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DISCRETIONARY DISCLOSURE OF LISTED NON-FINANCIAL FIRMS IN AN EMERGING MARKET: EVIDENCE FROM GHANA

Abdul Mansulu[1], Daniel Anarfi[1]

[1]Department of Accounting and Taxation, Faculty of Economics, Mendel University in Brno, Zemědělská 1, 613 00 Brno, Czech Republic

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Abstract

The main objectives of this study are to measure the extent of voluntary disclosure of listed non-financial firms in Ghana. The paper also seeks to identify the corporate governance attributes that influence voluntary disclosure, and finally, it rated the importance of voluntary items in the annual reports from the viewpoint of investors in Ghana. The paper makes use of 2013 to 2016 annual reports for 17 firms. The corporate governance attributes examined are board size, the proportion of independent non-executive directors on the board, blockholder ownership and the audit committee. Five control variables were also used to support the study. We developed a total of 66 voluntary items. Both the simple frequency distribution and Stata software were employed to analyze the data. The findings revealed a mean of 32.7% as the level of voluntary disclosure. Board size, block holder ownership and audit committee had a positive association but only board size was statistically significant. The proportion of independent non-executive directors had an insignificant negative relationship. Concerning the rating of the importance of the voluntary items, items under financial information were more of concern to investors. There are benefits that the findings provide which will be useful to investors, preparers of financial statements and regulators. The study reveals the corporate governance attribute(s) that influence corporate disclosure and points out the level of transparency if the level of disclosure is used as a proxy.

Keywords: corporate governance, voluntary disclosure, non-financial, listed firms, investors, board size, audit committee

INTRODUCTION

Voluntary disclosure has become an area of interest in the field of accounting in current times. Advanced economies have it as a commitment to institute a robust regulatory framework and ensure its implementation with regards to its corporate governance. The story is different in emerging economies which suffers from feeble regulatory environment and weak corporate governance structure leading to the expropriation of shareholders. There are several studies done in developed countries like (Li and Qi, 2008; Donnelly and Mulcahy, 2008) and developing countries like (Al-Janadi and Rahman, 2013; Adelopo, 2011; Elfeky, 2017) which all focused on voluntary disclosure. The topic became a focus of interest when shocks of corporate scandals hit giant organizations like Enron in USA, Amir-Mansour Aria in Iran, Pescanova in Spain, Malaysia Development Berhad, in Malaysia for the years 2001, 2013, 2010, 2018 respectively and financial loss occurred to stakeholders, therefore, the need for the discussion. Sufficient disclosure of information is an important issue to shareholders and investors since they tie disclosure to transparency. Low level of disclosure information result in information asymmetry which in effect debars investors to have trust in corporate annual reports and confidence in firms. The annual report which captures financial position and performance is expected to provide useful, reliable and relevant information to user groups for economic decision making and to show the prospects that holds for the corporate organization.

The study is premised on the following motivation. The paper is the first of its kind especially with the third objective (to rate the importance of voluntary disclosure from the viewpoint of investors). The study provides further literature on voluntary disclosure study in Ghana. It adds to literature corporate governance variables which are found to be significant in explaining voluntary disclosure in an emerging country like Ghana. Finally, the study results also present fair knowledge to users' group such as (investors, creditors, etc.) on how much more information listed non-financial firms disclose. Knowledge about this informs them to question and request more information from the firms open to the capital market.

There are three objectives developed for the study stated as follows:

1) To examine the extent of voluntary disclosure by listed non-financial firms on GSE in their annual reports
2) To identify the corporate governance attributes that determine the level of voluntary disclosure.
3) To rate the level of importance of the voluntary disclosure items for listed non-financial firms in Ghana.

After this section the organization was as follows, literature review. It further developed the hypotheses for the study. It also looked at research design, the data collection and sample as last but one main heading presents the analysis of results and discussion. The summary, conclusion and implication of the study is the finally concluded main heading.

Literature Review

Corporate Governance

The concept of corporate governance notably comes with a positive contribution to an organization especially when potential scandalous deals can threaten or cause corporate failure. History has it to tell when corporate giants like WorldCom and Enron collapsed, reason assigned to corporate governance issues. This makes the concept pivotal in quality circles and discussion platforms being it professional or academic. Corporate governance aims to ensure that stakeholders are secured from some scathe decisions from management which could be detrimental to the stakeholders in the long run.

OECD (2004), added that corporate governance is defined as the relationship between a company's board, its shareholders and other stakeholders. Corporate governance may be upheld both internally or externally. Internal governance is about the interaction that exists among management, board and shareholders. The external governance is overseen by external organizations. In Ghana regulators such as central bank, GSE and Securities and Exchange Commission (SEC) have the obligation to ensure firms are responsible and best corporate governance are practiced according to the law.

