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RESEARCH ARTICLE

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

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ABSTRACT

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.

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INTRODUCTION

Background to 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. 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 and 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 *et al.*, 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

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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 and Kirchmaier, 2013). 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 *et al*., 2008). Voluntary disclosure has been classified differently by past studies but this study adopts three categories as done by (Eng and Mak, 2003; Lim *et al*., 2007; Zhou and 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.

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 and 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 and 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.

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 and 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 and Omandi, 2013). Though, several studies (Zhou and Panbunyuen, 2008; Sweti and Attayah, 2013; Othman *et al*., 2014; Abad *et al*., 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).

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.

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.

LITERATURE REVIEW

Theoretical Review The theoretical basis of this paper is the agency theory and the signaling theory.

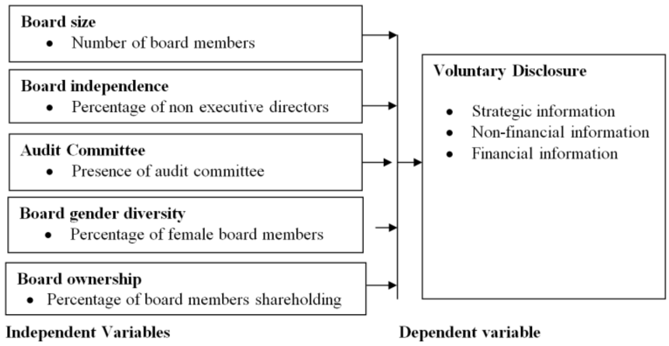
Empirical Review

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. 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. 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. 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 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. 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).

Conceptual Framework

A conceptual framework is the diagrammatic presentation of variables, showing the relationship between the independent variable and dependent variables. The relationship between the independent variables and dependent variable is presented schematically in the conceptual framework in Figure 1.



RESEARCH METHODOLOGY

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. 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) 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). 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 and Nasieku, 2015; Ndili and Muturi, 2015; Wangechi and Nasieku, 2015; Nduta and 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.

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 1. Operationalization of Variables

Variable	Measures	Attributes
Y	Voluntary disclosure	Strategic information index Non-financial information index Financial information index
X_1	Board Size	Number of board member
X_2	Independent directors	Number of independent directors
X_3	Audit committee	Number of committee members
X_4	Gender diversity	Proportion of female in the board.
X_5	Board Ownership	Percentage of shares owned by the board members

Source: (Meek, 1995; Eng & Mak, 2003; Lim, Matolcsy & Chow, 2007; Zhou & Panbunyuen, 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.

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. 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. In the current study the most appropriate model was fixed effects since the p value was greater than 0.05. A multiple regression model for panel analysis can be given as follows:

$$Y_{i,t} = \alpha + \beta_1 X_{1i,t} + \beta_2 X_{2i,t} + \beta_3 X_{3i,t} + \beta_4 X_{4i,t} + \beta_5 X_{5i,t} + \acute{\varepsilon}_{i,t}$$

Y= Voluntary Disclosure, X1= Board Size, X_2= Independent Directors, X_3= Audit Committee, X_4= Gender diversity, X_5= Board ownership, $\acute{\varepsilon}_{i,t}$ = error term, i= the specific firm, t=time in years

RESULTS

Panel Diagnostic Tests

Various diagnostic tests were carried out prior to fitting regression model; they include stationarity, multicollinearity, Hausman test, heteroskedasticity and serial correlation. Stationarity Tests Since were done 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 2 below. If the variables are not stationary, then they should be differentiated to the first difference or until stationarity is attained we should reject the null hypothesis whenever p value is less than 0.05 or the calculated value is greater than the calculated value.

