EFFECT OF SELECTED BOARD CHARACTERISTICS ON VOLUNTARY DISCLOSURE AMONG MANUFACTURING FIRMS LISTED IN NAIROBI SECURITIES EXCHANGE

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A research project report submitted in partial fulfilment of the requirement for the degree of master of business administration of South Eastern Kenya University

2019
DECLARATION

I understand that plagiarism is an offence and I therefore declare that this research project is my original work and has not been presented to any other institution for any other award.

Signature: ...................... Date..............................

Michael Kimeu Kamwana
D61/WTE/20456/2014

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

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DEDICATION

To my dear wife Mercy Gatwiri Kamwana, my parents Mr. and Mrs. Kimeu, My brothers Francis, John, and Boniface, Mr Sammy Mulwa - The principal and the entire fraternity of Mwaani Boys High School.
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## ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>African Development Bank</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CMA</td>
<td>Capital Market Authority</td>
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<td>EU</td>
<td>European Union</td>
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<td>NEDs</td>
<td>Non-executive directors</td>
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<td>NSE</td>
<td>Nairobi Securities Exchange</td>
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<td>TSE</td>
<td>Tehran Stock Exchange</td>
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<td>US</td>
<td>United States</td>
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DEFINITION OF TERMS

Audit Committee: This refers to the number of board members who are members of an audit committee in a listed company (Hussain & Alkdai, 2012).

Board Independence: This is the proportion of non executive directors in a listed company board (Sweti & Attayah, 2013).

Board Ownership: This is the proportion of shares of a listed company which are owned by the board members (Donnelly & Mulcahy, 2008).

Board Size: This is the actual number of board members who are voted during annual general meeting to spear head firm operation for a given financial year (Sweti & Attayah, 2013).

Gender Diversity: This is the proportion of females in the board of a listed company (Nalikka, 2009).

Voluntary Disclosure: Refers to sharing information publicly other than what is required by laws or regulations done for the sake of companies’ images, investors and accusation risk avoidance (Tian & Chen, 2009).
ABSTRACT
In pursuit of corporate goals agency relationship will be a recipe for conflict depending on the levels of information asymmetry. Voluntary disclosure can be influenced by several factors thus this study sought to find out the effect of selected board characteristics on voluntary disclosure of manufacturing listed companies in Kenya. The general objective of the study was to examine the effect of selected board characteristics on voluntary disclosure among manufacturing companies listed in Kenya. The study specifically, sought to find out the effect of board size, board independence, board ownership, gender board diversity and audit committee on voluntary disclosure. The study is significant to current and potential investors, government and policy makers and academicians. The study was guided by agency, signaling and stakeholders theory. A census approach was used to select ten companies which are listed in manufacturing sector and have continuously traded in Nairobi Securities Exchange in 2012 to 2016. The researcher used readily available secondary data from 2012 to 2016 for the listed manufacturing firms. In particular, secondary data was extracted from NSE Hand Books available from CMA libraries and audited financial reports. E-views 9 statistical software’s were used to analyse the data collected. Data was analyzed quantitatively by the use of descriptive statistics, correlation analysis and panel regression analysis. Results of the study positive and significant relationship between board size, independent directors, audit committee, gender diversity and board ownership on voluntary disclosure. It was recommended that every manufacturing listed should optimize its board size, independent directorship, audit committees, gender diversity and board ownership as such to enhance voluntary disclosure.
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Disclosures are revelations of how well or bad the management and directors have performed in relation to investments. There are two distinct types of disclosure, compulsory and voluntary disclosure. Scholars such as Polinsky and Shavell, (2006) feels that compulsory disclosure (also known as mandatory disclosure) is superior to voluntary disclosure while others (Tian and Chen, 2009) argues that the two types are of equal importance in their own dimension.

This study was guided by the agency theory, which showed the link between principal and agents as stated by Jensen and Meckling, (1976), the signaling theory showing the case for and against voluntarily disclosing information and finally the stakeholder’s theory show the link between the various stakeholders in an organization and how they influenced the level of information disclosure

1.1.1 Board Characteristics

As the board engages in these daunting tasks, it ought to be well constituted when handling their corporate duties to ensure efficiency and effectiveness in running of the company as per the corporate goals. The board characteristics consists of board size, independence of the directors, committees, director's ownership, age of the Board members, gender diversity, Chief Executive Officer (CEO) duality presence of committees, board meetings among others (Horvath & Spirollari, 2012).

The size of the board or the number of members in the board varies from one country to another. Most regulations do not state specifically the number of the required members even though there exists some guideline for the same (Johl, Kaur & Cooper, 2015). Johl et al. further notes that companies have been left to examine themselves and determine the size that enables them perform effectively. Zhou and Panbuyuen (2008) showed that smaller boards are more effective, active and dynamics than larger boards. However, such a board is likely to suffer from reduced expertise and combat control of managers (Hamed, 2014). Statistics according to Stuart (2014) showed the
average board size among the listed firm in the US and EU do not differ significantly and stood at 10.8 directors in the year 2014.

Capital Market Authority (CMA) calls for a balanced board that is containing both the executives and non-executive directors (NEDs) who are independent or non-independent. NEDs plays a role in monitoring the actions of CEO and executive directors and ensure the shareholders’ interests are met. The principles of good governance advocate for independence of the board members. Too many individuals who are working or had worked for the company are less accountable and increases chance of committing a crime, conceal the truth and hence power separation is necessary. Kenyan Capital Market Authority Cap 485A of 2002 specifies the board should have at least one third of the board member as independent and NEDs who have not served for a term exceeding nine years. Increased urgency for the number of independent NEDs which have seen countries in the US and EU increase the level of independence to 74% and 34% respectively (Ferreira & Kirchmaier, 2013).

The age and gender of the board play a great role as board characteristics. Research has shown that boards become less effective as the average age of its members rises. Recent research by African Stock Exchange has shown most of African companies do have one woman on their board of directors even though, a few (one-third) do not have (African Development Bank [ADB], 2015). Presence of audit committee is another feature of board that is imperative as it help to monitor closely the activities by the management. The size and presence of this committee has been found to improve earning quality (Tian & Chen, 2009).

Gil and Leung (2004) explain CEO duality element exists when CEO serves as the board’s chair thereby weakening the monitoring role of the board over the managers. A need to dissociate the role of CEO and that of board chairperson ensures oversight role is carried in the interest of the funders effectively (Hamed, 2014). Empirical studies have revealed that board ownership assists company minimizing the interest to disclose further information while also lowering agency costs (Yanesari, Gerayli, Abadi & Ma’atoofi, 2012). More importantly in the characteristics is the presence of committee especially audit committee. Previous studies have shown impact of audit
committee impacting the firms’ disclosure (Hamed, 2014; Johl et al. 2015; Yanesari et al., 2012).

1.1.2 Voluntary and Compulsory Disclosure

Voluntary disclosure refers to sharing information publicly other than what is required by laws or regulations done for the sake of companies’ images, investors and accusation risk avoidance (Tian and Chen, 2009). It provides both financial and non-financial information. A high degree of disclosure attracts great attention from members of the public and hence increase the investors’ confidence which explain the reasoning behind which companies are striving to achieve maximum disclosure. Moreover, it is a way of minimising adverse selection and moral hazards and ultimately reduces information asymmetry (Wang, Sewon & Claiborne, 2008).

Voluntary disclosure has been classified differently by past studies but this study adopts three categories as done by (Eng & Mak, 2003; Lim, Matolcsy & Chow, 2007; Zhou & Panbunyuen, 2008); strategic information, financial and non-financial information. First, strategic information focuses on the future of the company and the past which conveys the status of the company both national and transnational. Strategic information emerges from company policy, objectives, capital expenditure and research and development expenditure budget.

Second, financial information is expressed in monetary terms that can be evaluated through ratio such as liquidity, profitability, gearing/leverage and investors’ ratio, forecasting sales and profit and analysis of market shares. These ratios communicate much about the company financial position and as such they should be computed and summarized for a period mostly three or two years to enhance comparison. Lastly, non-financial information relates to employee and activities that encourage corporate social responsibility such as society, environment (reducing pollution), donations, and charity and so on. For employees’ disclosure is concerned about their welfare, any staff training and again (Zhou & Panbunyuen, 2008).
Compulsory disclosures are “those aspects and information which must be published as a consequence of the existence of some legal or statutory stipulations, capital markets, stock-exchanges commissions or accounting authorities regulations,” (Alina & Ion, 2010). This ensures that the user’s need for the information are satisfied and also ensure that the quality of the production is controlled by the set laws and standards (Tian & Chen, 2009). Categorically, mandatory disclosure is determined by: issuer or company, stakeholders, regulations, standards, disclosure period and dissemination means like a web site, printed among others. Compulsory disclosure includes disclosure of: assets, liabilities, income, expenditure, contributions by and distributed to the owners, cash flow, equity among others.

There are notable key differences on voluntary and compulsory disclosure. First is on time: as Tian and Chen (2009) points outs that compulsory disclosure is fixed for a given period while voluntary disclosure can be done at any right time. Second is on the root of disclosure: compulsory disclosure is monopoly of companies’ self-information whilst voluntary is for globalization of market and economy. Third difference is on content: compulsory disclosure conveys basic financial information, information on board and top managers, vital related transactions and explanation of important items, whereas voluntary disclosure contains future strategies, research and development plans, forecasts, project analysis, and financial information analysis and so on (Tian & Chen, 2009).