Ghana has its own corporate governance codes with the regulatory framework enshrined in the Companies code 1963 (Act 179), Securities and Industry Law 1993 (PNDCL 333) as revised in the Security Industry (Amendment) Act, 2000 (Act 590) and the listing regulations, 1990 (L.I. 1509) of Ghana Stock Exchange all to ensure an effective and sound practice of corporate governance. These codes spell out the extracting benefits through efficiency, internal control, transparency, probity, accountability, board structure, director's responsibility among others.

The corporate governance mechanism sets the rules straight to ensure a mitigation of agency cost, that is to basically drive down cost of information asymmetry and in effect increase firms value. Better performing stock has an association with firms that have higher disclosure quality (Mitton, 2002). The authors further added that a very vital ingredient of corporate is the disclosure quality and the amount of disclosure made available to users. It is observed that capital providers consider the effectiveness of corporate governance to allocate resources to sound corporate organization. The value of a firm is the requisite factor that providers of capital dwells on to extend funds to corporate business having in mind an expected return to the owners.

Corporate Governance and Disclosure

Prior studies concentrate on factors affecting the extent of voluntary disclosure. The factors are corporate attributes, ownership structure and corporate governance (Herath and Altamimi, 2017). All these are factors to be addressed to wholly conclude on the response of voluntary disclosure. Umpteen studies have been conducted in recent times focusing on measuring the association between corporate governance and voluntary disclosure. Studies like Al Markati and Hamdan (2017) in Bahrain, Akhtaruddin *et al.* (2009) in Malaysia, Al-Janadi and Rahman (2013) in Saudi Arabia, Adelopo (2011) in Nigeria, Elfeky (2017) in Egypt, Li and Qi (2008) China, Donnelly and Mulcahy (2008) in Ireland, Eng and Mak (2003) in Singapore, Al-Shammari and Al-Sultan (2010) in Kuwait, Rouf (2011) in Bangladesh, Kent (2008) in Australia, Liu, Valenti and Chen (2016) in Taiwan, Agyei and Gyamerah (2016); Bokpin and Issahaq (2009) both in Ghana all examined corporate governance mechanism that influences the level of voluntary disclosure.

There is a growing interest in the area because of the keen interest of investors and other user group. The perception investors have about a firm has a long way to go to assist the firm's access funds from the capital market or not. Al-Markati (2017) opined that managers choice to disclose information freely to both the investor and the general public is to provide an insight of the value of the firm. There is an expectation from managers to disclose information which users can look through to the underlying efficiency of a firm. Kumar, Langberg and Sivaramakrishnan (2012) suggested that managers will make available information to enhance their image, boost firms stock prices basically when it comes to allocation of capital and also goes to the extreme to disclose obnoxious details to attract investment efficiency.

Voluntary disclosure is the free choice of information that is disclosed by managers. It is done on purpose by the firms since it signals transparency and openness to the public in order to give the firm a good outlook. Though an external factor, it reduces agency cost which is caused by information asymmetry between managers and stakeholders (Herath and Altamimi, 2017). Considering the role of voluntary disclosure policy and its impact, most recent study in corporate governance has been done on voluntary disclosure both in developed and developing markets (Herath and Altamimi, 2017).

Development of Hypotheses

The second objective of the study is to examine the association between corporate governance variables and voluntary disclosure in the corporate annual reports of listed non-financial firms in Ghana. The corporate governance variables used as the explanatory variable of the study are board size, the proportion of independent non-executive directors, block holder ownership and audit committee.

Board Size

Board size is an important corporate governance variable. The total membership of a firm's board consists of both executive and non-executive directors. Hussainey and Wang (2010) indicated that the management control over a board is contingent on the size of the board. Cost of monitoring increases to keep the agency problem within check when there is a relatively small size board. It is important for boards to have composition of adept personnel to make key long-term strategic decisions. Haniffa and Cook (2002) stated that large size with a pool of experience, knowledgeable and independent directors is key to board size since it ensures effective firm monitoring and control. Adelopo (2011) submitted that there is a positive relation between voluntary disclosure and board size. Conversely, Cheng and Courtenary (2006) reported a contrary result to their hypothesis. They concluded that large board size has negative effect on board performance.

H1: There is a positive association between board size and voluntary disclosure.

Independent Executive Directors (InED)

They are directors who do not form part of management of the organization. They are not engaged in the routine activities of the organization unlike executive directors who are full of responsibilities on the day-to-day operation of the firm (Akhtaruddin *et al.*, 2009). The true independence of the board of directors (BOD) to have an unbiased approach to decision rest much with the independent executive directors. A larger representation of them on the board ensures effective monitoring, enhance disclosure of information by management and inadvertently positions stakeholders in a safer state. The corporate governance code of Ghana compels firms to have at least a third of the total membership of the board as independent directors (Agyemang *et al*., 2013). A higher percentage of non-executive directors was said to be related with high extent of voluntary disclosure under the study "board composition, regulatory regime and voluntary disclosure" using 104 firms in Singapore (Cheng and Courtenay, 2006). Donnely and Mulcahy (2008) also found a positive relationship between voluntary disclosure and the number of non-executive directors on the board. On the contrary (Al-Shammari and Al-Sutan, 2010) found no significant relationship between independent non-executive directors and voluntary disclosure. Firms with higher independent non-executive directors ensure forward looking and strategic information disclosure. Below is the hypothesis for the literature:

