"Corporate governance structures and their implications on audit quality: UK evidence"

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CORPORATE GOVERNANCE STRUCTURES AND THEIR IMPLICATIONS ON AUDIT QUALITY: UK EVIDENCE

Abstract

This study evaluates the impact of corporate governance variables on audit quality in the United Kingdom (UK). The aim of the study is to ascertain the influence of board size, chief executive officer's (CEO) dual role, and audit committee independence on audit quality. Two different proxies of audit quality were employed: the level of discretionary accruals and auditor size. The sample comprised 1,306 firms listed on the FTSE All Share Index for a long period covering 2012–2022. Different methodologies were employed to reach conclusions. Panel least squares and logit regressions provided robust results. Specifically, the results imply a positive relationship between board size, audit committee independence, and audit quality. Interestingly, CEO duality does not seem to alleviate audit quality levels. Contrary to many research findings and regulatory concerns, the CEO's dual role is positively related to both audit quality proxies. All independent variables in the panel least squares model are statistically significant at conventional significance levels. The logit model provides unequivocal support to the beneficial role of board size on audit quality, at all levels of significance (*p*-value 0.00). The UK's "comply or explain" regime offers a unique setting for future research on several corporate governance variables.

Keywords	earnings management, discretionary accruals, auditor size, board size, audit committee, CEO duality
JEL Classification	M42, M41, M48, G34

INTRODUCTION

Major audit failures, with many induced by economic turbulence, paved the way for a comprehensive response to reinforce audit quality. Stakeholders realized that there were many deficiencies of a qualitative nature regarding financial reporting. Regulators responded to meet those needs by formulating relevant audit quality frameworks and empowering supervising mechanisms. An integral part of the suggested frameworks is corporate governance structures.

Corporate governance structures, such as the board of directors and the audit committee, aim to reinforce financial reporting credibility, safeguard audit quality, and ultimately protect market participants. Rigid corporate governance structures mitigate agency costs by alleviating management's efforts to manipulate earnings. Earnings manipulation is associated with subtle levels of financial reporting quality and, ultimately, audit quality. Empirical research seeks to assess the effects of corporate governance structures and policies on audit quality. Market participants and regulators could benefit from the suggested relationships detected in empirical testing.

1. LITERATURE REVIEW AND HYPOTHESES

Auditing is an indispensable service for market participants, provided by specialized professionals. The role of auditing is threefold. Auditors deter self-serving motives from management, monitor the integrity of financial statements, and insure management from litigation risks. Inevitably, the quality of audit work is of crucial importance. Regulators imposed supplementary mechanisms, such as corporate governance structures, to support audit quality and protect market stakeholders.

The understanding of audit quality is largely influenced by the perspective that opted to analyze audits. If one considers audit as a product deriving from a manufacturing process, quality is mainly explained by conformity to established standards (Parasuraman et al., 1985). Consequently, audit quality is judged on the grounds of conformity to accounting and auditing standards. Alternatively, if one considers audit as a service, quality is explained by the fulfillment of expectations of interested parties (Sampson & Froehle, 2006). Failure to meet expectations creates "expectation gaps" between different participants (Parasuraman et al., 1985). The most acknowledged participants in an audit context are the users of the financial statement's information and the auditors. An expectation gap between these parties occurs when both interpret the auditor's responsibilities differently (McEnroe & Martens, 2001). In this vein, an audit failure does not necessarily coincide with a company going bankrupt after receiving an unmodified audit report. On the contrary, audit failures occur even when managers experience suboptimal performance from the auditor or ascertain that the auditor did not meet their needs (Behn et al., 1997).

