CORPORATE GOVERNANCE MECHANISMS AND DISCLOSURE QUALITY: EVIDENCE FROM UK TOP 100 PUBLIC COMPANIES

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Abstract

This research is aimed to explore the determinants of corporate governance disclosures with emphasis on board structure and external audit. Theoretical and empirical literature shows conflicting evidence on how aspects of corporate governance are related to disclosures. This study carried out an extensive synthesis of the existing literature, taking into account the aims of analysis and the underlying situation of past studies, to come up with tentative answers to the research questions before the analysis. The paper adopts a balanced analysis in which disclosures are assumed to be as a result of both board and nonboard factors but still within the corporate governance realm. In order to achieve the overall aim, the study sample was drawn from the existing list of UK's Top 100 FTSE non-regulated firms. A combination of quantitative statistical and business analytics methods was used to carry out the analysis. Using the Corporate Governance Disclosure Quality (CGDQ) index as the dependent variable and selected board and non-board factors as independent variables, pooled OLS regressions were run. The diagnostic tests were carried out to establish the relative contribution of each independent variable to the model. It was established that the age of board members, the proportion of female directors, the frequency of audit committee meetings, external audit expense, firm growth opportunities, and firm size were important determinants of CGDQ. It was suggested that future studies should investigate whether board structure is still an important determinant of corporate disclosures in the age of advanced information technology.

Keywords: Corporate Governance, Disclosure, FTSE100, External Auditor Fees, Board of Directors, Audit Committee

1. INTRODUCTION

Corporate disclosures have occupied corporate governance literature for a long time. In the early 2000s, there was renewed interest in disclosures especially after the corporate scandals of Enron, WorldCom, Lehman Brothers, and other companies came to the limelight (Bauwhede & Willekens, 2008). Both research and practice have suggested that wellthought-out corporate communications are required to mitigate the information asymmetry, which is suggested to be the cause of agency problem and agency costs in corporations. It is believed that corporate transparency is a signal for the quality of management and management ability to induce growth and profitability (Bhat et al., 2006; Daub, 2007; Eccles et al., 2014; Enache & Hussainey, 2019).

There are many typologies of disclosures: voluntary disclosure (Cheng & Courtenay, 2006; Al-Akra et al., 2010), triple-bottom-line disclosure (Ho & Taylor, 2007), CSR disclosure (Said et al., 2009; Saleh et al., 2010; De Villiers & Marques, 2016), social and environmental disclosure (Haniffa & Crooke, 2005; Siregar & Bachtiar, 2010; Alrazi et al., 2016), and sustainability disclosure (Michelon & Parbonetti, 2012; Lagasio & Cucari, 2019). The corporate governance theory explains how firms choose some approaches to disclosures than others.



The agency theory can be used to explain the behaviour of management in the context of governance disclosure (Parsa et al., 2007; Kelton & Yang, 2008; Sharma, 2014; Elshandidy & Neri, 2015). Prior suggestions on the framework and basis of the agency theory depict that the control-ownership separation that can create agent-principal conflict of interest due to information asymmetry between insiders and outsiders, since management can operate for their benefit rather than maximizing shareholders' value (Jensen & Meckling, 1976; Fama & Jensen, 1983; Watts & Zimmerman, 1986). At the centre of the agency theory is the hypothesis that corporate disclosures are crucial for the functioning of an efficient capital market (Healy & Palepu, 2001).

The tenets of the agency theory appear to coalesce with those of the capital market efficiency on the front of disclosures. The latent conflict is that managers have the advantage as custody of corporate information, but the shareholders or investors cannot access all corporate information and thus cannot evaluate and determine the basis of managerial decisions or the value of stocks in the market (Jensen & Meckling, 1976; Fama & Jensen, 1983). Therefore, shareholders are willing to pay monitoring costs and bonding costs to ensure the alignment of interests and induce management to work only for shareholders' interest or benefits (Ross, 1973; Jensen & Meckling, 1976). The investors also bear agency costs in the process of searching for accurate information when the disclosure level and transparency is too low (Healy & Palepu, 2001).