H2: There is a positive relation between the ratio of InED and voluntary disclosure

Block Holder Ownership

Ownership composition is also a key feature under corporate governance. Corporate organizations have variety of shareholders which include government, managers, board members and other outsiders with different share percentage. Eng and Mak (2003) measured blockholder ownership as substantial shareholder's percentage of ordinary shares held (that is having 5% or more shareholdings). It is observed that most shareholders with more than 5% are institutional investors. And these investor group possess financial expertise and are well able to interpret the information disclosed in the annual reports of corporate activities and for that reason demands more from managers as disclosure. Hence it is expected that voluntary disclosure increases with increases in blockholder ownership. Eng and Mak (2003) and Haniffa and Cooke (2002) find no relationship between the two though.

H3: There is a positive association between blockholder ownership and the level of voluntary disclosure.

Audit Committee

Compliance with best practices is the expected benchmark from management of firms. Monitoring of control system and quality reporting is left to the audit committee of a corporate firm. Audit committees are tasked to have an oversight responsibility on information disclosure and also to provide error-free and accurate information and the sound execution of that mandate exact confidence on the financial statement (Baroko, 2007). The legal and regulatory framework of corporate governance in Ghana enjoins firms to have an audit committee compose of at least three (3) directors with independent non-executive directors been the majority (CGCG, 2010). Al-Shammari and Al-Sutan (2010) concluded in their study that the existence of audit committee was significantly related to the level of voluntary disclosure. Akhtaruddin *et al.* (2009) believed in the positive relationship, however the hypothesis was not confirmed in their study. The result was consistent with the study conducted in Egypt by Elfeky (2017). This stem from the fact that audit committee is not mandatory under the corporate governance code of Egypt. The hypothesis generated was,

H4: There is a positive relationship between the audit committee of firms and voluntary disclosure.

MATERIALS AND METHODS

Sample

The study was conducted on firms listed on the Ghana Stock Exchange (GSE) with the scope focused on non-financial firms. Out of the 41 firms listed on the GSE as at 30th June, 2018, a total of 17 firms were selected for the study. These were firms listed before 2016 and also had their annual reports assessed. A total of 24 firms were excluded, expressed as 13 financial firms and 11 non-financial firms listed after 2016 or without an available annual report.

Data Collection

The study used both primary and secondary sources of data. Concerning the secondary data, the predictive and control variables were all obtained from the annual reports of the sampled firms. Questionnaires were used as the primary collection tool to rate the importance of each disclosure item. The questionnaire had a list of 66 disclosure items categorized under companies information, financial information, projected information, employee information, corporate governance information, environment and social policy information and management analysis. The voluntary items were large enough to cover relevant and wide aspect of corporate entity. It is relevant because it touches on the general overview of the firm, corporate social responsibility (CSR), financial information, future oriented information and the other three categories looked at disclosed items related to insider users (employees and management). The company information deals with corporate overview, and the projected information deals with futuristic information disclosed to know the companies line of strategy (eg of the projected disclosure item is “effect of business strategy on future performance”. Other categories include financial information and environment and social policy information to address Corporate social responsibility (CSR). The last three are centered to address how important the disclosure relevant to user group like employees, management is to the investors therefore the need for employee information, management analysis and corporate governance information. The disclosure items were developed in consultation with disclosure checklist used by (Binh, 2012, Wong and Ho, 2001). The items were cross checked for inclusion into the questionnaire by 2 chartered accountants. This was to verify the relevance of the items in relation to the reporting environment in Ghana. The questionnaires were sent to investor groups in Ghana both individual and institutional. Their contact lists were obtained from Ghana Investment Promotion Centre (GIPC) a government institution which co-ordinates and monitors all investment activities and assists domestic and foreign investors. The questionnaire document in a goggle form was sent via email to 126 investors to rate the importance of the 66 disclosure items. 41 out of the 126 questionnaires representing (32%) were returned all in three weeks. After two weeks of gathering the responses from the issuance of the questionnaire, a reminder was sent with additional week to gather the remainder. The rating score was scaled from 1 to 5 where 1 is “not important”, 2 “somewhat important’, 3 “important”, 4 “very important” and 5 “essential”. A simple frequency distribution was employed to compute the average score of each disclosed item. The disclosure score index by each firm was then divided on the maximum score.