Audit quality can only be approximated by various metrics due to its subjective nature. DeFond and Zhang (2014) classify audit quality metrics into two major categories: input and output-based. Output-based measures accrue mainly from the firms' financial reporting system. Such measures comprise the issuance of restatements (Abbott et al., 2004; Lin et al., 2006) and the reaction of the market participants to audit-related issues (Teoh & Wong, 1993). The reaction of market participants is often approximated by an earnings response coefficient, the implications on the cost of capital, and the stock market reactions to audit-related events (DeFond & Zhang, 2014). Nevertheless, most of the research works draw inferences on audit quality based on the quality of financial reporting. The latter is commonly approximated by the magnitude of accruals. Dechow (1994) suggests that the levels of discretion over the recognition of accruals can lead to earnings manipulation. A cornerstone in accrual modeling is Jones' (1991) discretionary accruals model. The model stipulates that accruals are a function of revenue growth and tangible assets (Property Plant and Equipment – PPE). The initial model was modified by imparting the change in credit sales (Dechow et al., 1995), addressing thus concerns for false detection of accruals as normal. Jones' (1991) and the modified Jones' model, proposed by Dechow et al. (1995), surely dominate relevant literature. Both models stipulate that total accruals are split into discretionary and non-discretionary. Non-discretionary accruals envisage fundamental corporate performance. The level of discretionary accruals unveils earnings management maneuver efforts, indicative of low financial reporting quality and, ultimately, low audit quality. Even though measurement errors in the accrual estimation processes remain a challenge, accruals seem to be a credible proxy for unveiling earnings quality in a consistent manner (Francis, 2011).

Input-based measures of audit quality are mainly driven by the features of auditor/client relationships. The size of the auditor, the tenure, and the level of audit fees are commonly met in empirical research as proxies to audit quality. Audit research primarily distinguishes four major audit firms (EY, KPMG, Deloitte Touche, and PwC) and classifies them as "Big 4." Audit market share inflates BigN membership accordingly (Lin & Hwang, 2010). Big audit firms possess a comparative advantage as opposed to their peers due to the multitude of resources and accumulated knowledge. Big audit firms are considered to offer audits of superior quality (Knechel et al., 2013). The reasoning behind the Big 4 superiority in auditing is not limited to capabilities but is also extended to litigation and reputation risks (Asthana et al., 2010). This implies that audited

financial statements from a sized auditor could be a reliable proxy for audit quality (Wang et al., 2008; He et al., 2014; Dimitras et al., 2015). Market merits seem to exert an influence on the behavior of the Big 4 audit firms. Strict regulation and supervision urge Big 4 auditors to deliver homogeneous, high-standard outputs (Davidson et al., 2005). The UK market is characterized by its strict, comprehensive regulatory environment. Inevitably, the examination of the audit quality in this context attracts research interest. This study employs a supplementary model that evaluates audit quality based on the size of the auditor.

Agency cost theory thoroughly explains the conflicting interests between agents and principals within a firm framework. Agency cost theory describes the adverse financial consequences accruing from the conflict of interest between principals and agents (Jensen & Meckling, 1976; Fama & Jensen, 1983). The alignment of interests between the two groups is facilitated inter-alia via monitoring mechanisms. Corporate governance structures aim to mitigate such conflicts and ensure that firm administration runs for the interests of the principals. The board of directors plays a pivotal role in the corporate governance structure. The main task of the board is to ensure the alignment of interests between agents and shareholders (Lin & Hwang, 2010). Large boards are less likely to be influenced by the CEO, compared to smaller counterparts (Ntim & Soobaroyen, 2013). Additionally, large boards may comprise individuals with accumulated knowledge and expertise who can manage the firm more effectively. However, there is also contradicting evidence. Large boards may suffer from communication and coordination problems that could result in lower levels of audit quality (Ben-Hassoun et al., 2018). Nevertheless, empirical research commonly associates audit quality and board size in a positive manner. Such a relationship is found when audit quality is approximated by the quick disassociation of auditors with bad reputations (Asthana et al., 2010) or even by the level of audit fees (Hamid & Abdullah, 2012). Larger boards support audit quality when the latter is proxied by auditor size (Fawzi Shubita et al., 2024). Research also documents a negative relationship between board size and discretionary accruals (Ebrahim, 2007), reinforcing the argument that board size benefits audit quality.

Regulators oppose a dual role for CEOs, raising concerns over their impartiality when they simultaneously manage and monitor managerial performance. UK Corporate Governance Code (Financial Reporting Council, 2018) stipulates that CEO duality should be avoided, i.e., "The roles of chair and chief executive should not be exercised by the same individual." This provision is supported by empirical evidence (Gelb & Zarowin, 2002; La Porta et al., 1999). Executive directors, and CEOs included, could be biased when evaluating management performance. Their dominant role could impair board independence. Therefore, a separate role for the CEO is suggested. A CEO undertaking dual roles is associated with earnings manipulation techniques (Hudaib & Cooke, 2005). A separate and distinctive role for the CEO is positively related to many audit quality metrics, such as auditor size (Lin & Liu, 2009) and audit fees (Tsui et al., 2001). Bliss (2011) suggests that CEO duality deters board independence and undermines audit quality.