Last but not least, voluntary disclosure can be displayed anywhere, for example annual reports, public announcement, booklets, website, road show, etc. whereas compulsory disclosure is normally shown in the annual report, interim report, and season report. Now to sum it all, voluntary disclosure is a significant indicator of the earning quality of a company that would help investors in making better decisions on allocation of their capital.

1.1.3 Manufacturing Firms Listed In Nairobi Securities Exchange (NSE)

NSE is the principal stock market in Kenya for both local and foreign investors; it commenced trading in 1954 when it was registered under Societies Act (NSE, 2016).
NSE is also a member of African Securities Exchange Association. In terms of trading volumes NSE is fourth largest in Africa in terms of market capitalization as percentage of GDP (Oguna, 2014). Many companies had been listed in the Exchange, and by then there were 65 companies whose shares were doing quite well. NSE was classified into 11 sectors among the manufacturing firms. Among them was listed manufacturing and allied companies group where all the companies in that industry were included for ease and like with like comparison. There were ten listed companies under the group of manufacturing and allied firms, namely B.O.C Kenya Ltd, British American Tobacco Kenya Ltd, Carbacid Investments Ltd, East African Breweries Ltd, Mumias Sugar Co. Ltd, Unga Group Ltd, Eveready East Africa Ltd, Kenya Orchards Ltd, A. Baumann CO Ltd and Flame Tree Group Holdings Ltd (http://www.nse.co.ke).

1.2 Statement of the Problem

Transparency and accountability remains to be the greatest desire of stakeholders from any firm that they have entrusted with good faith to change their life in one way or the other. Transparency serves to promote fair and efficient administration of corporations, according to legal and regulatory business requirement, hence achieving the predefined objectives that would see strategic goals being met in the long-term to satisfy key stakeholder that is, owners, financiers, customers and suppliers (Tarus & Omandi, 2013). Lack of full disclosure on the activities of the company had left shareholder at risk of manipulated earnings as recently witnessed in with rising cases of scandals, frauds, suspension and even delisting.

Despite continued empirical enquiry on factors influencing voluntary disclosure there was limited nexus of corporate governance transparency on voluntary disclosure. Again, none of the study had focused on manufacturing companies listed Nairobi securities exchange listed companies in particular. This study therefore aimed to fill that gap by focusing specifically on all manufacturing companies that were listed in Kenya. Moreover, most of the studies which had been undertaken had been on corporate governance and firm performance (Tarus & Omandi, 2013). Though, several studies (Zhou & Panbunyuen, 2008; Sweti & Attayah, 2013; Othman, Ishak,
Arif & Aris, 2014; Abad, Lucas-Pérez & Minguez-Vera, 2014) had used secondary data, they used ordinary least squares despite panel regression analysis being the most appropriate because the data was be panel in nature (Baltangi, 2005).

1.3 Research Objectives

The general objective of the study was to find out the effect of selected board characteristics on voluntary disclosure among the manufacturing firms that were listed in NSE.

1.3.1 Specific Objectives

In order to achieve the main objective, the study was guided by the following objectives:

i. To find out the relationship between board size and the voluntary disclosure among manufacturing companies listed in NSE.

ii. To establish the relationship between the proportion of independent directors and voluntary disclosure among manufacturing companies listed in NSE.

iii. To establish the relationship between size of audit committee and voluntary disclosure among manufacturing companies listed in NSE.

iv. To determine the relationship between gender board diversity and voluntary disclosure among manufacturing companies listed in NSE.

v. To establish the relationship between board ownership and voluntary disclosure among manufacturing companies listed in NSE.

1.3.2 Research Questions

The study sought to answer the following questions:

i. What is the relationship between board size on voluntary disclosure among listed manufacturing companies in NSE?
ii. What is the relationship between independent directors and voluntary disclosure among listed manufacturing companies in NSE?

iii. What is the relationship between audit committee and voluntary disclosure among listed manufacturing companies in NSE?

iv. What is the relationship between board gender diversity and voluntary disclosure among listed manufacturing companies in NSE?

v. What is the relationship between board ownership and voluntary disclosure among listed manufacturing companies in NSE?

1.4 Justification of the Study

Firms listed and non-listed are always concerned with the level of information asymmetry which can be mitigated through voluntary disclosure. The main reason for undertaking this study was primarily because most of the studies had been customized for the developed countries such as the United States and United Kingdom with very limited studies in developing economies.

1.5 Significance of the Study

This study was to be beneficial to the government through the various regulatory agencies such as market authorities in Kenya, capital market authority. The study was to address the loop holes in the level of voluntary disclosure and consequently give recommendations which were aimed at ensuring organizational sustainability and continued operations with minimal chances of information asymmetry.

This research will aid the researchers and academicians seeking to understand the challenges faced in voluntary disclosure. In addition to the problem’s institutions face as it pertains voluntary disclosure, the researchers will have an insight on the possible areas that need to be properly addressed even before embarking on the real research.

1.6 Limitations and Delimitations of the Study

The study employed use of secondary data to be retrieved from audited annual financial statements. Although, the quality of these reports is reliable and expected to
meet international financial reporting standards requirements, there are chances of undetected errors which may lead to inherited limitations in case of error of original entries. Secondly, the study drew its firms from those listed in manufacturing sector; this implies data collected may have had different accounting cycles with some ending in March, June or December, customised studies should be carried out to ensure uniformity in accounting periods and cycles. Although, the choice of this region was guided by budgetary constraints facing the researcher, the applicability of the findings should be limited to the small region. To eliminate biased application of the findings a similar study ought to be a carried out and draw respondents from different sectors amongst companies listed in NSE and considered different time periods.

Although, there are related issued associated with voluntary disclosure the current study limited its examination on three aspects of voluntary disclosure which were financial, non-financial and strategic disclosure. Secondly, despite of several aspects being documented to have influence on voluntary disclosure in this study empirical and conceptual examination was limited to influence of board size, non-executive directorship, gender diversity and board ownership. Thirdly, though the study adopted panel data during analysis panel diagnostic tests were not executed owing to researchers’ statistical capability. This did not have adverse effects on study findings. Finally, there are several companies which are quoted in NSE. This study limited its sampling size to manufacturing companies owing to their uniqueness and expected contribution in economic development. Consequently, applicability and generalization of these study findings will be limited to quoted manufacturing companies in Kenya, non-quoted ought to empirically investigate the influence of selected characteristics on their voluntary disclosure.

1.7 Scope of the Study
The study was limited to 10 manufacturing companies listed in Nairobi securities exchange (NSE). The study used secondary data which was collected through the use of audited financial statement which were readily available in the websites as well as physical visit to CMA library to retrieve information for all quoted companies.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter introduced three theories to explain the objectives of the study and the problem at hand, namely agency theory, stakeholder’s theory and signaling theory. The theories were discussed based on their proponents, their strengths, weaknesses as well as assumptions. In addition, past studies on corporate governance and voluntary disclosure were as well discussed. Secondly, the chapter discussed the empirical review, conceptual framework, summary of the literature and the research gaps that were emanating from the past studies.

2.2 Theoretical Review

The theoretical framework is a summary of your theory regarding a particular problem that is developed through a review of previous research on the variables involved (Bryman & Bell, 2007). It identifies a plan for investigation and interpretation of the findings. The theoretical framework involves a well-supported rationale and is organized in a manner that helps the reader understand and assess your perspective (Mugenda & Mugenda, 2008). The purpose is to demonstrate that the relationships you propose are not based on your personal instincts or guesses, but rather formed from facts obtained from authors of previous research (Oso & Onen, 2009).

In the forthcoming section agency theory which showed the link between principal and agents as stated by Jensen and Meckling in 1976; secondly signaling hypothesis showing the case for and against voluntarily disclosing information and finally the stakeholder’s theory showing the link between the various stakeholders in an organization and how they influenced the level of information disclosure.
2.2.1 Agency Theory

This theory was brought forth by Jensen and Meckling (1976) when they posited that an agency relationship applies where individual(s), the principal, enters into a contract with another individual(s), the agent, to carry out some functions that includes decision making. In company setup, managers act as the agents of the company owned by shareholders who are the principal delegating duties or discharging their responsibility to a third party. Due to the different interests of the parties that make up a company, agency costs may arise. In case of abnormal activities shareholders employ monitoring tools at their own cost to inhibit further deterioration while on the other side managers have incurred bonding cost to convince the principals that no harm that would emerge owing to their activities and decisions.

Further cost may be incurred in what can be termed as a residual cost that arises when agents diverge from the primary objective of the shareholders, which is to maximize their return (Shehata, 2014). In short, as Jensen and Meckling (1976) posited agency cost would comprise of the cost of monitoring and evaluation, residual cost and bonding cost. There exist agency problems in the principal-agent relationship since management may be more informed owing to access to relevant information while the shareholders on the other hand will depend on the reported information which may not be fully conclusive. And this is referred to as information asymmetry.