This study investigates the impact of corporate governance mechanisms on corporate governance disclosure level of FTSE100 nonfinancial companies in this paper. The paper reviews the relevant corporate governance literature, theories and empirical studies in the context of the determinants of disclosures. The methods used in the study are also explained followed by the presentation of the study findings. Finally, the key issues from the study are summarized in the conclusions section.

THE DETERMINANTS OF **CORPORATE** 2. DISCLOSURES

2.1. Board structure and corporate disclosure

The traditional agency problem is well manifested by considering the 'selfish' nature of managers versus required corporate transparency the ideas. According to the agency theory, the agents (managers) should act in the best interest of the principals (owners) - disclosure of information to the shareholders (Fama & Jensen, 1983). However, managers have self-interest seeking behaviour and would not work to maximize shareholders' value or wealth (Jensen & Meckling, 1976; Fama & Jensen, 1983; Watts & Zimmerman, 1986). At the centre of this study is the argument that the traditional agency problem should not always occur, since keener analysis of the theory uncovers traces of incentives that managers have to disclose company information in order to reduce the agency conflicts especially through the way the board is structured (McColgan, 2001).

2.1.1. Board independence and disclosure

The presence or proportion of independent directors on the board is crucial since they are assumed to be external directors with no relationship with the management or the firm in any way. It is argued that independent directors bear high reputation costs and this might encourage them to effectively be engaged in monitoring management's actions and hence limiting the opportunistic behaviour of managers (Weisbach, 1988; Borokhovich et al., 1996). More specifically, it is suggestive that independent directors play a crucial role in affecting disclosure decisions of corporations (Beasley, 1996), and in urging management to improve their disclosure practices by disclosing more information to stakeholders (Patelli & Prencipe, 2007). Moreover, the UK Corporate Governance Code suggests that the independent directors may protect its overall interest against potential opportunistic behaviour and prescribe the inclusion of more independent directors in the boardrooms (Cadbury Report, 1992).

Lim et al. (2007) show a positive impact of independent boards on the level of non-mandatory disclosure in published reports and more provision of material coming strategic movements for Australian firms. Additionally, other studies also show that more independent directors enhance the issuance, regularity, and accuracy of non-mandatory firm performance projections (Ajinkya et al., 2005; Karamanou & Vafeas, 2005; Elmagrhi et al., 2016); the outsiders ability enhance to forecast performance (Byard et al., 2006); decrease the management practices of earning management and manipulation (Mak & Li, 2001; Chen & Jaggi, 2001); improve in non-mandatory disclosure (Cheng & Courtenay, 2006; Patelli et al., 2007; Akhtaruddin et al., 2009) for Singapore, Italy and Malaysian firms. So, based on the agency perspectives above and the empirical evidence noted above, we test the following hypothesis.

H1: The proportion of independent directors has a positive association with corporate governance disclosure.

2.1.2. Board size and disclosure

Two competing positions exist based on two theoretical orientations. According to agency theory, board size is considered one of the significant factors for monitoring management and in making strategic decisions. This can also be extended to its role as one of the determinants of corporate governance disclosure quality. Herman (1981) argues that large board size is more likely to be ineffective. The proponent of the agency theory, Jensen (1993), also argues that the number of directorson the board is a decreasing function of the effectiveness in communication and monitoring of management. On the other hand, the resource-based perspective suggests that board size may be an important factor that promotes corporate transparency. It is argued that a large board size may increase the pool of expertise and a valuable resource that would be beneficial to the firm (Hidalgo et al. 2011). Based on the expert power perspective, it is suggestive that larger boards provide different backgrounds and views which, in turn, improve the board's ability to oversee the firm activities including voluntary reporting and disclosure practices (Gandia, 2008). In the same way, empirical data shows mixed results. Some support a positive association of board size and non-mandatory reporting (Abeysekera, 2010; Allegrini & Greco, 2013), CG disclosure (Elmagrhi et al., 2016; Albassam & Ntim, 2017), and positive



nonlinear relationship between board size and corporate social responsibility reporting (Said et al., 2009; Siregar and Bachtiar, 2010).

