	<ul style="list-style-type: none"> • Large variation in mandatory risk disclosure • Risk disclosure mainly qualitative • Few disclosures on interrelations of risk factors • Poor risk forecasts
Beretta and Bozzolan (2004)	<ul style="list-style-type: none"> • Content analysis; disclosure index and regressions • 85 annual reports of Italian listed non-financial companies 	<ul style="list-style-type: none"> • Voluntary risk disclosure mainly qualitative • Focus on past and present risks, rather than future risks • Evidence consistent with size effect
Lajili and Zéghal (2005)	<ul style="list-style-type: none"> • Content analysis • 300 annual reports of Canadian listed companies 	<ul style="list-style-type: none"> • Large variation in voluntary risk disclosure • Risk disclosure mainly qualitative
Mohobbot (2005)	<ul style="list-style-type: none"> • Content analysis; disclosure index and regressions • 90 annual reports of Japanese listed companies 	<ul style="list-style-type: none"> • Large variation in voluntary risk disclosure • Risk disclosure mainly qualitative • Evidence consistent with size effect
Groenland, Daals and von Eije	<ul style="list-style-type: none"> • Content analysis; regressions • 125 annual reports of Dutch listed companies 	<ul style="list-style-type: none"> • Risk paragraph consists on the average of 3 percent of the annual report

(2006)		<ul style="list-style-type: none"> • Positive association between mentioning of risk management system and return
Linsley and Shrivs (2006)	<ul style="list-style-type: none"> • Content analysis • 79 annual reports of UK listed non-financial companies 	<ul style="list-style-type: none"> • General statements of risk management outnumber the more specific statements • Evidence consistent with size effect • Correlation between volume of risk disclosures and level of environmental risk
Linsley, Shrivs and Crumpton (2006)	<ul style="list-style-type: none"> • Content analysis • 18 annual reports of Canadian and UK banks 	<ul style="list-style-type: none"> • Evidence consistent with size effect • General statements of risk management outnumber the more specific statements
Abraham and Cox (2007)	<ul style="list-style-type: none"> • Content analysis and regressions • 100 annual reports of UK listed non-financial companies 	<ul style="list-style-type: none"> • Positive association with number of independent directors in Board • Positive association with dual listing in US • Negative association with corporate ownership by long-term institutions • Positive association with level of risk • Evidence consistent with size effect

Deumes (2008)	<ul style="list-style-type: none"> • Content analysis; regressions • 90 prospectuses of Dutch companies 	<ul style="list-style-type: none"> • Prospectuses of Dutch companies generally provide adequate information about the material risks to an investment in a company's securities • Risk disclosure in prospectuses can be seen as an area of best practices when it comes to risk communication
Hassan (2008)	<ul style="list-style-type: none"> • Content analysis; disclosure index and regressions • 41 annual reports of United Arab Emirates listed companies 	<ul style="list-style-type: none"> • Evidence not consistent with size effect • Risk disclosure level related to industry type and degree of leverage

Source: based on Dobler (2008, p31), supplemented with other studies

Appendix 5: Respondents opinion on CRD

The period of existence since incorporation of the company			
	Percent	Valid Percent	Cumulative Percent
least significant	33.3	33.3	33.3
less significant	57.4	57.4	90.7
Significant	3.7	3.7	94.4
more significant	1.9	1.9	96.3
very significant	3.7	3.7	100
Total	100	100	
The type of the external auditor carrying out the audit			
least significant	5.6	5.6	5.6
less significant	14.8	14.8	20.4