According to Ayemere and Elijah, (2015) information asymmetry further results agent problems of two forms moral hazard and adverse selection. As a way of a mitigating these agency problems, companies may adopt optimal contracts and regulation governing private disclosure for managers as suggested by Healy and Palepu, (2001). And as Jiraporn and Gleason (2007), and LaFond and Watts (2008) observed the financial statement usefulness is slowly losing importance, and therefore monitoring role has to be fully functional. Another way of solving or reducing agency problems and costs is through the use of corporate voluntary disclosure (Barako et al., 2006) which is a way of convincing external stakeholders through publicity and reports that reveal as much as users would like to know about the company, including indicating managers to be acting optimally (Watson, Shrives & Marston, 2002). However, this contrasts earlier observation by Al-Razeen and Karbhari (2004) that shareholders
need only to be furnished with the minimum amount of information for their financial and non-financial decision making.

With an intention of protecting, management interests may further resolve to earnings management, which in the long run may have a lethal impact on the company value due to concealed true economic firm value (Basiruddin, 2011). Ayemere and Elijah (2015) study of information asymmetry in Nigeria further affirmed that the agency problem can also be controlled by enhancing monitoring tool both internal and external with excessive reporting and auditing the books of account thoroughly and frequently. And as economic theory suggests company’s obligation to increase levels of disclosure should lower the information asymmetry element of a company’s cost of capital. Conflicts of interest suggested by stakeholder theory, seem to be solved by the agency theory where management realizes that corporate voluntary disclosures is a powerful tool to communicate with stakeholders plus reducing the cost of capital (Hassan & Melegy, 2015). However, it must be recognized that information might have a negative value, especially if because investors may perceive themselves to be worse off if they consider that the company is disclosing information which might be exploited to their detriment.

The theory is appropriate in the current study since the board members are assigned the responsibility of day to day running of an organization. Since they are agents of the shareholders they ought to continuously disseminate the relevant information to the shareholders for optimal decision making. Information sharing is not free from conflict especially if the shareholders perceive that board members may induce the firm management depending on the level of information access because they have even the confidential information which if misused may lead to insider trading.

2.2.2 Signaling Theory

Signaling theory can be traced by from the studies of Arrow (1972) and Spence (1973). This theory was arrived by Spence (1973) when wishing generalizes about information economics. As Miller (2002) enlightens research on disclosure in the financial market proposes that firms with most profits tends to supply market with more and better information. Studies such as Lang and Lundholm, (1993), Wallace,
Naser and Mora (1994) confirm this proposition while others like to establish no relationship (Lau, 1992; Raffournier, 1995) and in some instance a negative relationship (Wallace & Naser, 1995).

Bini, Giunta and Dainelli (2010) in their study of signaling theory and voluntary disclosure in the UK and Italy financial observed that it is not always the case that company which make most profit have provided the market with extra information. Bini et al., (2010) conclusion come about since market has been found to be in a position to limit their production and usage of information, thus concentrating on the core activities of the agency relationship. In fact, companies that make less profit are seen to be induced to give additional information voluntarily and as Bini et al., (2010) refer them to be useless and doctor to appease investors.

The core objective of disclosure is to alert analyst and investors about quality and values. Spence (1973) clarification of information asymmetry on corporate reporting showed reasons that would lead companies to signal certain information. Spence alludes that voluntary disclosure would be used to signal better performance thus attracting investment through reputation created (Shehata, 2014). According to Birjandi, Hakemi and Sadeghi (2015) companies that are well-known for thorough financial reporting and extra information stands firm in competition for resources. This could be explained by the trust developed by investors over time.

Dissemination of strategic information during the annual general meeting via audited financial statement minimizes the level of risk exposure among the stakeholders in an organization. The disclosure of the steps to be undertaken by a corporation so as to remain relevant within a particular time may trigger better firm performance in future. Since there are differing classes of directors with some being executive while the others non-executive it’s paramount to benefit from the skills composition in an organization. Moreover, the presence of audit committee in an organization will minimize the levels of information asymmetry since the shareholders will depend on more than one of source of information for the sake of decision making.
2.2.3 Stakeholders Theory

This theory was first described by Edward. The theory postulates that anyone who is involved or has invested in a company is usually affected by the company employees, environmentalists near the company plants, vendors, governmental agencies and more. The theory assumes that the business needs to ensure compliance with the spirit of both ethical standards and international law. Moreover, it also assumes that businesses also have to take full responsibility for all of the actions of the company and the impacts those actions have on their various stakeholders. Bridoux et al. (2014)

Stakeholders theory basically advocates for the purpose of the organization to be aligned with the group of stakeholders in the organization so that they can best manage different interests, needs and viewpoints (Friedman, 2006). According to Fontaine, Haarman and Schmid (2006) management should take it as their responsibilities to strike a balance in managing stakeholders’ benefits including involving them in decision making and acting as agents to stockholders thus overseeing the survival of the firm in the long term.

Approach to stakeholder concepts takes three forms: normative stakeholder theory, descriptive stakeholder theory and instrumental stakeholder theory. Friedman (2006) describes the normative stakeholder theory as theory where managers or stakeholder learn how to act and view the role of the corporation base on ethics. Descriptive stakeholder theory deals with behaviour and views on actions and roles of managers and stakeholders. Instrumental stakeholder theory deals with how managers should act if they want to flavor and work for their own interests (Fontaine et al., 2006).

The theory tends to explain the reason why most firms need to engage in an act of disclosing more information voluntarily. To gain support from stakeholders, who includes managers, shareholders, creditors, customers, suppliers, government, trade unions, and the public (Uyar & Kılıç, 2012a), companies ought to convey information relevant to stakeholders (Smith, Adhikari & Tondkar, 2005). Demand for more information from stakeholders to reduce information asymmetry explain the reason
why it must put clear all the activities engaged by the companies which can only be achieved through additional information.

This theory, even after being so elaborate in some ways it remains ambiguous, especially on its foundations, thereby presenting a given number of limitations. On one side this theory suggests a relational representation of the organization based on complete contracts, which suppose that the conflicts of interests can be solved by ensuring a maximization of each group interests. On the other side this theory builds a reduced representation of the social and environmental responsibility of the company (Fontaine, 2006). Apart from this ambiguity, one is also left wondering how the interests of those parties who are too weak are represented. Another possible question for this theory, is whether we can reduce the general interest to the sum of each group of stakeholder interests? Again, many theorists come up with different definition of stakeholder thus leaving a question of which is the most appropriate?

2.3 Empirical Review

This section reviews previous studies that have been conducted in line with five independent variables as related to voluntary disclosure in different parts of the world. The reasons for those studies, methodology and findings of the study are cross examined with other empirical studies to establish any gap in the knowledge extracted.

2.3.1 Board size and Voluntary Disclosure

Karagul and Yonet (2014) examined the Turkish case on the impact of board characteristics on voluntary disclosure. A board characteristic was attributed to board size, CEO duality and board independence. Secondary data was drawn from annual financial statement of the companies. Both descriptive and inferential statistics were used to analyse the data. Correlation and regression analysis showed that there was a positive and significant relationship between board size and voluntary disclosure. It would have been appropriate to adopt panel data analysis techniques since the data was panel in nature rather than use ordinary least square regression analysis.
Sartawi, Hindawi, Bsoul and Ali (2014) examined the effect of board composition on voluntary disclosure among Jordanian listed companies. Board composition was defined as board size, non-executive directors and duality. A sample of 103 firms which were actively trading in 2012 was used in the study. Multiple regression analysis was used to analyse the data. Results of the study showed that there was a positive and significant relationship between board size and voluntary disclosure. These results were in agreement with Gandia (2008) who argued that though increased board size increases agency costs, it is more beneficial since the level of corporate transparency also increases. This is attained through heterogeneity of ideas and capacity which enhances organizational attainment of vision and mission.

Ramadhan, (2014) examined the association between board composition, the existence of audit committees, ownership structure and the level of voluntary disclosure in the annual reports of listed companies in Bahrain Stock Exchange. Information was generated using content analysis of annual reports. A disclosure check list consisting of thirty items were identified from previous research and a self-constructed voluntary disclosure index was developed. Descriptive statistics, correlations and regression analysis were used to test the research hypotheses. Contrary to expectations and consistent with some previous empirical studies, the results found that there was no relationship between the extent of voluntarily disclosure and both, board composition and audit committees, but there is a negative and weak relationship with ownership concentration.

Sweti and Attayah (2013) conducted a research to determine the critical factors influencing voluntary disclosure in for those companies listed in Palestine Exchange for year 2011 and 2007. Among the factors under investigation were the board size, non-executive directors (NED) and audit committee. Board size was looked at as the number of members present in the board of directors, NED by the proportion of the non-executive directors to the total while voluntary disclosure in this study was judged by the amount and detail of non-mandatory accounting and non-accounting information that is contained in the management discussion and analysis in the annual report and this information was categorized into strategic,
non-financial and financial information. Multiple regression analysis revealed that these factors do have a positive impact on the firm’s voluntary disclosure.

Using data sets of totals of ninety companies listed on the Tehran Stock Exchange from year 2006 to 2010, Heydari, Razeghi and Sharifi (2015) investigated the relationship between institutional ownership with financial policies and firm performance. Firm performance was assessed using ROE, ROA and Tobin Q. Correlation and multiple regression analysis showed an institutional ownership has positive and significant relationship with dividend policy and negative and significant relationship with financial leverage. Institutional ownership showed a positive relation with firm performance. The choice of regression analysis was inappropriate for this study since the data were time series and cross section in nature, hence it would have been correct to apply panel data analysis method such as the fixed random effect. Again, this study did not test relation between the specific policy like the leverage and dividend policy with firm performance. The current study tried to follow the correct method of analysis and test for specific policies.