Audit committees also play a pivotal role in audit quality levels. UK Corporate Governance Code (Financial Reporting Council, 2018) stipulates that audit committees should comprise solely non-executive members, i.e., "The board should establish an audit committee of independent non-executive directors…" Fully independent audit committees are positively related to the level of audit fees (Abbott et al., 2003), negatively to auditor resignations (Lee et al., 2004) and occurrence of restatements (Abbott et al., 2004); all the variables above are widely accepted as audit quality metrics. In the same vein, Bedard et al. (2004) suggest a negative relationship between completely independent audit committees and abnormal accruals. There is strong empirical evidence in favor of the beneficial role of audit committee independence on audit quality (Hermanson et al., 2024).

This study aims to assess the relationship between board size, CEO's dual role, audit committee's independence, and audit quality. The preceding literature review paves the way to formulate three research hypotheses, as follows:

H_1:   *Audit quality is positively related to board size.*

H_2: *Audit quality is negatively related to CEO duality.*

H_3: *Audit quality is positively related to a fully independent audit committee.*

2. METHOD

This study assesses the implications of corporate structures on audit quality in the UK setting. The sample comprises firms listed on the FTSE All Share Index. The study collected data from Datastream. The timeframe includes the years 2012 to 2022. The data for the year 2011 were also employed to calculate first differences where appropriate. The paper, as a prerequisite, had each sector consisting of at least fifteen firms (Gunny & Zhang, 2013) with corresponding observations. Table 1 presents the sectors that fulfilled the criterion and were involved in the estimation of discretionary accruals. The depth of the UK market provides a sizeable sample of observations that supports the credibility of the conclusions.

Table 1. Firm sample – Sectoral distribution

Industry	Number of firms
Aerospace and Defense	18
Alternative Energy	16
Chemicals	22
Construction and Materials	32
Electronic and Electrical Equipment	25
Fixed Line Telecommunications	25
Food Producers	36
General Industrials	22
General Retailers	80
Healthcare Equipment and Services	42
Household Goods and Home Construction	31
Industrial Engineering	20
Industrial Transportation	52
Leisure and Personal Goods	30
Media	87
Mining	134
Oil Equipment and Services	16
Oil and Gas Production	102
Pharmaceuticals and Biotechnology	87
Software and Computer Services	190
Support Services	108
Technology Hardware and Equipment	30
Travel and Leisure	101
Total	**1306**

Adopting prior literature (Davidson et al., 2005), this study employed the cross-sectional version of the modified Jones' model (Bartov et al., 2000). The model stipulates that the level of discretionary accruals stems from the difference between the firm's total accruals and its non-discretionary accruals. The latter are estimated from regression equation (1):

$$NDAC_{ijt} = \hat{a}_j \cdot \left[1 / A_{ij,t-1} \right]$$
$$+ \hat{\beta}_{1j} \cdot \left[\Delta REV_{ijt} - \Delta AR_{ijt} / A_{ij,t-1} \right] \quad (1)$$
$$+ \hat{\beta}_{2j} \cdot \left[PPE_{ijt} / A_{ij,t-1} \right] + e_{ijt} .$$

where $\hat{a}_j$, $\hat{\beta}_{1j}$, $\hat{\beta}_{2j}$ are industry specific deriving from the cross-sectional regression equation (2).

$$TAC_{ijt} / A_{ij,t-1} = \hat{a}_j \cdot \left[1 / A_{ij,t-1} \right]$$
$$+ \hat{\beta}_{1j} \cdot \left[\Delta REV_{ijt} / A_{ij,t-1} \right] \quad (2)$$
$$+ \hat{\beta}_{2j} \cdot \left[PPE_{ijt} / A_{ij,t-1} \right] + e_{ijt} .$$

The level of discretionary accruals (DAC) is provided by the residual value presented by equation (3).