Model Specification

To examine the association between the dependent variable and the predictive and control variables, a linear multiple regression model was constructed. The following regression model is estimated as:

i. Full Model

$$VDit = \alpha + \beta1BSIZEit + \beta2PINEDit + \beta3BHOLDit + \beta4PACit + \beta5FSIZEit + \beta6LEVit + \beta7ROAit + \beta8ROEit + \beta9ATYPEit + \varepsilon it \quad (1)$$

ii. Restricted Model 1

$$VDit = \alpha + \beta1BSIZEit + \beta2PINEDit + \beta3BHOLDit + \beta4PACit + \beta5FSIZEit + \beta6LEVit + \beta8ROEit + \beta9ATYPEit + \varepsilon it \quad (2)$$

iii. Restricted Model 2

$$VDit = \alpha + \beta1BSIZEit + \beta2PINEDit + \beta3BHOLDit + \beta4PACit + \beta5FSIZEit + \beta6LEVit + \beta7ROAit + \beta9ATYPEit + \varepsilon it \quad (3)$$

Where:
VD = Voluntary disclosure index for each sample firm
BSIZE = Board size
PINED = Proportion of independent non-executive directors
BHOLD = Block holder Ownership
PAC = Proportion for audit committee members
FSIZE = Firms Size
LEV = Leverage
ROA = Return on Asset
ROE = Return on Equity
ATYPE = Type of external auditor
α = constant
$\beta1 – \beta9$ = estimated coefficient of the predictive and control variables
ε = error term

Development of Voluntary Disclosure Index

Empirical study has examined the disclosure behavior of firms using a disclosure checklist. There are two widely used approaches of disclosure index namely weighted and unweighted. For the study both approaches were used. To arrive at the level of voluntary disclosure, the unweighted disclosure index was used. This is mostly appropriate where the study is not user specific (Cooke, 1989). The items were scored using a dichotomous approach where a score of 1 applies for disclosure of item and 0 for otherwise, subject to the applicability of the disclosed item. The disclosure score of the items for the firms is the total score of each item for the companies. The mathematical expression of the disclosure item is given as:

Actual disclosure of each item = $\sum_{i=1}^{n} di / n$

where:

d_i = 1 if the item di is disclosed in the annual report, and otherwise 0.

n = total number of the companies' annual reports in the sample

Secondly, to rate the importance of the items from the viewpoint of investors, the weighted index was used. This is where the rating score of the respondents apply. The mean score of each disclosure item is given as:

Mean score for each item =

$$= \frac{\text{Total score marked by 41 investors for the item}}{\text{Expected Maximum score marked by 41 investors}}$$

Contrary argument was raised contending that there isn't significant difference in results for both results for both approaches of indexing. Chaw and Wong-Boren (1987) obtained same results under unweighted and weighted index

Measurement of Independent Variables

Explanatory variables

The data on the independent variables were all secured from the corporate annual reports for the study period 2013 to 2016. The data captured details on board size, independent non-executive directors on the board, audit committee and Shareholders with holding greater than or equal to 5%. Ho and Taylor (2010) asserted that the attributes are used to create a composite proxy measure to make known the corporate governance structure strength of a firm. The dichotomous measurement is still applied for these corporate governance attributes. A value of 1 is assigned for each attribute that is presumed to reinforce the voluntary disclosure practice of a firm, and 0 otherwise.

Control variables

As control variables, the study used firms' characteristics which are also considered to influence the level of voluntary disclosure behavior. These consist of firm size, return on asset, return on equity, leverage and the auditing firm. A brief description for the selection of the control variable is given as follows:

i) firm size – Naser, Al-khatib and Karbhari (2002) hinted that user groups are always soliciting for information from the annual report to make informed decision. It is noted that larger firms have a commitment to disclose voluntarily more information to users to aid their judgement.

I: *Measurement of Variables*

Variable	Hypothesis	Measurement	Exp. Sign
Dependent Variable			
Voluntary Disclosure		Voluntary Disclosure Index	
Explanatory Variables			
Board Size	H1	The total membership of directors on the board	+
Proportion of Independent Executive directors	H2	The percentage of non-executive directors to the total number of directors on the board	+
Block holder Ownership	H3	The proportion of ordinary shares owned by substantial shareholders (with shares of 5% or more)	+
Proportion for audit committee members	H4	The percentage of the audit committee to total board membership	+
Control Variables			
Return on Asset		The earnings after tax and interest expressed as a ratio on Total Asset	+
Return on Equity		The earnings after tax and interest expressed as a ratio on Shareholder's Equity	+
Leverage		The ratio of long-term debt to the book value of equity	+
Firms Size		Proxy using TCE and measured in log of TCE, Log of TCE	+
Auditor Type		Audited by a Big Four Auditing firm	+

Source: Authors own construct

Studies like (Elfeky, 2017; Akhtaruddin *et al.*, 2009) used this characteristic.

ii) Profitability (ROA and ROE) – several studies have hypothesized an association between voluntary disclosure and profitability. High profit is an indicator of success and managers always seeks to justify their compensation package (Barako, 2007) and are always willing to use the opportunity to disclose large amount of information. This happens for firms which make high profit and this is in line with the signal theory (Inchausti, 1997). The impact profit can have on the voluntary disclosure makes it justified to include it in the study as a control variable.