Zhou and Panbunyuen (2008) examined the role of board composition on different levels of voluntary disclosure. The study used secondary data from annual financial statements of companies listed in China and Sweden. Multiple regression analysis showed that there was a positive and significant relationship between board size and strategic information disclosure, financial information disclosure, non-financial disclosure and the overall disclosure. Although, the study collected panel data among listed companies it used ordinary least squares regression analysis and it would have been appropriate to use panel data regression analysis procedure which include pooled effects, fixed effects and random effects regression analysis. Moreover, regression analysis is based on several assumptions and this study did not test the possible violation of any of the five assumptions.

2.3.2 Independent Directors and Voluntary Disclosure

Yanesari, Gerayli, Maatoofi and Abadi (2012) explored the specific board characteristics and voluntary disclosure in Iranian firms using 95 public traded firms
for duration of six years starting 2005 via 2010. The specific characteristics of the board under study were board independence as proxied by the number of independent directors in the board, chief executive officer duality and board ownership. Voluntary disclosure was operationalized by 46 information items expressing disclosure policy whereas board independence was seen as proportion of independent directors. Applying multiple linear regression, the empirical test indicated where there was a high degree of board independence, there was an associated improvement in the level of disclosure.

Letting, Aosa and Machuki, (2012) in their study on Board Diversity and Performance of Companies Listed in Nairobi Stock Exchange concluded that when using the Ordinary Least Squares (OLS) regression, their results showed a weak positive association between board diversity and financial performance. On overall, their results indicate a statistically non-significant effect of board diversity on financial performance except for the independent effect of board study specialization on dividend yield.

In China and Sweden, Zhou and Panbunyuen (2008) applied quantitative method to examine the association between the board composition and different types of voluntary disclosure. Board composition was proxied by the proportion of independent directors in regard to all directors in companies while the different types of voluntary disclosure made up a disclosure checklist comprising strategic, non-financial and financial information. A sample of 50 companies taken from different sectors in Shanghai Stock Exchange was used for analysis. The results from linear regression analysis indicated an insignificant association between proportion of independent directors and voluntary disclosure from the sample taken. Though this study investigated different sectors in China and Sweden these sectors do not comply to the same regulations and therefore level of voluntary disclosure may differ. To overcome this challenge, the study opts to examine only those firms listed in stock exchange and those that comply to the manufacturing standards and rules.

Sweiti and Attayah (2016) investigated the effect of critical factors on voluntary disclosure in Palestine securities exchange. The study hypothesized that voluntary
disclosure is influenced by non-executive directors, audit committee, board size, number of shareholders and board activities. The study adopted descriptive research design. Purposive sampling was applied to select 35 listed companies for period 2007 to 2012. Data was analyzed using descriptive statistics, correlation and regression analysis. Regression analysis revealed positive and significant relationship between non-executive directors, audit committee, board size, number of shareholders, board activities and voluntary disclosure in Palestine. It was appropriate to have executed regression analysis assumptions prior to fitting regression models.

Bansal, Lopez-Pene and Lazaro (2018) investigated the effect of board independence on corporate social responsibility disclosure. Moreover, the moderating role of family ownership was examined. Panel research design was adopted and a sample of 29 companies was drawn from 29 countries for a period 2006 to 2014. Data was analyzed using Tobit regression analysis. Results of the study revealed inverse and significant influence of board independence on corporate social responsibility disclosure. Moreover, family ownership had significant moderating effect was reported. It was concluded that family ownership reduces the level of information asymmetry between independent director and management courtesy of family ownership.

Okoth and Coskun (2016) investigated the effect of corporate governance on firm performance. The study adopted descriptive research design and simple random sampling to select non-financial listed companies in Istanbul securities exchange. Secondary data was collected for period 2009 to 2013. Data was analyzed through regression, correlation and descriptive statistics. Results of the study revealed positive and significant effect of board governance index and economic value added. Moreover, there was positive and non-significant effect of governance index and return on assets. It would have been appropriate to adopt data for a long period of time to minimize possibilities of small sample size problem.
2.3.3 Audit Committee and Voluntary Disclosure

Othman, Ishak, Arif and Aris (2014) conducted a study on influence of audit committee on voluntary disclosure among 94 firms listed in Bursa Malaysia. Audit committee was identified with tenure, multiple directorship, meeting frequency, committee size, and expertise and voluntary disclosure aspects were adapted from Persons (2009) study in the United States. The study used content analysis to examine the annual reports of these firms as well as multiple linear regressions to establish the association between the study variables. Findings of the study showed that long tenure in the committee and multiple directorships led to high level of voluntary disclosure while meeting frequency, committee size, and expertise had no influence on voluntary disclosure. This study was of its kind as it informs stakeholders what to look for when determining ethics of the committee.

Zhou and Chen (2004) investigated the association between audit committee characteristics (governance expertise, meetings, size, financial expertise and independent) with earning's management through loan loss provisions by commercial banks. However, as the matters are concerned, there are a few studies on the relationship between audit committee characteristics and voluntary disclosure. This study adds new evidence to the audit committee characteristics literature. It focuses on six audit committee characteristics that are; audit committee independence, expertise, frequency of meeting, size, tenure and directorship with its relationship with ethics disclosure.

Nazar and Rahim (2015) investigated the impact of board size on performance of Sri-Lanka companies. The study adopted cross sectional research design. Secondary data was retrieved from annual financial statements of listed companies. Purposive sampling was used to select 109 listed companies. Results of the study revealed negative and significant effect of board size on return on assets. In contrast, there was an inverse and significant effect of board size on return on equity. The study concluded that board sizes had influence on composition of committee amongst board members which had influence on frequency and size of heterogeneous committees.
Madi, Ishak and Manaf (2014) too investigated the effect of audit committee characteristics on voluntary disclosure in Malaysian listed firms in the year 2009. Selecting a sample of 146 firms and using content analysis data from annual reports were explored on disclosure. Several audit committee characteristics were analyzed and related to weighted disclosure checklist. It was found that audit committee independence, size and multiple directorships had positive association with voluntary disclosure whilst audit committee, frequency of meetings and financial expertise had insignificant corporate voluntary disclosure.

Setiany, Hartoko, Suhardjanto and Honggowati (2015) investigated the impact of audit characteristics on financial voluntary disclosure. The study hypothesized that financial voluntary disclosure was dependent on size of audit committee, education heterogeneity of audit committee members, independence of audit committees’ members, tenure of audit committee members and frequency of meetings. Purposive sampling was used to select 100 Indonesian listed companies which comprises of its index. Results of the study revealed that financial voluntary disclosure was dependent on audit committee size, audit committee tenure and independence of audit committee meetings. To minimize model over specification there is need to incorporate alternative corporate governance attributes. This will ultimately investigate the strength of each attribute on financial voluntary disclosure.

Fakhari and Pitenoie (2017) investigated the impact of audit committee and its characteristics on firm information environment. Audit characteristics were operationalized as independence, financial knowledge, gender diversity and audit committee size. Panel research design was adopted and panel data collected from 2008 to 2015. Purposive sampling was used to select 41 companies. Data was analyzed through descriptive, correlation and regression analysis. Results of the study revealed positive and significant effect of audit committee independence, expertise and firm information environment. In addition, there was no significant influence between audit committee gender composition and information environment.
2.3.4 Directors’ Gender Diversity and Voluntary Disclosure

In Finland, Nalikka (2009) sought to probe the impact created by having directors with gender diversity on voluntary disclosure in companies listed in Helsinki Stock Exchange during the period running from year 2005 through 2007. Laying much emphasis on the CEO, CFO and board of directors, data was gathered from a sample of 108 companies’ annual reports. However, the results in this study did not support the extant literature that emphasizes on the need for genders diversity which is assumed to help in decision making since new perceptions on various issues are combined through incorporating all gender in brainstorming sessions (Walt and Ingley, 2007; Rose, 2007). In addition, the gender diversity is thought to bring diversified background, expertise and experience.

Abad, Lucas-Pérez and Minguez-Vera (2014) researched on whether gender diversity in corporate boards has a reduction effect on the level of information asymmetry among the companies listed in Spanish. Taking a sample of 99 firms listed in SIBE (North Korea) in period spanning from 2004 via 2009, and assessing information asymmetry as bid-ask spread while gender diversity was looked at as the presence of women on the boardroom. Asserting the past researches, the results showed that gender diversity on board had an inverse and significant association with the level of information asymmetry in the equity market. This implies that women tend to improve the information environment of the firm not only to the corporate level but also to the low levels.

Mao (2015) empirically investigated the relationship between state ownership, institutional ownership and firm performance in public listed companies in China. Data was collected from a sample of 1019 firms listed in the Shanghai Stock Exchange and ShenZhen Stock Exchange between 2007 and 2014. The research findings establish that state ownership had a negative effect on firm performance due to the fact that the state pursues political goals instead of profit maximization. Institutional ownership was however found to have a positive relationship with firm performance which was attributed to better incentives and financial competency in monitoring management.
In their study, Hassan and Melegy (2015) sought to find the economic consequences of corporate voluntary disclosure for Egyptian listed companies. Tobin’s Q was used to measure the market value while voluntary disclosure was assessed from company annual reports and corporate websites using disclosure index classified into strategic, financial, non-financial and governance information. Weak significant linkages were found between governance information voluntary disclosure and corporate market values. This implies that the content spelt out in annual reports and websites about voluntary disclosure have some extent of economic value.