H2: There is a positive relationship between board size and corporate disclosure.

2.1.3. Board diversity and disclosure

The diversity of the board has to do with the attributes of board composition from different gender, ethnicity or cultural, educational, functional, occupational, and industry experience, backgrounds (Milliken & Martins, 1996). This study focuses on the diversity of the board of directors in terms of gender and age diversity.

According to Kang et al. (2007), gender is an important attribute in the diversity debate. It is argued that women's presence in boards may influence efficiency hence mitigate the agency problem (Zhang et al., 2012); that having women on the board of directors may enhance the competitive (Bernardi et al., 2002; Bravo advantage - & Alvarado, 2019); can lead to better firm performance (Ripley, 2003); and represent the interests of stakeholders better (Sicilian, 1996; Williams, 2003). The corporate governance codes and the regulatory frameworks prescribe the increase of the presence of women on the board. In the UK, only 3% of the top FTSE companies in the UK have women executive directors (Hyland & Marcellino, 2002). Some studies using the presence of women on the board find a positive relationship with firm governance in many ways (Adams & Ferreira, 2009; Coffey & Wang, 1998; Elmagrhi et al., 2016). Accordingly, this study hypothesizes the following:

H3: Board gender diversity has a positive effect on the extent of CGD level.

According to Petersson and Wallin (2017), heterogeneity of the board composition in age may indicate that the board reflects the society and that it has diverse information and experience. The diversity of the board in terms of age is a critical attribute of the board. It is argued that the middle positions individuals dominate and age responsibilities in firms, institutions, and society, and the young age group exhibits the energy and drive to compete. Empirical evidence on age diversity is very scant. Carter et al. (2003) find that younger boards are more likely to include female directors than older boards. From this, it may be suggestive that young directors may be more open to new approaches and hence disclosure quality than old directors. Hence, based on the fact that the average age of the board has been increasing, it may suggestive that the corporate governance he disclosure level of FTSE 100 UK companies in the decade has been decreasing. This is to be tested in this research.

H4: Board age diversity has a negative relationship with the extent of CGD level.

2.1.4. Audit committee effectiveness and disclosure

The audit committee is a sub-committee of the board with a specific role that focuses on supervising auditing and reporting practices (Pincus, Rusbarsky, & Wong, 1989). The regulatory frameworks in the UK state that audit committee has a crucial complementary role in monitoring the activities of the firm by enhancing the reporting practices and protecting shareholders' interests through disclosing price-sensitive information (the Blue Ribbon Report, 1999; the Smith Report, 2003). This study considers the following audit committee characteristics essential: meetings frequency and committee meeting participation or attendance rate, as determinants of corporate disclosure as advised in Vafeas (1999) and Brick and Chidambaran (2010). It is believed that regular attendance of audit committee meetings, measured by the number of the audit committee meeting, may indicate due diligence and commitment of the members (Vafeas, 1999; Talpur et al., 2018). The increased attendance rate of the audit committee members decreases the information asymmetry between them and promotes more effective functioning as a unit in discharging its fiduciary duties (Brick & Chidambaran, 2010).

H5: There is a positive relationship between the frequency of audit committee meeting and corporate disclosure quality.

2.2. External auditors and disclosure

External audit is historically essential in promoting transparency and accountability. It is considered to be one of the monitoring devices in the situation where there is a potential interest of conflict between owners and managers (Watts, 1977; Benston, 1980; Watts & Zimmerman, 1981; DeAngelo, 1981). From the agency perspectives, external auditors that are committed with providing an unbiased opinion on the quality of disclosure are important corporate governance mechanism (Jensen & Meckling, 1976); and instrumental in encouraging transparent and comprehensive financial disclosure (Ashbaugh & Warfield, 2003). In line with this, it is implied that hiring a big auditing firm signals the high-quality of disclosure of financial data to the financial market (Titman & Trueman, 1986). Regarding this, Dunn and Mayhew (2004) conclude that the selection of the external auditor is determined by management reporting strategy, which is also reflected by the degree of the auditor's industry-specialization.