iii) Auditor type – Wallace and Naser (1995) reveals that firms audited by BIG 4 accounting firms are compelled to disclose beyond the mandatory information to cover the voluntary ones. BIG 4 auditing firms have a reputation to protect and are independent, which causes client firms to disclose more information as expected (De Angelo, 1981). Secondly, being audited by the BIG 4 also reduces the agency cost since firms which engage them send signal their commitment not to conceal or hide any information from users (De Angelo, 1981)

iv) Leverage – Highly leverage firms reduces agency cost through provision of information beyond the mandated one. This is to provide assurance to debtholders concerning the security of their principal and interest (Al-Shammari, 2008). Firms with high leverage tends to have high monitoring costs, therefore makes them disclose more information. Akhtaruddin *et al.* (2009) found no evidence for similar study.

RESULTS AND DISCUSSION

Descriptive Statistics of the variables

Tab. II reports on the descriptive statistics for the sample firms. The results from the disclosure index indicate a mean of 32.7% with the maximum score achieved by a firm as 79.7% and the minimum is 4.4% with a standard deviation of 20%. There is a clear indication that the firms are widely distributed with regards to voluntary disclosure. The average disclosure index is arguably regarded as low compared to studies like (Akhtaruddin *et al.* (2009), 53.2%; Elfeky (2017) 34.26%) but greater than findings in studies like (Alfraih (2015), Albitar (2015) and Donnelly and Mulcahy (2008) for Kuwait (23%) Jordan (32.4%) Ireland (21.4%) respectively).

The report shows clearly that the average size of the board is 8.45 with the maximum and minimum sizes of 14 and 3 respectively. There is a significant proportion of independent non-executive directors represented on board at a mean of 61.6% better interpreted as, for every 10 directors, 6 are independent non-executive directors. Almost 3 out of 10 directors are represented on the audit committee showing as 29% in Tab. II. This is close to the requirement of the corporate governance code requirement in Ghana which expects firms to have at least 33% representation of directors on the audit committee. The statistics also indicates a mean of 79% of shares held by block holders

II: *Descriptive Statistics*

Variable	Mean	St. Dev.	Minimum	Maximum
Dependent Variable				
TVD (%)	32.7	20	4.4	79.7
Explanatory variable				
BSIZE	8.455	3.053	3	14
PINED (%)	61.6	22.5	14.3	88.8
BHOLD (%)	79	16.7	27.3	100
AUDCOM (%)	29.1	18.9	0	100
Control variable				
FSIZE (GHC, million)	7.069	2.579	6.52	10.033
LEV (%)	–53.2	872.4	–7034	1096
ROA (%)	–16.4	109.8	–774	61.6
ROE (%)	–10.3	100.1	–684	230
ATYPE (%)	70.5	45.9	0	100

Source: Stata results

which was substantial. For the control variables, the leverage shows an average ratio of debt to equity of –53.2%, explained as long-term debt occupies a significantly lower portion of the capital structure. The results present an average of –16.4% and –10.3% for ROA and ROE respectively. This indicates an overall negative return both on total asset and shareholders' equity respectively for the sample firms. The average for auditor type is 70.5% explained as 7 out of 10 annual reports were audited by any one of the 4 big Accounting firms. Lastly, the average firm size is (GHC, million) 7.069 and this relates to the value of the total asset held by the firm.

Univariate Analysis

The test for the correlation was done for all the variables which showed a number of strong correlations between some independent variables with the largest reported correlation value at (0.794) between leverage and ROE as indicated in Tab. III. Considering the level of correlation among the variables, there was no multicollinearity problem since none of the correlation values was above the critical value of 0.80 according to (Cooper and Schindler, 2008)

Multiple Regression Analysis

From the study, Tab. IV reports the results of the multiple regression analysis. The Table shows the results for 3 models. The first estimate is the full model which shows the association between the level of disclosure and the 4 predictive and 5 control variables. The estimate of the second and third variable looks at the full model without ROA and ROE which are profitability variables (control variable) for restricted model 1 and restricted model 2 respectively. The restricted models are used to test for robustness of the main model. Lu and White (2014) suggested that for robustness check, there is a regression specification modification by adding or eliminating a regressor which causes certain key regression coefficient to behave.

Restricted Model 1

The model is the same as the full model but short of ROA which is a control variable. The model as shown in Tab. IV, with 8 independent variables explains 43% of the variance in the disclosure level. The study is significant (p value = 0.001) with $F = 5.61$. According to this model, Board size is the only predictive variable which is statistically significant ($p > 0.001$).

Restricted Model 2

This model regresses the level of voluntary disclosure on all the explanatory variables and the control variables (excluding ROE). Board size and proportion of independent non-executive directors are seen to be statistically significant at $p = 0.001$ and $p = 0.077$ respectively. From Tab. 4, R-square is 0.39 which tells us that the model based on the results from the current data explains 39% of the variation in the level of disclosure. This means that, the model is 39% efficient in predicting variances in voluntary disclosure.