Gul, Srinidhi and Ng (2011) supported that there is positive relationship between women on the board and the three variables, abnormal return in complex environment; strategic control and stock price in formativeness respectively. This relationship can only be explained by stakeholder theory and not the agency theory unlike earlier suggested. As agency theory explains, promoting a greater number of females tends to improve or impair corporate governance which would further be translated to the financial performance.

Latif, Shahid, Haq, Waqas and Arshad (2018) investigated the impact of corporate governance on firm performance of Manufacturing companies in Kenya. Panel research design was adopted and secondary data collected from 12 manufacturing companies from 2005 to 2012. Data was analysed using regression, correlation and descriptive statistics. Results of the study revealed positive and significant impact of corporate governance on firm performance of manufacturing companies in Pakistan. It would have been appropriate to report panel data diagnostics tests in addition to regression modelling.

2.3.5 Board Ownership and Voluntary Disclosure

A cross-sectional study was conducted by Donnelly and Mulcahy (2008) to assess the relationship between ownership structure by the board and voluntary disclosure in Ireland. Using information contained in annual reports of different companies listed as
of 2002, data was collected for 51 companies. Scores were given to the firms based on the voluntary disclosure checklist that was adopted from Eng and Mak (2003) while ownership was assessed by the proportion of share held by executive directors and block held by institutional investor. The study established that no evidence to support the relationship between ownership structure and voluntary disclosure. This was inconsistent with prediction of agency theory that favours ownership as a solution to the agency problems or conflicts between board members.

Soliman, Ragab and Eldin (2014) investigated listed companies in Egypt for the relationship between board composition and owners and voluntary disclosure. Ownership was determined using the ownership concentration, institution and managerial ownership. The results of the study from the regression showed that there exists no linkage between different forms of ownership and voluntary disclosures. This calls for Egyptian regulators to improve corporate governance so as to optimize ownership structure (Soliman et al., 2014).

For clarity of the future long-term sustainability and ease of information related problems, most companies have opted to disclose more to safeguard the interests of most stakeholders and as Mwiti (2014) observed this additional information comes at a cost to the firm. This is to mean that value enhanced by such information must be evaluated to ensure cost incurred in the process do not out-weigh the benefits to be received.

Akhtaruddin and Haron (2010) examined the connection between board ownership and corporate voluntary disclosure using 124 public listed companies in Malaysia. An indication from the results suggested that ownership of the board members did have low level of linkage with voluntary disclosure.

Chau and Gray (2002 carried research on the environmental factors that influence voluntary disclosure in Hong Kong. These studies specifically focused on ownership structure, organization chart, directors’ personal and academic profiles, number of shareholders sitting on the board, presence of the internal audit committee, age and
profile of executives and individual remuneration. Applying non-parametric approach, firm performance was proxied by Tobin’s Q and ROE. Data collected from the annual reports proved that there existed the positive connection between voluntary disclosure checklist for governance and performance measures. This shows that the level of disclosure plays a meaningful role in signaling performance.

Contrary to Donnelly and Mulcahy (2008) Investigated on board structure, Ownership and voluntary disclosure in Ireland. The results showed that there was a positive and significant relationship voluntary disclosure and non-executive directors. The findings seemed to support the agency theory. Further observation of the Malaysian firms showed that firms that had high percentage of independent non-executive directors witnessed a weaker negative relationship between the board ownership and voluntary disclosure.

2.4 Conceptual Framework

A conceptual framework is the diagrammatic presentation of variables, showing the relationship between the independent variable and dependent variables. In this study, the independent variables will be; board size, independent directors, audit committee, board gender diversity and board ownership. The study seeks to study how these independent variables influences voluntary disclosure among listed companies as indicated by the voluntary disclosure index in the questionnaire. The relationship between the independent variables and dependent variable is presented schematically in the conceptual framework in Figure 2.1.
Independent Variables

- Board size
  - Number of board members
  - Number of shares of board members

- Board independence
  - Percentage of non-executive directors
  - Percentage of executive directors

- Audit Committee
  - Presence of audit committee
  - Frequency of meetings of audit committee

- Board gender diversity
  - Percentage of female board members
  - Percentage of male board members

- Board ownership
  - Percentage of board members shareholding
  - Percentage of non-board members shareholding

Dependent variable

Independent variable

Figure 2.1 Conceptual Framework

Source (author 2018)
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter went through the research design, target population, sampling procedure, sampling size, data collection instrument and then data analysis. At last, the discussion of the credibility of the study including reliability and validity also followed.

3.2 Research Design

According to Kombo and Tromp (2006) research design refer to the guideline demonstrating how the objective of the study will be achieved. This study aimed to establish a causal relationship between the selected board characteristics and voluntary disclosures in the manufacturing firms listed in NSE hence adopts a correlation design. The choice of correlation design was guided by Oso and Onen (2009) who explain that it suitable when the researcher is in needs of establishing the causal relationship hence appropriate for this study.

3.3 Target Population

A population according to Njenga and Kabiru (2009) is defined as the whole set of individuals and objectivity where scientifically generalizable inference can be made. This study targeted all ten (10) manufacturing firms listed in the Nairobi Securities Exchange (http://www.nse.co.ke) as shown in Appendix III.

3.4 Data Collection Instrument

The study was based on secondary data gotten from the annual reports of the manufacturing firms as the data resources. According to Mugenda and Mugenda (2008) data readily available and which has been collected in the past by other
individual(s) other than researcher is referred to as secondary data. This data was suitable in this case as it was readily available, efficient in both monitory and time constraints (Ogwe, 2014). An intense content analysis of the annual reports for the ten (10) listed manufacturing firms was used. The choice of annual reports to provide voluntary disclosure indices was due to numerous reasons: One reason is because it contained voluntary disclosure and preparation of such reports had the analyst and investors in mind (Hamrouni et al., 2015). Secondly, Zarb (2007) documented that annual reports provide the best form of disclosure due to the information contained therein. Another reason was that, as it had been established in the past studies, there was a high positive correlation between corporate disclosure in annual reports and other forms of disclosure (Holland (1998) as cited in Hamrouni et al., (2015).

The study made use of both the qualitative and quantitative data. And as Bryman and Bell (2007) points “quantitative research can be construed as a research strategy that emphasizes quantification in the collection and analysis of data.” For qualitative data, research could be interpreted as a research approach that usually emphasizes words that can be scaled after collection of data for analysis of data (Kothari, 2007).

As Creswell (2008) argues prior to research a researcher ought to develop a data collection instrument which is purely meant to measure, quantify or observe the data under investigation. This study proposed to use Disclosure Check List as the principal instrument for collecting data from the annual report. The same instrument was used by (Githira & Nasieku, 2015; Ndili & Muturi, 2015; Wangechi & Nasieku, 2015; Nduta & Muturi, 2015) in their study in Securities Exchange in East Africa. The Disclosure Check List comprised four kind of information, namely strategic, financial and non-financial information and details to be captured on independent variables.

### 3.4.1 Validity of Research Instrument

Validity of any research is an important criterion that is concerned with the integrity of the inferences made from a study (Bryman& Bell, 2007). Specifically, validity is concerned with assessing whether the researcher is “observing, identifying or measuring the data” coinciding with what researcher is supposed to. (Zhou &
Panbunyen, 2008: 11). According to Bryman and Bell (2007), there are four types of validity: measurement validity, internal validity, external validity and ecological validity. In respect to this study, measurement validity was enhanced by making sure that said variables were the ones that would be considered and with the said measure. Internal validity was shown from the correlation test that established the relationship between variables. Since the secondary data was only be extracted from the annual reports of the sampled companies, the results were expected to have a high degree of credibility and accountability.

3.4.2 Reliability of Research Instrument

Ogwe (2014) defines reliability as the possibility of reproducing the same results if the research were repeated and is particularly linked to quantitative research. As mentioned earlier, the data that was obtained from published annual reports which increased certainty of achieving a high degree of reliability. Again, with the usage of statistical package then the processing of the data it was hoped to be accurate, controllable and reliable.

3.5 Data Analysis

This section was composed of four steps: data preparation through cleaning, data analysis, interpretation and report writing. Microsoft Excel and E views package was used to analyse the data. Panel regression analysis, diagnostic tests for, stationarity, and fixed effects were also used. The panel analysis method was appropriate for the data, since the data had both cross sectional and time series effects.