2.2.1. Audit expense

The relationship between the audit fee and audit quality has been fairly studied. Some researchers argue that due to their higher market share, size, and power, larger external auditors can request higher charges; as higher fees imply a tendency towards being well-audited (Kanagaretnam et al., 2011). Additionally, Yasina and Nelson (2012) suggest that high audit fees are linked to higher quality of audit services to firms in contrast to lower audit fees, and hence that higher audit fees indicate a higher audit quality. The opposite view is that high audit fees negatively affect the auditor's motivation to perform higher quality services as they are economically dependent on the client. The research by Hoitash et al. (2007) reveals that there was a statistically negative relationship between the amount of audit fee and audit quality among the US firms, in particular for non-audit services. Empirical studies by Choi et al. (2010) also find a negative relationship between abnormally high audit fee and audit quality. Moreover, Kraub et al. (2011) find that audit quality measured by both misstatements and earnings management have a positive relationship

with the positive abnormal audit fee for German firms, thus indicating the negative impact of abnormal audit fee on audit quality.

Other arguments in the literature on audit fee suggest that the audit fee can be one of the factors that can curb the audit independence and hence audit quality. DeAngelo (1981) argues that auditor independence is inversely related to the audit fees depending on retaining any one client. Transaction costs of changing auditors to the client and the absence of perfect substitutes might enable the incumbent auditors to set high future fees above the actual costs of audits (DeAngelo 1981). Moreover, Larcker and Richardson (2004) also argue that the relationship between audit fee and audit quality is sensitive to the proxy to measure auditor independence. This implies that auditor independence has a moderating effect on the relationship between audit fee and audit quality. Literature shows that early researches focus on the relationship between audit fee and audit quality. Srinidhi and Gul (2007) argue that the audit market is strictly regulated and thus opportunities for auditors to earn rents are limited. Using performance-matched discretionary accruals as a proxy for audit quality Mitra et al. (2009) report results that both expected and unexpected audit fees have a negative relationship with discretionary accruals, thus indicating a positive relationship of audit fee with audit quality for US firms. Based on the arguments above and because we use the average audit fee that may not curb auditor independence hence the hypothesis below.

H5a: There is no positive relationship between audit expense and corporate disclosure quality.

2.2.2. External audit tenure

The investigations of corporate scandals such as the Enron one led to the establishment of the relationship between external auditor tenure and fraud. Geiger and Raghunandan (2002) report evidence that audit firms are more likely to give an unqualified audit report in the early years of the auditor-client relationship, namely in the short tenure. Johnson et al. (2002) show result that the possibilities of fraud is higher in the early years of hiring the external auditor (low audit tenure, which is three or fewer years) but find no relationship with the average audit tenure and high audit tenure (9 years or more). Myers et al. (2003) also find that earnings quality have a positive relationship with audit tenure. Also, consistent with Johnson et al. (2002), Carcello and Nagy (2004) find that short auditor tenure is significantly and positively related to fraudulent financial reporting while failing to find such relationship for long term auditor tenure. On the other hand, other earlier studies show evidence that audit quality is lower in the cases of longer audit tenure. Casterella et al. (2004) conclude that audit quality is more likely to be higher when audit tenure is long and vice versa. Davis et al. (2003) also report that fraud signals increase as audit tenure increases; and they thus conclude that as auditor tenure increases management gains additional reporting flexibility, thus low audit quality as audit tenure increases.

H5b: There is no relationship between audit tenure and corporate disclosure quality.