III: *Pearson Correlation coefficient*

Variable	TVD	BSIZE	PINED	BHOLD	AUDCOM	FSIZE	LEV	ROA	ROE	ATYPE
BSIZE	0.505***	1								
PINED	–0.149	0.171	1							
BHOLD	0.262**	0.273**	–0.058	1						
AUDCOM	0.318***	0.362***	–0.37**	0.014	1					
FSIZE	–0.241**	–0.123	0.032	–0.032	–0.18	1				
LEV	0.148	–0.627	–0.071	–0.084	0.02	–0.026	1			
ROA	0.193	0.299**	–0.004	0.225	0.286**	0.100	–0.007	1		
ROE	0.240**	–0.084	–0.148	0.088	0.0475	–0.027	0.794***	0.169	1	
ATYPE	0.185	0.427***	–0.192	0.217*	0.428***	–0.049	–0.098	0.27**	–.08	1

Note: * $p < 0.10$, two-tailed; ** $p < 0.05$, two-tailed; *** $p < 0.01$, two-tailed;
Source: Stata results

Full Model

The regression results in Tab. IV shows the association between voluntary disclosure level and 4 explanatory variables as well as 5 control variables. The result shows an F value of 4.93 which is significant at 0.000. The R Square is recorded at 43% with an adjusted R square of 35%. These details suggest that a significant percentage of voluntary disclosure can be explained by the variations using the full set of independent variables.

The multiple regression results show that board size is statistical significantly at (p = 0.000) with a coefficient of 0.035. The results show a positive relationship between voluntary disclosure and board size meaning H1 is supported. This seeks to suggest that a larger board is positively related to the level of voluntary disclosure since with their collection of expertise, it allows for making better decision and sufficient discretionary disclosure. This result is consistent with the studies of (Albitar, 2015; Alhazaimeh, Palaniappan and Almsafir 2014; Nadndi and Ghosh, 2012; Allegrini and Greco 2011) unlike the studies of (Elfeky, 2017, Gyamerah and Agyei, 2016) which showed a negative association. The transparency and disclosure of a firm's information is contingent on the size of the board since large board is viewed as an effective governing mechanism to disclose more information.

The ratio of the proportion of independent non-executive directors was used as another explanatory variable which showed a negative coefficient of 0.156 showing (p value = 0.147) level which is insignificant. The study hypotheses stated that the higher proportion of InED, the more voluntary information disclosed. However, the result of the study doesn't confirm H2. The result is inconsistent with the studies of (Akhtaruddin *et al.*, 2009; Donnely and Mulcahy, 2008; Cheng and Courtenay, 2006) but is supported by the studies of (Albitar, 2015; Barako, 2007; Ho and Wong, 2001).

The next corporate governance variable is the block holder ownership. The regression coefficient for the variable is 0.187 which is positive and statistically insignificant at the 0.155 level. The study hypothesis is supported. To take into account the result, firms with a higher proportion of blockholdership, tend to disclose more voluntary information. Most blockholders are notably institutional shareholders who are well informed and are intelligent and much is demanded from

IV: *Multiple Regression Results*

Variables	Full Model		Restricted Model 1		Restricted Model 2	
	Coef.	P value	Coef.	P value	Coef.	P value
Explanatory						
BSIZE	0.035***	0.000	0.034***	0.001	0.034***	0.001
PINED	–0.156	0.147	–0.161	0.128	–0.193*	0.077
BHOLD	0.187	0.155	0.178	0.162	0.160	0.231
AUDCOM	0.086	0.540	0.075	0.579	0.066	0.644
Control						
FSIZE	–0.011	0.163	–0.012	0.134	–0.012	0.132
LEV	–0.003	0.495	–0.002	0.533	0.004	0.131
ROA	–0.007	0.744			0.008	0.704
ROE	0.071**	0.05	0.066**	0.047		
ATYPE	–0.053	0.318	–0.054	0.296	–0.060	0.266
const.	0.077	0.624	0.099	0.486	0.146	0.359
F-statistics	4.93		5.61		4.79	
F-sig.	0.000		0.000		0.000	
R2	0.43		0.43		0.39	
Adjusted R2	0.35		0.35		0.31	

Note: * p < 0.10, two-tailed; **p < 0.05, two-tailed; *** p < 0.01, two-tailed;
Source: Stata results

managers to disclose to protect their interest. The result is consistent with the study of Eng and Mak (2003) but not consistent with (Elfeky, 2017; Albitar, 2015)

The regression coefficient for the board audit committee is (0.086) which is positive and statistically insignificant at the (p value = 0.540) level and the hypothesis is supported. The study indicates that higher board members on the audit committee may have positive impact on the level of voluntary disclosure. This study is similar to the study of (Gyamerah and Agyei, 2016; Al-Shammari and Al-Sutan, 2010; Haniffa, 2008). The larger the audit committee members who are often with accounting experience, the more transparent and accurate disclosure they encourage managers to present.