$$DAC_{ijt} = TAC_{ijt} - NDAC_{ijt} . \quad (3)$$

Table 2. Variables for audit quality metric and operationalization

Acronym	Operationalization
TAC_{ijt}	Total accruals for firm i in industry j in year t
$NDAC_{ijt}$	Non-discretionary accruals for firm i in industry j in year t
DAC_{ijt}	Discretionary accruals for firm i in industry j in year t
A_{ijt}	Total assets for firm i in industry j in year $t-1$
ΔREV_{ijt}	Net sales for firm i in industry j between year t and year $t-1$
ΔAR_{ijt}	Accounts receivable for firm i in industry j between year t and year $t-1$
PPE_{ijt}	Gross property and plant for firm i in industry j in year t

Total accruals can be estimated either by the cash-flow, or, alternatively, by the balance sheet method. Adopting prior literature (Hribar & Collins, 2002), this study opted for the cash flow approach. Total accruals are determined by the difference between the net income for the financial year and the cash flow from operating activities.

The model included several control variables commonly met in prior research. Firm size seems to play an important, albeit controversial, role in estimation models. Some researchers suggest that big – in terms of the value of total assets – firms are keenly studied by market participants, witnessing, therefore, a negative relationship between the level of abnormal accruals and firm size (Ghosh & Moon, 2010; Gul et al., 2009). However, a positive relationship is also recorded (Wang, 2014). Sizeable firms own more resources and invest relatively more in internal procedures and controls, benefiting, therefore, from improved levels of audit quality. Firms with no earnings persistence and liquidity problems are expected to exhibit greater levels of abnormal accruals, the latter being a tool to calibrate earnings volatility and improve firm attractiveness (Dechow & Dichev, 2002). The study opted for a loss-making financial year in period t-1 and a quick ratio to capture earnings persistence and liquidity problems, respectively.

Adopting the methodology of Davidson et al. (2005), a panel least squares regression was run to test the three hypotheses for the model:

$$
\begin{aligned}
DAC = {} & \beta_0 + \beta_1 BRDSIZE_{i,t} \\
& + \beta_2 CEODUAL_{i,t} + \beta_3 ACMGTIND_{i,t} \\
& + \beta_4 SIZE_{i,t} + \beta_5 LOSS_{i,t-1} \\
& + \beta_6 QUICK_{i,t} + e_{i,t} \ .
\end{aligned}
\tag{4}
$$

where DAC denotes the level of discretionary accruals, BRDSIZE denotes the number of board members at the end of the fiscal year, CEODUAL is a dummy variable that takes the value of one if the CEO is a member of the board and zero otherwise, ACMGTIND is a dummy variable that takes the value of one if all audit committee members are independent and zero otherwise, SIZE denotes the size of the firm expressed as the natural logarithm of total assets, LOSS is a dummy variable that takes the value of one if the firm recorded losses in the previous fiscal year and zero otherwise. Finally, QUICK is the ratio of cash and cash equivalents to current liabilities, whereas e denotes the error term of the regression equation.

If the hypotheses are validated, the study expects to find a negative relationship between the level of discretionary accruals (DAC) and (a) board size

(b) audit committee independence. Conversely, if the hypothesis holds, DAC should be positively related to CEODUAL.

An additional audit quality metric was employed to test the three hypotheses. Audit quality is commonly approached in terms of auditor size. Therefore, a logit regression was run where the dependent variable was auditor size (AUDSIZE), a binary variable indicating whether the financial statements of the firm were audited from a Big 4 auditor (value of unity), or otherwise (zero). Equation (5) presents the model tested.

$$
\begin{aligned}
AUDSIZE = {} & \beta_0 + \beta_1 BRDSIZE_{i,t} \\
& + \beta_2 CEODUAL_{i,t} + \beta_3 ACMGTIND_{i,t} \\
& + \beta_4 SIZE_{i,t} + \beta_5 LOSS_{i,t-1} \\
& + \beta_6 QUICK_{i,t} + e_{i,t} \ .
\end{aligned}
\tag{5}
$$

If the hypotheses hold, the study expects to find a positive relationship between auditor size and (a) board size and (b) audit committee independence, whereas one anticipates a negative relationship for the CEO's dual role.