2.3. Other determinants of disclosures

2.3.1. Firm growth opportunities

The information on investment opportunities of a company is essential for investors. Most studies have found out that as growth option increases, the firm performance will also increase. It has been found that the expansion in new investment ventures might reduce the current accounting income in the short-run since the investment opportunities require an immediate outlay of capital where the payoffs are not reflected in current accounting earnings (Abbott et al., 2004). As a firms experiencing consequence, managers of expansion in investment opportunities that do not have current payoffs tend to increase their disclosures to counter any adverse effect of low short-run accounting earning and to gain confidence from their stakeholders (Skinner, 1993). Other analysts have argued that firms with higher growth opportunities are more difficult to monitor (Hutchinson & Gul, 2004) and management is more reluctant to voluntary disclosure (Huafang & Jianguo, 2007). While several financial ratios can be used to measure disclosures, the market-to-book asset ratio (Tobin's Q) to measure growth opportunities as it contains more information about disclosure than other ratios (Adam & Goyal, 2008). As for the other measures, empirical findings on growth opportunities are mixed. While Alves et al. (2012) found that growth opportunities are positively related to disclosure; Eng and Mak (2003), Scholtz and Smit (2015) report negative ones.

H6a: Growth opportunities are positively related to the level of corporate disclosure.

2.3.2. Firm size

On firm size, larger companies tend to disclose more data in order to lessen information asymmetry and agency costs, especially monitoring costs. Therefore, it is expected that large companies disclose more corporate governance information than smaller firms (Eng & Mak, 2003). This agency theory perspective implies that the extent of corporate disclosure increases as firm size increases. Second, more disclosure of information by larger firms is related to the hypothesis of economies of scale, where large companies may incur lower costs in their reporting practices of corporate information (Lang & Lundholm, 1993; Cowen et al., 1987; Tagesson et al., 2011). However, contrary to this expectation, Jensen and Meckling (1976) argue that large companies may tend not to disclose some information to "avoid political costs". Others argue that smaller firms have more incentives of achieving competitive advantage by more transparency and the disclosure of more information to the public (Singhvi & Desai, 1971; Wallace & Naser, 1995). More studies also show evidence of positive impact of firm size on other forms of disclosure such as voluntary disclosure (Hossain & Reaz, 2007) and corporate social responsibility disclosure (Kansal et al., 2014).

H6b: Firm size has a positive relationship with firm corporate disclosure level.

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3. METHODOLOGY

3.1. Sample and variables

The population of the study consists of FTSE nonregulated companies. The exclusion of regulated firms (e.g., banks and insurance entities) is due to the different accounting, regulation, and governance practice that they have, which may lead to misleading findings. The study uses a sample of Top 100 FTSE non-regulated companies with observations of 10-years (2009-2017). The data on the Top 100 FTSE companies are collected from Bloomberg Platform and DataStream. Some of the missing values (mainly governance data) of some observations are collected manually from annual reports. The sample excludes financial services companies and other regulated firms. So, the final panel data sample consists of 89 FTSE biggest companies in which 409 firm years are finally achieved after removing the worrying missing values or observations. The period of 2009 to 2017 is chosen to take into account that the UK economy began to recover from the consequences of last global financial crisis that started in late 2007 and continued its normal course until recently. Table 1 shows the dependent variable (*CGDQ*) and independent variables.

Table 1. Variables used in the analysis

Symbol	Variable name	Description
CGDQ	Corporate governance disclosure quality score	A score of the quality level of the disclosure of the firm's corporate governance, as given by Bloomberg
IND	Percentage of independent directors	Percentage of independent directors out of the total boards
BSIZE	Board size	The total number of board members
BFEM	Percentage of female on the board	Percentage of female directors out of the total boards
BAGE	Board average age	The average of the ages of the members of the board of directors
AUDMEET	Number of audit meetings	The annual number of meetings held by the audit committee
AUDTEN	Audit tenure	The number of consecutive years the same external auditor audited the firm
FEES	External audit expense	The total audit fee paid by the company as a proxy for auditor size
TOBIN	Tobin's Q	Tobin's Q as a proxy for firm performance
MCAP	Market capitalization for size	Number of stock outstanding multiplied by the average stock price