Table 2. Unit Root Test at Levels

Variable	Test at levels	Philips Perrons (PP) Test		
		T Statistic	Critical Value at 5%	P value
Voluntary Disclosure	Constant	-4.30	-2.91	0.00
	Constant and Trend	-4.35	-3.48	0.00
Board Size	Constant	-5.36	-2.91	0.00
	Constant and Trend	-5.31	-3.48	0.00
Independent directors	Constant	-4.27	-2.91	0.00
	Constant and Trend	-4.23	-3.48	0.00
Audit committee	Constant	-5.57	-.2.91	0.00
	Constant and Trend	-5.57	-3.49	0.00
Gender Diversity	Constant	-6.02	-.2.91	0.00
	Constant and Trend	-6.66	-3.49	0.00
Board ownership	Constant	-6.56	-.2.91	0.00
	Constant and Trend	-6.46	-3.49	0.00

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. The results for the test are shown in Table 3 below.

Table 3. Hausman Test

Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Hausman Test		5.13	5	0.40
Variable	Fixed	Random	Variable (Diff.)	Prob.
Board size	-0.04	-0.00	0.00	0.06
Independent Directors	0.04	0.04	0.00	0.92
Audit committee size	-0.00	0.00	0.60	0.60
Gender diversity	-0.15	0.24	0.09	0.19
Board ownership	0.95	0.47	0.12	0.15

From the Table 3 above, the results revealed that the most appropriate model to fit was the random effects model since the p value >0.05.

Descriptive Analysis

Descriptive analysis for the data was carried out and the results are shown in Table 4 below. 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 center point. Kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution (Kothari, 2011).

Table 4. Descriptive Analysis

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

The results in the table 4.1 above indicate that. 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%.

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.

Model Summary

Regression model summary are shown in the Table 5 below

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.71a	0.51	0.49	0.26	2.16

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

The results from the table 5 above showed an R squared of 0.51 and revealed that 51% 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.

Regression Coefficients

Regression coefficients for the analysis are shown in Table 6 below

Table 6. Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.55	0.16	3.36	0.00
Board size	0.00	0.005	2.34	0.00
Independent directors	0.01	0.002	3.59	0.00
Audit committee Size	0.01	0.003	2.36	0.00
Gender diversity	0.06	0.03	2.29	0.00
Board ownership	0.12	0.04	3.29	0.00

From the Table 6 above, the coefficients shows the nature of the relationship between study variables. Both t ratio and p value shows 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.

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 7 below.

Table 7. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	124.405	5	24.881	197.005	.000a
	Residual	3.024	24	0.126		
	Total	127.429	29			

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

The results from the Table 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).

DISCUSSION

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 were in agreement with Sweti and Attayah (2013), Ezat and Al-Masry (2008), Navarro and Urquiza (2010), Sartawi *et al*., (2014) and Gandia (2008) all these studies were in agreement that board size had positive and significant relationship with voluntary disclosure. The findings show that there is a nexus 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 stakeholders 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.

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 were in agreement with signaling theory which stipulated that those companies which are best performing will always disclosure 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.

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. 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

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 were in agreement 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.

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 M ulcahy (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.

Conclusion

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. 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 disclose 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.

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, there is need for listed companies to make information in financial statements as simple as possible through use of quantitative approaches such as graphs to show trends on profitability. 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. 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.

Suggestions 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 studies 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.

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Appendix II Research Instrument (Disclosure Check List)

	2012	2013	2014	2015	2016
Dependent variable					
Strategic information index					
- Company policy					
-Statement of strategy and objectives					
- Planned capital expenditure					
-Policies on research and development					
- Governance structures					
Non-financial information index					
-Employee training					
-Education background of employees					
-Environmental concerns					
-Charity /donations					
-Line of Business					
-Distribution of employees					
-Statement of corporate social responsibility					
Financial Information Index					
- Liquidity ratios					
- Leverage ratios					
- Market share analysis general					
-Stock price at year end					
-Profit forecast					
-Forecast of sales					
Independent Variables					
X_1-Number of board member					
X_2- Number of independent directors					
X_3 – Size of audit committee					
X_4 – Number of women in the board					
X_5- Percentage of shares owned by board members					

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