The study results show that all the control variables are insignificant and have a negative coefficient except ROE which has a positive association with voluntary disclosure and is also statistically significant (p value = 0.50). Firms which are larger in size and are mostly profitable showed no evidence of making more voluntary disclosures. This is consistent with the results reported by Akhtaruddin *et al.* (2009) for Malaysian firms. The coefficient for the nature of audit firms is insignificant, and hence, unrelated to voluntary disclosure. Similarly, leverage, another control variable did not provide any significant result that is consistent with Chen and Jaggi (2000).

Sensitivity Analysis

A sensitivity analysis is conducted on the study using the profitability variables namely ROA and ROE. In restricted model 1, ROA is excluded from the model and this causes a slight change in the results compared to the full model. The restricted model 2, ROA was replaced with ROE as the measure of profitability. The results differ from full model in that proportion of independent non-executive directors' turns to become statistically significant at (p value = 0.077). Overall, we conclude that using the full model only shows one explanatory variable is significant and positively associated to the level of voluntary disclosure.

The Actual Disclosure Level of the Firms

Reported from Tab. V and VI, the average voluntary disclosure for the study was at a moderate rate of 32.7%. The result represents the rate at which the totality of the sampled firms disclosed the voluntary items in their annual report. The result is consistent with the results from developing economies where the incentive for voluntary disclosure is not upheld in greater esteem. The results extracted from the firm's annual reports indicated companies information and financial information categories as the highest disclosure levels with both disclosing 48.74% each followed by environment and social policy (48.03%) and the last three categories been corporate governance information, projected information and employee information. Their actual disclosure scores were 24%, 16.17% and 6.86% respectively. Binh (2012) a study of non-financial listed firms in Vietnam also disclosed corporate information to have the highest level of disclosure at 70.17%. In similar study conducted by Barako (2007), the study concluded an upward change in the level of disclosure for general and strategic information. Concerning the items, four disclosure items under Companies information category made it in the first 10 highest disclosure with the first three emerging from this category (General information about the economy (94.11%), description of major goods/products (94.11%) and corporate mission statement (82.35%). The companies information just provides general details about the company and its interaction with the environment and the disclosure of such information looks relatively cheap, easy to ascertain, and unimportant to competitors therefore the high presence of those disclosure is not surprising. Similar reports from these studies (Binh, 2012; Al-Shammari, 2008; Barako, 2007) were noted.

The financial information category tied with the same average like the companies information showing three items among the highest 10 perceived important items to investors. The items namely (4^{th} place, information on share price (82.35%), retained earnings (5^{th}–82.35%) and finally at 7^{th} place, summary of financial data for the last two years or over (70.6). Investors return is paramount and information disclosed under this category is an evidence of making known their interest. The financial information provides information about the earnings in terms of trend and other shareholder information which reveals the financial character of the firms.

Corporate governance information was regarded as the fifth for the categories, however two items were captured among the first ten highest items namely director's shareholdings in the company and other related interests (e.g. stock options) – 52.94% and Name, age and address of directors (52.9%). This seeks to suggest there is the demand about the firm's directors and as an

V: *Perceived importance of voluntary disclosure of investors and Actual Disclosure Level (%) of 7 categories in annual reports*

Order	Categories	Mean rating Score	Average Actual Disclosure (%)
1	Management Analysis	3.28	47.06
2	Environment and Social policy	3.25	48.03
3	Projected Information	3.21	16.17
4	Companies Information	3.20	48.74
5	Financial Information	3.19	48.74
6	Corporate Governance Information	3.02	24.00
7	Employee Information	2.89	6.86

Source: Frequency distribution result

VI: *The first 10 highest actual disclosure by firms' annual reports*

Ranks	Index Items	No. Of Index	Firms actual Disclosure (%)
1	General information about the economy	1	94.11
2	Description of major goods/products	4	94.11
3	Corporate mission statement	2	82.35
4	Information on Share price	16	82.35
5	Retained profit	18	82.35
6	Brief history of the corporation (the establishment and development)	3	76.47
7	Summary of financial data for the last 2 years or over	15	70.6
8	Future outlook of the company	60	58.82
9	Directors' shareholding in the company and other related interests (e.g. stock options)	50	52.94
10	Name, age and address of directors	46	52.90

Source: Frequency distribution results

VII: *The most imp. items by the view point of investors with the firms 'Actual Disclosure Level*

Number Index	Index Items	Mean rating Score	Average Act. Disclosure (%)
16	Share price information	3.83	82.35
60	Future outlook of the company	3.83	58.82
1	General information about the economy	3.71	94.11
2	Corporate mission statement	3.63	82.35
26	Effect of business strategy on future performance	3.56	41.17
19	Bank loan, mortgage and their use	3.56	29.41
21	Foreign currency fluctuation information during the year	3.54	17.64
18	Retained profit	3.51	82.35
48	Skills and experiences of directors	3.51	47.06
14	Significant issues during the year	3.49	35.3

Source: Frequency distribution results

issue of interest information about them needed to be disclose for the usage of investors.