The dependent variable is Bloomberg's corporate governance disclosure index (*CGDQ*), which is a proxy to measure corporate governance quality level. According to Bloomberg, the index varies from 0.1 for a firm that reports a minimum amount of governance data to 100 for those that report all data points.

observed that the values of the median and the mean for most variables are very close to each other except for *FEES* and *MCAP* and their distribution is skewed to the right, thus indicating that they are not normally distributed. Their skewness values also are greater than two thus confirming the interpretation of their median and mean. Furthermore, the values of skewness reveal that *AUDMEET*, *AUDTEN*, and *TOBINQ* are not normally distributed. *CGDQ, IND, BSIZE, BFEM,* and *BAGE* exhibit an approximate normal distribution.

3.2. Data analysis

The descriptive analysis of the raw data without transformation is presented as Table 2. It can be

Table 2. Descriptive statistics of the dependent and independent variables

Variable	Minimum	Median	Mean	Maximum	Skewness	Kurtosis
CGDQ	10.71	60.71	60.70	82.14	-0.31	4.52
IND	0.00	66.67	65.49	92.86	-0.38	3.54
BSIZE	4.00	10.00	11.00	20.00	0.67	4.07
BFEM	0.00	20.00	19.22	50.00	0.06	2.63
BAGE	46.17	57.50	57.49	70.00	-0.03	4.02
AUDMEET	1.00	5.00	5.12	15.00	2.12	9.02
AUDTEN	1.00	11.00	12.75	109.00	3.29	24.70
FEES	0.00	2.30	6.16	57.00	2.96	12.04
TOBINQ	0.62	1.52	2.51	80.94	10.26	118.00
MCAP	33.32	6481.93	18520.62	207964.50	3.01	13.23

3.2.1. Diagnostic tests

The OLS regression of the raw data intended for diagnostic analysis of the OLS assumptions that have the R^2 value of 0.4213 and adjusted R^2 of 0.4083, thus indicating that the variations in the explanatory variables explain 41% of the variation in the dependent variable (*CGDQ*). The graphical and numerical checks for normality of the residuals show that they are approximately normally distributed. Additionally, the statical tests on heteroscedasticity also show that error terms have homoscedasticity, thus indicating they have constant variance. Moreover, the Durbin-Watson test for serial

autocorrelation shows evidence of no positive autocorrelation.

Furthermore, the check for variance inflation factor (VIF) and tolerance show that there is no VIF value higher than ten thus showing the absence of severe multicollinearity. However, *FEES* is found to contribute a lot to the VIF thus indicating the need for nonlinear transformation of the variable. As for the tolerance $(1-R^2)$ level, all variables exhibit tolerance of less than 1.0 thus confirming the evidence of VIF. Further check shows that variables Conditional Index number for *FEES*, *TOBINQ* and *MCAP* are greater than ten thus indicating the problem of global instability and the need for nonlinear transformation.

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The result of more check for multicollinearity between pairs of independent variables using Pearson's pairwise correlation as presented in Table 3 shows that there is no strong multicollinearity of the pairs except between *FEES* and *MCAP* that exhibit 0.844. Since there is no economic explanation for such strong multicollinearity between *FEES* and *MCAP*, it is decided to make nonlinear transformation on them. Also, a nonlinear transformation is made on *BSIZE*, *BAGE*, and *AUDMET* in order to handle pairs that exhibit moderate multicollinearity.