3. RESULTS

Table 3 depicts the descriptive statistics for the variables included in both models. It comprises central tendency and variability metrics of the variables. Further, it is complemented by their distributional characteristics. The mean (median) value of the board size is 8.51 (8.0) members. Board size (BRDSIZE) exhibits considerable variability with a standard deviation of 2.24, whereas the variable distribution is skewed to the right. This implies that there are many instances with sizeable boards. The maximum value of the variable is seventeen members. The mean value of the audit committee independence (ACMGTIND) is 0.92, implying increased compliance with the governance code's suggestion. In most firms of the sample, the CEO is a board member, as indicated by a mean value of 0.99 for the CEODUAL variable. Discretionary accruals figures are positively skewed, an indication of management efforts to enhance earnings for the selected period.

Tables 4 and 5 depict the Spearman correlation between the variables of the regression equations

Table 3. Descriptive statistics

Variable	DAC	AUDSIZE	BRDSIZE	CEODUAL	ACMGTIND	SIZE	LOSS$_{t-1}$	QUICK
Mean	0.13	0.93	8.51	0.99	0.92	14.23	0.14	1.17
Median	0.01	1.00	8.00	1.00	1.00	14.06	0.00	0.82
Maximum	7.37	1.00	17.00	1.00	1.00	19.94	1.00	59.97
Minimum	−1.10	0.00	1.00	0.00	0.00	8.95	0.00	0.00
Std. Dev.	0.45	0.24	2.24	0.10	0.27	1.60	0.35	2.18
Skewness	4.27	−3.58	0.73	−9.45	−3.15	0.67	2.07	17.83
Kurtosis	40.93	13.88	3.64	90.29	10.90	3.50	5.28	445.93
Observations	2307	2307	2307	2307	2307	2307	2307	2307

Note: DAC – discretionary accruals, AUDSIZE – auditor size, BRDSIZE – board size, CEODUAL – CEO member of the board, ACMGTIND – fully independent audit committee, SIZE – total assets, LOSS – negative income, QUICK – quick ratio.

(equations 4 and 5, respectively). The presence of the CEO on the board is negatively related to the level of discretionary accruals ($r = -0.0494$, $p < 0.05$). This is an interesting finding that opposes the theoretical framework analyzed in the literature review section. Large boards favor fully independent audit committees ($r = 0.07$, $p < 0.01$). Audit committee management independence is positively related to firm size ($r = 0.0632$, $p < 0.01$). Larger firms keenly adopt corporate governance code's provisions that favor a fully independent audit committee.

Table 5 shows that large boards are associated with a Big 4 auditor engagement, probably aiming to safeguard their reputation ($r = 0.22$, $p < 0.01$). As in Table 4, fully independent audit committees favor a Big 4 auditor hiring ($r = 0.07$, $p < 0.05$). Larger and more independent audit committees are inclined to hire a Big 4 auditor

aiming to elevate assurance and audit quality levels (Ghafran & O'Sullivan, 2013).

Table 6 presents the empirical results for the first regression model. The level of discretionary accruals (DAC) is indicative of suboptimal levels of audit quality. Board size has a negative coefficient of −0.009 with a standard error of 0.005, leading to a *t*-statistic of −1.714 and a significance level of 0.087. The negative coefficient implies that an increasing size of the board deters earnings management and upholds financial reporting quality and, consequently, audit quality. This statistically significant relationship validates the first hypothesis.

Conversely, the second hypothesis is not supported by the empirical results. The CEO duality coefficient is negative (−0.268) and significant at all conventional significance levels with a *p*-value of 0.003. This relationship implies that a CEO who

Table 4. Spearman correlation – Regression equation 4

Variable	DAC	BRDSIZE	CEODUAL	ACMGTIND	SIZE	LOSS	QUICK
DAC	1						
BRDSIZE	0.0467	1					
	(2.24)**						
CEODUAL	−0.0494	0.0269	1				
	(−2.37)**	(1.29)					
ACMGTIND	0.0154	0.0701	0.0008	1			
	(0.74)	(3.37)***	(0.03)				
SIZE	0.0878	0.6300	−0.0393	0.0632	1		
	(4.23)***	(38.94)***	(−1.88)*	(3.03)***			
LOSS	−0.1366	−0.0373	−0.0179	−0.0545	−0.0787	1	
	(−6.62)***	(−1.79)*	(−0.86)	(−2.62)***	(−3.79)***		
QUICK	−0.1131	−0.1204	−0.0163	0.0000	−0.2605	0.0474	1
	(−5.46)***	(−5.82)***	(−0.78)	(0.00)	(−12.95)***	(2.27)**	