3.5.1 The model

Fixed effects model assumes that heterogeneous groups or time had different intercepts, while random affects models assumes there are differences in disturbance or the error term. Since there was a dilemma in choosing between random and fixed effects, Hausman test was used to decide on the best model to apply between random effects and fixed effects model. According to Hausman (1978) there will be enough to warrant rejection of the null hypothesis which hypothesis that the model has
random effects against the alternative which states that the model had fixed effects. A multiple regression model for panel analysis can be given as follows:

\[ Y_{i,t} = C + \beta_1 X_{1i,t} + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \beta_4 X_{4i,t} + \beta_5 X_{5i,t} + \epsilon_{i,t} \]

Y = Voluntary Disclosure, X1= Board Size, X2= Independent Directors, X3= Audit Committee, X4= Gender diversity, X5= Board ownership, \( \epsilon_{i,t} \) = error term, i= the specific firm, t=time in years

Hausman test was applied to determine which of the two models (FE or RE) is appropriate.

3.5.2 Measurement of Variables

This section displayed the selected board characteristics in the form of independent variables. The selected board characteristics consisted of board size proxied by the number of members in the board, independence of directors proxied by number of independent directors in board and the audit committee assessed based on its presence and number of members in the committee, board gender diversity based on the number of female directors in the board and board ownership based on the number of board members who are shareholders in the company. The measurement of dependent variable (voluntary disclosure) used disclosure check index that contained information on strategic, financial and non-financial information as shown.

In the voluntary disclosure items shown in Appendix II were treated to have equal importance even though the study acknowledged that there could be variability in the content. This helped in avoiding subjectivity as was suggested by Hamrouni (2015). A value of 1 was entered when the disclosed item was present and 0 when absent. Finally, the total score was computed as the un-weighted score sum of all index items. Level of voluntary disclosure for every was calculated as

\[
\text{Level of disclosure} = \frac{\text{Actual items disclosed}}{\text{Total possible items in the index}}
\]
The independent variables were assessed by the number of: board members, independent directors, audit committee members’ presence of audit committee, board gender diversity and board ownership was outlined in the same annual reports.

Table 3.1 Operationalization of Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measures</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Voluntary disclosure</td>
<td>Strategic information index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-financial information index</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financial information index</td>
</tr>
<tr>
<td>X₁</td>
<td>Board Size</td>
<td>-Number of board member</td>
</tr>
<tr>
<td>X₂</td>
<td>Independent directors</td>
<td>-Number of independent directors</td>
</tr>
<tr>
<td>X₃</td>
<td>Audit committee</td>
<td>Number of committee members</td>
</tr>
<tr>
<td>X₄</td>
<td>Gender diversity</td>
<td>Proportion of female in the board.</td>
</tr>
<tr>
<td>X₅</td>
<td>Board Ownership</td>
<td>Percentage of shares owned by the board members</td>
</tr>
</tbody>
</table>

Source: (Meek, 1995; Eng & Mak, 2003; Lim, Matolcsy & Chow, 2007; Zhou & Pan bunyuen, 2008; Xie, Davidson & DaDalt, 2003; Peasnell, Rope & Young, 2001; Wakaba, 2014; Anderson et al., 2003; Al-Matari et al., 2012; Abad et al., 2014; Soliman et al., 2014.)
CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

The current chapter presents the secondary data collected from annual financial statements of listed manufacturing and allied companies in NSE from 2012 to 2016. In the current chapter descriptive analysis, diagnostic tests and panel data analysis is presented. The target populations for the study 10 companies though only seven were listed from 2012 to 2016.

4.2 Descriptive Analysis

In statistics, the Jarque–Bera test is a goodness-of-fit test of whether sample data have the skewness and kurtosis matching a normal distribution (Kothari, 2011). If the p value is less than 0.05, then the data is not normally distributed. Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the centre point. Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution (Kothari, 2011). The skewness for a normal distribution is zero, and any symmetric data should have skewness near zero. Negative values for the skewness indicate data that are skewed left and positive values for the skewness indicate data that are skewed right. By skewed left, we mean that the left tail is long relative to the right tail. Similarly, skewed right means that the right tail is long relative to the left tail (Kothari, 2011). The values for asymmetry and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution (Sekaran & Bougie, 2010). Descriptive analysis for the data was carried out and the results are shown in Table 4.1 below
### Table 4.1 Descriptive Analysis

<table>
<thead>
<tr>
<th></th>
<th>VD</th>
<th>Board</th>
<th>Size</th>
<th>Independent Directors</th>
<th>Audit Committee Size</th>
<th>Gender diversity</th>
<th>Managerial ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.68</td>
<td>10</td>
<td>5</td>
<td>4</td>
<td>0.24</td>
<td>0.136</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>0.75</td>
<td>9</td>
<td>5</td>
<td>3</td>
<td>0.22</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>0.9</td>
<td>15</td>
<td>8</td>
<td>10</td>
<td>0.57</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>0.24</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.19</td>
<td>2.11</td>
<td>1.91</td>
<td>1.78</td>
<td>0.15</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>0.28</td>
<td>0.42</td>
<td>0.12</td>
<td>1.80</td>
<td>0.27</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.50</td>
<td>2.80</td>
<td>1.66</td>
<td>5.93</td>
<td>3.18</td>
<td>2.65</td>
<td></td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>1.96</td>
<td>1.09</td>
<td>2.70</td>
<td>31.42</td>
<td>0.48</td>
<td>5.82</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>0.51</td>
<td>0.58</td>
<td>0.26</td>
<td>0.00</td>
<td>0.79</td>
<td>0.05</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>23.65</td>
<td>339.00</td>
<td>160.00</td>
<td>144.00</td>
<td>8.51</td>
<td>4.76</td>
<td></td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>1.21</td>
<td>151.54</td>
<td>124.57</td>
<td>107.54</td>
<td>0.76</td>
<td>0.28</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
<td></td>
</tr>
</tbody>
</table>

The results in the table 4.1 above indicate that, any variable whose Jarque Berra $p$ value was greater than 0.05 was normally distributed. The average voluntary disclosure among manufacturing listed companies was 68%. The average board of listed manufacturing companies in Kenya was 10. Gender diversity averaged at 24%.

### 4.3 Panel Diagnostic Tests

Various diagnostic tests were carried out prior to fitting regression model; they include stationarity, multicollinearity, Hausman test and serial correlation.

#### 4.3.1 Stationarity Tests

Since the data had time series characteristics, stationarity features were evaluated so as to confirm variance finite characteristics, in which departure from the mean value as compared to non stationary series which keeps on fluctuating (Gujarati, 2012). Phillip Perrons (PP) was used to test for stationarity and the results are shown in Table 4.2 below. The test assumes that the data will have unit root against the alternative that
the data was generated from stationary process. If the p value is less than 0.05, then the data is assumed to be from stationary process.

Table 4.2 Unit Root Test at Levels

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test at levels</th>
<th>Philips Perrons (PP) Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>T Statistic</td>
</tr>
<tr>
<td>Voluntary Disclosure</td>
<td>Constant</td>
<td>-4.30</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-4.35</td>
</tr>
<tr>
<td>Board Size</td>
<td>Constant</td>
<td>-5.36</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-5.31</td>
</tr>
<tr>
<td>Independent directors</td>
<td>Constant</td>
<td>-4.27</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-4.23</td>
</tr>
<tr>
<td>Audit committee</td>
<td>Constant</td>
<td>-5.57</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-5.57</td>
</tr>
<tr>
<td>Gender Diversity</td>
<td>Constant</td>
<td>-6.02</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-6.66</td>
</tr>
<tr>
<td>Board ownership</td>
<td>Constant</td>
<td>-6.56</td>
</tr>
<tr>
<td></td>
<td>Constant and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trend</td>
<td>-6.46</td>
</tr>
</tbody>
</table>

From the table above, the results indicates that Voluntary disclosure, board size, independent directors, size of audit committee, gender diversity and board ownership
all had a value of zero and thus it can be concluded that all the variables were stationery.

4.3.2 Hausman test

Since the data was panel in nature, the most appropriate model to use was either fixed effects or random effect. Thus, it was paramount to examine the most appropriate model between FEM and REM using Hausman test. If the p value > 0.05, we should use the random effects model and if p value < 0.05, we use the fixed effects model. According to Hausman (1978) there will be enough to warrant rejection of the null hypothesis which hypothesis that the model has random effects against the alternative which states that the model had fixed effects. The results for the test are shown in Table 4.3 below.

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hausman Test</td>
<td>5.13</td>
<td>5</td>
<td>0.40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Fixed</th>
<th>Random</th>
<th>Variable (Diff.)</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size</td>
<td>-0.04</td>
<td>-0.00</td>
<td>0.00</td>
<td>0.06</td>
</tr>
<tr>
<td>Independent Directors</td>
<td>0.04</td>
<td>0.04</td>
<td>0.00</td>
<td>0.92</td>
</tr>
<tr>
<td>Audit committee size</td>
<td>-0.00</td>
<td>0.00</td>
<td>0.60</td>
<td>0.60</td>
</tr>
<tr>
<td>Gender diversity</td>
<td>-0.15</td>
<td>0.24</td>
<td>0.09</td>
<td>0.19</td>
</tr>
<tr>
<td>Board ownership</td>
<td>0.95</td>
<td>0.47</td>
<td>0.12</td>
<td>0.15</td>
</tr>
</tbody>
</table>

From the table 4.3 above, the results revealed that the most appropriate model to fit was the random effects model since the p value > 0.05.