Table 3. Pearson's pairwise correlations of	on explanatory variables
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Variable	IND	BSIZE	BFEM	BAGE	AUDMET	AUDTEN	FEES	TOBINQ	MCAP
IND	1.000								
BSIZE	0.037	1.000							
BFEM	0.341*	0.101*	1.000						
BAGE	0.270*	0.308*	0.034	1.000					
AUDMET	0.212*	0.327*	0.035	0.295*	1.000				
AUDTEN	0.035	0.164*	0.083	0.078	0.180*	1.000			
FEES	0.389*	0.394*	0.020	0.430*	0.457*	0.084	1.000		
TOBINQ	-0.018	-0.136*	0.050	-0.094*	-0.039	0.009	-0.098*	1.000	
MCAP	0.457*	0.374*	0.155*	0.376*	0.313*	0.075	-0.844*	0.069	1.000

Finally, the graphical check for linearity of the relation between the dependent variable and each independent variable shows some problems of nonlinearity due to some few extreme observations for few variables such as *BAGE*, and *FEES* and *MCAP*. Overall, most IVs were fund to be normally distributed, not auto-correlated to each other and having acceptable ranges of homoscedasticity. The following variables were transformed: *BSIZE*, *BAGEAVG*, and *NAUDTMEET*, *AUDTEXP*, *TOBINQ*, and *MKTCAP*.

3.3.2. Analytical model

The analytical model for the study is denoted below:

 $CGDQ_{it} = \pounds_{0} + \pounds_{1}IND + \pounds_{2}BSIZE + \\ \pounds_{3it}BAGE + \pounds_{4}BFEM + \pounds_{5}AUDTEN + \\ \pounds_{6}AUDMET_{it} + \pounds_{7}FEES + \pounds_{8}TOBINQ_{it} \\ + \pounds_{9}MCAP + \varepsilon_{it}$ (1)

Using multivariate OLS regression, predictions of corporate disclosures were made using the IVs shown in the model.

4. RESULTS, ANALYSIS, AND DISCUSSIONS

A pooled OLS regression was run on the independent variables. Table 4 presents the output of the analysis.

Table 4. Pooled OLS, robust regression and median regression of independent variables on CGDQ

Variable	P_OLS	ROBUST_R	MEDIAN_R
IND	0494	0494	0102
BSIZE	.1208	.1208	1.336
BFEM	0502	0502	0621**
BAGE	16.14**	16.14**	14.83**
AUDMET	3.126**	3.126***	4.122 ***
AUDTEN	1742	1742	.2281
FEES	.8862***	.8862***	.6867**
TOBINQ	-1.276***	-1.276***	722***
MCAP	2.65***	2.65***	2.626***
_CONS	-26.76	-26.76	-30.08
Ν	409	409	409
R2	.4475	.4475	
R2_a	.4351	.4351	
Rank	10	10	10

The results in Table 4, among all the board characteristics, only BAGE and AUDMET have a relationship with CGDQ. positive Board independence, board size and the proportion of female in the board room show insignificant impacts on CGDQ. The results of this study fail to confirm the positive relations reported by Cheng and Courtenay (2006), Patelli and Prencipe (2007), Albassam and Ntim (2017), Elmagrhi et al. (2016) on voluntary disclosure and voluntary CG disclosure, respectively. Moreover, the pooled OLS results show evidence (at .05 significance level) that average board age and the audit committee meetings' frequency lead to higher quality of governance reporting; and were consistent with Ho and Wong (2001), Barako et al. (2006), Al-Shammari and Al-Sultan (2010) on voluntary corporate disclosures.

The sensitivity analysis using robust and median estimators also confirm evidence from pooled OLS regression except that the proportion of female board members strangely exhibit negative impact on disclosure level for the UK top 100 firms. From the sensitivity analyses, there is evidence that the more the age of the board members on average, the more will be the disclosure level, thus supporting the resource dependency theory on the experience of the board members. This finding is consistent with the finding of Carter et al. (2003) on voluntary disclosure. There is also evidence (at .01 significance level) that the frequency of audit meeting will enhance corporate committee governance disclosure quality, thus confirming the positive impact of the audit committee diligence. This result on the frequency of audit meeting was as expected since the frequency of audit committee members, which reveals their diligence and commitment will induce the incentives to process accounting and corporate governance information effectively so that disclosure quality will increase. These findings are consistent with those of Talpur et

al. (2018) which conducted a similar model on a sample of Malaysian listed companies.