Tab. VII provides the report on the 10 most important items from the view of investors. The ranking started from share price information, future outlook through to significant issues during the year at a mean rating score of (3.83, 3.83 …….. to 3.49) respectively. Most of the information were found under the financial information (namely share price information, bank loan and their use, foreign currency fluctuation information during the year and retained profit) ranked as 1st, 6th, 7th and 8th respectively. Financial information items are the most important items in the voluntary disclosure information. The 6th and 7th place items had a very moderately low actual disclosure rate reason assigned that those items can be easily reached by the users through available information in financial statement (Binh, 2012). The desirable level of disclosure expected from investors are deemed relatively higher than the actual disclosure (34.22%) made by the firms.

CONCLUSION

There are three objectives for the study. To address the initial objective, which is to measure the level of voluntary disclosure by listed non-financial firms in Ghana, the paper reported a mean of 32.7%. The report arguably is regarded very low compared to studies like (Akhtaruddin *et al.* (2009), 53.2%; Elfeky (2017) 34.26%) but greater than findings in studies like (Alfraih (2015), Albitar (2015) and Donnelly and Mulcahy (2008) for Kuwait (23%) Jordan (32.4%) Ireland (21.4%) respectively).

The results also provide evidence on the positive association for three corporate governance variables with only board size, showing statistical significance. Blockholder ownership and audit committee also had a positive association with the level of voluntary disclosure but insignificant. Proportion of independent non-executive directors to the board was insignificant with a negative association with the voluntary disclosure.

Companies information and financial information categories had the highest disclosure level in the annual reports. The results are consistent with studies like Al-Shammari (2008) in Kuwait and Barako (2007) in Kenya. With regards to the ratings by investors, the financial information category had dominant items among the first ten highest items. The ranking started from share price information, future outlook and thirdly, significant issues during the year and so on. The key importance of this objective is to make input in upgrading the quality of reports by Ghanaian firms. Little disclosure was made on corporate governance information and employee information and a recommendation is for the firms to improve in the level of disclosure for those items in those categories which would deepen investors knowledge about the firms.

To answer the third research objective, that is to rate the importance of voluntary disclosure from the view point of investors, the overall actual level of disclosure was 32.7% which is arguably regarded very low.

To conclude there is arguably a low level of transparency especially with regards to the free choice of information disclosure. Though higher level of voluntary disclosure does not necessarily mean higher disclosure notwithstanding, low disclosure can also be suggested as the result of the lack of legal enforcement by the regulators. Since the capital market ties provision of capital to firm's performance, sufficient relevant disclosure and best practice of corporate governance, it is recommended for firms to improve their level of transparency through disclosure in other to give investors' confidence to enable the former to attract capital.

More so preparers of the annual report need to disclose much more information based on the findings so as to improve trust from investors in the statement. This is important because the need for information asymmetry is key between the suppliers of funds and the demanders of funds for mutual benefit which rest on how much disclosure a firm makes.

The study makes three notable contributions. It adds up to the knowledge on corporate governance by empirically investigating the impact that corporate governance attributes have on voluntary disclosures for listed non-financial firms in Ghana. Secondly is where the study brings to light the level of voluntary disclosure which are of concern to stakeholders such as regulators, researchers, accountants, financial analysts. Since the overall disclosure sheds light to aid investors in making informed decisions, stakeholders' commitment to ensure sound voluntary disclosure practices is necessary to promote the capital market of the economy. The disclosure items which investors prioritize is discovered in the study where emphasis is laid on individual items and the categories of the information as such. This is a unique contribution of its kind in Ghana.

The study has several implications for firms and regulators. These bodies have it as a shared responsibility to improve the transparency and voluntary disclosure practices. To the firms the knowledge of the benefits of sufficient information disclosure may trigger an increase in voluntary disclosure. To the regulators, the study seeks to suggest the need for a guideline which will ensure proper voluntary disclosure practice in annual reports

The study has a handful of limitations to record. There is several information which can be extracted as disclosure information (examples include report from management meeting, financial press releases) however only information from annual report were used since it is regarded as the most imminent source of information for decision making. The study also limited itself to just a handful of corporate governance variables. Future studies could focus on addressing other variables such as family control, role duality just to mention but a few. Secondly, the study covered only non-financial firms even excluding those annual reports couldn't be accessed. An entire industry was excluded from the study notably financial institution. Covering other firms would be an interesting extension for further study. Lastly, further research should be opened to rate the importance of voluntary disclosure from the view point of financial analyst or financial managers. This means that the results and its interpretation should not be a generalization for all firms listed on the Ghana Stock Exchange having the limitation in mind

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Contact information
Abdul Mansulu: abdulis4christ@yahoo.com
Daniel Anarfi: anarfidaniel@ymail.com