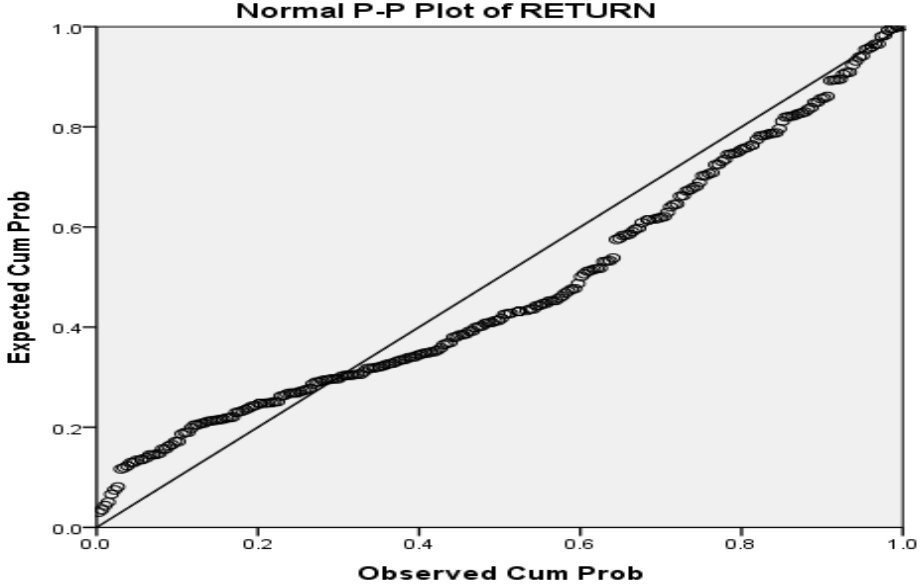
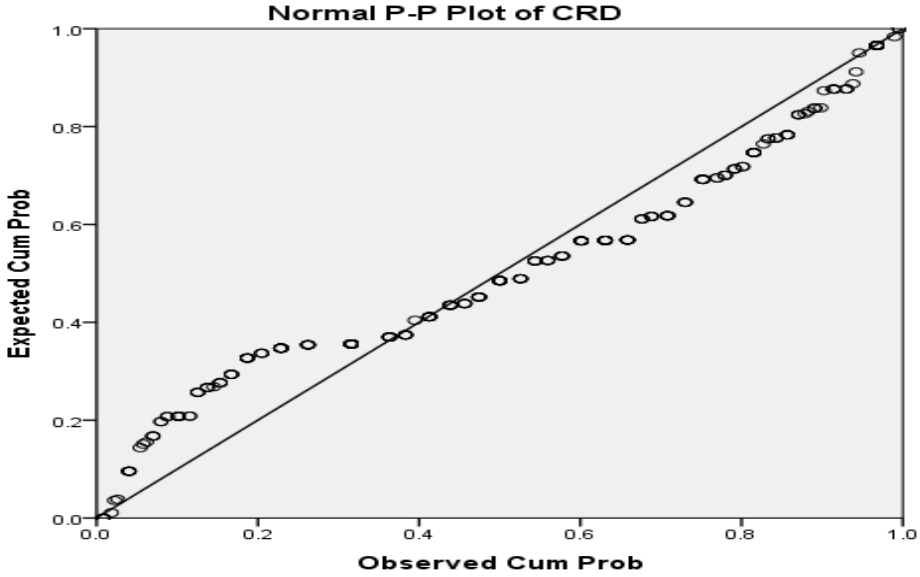
Significant	20.4	20.4	40.8
more significant	21.3	21.3	62.1
very significant	38	38	100
Total	100	100	
The existence of audit committee of a company			
least significant	22.2	22.2	22.2
less significant	10.2	10.2	32.4
Significant	19.4	19.4	51.9
more significant	22.2	22.2	74.1
very significant	25.9	25.9	100
Total	100	100	
The level of institutional to individual share ownership in a company			
least significant	2.8	2.8	2.8
less significant	12	12	14.8
Significant	13	13	27.8
more significant	18.5	18.5	46.3
very significant	53.7	53.7	100
Total	100	100	
The proportion of executive to non-executive board members			
least significant	5.6	5.6	5.6
less significant	10.2	10.2	15.8
Significant	17.6	17.6	33.4
more significant	25.9	25.9	59.3
very significant	40.7	40.7	100
Total	100	100	
The level of performance as measured by profit over time			
	Percent	Valid Percent	Cumulative Percent
least significant	37	37	37
less significant	25.9	25.9	62.9

Significant	18.5	18.5	81.4
more significant	10.2	10.2	91.6
very significant	8.3	8.3	100
Total	100	100	

Level of disclosure

Change in level of corporate risk disclosure	
	Percent
least significant	20.4
less significant	14.8
Significant	24.1
more significant	21.3
very significant	19.4
Total	100
Change in content of the information disclosed	
no change	19.4
less change	5.6
moderate change	20.4
significant change	54.6
Total	100

Appendix 6: Q-Q Plot of Regression standardized Residual



Appendix 7: Histogram on standardized Residual