4.3.3 Correlation Analysis

Karl Pearson correlation analysis was carried to examine the strength of the association between voluntary disclosure and selected board characteristics. The Karl Pearson test is preferred in this case because the variables were in ratio scale; otherwise if the variables were in nominal or ordinal scale we should have used
Spearman’s rank correlation which measures a monotonic correlation between the variables (Kothari, 2011). Currently, none of the variables was in ordinal scale hence the study adopted Karl Pearson correlation coefficient. The Karl Pearson coefficient can take any value in the range (-1, 1). The sign of the correlation coefficient indicates the direction of the relationship, while the magnitude of the correlation (how close it is to -1 or +1) indicates the strength of the relationship. Whenever the p value is less than 0.05 then there is a significant positive or negative relationship. The results are shown in the Table 4.4

Table 4.4 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>VD</th>
<th>Board size</th>
<th>Independent directors</th>
<th>Audit committee Size</th>
<th>Gender diversity</th>
<th>Board ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>VD</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board size</td>
<td>0.17**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent directors</td>
<td>0.51**</td>
<td>0.45</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audit committee Size</td>
<td>0.31**</td>
<td>0.32</td>
<td>0.52</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender diversity</td>
<td>0.27**</td>
<td>0.15</td>
<td>0.3</td>
<td>0.28</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Board ownership</td>
<td>0.15**</td>
<td>-0.22</td>
<td>-0.04</td>
<td>-0.13</td>
<td>-0.3</td>
<td>1</td>
</tr>
</tbody>
</table>

The results in the Table 4.4 above revealed that there was no collinearity between independent variables since none of them had correlation coefficient greater than 0.8.

Voluntary disclosure had positive and significant relationship with board size, independent directors, audit committee size, gender diversity and board ownership. This implies an increase in board size increases voluntary disclosure. This ought to be monitored since an increase in board size would imply increase in operational costs though it has positive impact on agency and monitoring cost.

4.4 Regression Analysis

Multiple regression analysis was carried out to examine the nature of the relationship between voluntary disclosure and board size, independent directors, audit committee, director’s gender diversity and board ownership.
4.4.1 Model Summary

Regression model summary are shown in the Table 4.5 below

Table 4.5 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.71a</td>
<td>0.51</td>
<td>0.49</td>
<td>0.26</td>
<td>2.16</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Board size, Independent directors, Audit committee, Gender diversity, Board ownership
b. Dependent Variable: Voluntary disclosure

The results from the table 4.5 above showed an adjusted R squared of 0.49 and revealed that 49% of variations in voluntary disclosure can be explained jointly by board size, number of independent directors, size of audit committee, gender diversity and board ownership.

4.4.2 Regression Coefficients

Regression coefficients for the analysis are shown in Table 4.6 below

\[
Y_{i,t} = C \beta_1 X_{1i,t} + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \beta_4 X_{4i,t} + \beta_5 X_{5i,t} + \epsilon_{i,t}
\]

Y= Voluntary Disclosure, X1= Board Size, X2= Independent Directors, X3= Audit Committee, X4= Gender diversity, X5= Board ownership, \( \epsilon_{i,t} \) = error term, i= the specific firm, t=time in years

\[
Y = 0.55 +0.0005X_{1i,t} + 0.01X_{2i,t} + 0.01X_{3i,t}+ 0.06X_{4i,t} + 0.12X_{5i,t} + \epsilon_{i,t}
\]
Table 4.6 Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.55</td>
<td>0.16</td>
<td>3.36</td>
<td>0.00</td>
</tr>
<tr>
<td>Board size</td>
<td>0.0005</td>
<td>0.005</td>
<td>2.34</td>
<td>0.00</td>
</tr>
<tr>
<td>Independent directors</td>
<td>0.01</td>
<td>0.002</td>
<td>3.59</td>
<td>0.00</td>
</tr>
<tr>
<td>Audit committee Size</td>
<td>0.01</td>
<td>0.003</td>
<td>2.36</td>
<td>0.00</td>
</tr>
<tr>
<td>Gender diversity</td>
<td>0.06</td>
<td>0.03</td>
<td>2.29</td>
<td>0.00</td>
</tr>
<tr>
<td>Board ownership</td>
<td>0.12</td>
<td>0.04</td>
<td>3.29</td>
<td>0.00</td>
</tr>
</tbody>
</table>

From the table 4.6 above, the coefficients show the nature of the relationship between study variables. Both t ratio and p value show the significance of the relationship. If t ratio is greater than + or – 1.96 and p value less than 0.05, then there will be a significant relationship between the study variables, either negative or positive depending on the coefficient sign.

Regarding the first research question which sought to find out the nature of the relationship between board size and voluntary disclosure, results revealed positive and significant relationship between board size and voluntary disclosure (β=0.005, t= 2.34, p value <0.05). This implies that a unit in board size while holding number of independent director’s constant, size of audit committee, gender diversity and board ownership constant.

Concerning the second research question which sought to find out the relationship between independent directors and voluntary disclosure, regression analysis revealed that there was a positive and significant relationship between independent directors and voluntary disclosure (β=0.01, t =3.59 and p value <0.05). This implies that a unit change in number of independent directors increases the voluntary disclosure by 0.01 units while holding all board size, size of audit committee, gender diversity and board ownership.

The third research question sought to find out what is the relationship between audit committee and voluntary amongst manufacturing listed companies. Results of the
study revealed that there was a positive and significant relationship between size of audit committee and voluntary disclosure among manufacturing listed companies (β=0.01, t=2.36, p value<0.05). This implies that a unit change in size of audit committee while holding other factors constant increases voluntary disclosure by 0.01 units.

The fourth research question sought to find out what was the relationship between gender diversity and voluntary disclosure among listed manufacturing companies in NSE. Results of the study revealed that there was a positive and significant relationship between gender diversity and voluntary disclosure (β=0.06, t=2.29 and p value <0.05). This implies that a unit change in gender diversity increases voluntary disclosure by 0.06 units while holding other factors constant.

The fifth research question sought to find out what was the relationship between board ownership and voluntary disclosure amongst manufacturing companies listed in NSE. Results of the study revealed positive and significant relationship between board ownership and voluntary disclosure (β=0.12, t = 3.29 and p value <0.05). This implies that a unit in board ownership increases voluntary disclosure by 0.12 units.

4.4.3 ANOVA

Analysis of Variance (ANOVA) consists of calculations that provide information about levels of variability within a regression model and form a basis for tests of significance. Analysis of variance was carried out and the results are shown in the Table 4.7 below.
Table 4.7 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>124.405</td>
<td>5</td>
<td>24.881</td>
<td>197.005</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>3.024</td>
<td>24</td>
<td>0.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127.429</strong></td>
<td><strong>29</strong></td>
<td><strong>127.429</strong></td>
<td><strong>127.429</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Board size, Independent directors, Audit committee, Gender diversity, Board ownership

b. Dependent Variable: Voluntary Disclosure

The results from the table 4.7 above revealed that board size, number of independent directors, size of audit committee, gender diversity and board ownership all had joint significant influence on voluntary disclosure among the listed manufacturing companies (F= 197.005, P value = 0.00).
CHAPTER FIVE

5.0 DISCUSSIONS

In the following section the results disagreements or agreements with past studies will be shown. Moreover, results agreements or disagreement with theoretical framework will be discussed.

5.1 Board size and Voluntary Disclosure

The first objective of the study sought to examine the relationship between board size and voluntary disclosure. Both correlation and regression analysis revealed positive and significant relationship between board size and voluntary disclosure. These findings agreed with Sweti and Attayah (2013), Ezat and Al-Masry (2008), Navarro and Urquiza (2010), Sartawi et al., (2014) and Gandia (2008) all these studies agreed that board size had positive and significant relationship with voluntary disclosure. The findings show that there is a very close link between agency theory and voluntary disclosure; this will enhance efficient allocation of agency and monitoring costs. Moreover, there is need to monitor the board sizes as such to ensure there is heterogeneous composition of board members and ensure listed companies benefits fully from expatriate as stipulated in stakeholder’s theory.

There is need for listed companies to embrace culture of voluntary disclosure especially in periods there have issued profit warnings. This will minimize agency costs associated with breaching information asymmetry gap. Furthermore, board members are deployed to serve agency role by stakeholders who may not be involved in day to day running of listed firms. There are so many dynamics which have significant influence on wealth maximization and since the key drivers of this aspect are board members they ought to continuously inform all stakeholders freely and clearly.
5.2 Independent Directors and Voluntary Disclosure

The second objective of the study sought to examine the relationship between independent directors and voluntary disclosure among listed manufacturing companies in Kenya. Results of the study findings revealed positive and significant relationship between independent directors and voluntary disclosure among manufacturing listed companies. These findings agreed with signaling theory which stipulated that those companies which are best performing will always disclose more information. This dissemination can be accelerated by skilled leadership force within board composition, thus those companies which have independent directors will have chances of benefiting from their skilled composition and consequently disseminate more information.

Moreover, the study findings corroborated with Yanesarri et al., (2012), Cheng and Courtenay (2006), Huafang and Jianguo (2007), and Karagul and Yonet (2014) who reported positive and significant relationship between board independence and voluntary disclosure. They purported that external supervision have tendency of counter checking information shared with them as such to authenticate its accuracy and correctness and consequently increase chances of audit report being true and fair.

However, the study contrasted Zhou and Panbunyuen (2008) who reported inverse and significant relationship between independent directors and voluntary disclosure; this was attributed with different reporting standards which were adopted in China and Sweden. This calls for examination on levels of adherence to international financial reporting in addition to voluntary disclosure while drawing respondents from different economic regions.