The result from all estimators used shows that extent of expense on external audit functions (*FEES*) is found to show a significant positive impact on *CGDQ* (at .01 significance level). The sensitivity analysis confirms the result. This is as expected, and hence, it is suggestive that external auditors that give high-quality auditing to corporations may demand high fees and that companies paying high audit fees are inclined to improve their corporate governance disclosure quality. On the other hand, the extent of external auditor's tenure with the respective company has no relationship with the corporate governance disclosure level. This result was as expected and confirmed in the sensitivity analysis.

The primary analysis shows the result that firm growth opportunity measured by Tobin's Q has an unexpected negative relationship with corporate governance disclosure quality level. There is evidence at .01 significance level that the level of profitability which is the prospect for growth opportunity has a negative impact on CGDQ. The sensitivity analysis affirms this. The result of this study is inconsistent with the positive relationship between growth opportunities and disclosure by Alves et al. (2012). The unexpected evidence from the result on TOBINQ might suggest that as the growth opportunities of corporations increase, management has the incentives to withhold some information that might affect the company's competitive advantage in the top 100 UK listed companies.

As for the firm size, the results show that there is a significant positive relationship between the market capitalization of the firm and its *CGDQ*. The evidence is consistent with several research studies (Craven & Martson, 1999; Gul & Leung, 2004; Arcay & Vazquez, 2005 among others). The evidence of positive relationship might suggest that as firm size increases in terms of its equity market value, the disclosure of their corporate governance is enhanced, thus implying tendency of boldness and transparency with increased size in terms of the value of equities.

The study contributes to knowledge regarding the transparency and disclosure field in several ways. First, the study contributes its part to the ongoing debates on transparency or disclosure mainly using the agency theory and the aspects of the resource-based perspective. Second, it uses Bloomberg's Governance Disclosure Score (GDS) which objectively measures the level of transparency instead of the subjective measures approach criticized in Katarachia et al. (2018). Third, the study focuses on both board and non-board factors affecting disclosures. This significantly allows a balanced analysis. Fourth, it takes into account the endogeneity problem that is prevalent in financial and economic data and uses appropriate analytical methodology. Fifth, it uses a time-series panel data of 10-year period instead of a one-year crosssectional data that would otherwise be limited in details for this caliber of analysis. Finally, the findings of the study could spark discussions on whether the old-age determinants of corporate disclosures are still valid; mainly because it was shown that most of the board characteristics are not determinants of corporate governance disclosure quality.

5. LIMITATIONS AND KEY AREAS FOR FUTURE RESEARCH

One possible limitation is that as the result of this paper is a limited number of governance characteristics that were selected to test how to mitigate the agency problem by improving the disclosure quality. Therefore, it might be difficult to generalize the analysis' results to reflect all governance aspects.

Although the results of this paper add important and interesting evidence of the role of some corporate governance on the quality of corporate governance disclosure, some features could be relevant to the issue of the disclosure quality determinants exist but not investigated by this research. In order to better understand the theoretical and practical implications of the findings, one attractive area for future research is to reexamine some of the board of directors attributes (e.g. board size and independence) that were found, surprisingly, to play a passive role in determining the CGDQ on other diminutions of disclosure (e.g. environmental, social, and governance disclosure, CSR disclosure etc.).

6. CONCLUSION

The empirical investigation on the determinants of corporate governance disclosure quality on UK top 100 listed firms shows that average board age, the proportion of female in the boardroom, frequency of audit committee meeting, external audit expense, firm growth opportunities, and firm size in terms of equity value are important determinants of *CGDQ*. There is no evidence that there is any relationship board independence, board size, or tenure of the external board with the same firm and *CGDQ*.

While issues related to sampling and data quality may have occasioned the non-significance of other predictors of disclosures, it would be important to begin discussions around whether board structure is still an important determinant of corporate disclosures. Future studies could investigate the role of communications technologies and the internet in leaking out to the shareholder information hidden with the corporate governance structures.

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