Note: DAC – discretionary accruals, BRDSIZE – board size, CEODUAL – CEO member of the board, ACMGTIND – fully independent audit committee, SIZE – total assets, LOSS – negative income, QUICK – quick ratio. (*t*-statistics in parentheses). * significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level.

Table 5. Spearman correlation – Regression equation 5

Variable	AUDSIZE	BRDSIZE	CEODUAL	ACMGTIND	SIZE	LOSS	QUICK
AUDSIZE	1						
BRDSIZE	0.2253	1					
	(10.60)***						
CEODUAL	0.0309	0.0301	1				
	(1.41)	(1.37)					
ACMGTIND	0.0309	0.0769	−0.0113	1			
	(1.41)	(3.53)***	(−0.51)				
SIZE	0.2156	0.6391	−0.0193	0.0528	1		
	(10.12)***	(38.09)***	(−0.88)	(2.42)**			
LOSS	−0.0439	−0.0306	−0.0133	−0.0399	−0.0718	1	
	(−2.01)**	(−1.40)	(−0.60)	(−1.83)*	(−3.30)***		
QUICK	−0.0816	−0.1113	−0.0250	0.0117	−0.2681	0.0456	1
	(−3.75)***	(−5.13)***	(−1.14)	(0.53)	(−12.76)***	(2.09)**	

Note: AUDSIZE – auditor size, BRDSIZE – board size, CEODUAL – CEO member of the board, ACMGTIND – fully independent audit committee, SIZE – total assets, LOSS – negative income, QUICK – quick ratio. (*t*-statistics in parentheses). * significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level.

is also a member of the board is associated with higher levels of audit quality.

Finally, a fully independent audit committee is associated with improved audit quality, as implied by the negative coefficient (–0.072) in the model. The standard error of ACMGTIND is 0.034, resulting in a t-statistic of –2.093 and a significance level of 0.037. The third hypothesis is supported by this statistically significant relationship. The overall model has an R^2 value of 0.021 and an adjusted R^2 of 0.019, whereas the F value is 8.53 with 0.00 significance. Hence, the model is statistically significant, and corporate governance variables exert influence on audit quality levels.

Table 6. Regression analysis: Equation 4

Variable	Coefficient	Std. Error	t–statistic	Sign.
Constant	−0.046	0.132	−0.348	0.728
BRDSIZE	−0.009*	0.005	−1.714	0.087
CEODUAL	−0.268***	0.090	−2.999	0.003
ACMGTIND	−0.072**	0.034	−2.093	0.037
SIZE	0.041***	0.008	5.418	0.000
LOSS	0.027	0.027	1.023	0.306
QUICK	0.002	0.004	0.384	0.701
R²	0.021	Adj. R²		0.019
F	8.53	Significant		0.000

Note: BRDSIZE – board size, CEODUAL – CEO member of the board, ACMGTIND – fully independent audit committee, SIZE – total assets, LOSS – negative income, QUICK – quick ratio. * significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level.

Audit quality is not directly measurable. The adoption of different proxies may lead to different con-

clusions. Since many audit quality proxies are employed by researchers, this study ran an additional regression equation (5) with the alternative proxy of auditor size to verify the consistency of conclusions. Table 7 summarizes the results.

Table 7. Regression analysis: Equation 5

Variable	Coefficient	Std. Error	z–statistic	Sign.
Constant	−3.742	0.701	−5.339	0.000
BRDSIZE	0.181***	0.035	5.190	0.000
CEODUAL	0.205	0.397	0.517	0.605
ACMGTIND	0.056	0.166	0.334	0.738
SIZE	0.269***	0.046	5.846	0.000
LOSS	−0.092	0.130	−0.711	0.477
QUICK	−0.010	0.019	−0.521	0.603

Note: BRDSIZE – board size, CEODUAL – CEO member of the board, ACMGTIND – fully independent audit committee, SIZE – total assets, LOSS – negative income, QUICK – quick ratio. * significant at 0.10 level, ** significant at 0.05 level, *** significant at 0.01 level.