5.3 Audit Committee and Voluntary Disclosure

The third objective of the study sought to examine the relationship between audit committee and voluntary disclosure among manufacturing listed companies in Kenya. Both regression and correlation analysis revealed positive and significant relationship between audit committee and voluntary disclosure. These findings mirrored agency
theory, since audit committee members acted as agents who could monitor and consequently level of agency costs. Moreover, these results supported signaling theory and stakeholders could interpret voluntary disclosure as signal of superior performance. Indeed, Bini et al., (2010) purported that profit making companies listed in UK have tendencies to disclose more information as compared to their rivals. Therefore, listed companies should ensure they have functional audit committees which will propagate voluntary dissemination of information and eliminate chances of information asymmetry.

Further, the study findings contrasted Orthman et al., (2014) whose study reported non-significant relationship between audit committee and voluntary discourse and they perceived presence of audit committee as agent adherence to professional ethics. This study mirrored studies by Yuen et al., (2009), Hussain (2012), Madi et al. (2014) and Persons (2009) who reported positive and significant relationship between audit committee and voluntary disclosure. All these studies supported the need for board members to participate in audit committees’ meetings, and those serving in these committee to be in service for long tenure which enhance financing reporting quality and adherence and voluntary disclosure.

5.4 Gender Diversity and Voluntary Disclosure

The fourth objective of the study sought to examine the relationship between gender diversity and voluntary disclosure among manufacturing listed companies in Nairobi securities exchange. Both correlation and regression analysis revealed positive and significant relationship between gender diversity and voluntary disclosure. These results agreed with stakeholder’s theory which purports the need for interest of different stakeholders to be aligned to organization goals. Involvement of women in board membership will signal adherence of women investment goals in listed company’s investment policies. Indeed, there is need for listed to incorporate women either as board chairpersons or chief executive officers since they constitute 50% of Kenya’s population.
These results mirrored Francoeur et al., (2008), Nielsen and Huse (2010), Gul et al., (2011) who reported positive and significant relationship between women being in board and strategic controls. Indeed, Schubert (2006) purported that women ability to multi task, risk management and communication skills will enhance levels of voluntary disclosure among listed companies. Therefore, there is need for all listed companies to increase the number of women in their boards so as to benefit from their communication skills and consequently increase the levels of their voluntary disclosure.

5.5 Board Ownership and Voluntary Disclosure

The fifth objective of the study sought to find out the relationship between board ownership and voluntary disclosure among listed manufacturing companies in NSE. Results of the study revealed positive and significant relationship between board ownership and voluntary disclosure. These results were in support of stakeholders’ theory since board ownership enhanced the agreement between investment goals of listed companies and board members investment objectives. Indeed, agency costs were minimized because board members were not only acting as agents but also served principle roles as they coordinated the day to day running of listed companies.

These results contrasted a study by Donnelly and Mulcahy (2008) who found no significant relationship between board ownership and voluntary disclosure among listed companies in Ireland. These findings would differ owing to different level of legal and technological development in Kenyan securities market as compared to Ireland. Moreover, the number of listed companies in Ireland are more as compared to Kenya thus there are possibilities that companies listed in Ireland would have been guided by different policies as compared to Kenya now. The current study mirrored Akhtaruddin and Haron (2010) who found positive and significant relationship between board ownership and voluntary disclosure in Malaysia. This was attributed to board members tendency to minimize agency costs.
CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Based on the study findings the following conclusions can be drawn: Since there was a positive and significant relationship between board size and voluntary disclosure among manufacturing listed companies. This implies that increase in the board size significantly leads to increase in the level of voluntary disclosure. There is need for listed companies to increase their board size to meet unique requirements for their voluntary disclosure. Through this agency conflicts will be minimizing since information disclosure will increase.

Secondly, there was positive and significant relationship between independent directors and voluntary disclosure. This call for listed manufacturing to increase number of independent directors as such to improve on their levels of monitoring; through enhanced monitoring manufacturing listed companies will enhance information disclosure even if some information is beyond statutory requirements.

Thirdly, all listed companies should have fully functional audit committees and their sizes must be in tandem with company size as such to increase the level of voluntary disclosure. Moreover, the composition of audit committee should have diversified skills composition so as to ease auditing in different business aspects. For example there is need for lawyers to ease understanding of contractual engagement, engineers to observe adherence to international engineering standards and accountants who will ensure accounting standards are strictly followed.

Further, there is need to incorporate women in manufacturing companies which are listed. It is paramount to note that only one listed company had woman as chairperson. This signifies rampant need for women inclusion in corporate boards.
There is need for listed companies to adhere to constitutional requirements when they are recruiting board members and women position ought not to be limited only to company secretary since most of them were serving in this role only.

Finally, recruitment on board should also be pegged on board ownership so that whenever they are steering corporate growth they may aim to increase shareholders wealth. Moreover, an increased board ownership would mitigate monitoring and agency cost and this will increase firm performance.

### 6.2 Recommendations

Based on the study findings the following recommendations can be drawn, there is need for listed companies to increase the level of voluntary disclosure so to minimize the level of information asymmetry. Indeed, the capital markets authority (CMA) and other bodies regulating manufacturing listed firms should ensure that listed companies make the information in financial statements as simple as possible through use of quantitative approaches such as graphs to show trends on profitability. Moreover, qualitative ought also to be presented; so as to elaborate issues that cannot easily presented using graphical methods.

There is need for listed companies to have optimal board size so as to eliminate fatigue amongst board members. Although, board size influenced voluntary disclosure positively there is need to evaluate agency cost incurred to manage the current board size. There is need to check on possibilities of having bloated board sizes which may lead to duplication of skills. Moreover, listed companies ought to ensure that they have most of the requisite skills which will lead to attainment of company vision and mission.

Since board members are perceived as stewards of a given company. There is need to have homogeneous skills composition amongst non-executive directors. This will ensure that manufacturing listed companies benefits from the pool of experts. Indeed, this will minimize agency costs and maximize returns. Moreover, through skills
composition the preparation of financial statements will be more clearly since they will endeavor to minimize the information asymmetry amongst stakeholders.

Presence of audit committee within listed companies will enhance preparation of annual statements which are true and fair. Indeed, presence of audit committee signals reliable audit and risk management strategies within manufacturing listed companies. Moreover, audit committee should play watchdog role by ensuring that all requisite documentations are adhered to prior to commencement and during progress on huge capital outlay projects. Although, an increase in audit committee size increases voluntary disclosure measures should be taken to cap on its membership as such to manage agency cost associated with its presence.

All manufacturing companies listed in Kenya should be compelled to adhere to two thirds gender rule. Indeed, measures should be taken to increase the current size from an average of 24% so as to benefit from skills endowment amongst women. As the country executes the achievement of vision 2030, manufacturing companies should act as an avenue through which industrialization can be achieved. Moreover, these companies should act as employment avenues for all and no one ought to be discriminated owing to gender.

Employees share ownership schemes should be embraced within listed companies so as to enhance ownership and association. Since an increase in board ownership increases voluntary disclosure there is need for listed companies to sensitize board members to acquire more shares though their shareholding should not create an avenue for oppression more so to those small shareholders.

6.3 Sugges tions for Further Studies

The current study examined the causal effect of selected board characteristics and voluntary disclosure among manufacturing listed companies in Kenya, there is need for a similar study to be carried out and draw respondents from all sectors and increase the number of years from five to ten. Secondly, the current study was limited to small sample since it considered balanced data there is need for a similar study to
be carried out and it should draw sample for a long period. Apart from the selected board characteristics there are other attributes of corporate governance which can be considered in addition to board size, board independence, audit committee, gender diversity and board ownership.

Moreover, although the study didn’t find any element of multicollinearity, further studies should be carried out to determine whether the size of the audit has collinearity with independent directors, since they had the highest value of 0.52, although less than 0.8. In the same note, the regression coefficient of board size was 0.0005, which approximates 0.00 to the second decimal place, therefore suggesting for further investigation in terms of its level of significance.
REFERENCES


APPENDICIES

Appendix I Introduction Letter

Michael Kimeu Kamwana,

P.O. Box 35-90300,

Wote.

RE: REQUEST FOR RESEARCH DATA

I am a master’s of Business Administration in Finance Student in South Eastern Kenya University. You have been randomly selected for the study on “Effect of selected board characteristics on voluntary disclosure among listed manufacturing companies in Kenya”. This check index has four sections. Please fill the check index as honesty as possible since this information will not be used for any other purpose apart from academic research. For purpose of confidentiality please do not indicate your name. The check index is anonymous and no individual person will be identified or connected with a particular set of information or research findings. Your cooperation in completing this check index is greatly appreciated.

___________________

Michael Kimeu Kamwana,

MBA. Student
## Appendix II Research Instrument (Disclosure Check List)

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Strategic information index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Company policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Statement of strategy and objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Planned capital expenditure</td>
<td></td>
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<tr>
<td>- Policies on research and development</td>
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<td>- Governance structures</td>
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<td>Non-financial information index</td>
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<tr>
<td>- Employee training</td>
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<tr>
<td>- Education background of employees</td>
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Appendix IV Work Plan

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