Board size is positively related to auditor size, the latter implying improved levels of audit quality. The BRDSIZE coefficient (0.181) is statistically significant at all levels, with a z-statistic of 5.190 and a p-value of 0.00. This result further supports the first hypothesis and aligns with the respective finding from the regression equation (4).

The CEODUAL coefficient is positive (0.205) and reveals a positive association between CEODUAL and AUDSIZE. A CEO empowered with a dual role (who is also a member of the board) seems to improve audit quality. This finding counters the second hypothesis, albeit supports the respec-

tive finding from the regression equation (4). The CEODUAL has a z-statistic of 0.517 and a p-value of 0.605. Hence, this relationship lacks statistical significance. Finally, a fully independent audit committee (ACMGTIND) is considered to benefit audit quality, as indicated by a positive coefficient (0.056) accruing from the regression equation (5). As previously stated, despite the validation of a positive relationship, there is no statistical significance unveiled by a z-statistic of 0.334 and a p-value of 0.738.

4. DISCUSSION

The regression analyses provided consistent suggestions on the effects of the investigated corporate governance variables on audit quality. The first model unveiled systematic relationships between the three corporate governance variables and perceived audit quality. Board size improves audit quality levels, the latter proxied by less earnings management efforts. The negative relationship between board size and discretionary accruals corroborates previous findings (Ebrahim, 2007). In the same vein, the implied relationship of the audit committee independence conforms to strong empirical evidence on its favorable role in audit quality (Hermanson et al., 2024). The analysis brought up an interesting finding, though. CEO duality was found to have a positive impact on audit quality, contrary to research findings (Farber, 2005) and regulatory perceptions (provisions of the UK Corporate Governance Code).

The findings were not challenged when audit quality was proxied by auditor size. According to the empirical results of the second model, it is more probable for large boards to engage with a Big 4 auditor. This is consistent with prior literature (Bhattacharya & Banerjee, 2020). As the number of board members increases, they will probably seek improved levels of reassurance on the integrity of the financial statements. This is consistent with a strategy oriented to minimize reputational loss and litigation risk. Audit committee independence and CEO duality are also more probably associated with a Big 4 auditor. These findings are consistent with the respective ones of the first model. However, these two last observations lack statistical significance.

The UK environment is advantageous and has the potential to offer valuable insights into corporate governance provisions and their implications on audit quality (Wu et al., 2016). UK firms function under the "comply or explain" regime. This allows them to deviate from regulatory provisions if they can explain the reasoning behind this decision. Within this framework, the findings are of incremental importance. Future research should focus on other corporate governance variables that could enrich audit quality levels. Market stakeholders place a great interest in audit quality, a prerequisite for the efficient functioning of the markets and investor confidence.

CONCLUSION

The purpose of the study was to test the relationship between audit quality and three corporate governance variables in the UK market. Corporate governance structures aim to strengthen audit quality, delivering ultimately greater levels of assurance to shareholders. The paper tested the effect of board size, CEO dual role, and audit committee independence on audit quality. Primary data from the UK market were used, a mature market that adopted measures aiming to improve and reinforce audit quality levels. At the same time, the UK market functions under the "comply or explain" regime, giving firms the flexibility to decide on corporate governance issues irrespective of the provisions.

Audit quality is not directly observable. Consequently, the study approximated audit quality in a dual manner. Initially, the popular modified Jones' model was employed in its cross-sectional dimension to estimate the level of discretionary accruals, indicative of lower audit quality. Board size and audit committee management independence were found to be negatively associated with the level of discretionary accruals. Since the latter is indicative of suboptimal levels of audit quality, board size and audit committee independence foster audit quality. An interesting finding concerns the role of the CEO. Contrary to research findings and regulatory perceptions, the CEO's presence on the board of directors seems to be

positively related to audit quality. The results are robust when an alternative audit quality proxy, namely auditor size, is adopted. The empirical findings add to the growing body of literature devoted to audit quality. Further, they can be a valuable input in the decision-making of regulatory authorities.

AUTHOR CONTRIBUTIONS

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