

# The impact of corporate governance mechanisms on earnings quality during the COVID-19 Pandemic. Evidence from the UK

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## Abstract

This study aims to analyze the impact of corporate governance practices on the earnings quality of 228 firms located in the United Kingdom throughout the period from 2019 to 2022. Our fundamental concept states that there is a negative relationship between the efficiency of corporate governance practices within the organization and the probability of participating in earnings manipulation. The findings of our empirical study offer substantiation for our claims, as they demonstrate that companies with boards of directors marked by notable autonomy and financial capabilities, along with the presence of effective audit and compensation committees, experience an improvement in the quality of their earnings.

**JEL classification numbers:** G32, G34, M40, M41.

**Keywords:** Corporate Governance, Earnings Quality, Board of Directors, Audit Committee, Compensation Committee.

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# 1 Introduction

Ambor (2007) defines corporate governance as the process of holding individuals responsible for the control and management of a company. Corporate governance facilitates the establishment of equilibrium between shareholder interests and management's interests, which frequently conflict (Khan, 2011).

This article investigates the impact of corporate governance on earnings quality by analyzing a dataset of 228 enterprises from the United Kingdom between 2019 and 2022. Companies that elect to implement appropriate profit disclosure rules seem to employ efficient corporate governance processes (Jing et al., 2008). Jiang et al. (2008) found that the implementation of effective corporate governance policies by firms leads to a continuous improvement in their efficiency and earnings quality. In addition, companies with low profits often employ highly specialized and expensive corporate governance systems as a result of information asymmetry, whereas companies with high earnings quality lack such systems (Gaio and Raposo, 2014).

In the next section, we will concentrate on the existing literature regarding the association between corporate governance and the quality of earnings. Within Section 3, we formulated our study inquiries by drawing upon prior relevant investigations. Section 4 of our study is dedicated to the exposition of the econometric method employed in our empirical investigation. Section 5 is dedicated to the analysis of the empirical results, while the final section is focused on presenting the conclusions of our research.

# 2 Literature Review and Hypothesis Development

## 2.1 Corporate Governance: From the post-Global Financial Crisis era to the COVID-19 pandemic era

A number of studies have argued that weak corporate governance procedures are the primary factor behind the financial crisis (Adams, 2009; Kirkpatrick, 2009; Kumar and Singh, 2013; Deakin, 2010). However, Bruner (2011) has documented that during the 2007 financial and economic crisis experienced by the United States and the United Kingdom, both countries implemented a range of corporate governance reforms in order to manage the situation. Moreover, with regards to the Asian crisis of 1997–98, deficiencies in corporate governance had a substantial influence on the assessments and extent of the collapse in the Asian stock market (Johnson et al., 2000). Erkens et al. (2012) conducted a study on 306 companies from 31 countries to examine the role of corporate governance in the 2007-2008 financial crisis. The conducted results indicate a positive correlation between executive discipline during economic downturns and corporate governance. However, the study failed to address the weaknesses that were identified. Instead, these weaknesses were further strengthened, providing executives with a justification to prioritize short-term company performance. It is worth mentioning that there are indications that the boards of directors failed to manage the company's risks during the financial crisis, either because they were prevented from providing information about how to deal with the risks, or because there was a lack of competence and motivation of the board members since they weren't able to process the aforementioned information (Pirso and Turnbull, 2011). After the global financial crisis a demand of more effective corporate governance mechanisms arised so that businesses can safeguard their financial reporting quality (Ghafran et al., 2022; Hsu and Yang, 2022; Eng et al., 2019).

The Covid-19 lockdowns had a substantial influence on financial markets and the financial performance of corporations (Estrada et al., 2021). The pandemic had an unavoidable influence on managerial behaviors. Many managers experienced substantial pressure as a result of the poor market conditions brought forth by the pandemic. Consequently, they may have engaged in earnings management or employed accounting discretion to enhance their financial statements in order to meet their objectives (Ali et al., 2022; Choi, et al., 2011).

## 2.2 Corporate Governance and Earnings Quality

Accruals refer to a firm's earnings that have been acknowledged and possessed by the company but have not yet been paid to shareholders. On the other hand, real earnings are profits that have already been given to the stakeholders of the company. Although they have distinct characteristics, both have the objective of manipulating financial statements and deceiving shareholders (Kent et al., 2010; Aldamen and Duncan, 2016; El Diri et al., 2020; Habib et al., 2022; Susanto, 2017).

El Diri et al. (2020) conducted a study using a sample of 6873 companies spanning from 1989 to 2016. Their objective was to investigate the impact of corporate governance on concentrated markets and earnings management. Their findings indicate that corporate governance with board quality characteristics is more effective in controlling earnings management in markets with little concentration. Conversely, in restricted markets with strong corporate governance, directors often replace accruals management with real earnings management.

In a study carried out by Nguyen et al. (2023), they examined a sample of 800 non-financial enterprises in Vietnam from 2008 to 2018. The findings revealed that the quality of corporate governance has a mitigating effect on earnings management, regardless of whether it is assessed by accruals or actual earnings. Shan (2015) conducted a study using a sample of 1012 observations from enterprises based in Shanghai and Shenzhen between 2001 and 2005. The study found that organizations that use effective corporate governance practices are more likely to decrease earnings management compared to firms that do not. A study carried out by Chekili (2012) found a significant association between corporate governance factors such as the presence of independent non-executive directors, board size, CEO duality, and the practise of earnings management. Zahid (2020) conducted an investigation to examine the impact of corporate governance on earnings quality. The study focused on a sample of 107 companies from the Pakistan Stock Exchange (PSX), out of which 83 were included in the analysis. The findings revealed that corporate governance factors, including board size, CEO duality, and audit quality, have a negative impact on earnings quality. Sáenz González and García-Meca (2014) conducted a study on the relationship between corporate governance mechanisms and earnings management in Latin American countries from 2006 to 2009. They found that the high ownership concentration in Latin American companies has a negative impact on the quality and transparency of financial information provided to the market. This suggests that ownership concentration can act as a limiting factor for manipulative practices, but only when the ownership of the main shareholders is at a moderate level.

Mashayekhi and Bazaz (2010) conducted a study on an important number of companies listed on the Tehran Stock Exchange (TSE) between 2005 and 2008. They found that the type of corporate governance mechanism employed by a firm has a significant impact on earnings management. Specifically, they discover a positive relation between internal governance mechanisms and earnings management, as well as a negative association between external mechanisms and earnings management. In addition, Mashayekhi and Bazaz (2010) found that there is a negative relationship between the size of a company's board of directors and the quality of its earnings. However, increasing the number of independent directors and the frequency of board meetings can enhance the quality of the company's earnings.

Corporate governance encompasses internal and external processes that play a crucial role in maintaining a balanced relationship between stakeholders and firm managers (Man and Wong, 2013). The internal mechanisms of corporate governance, including the board of directors, executive officer remuneration, and the distinction between the CEO and the chairman of the board, have a positive impact on a company's operational performance and subsequent market valuation (Klapper and Love, 2003). Furthermore, the presence of more independent directors and the frequency of board meetings can significantly enhance the quality of companies' earnings (Mashayekhi and Bazaz, 2010). In addition, corporate governance is established to guarantee transparent operations and adherence to the firm's rules and objectives as determined by both the corporation and its shareholders. Given the information provided, our first research hypothesis is as follows:

***Hypothesis:** Enhanced corporate governance measures have a positive association with the quality of a firm's earnings.*

### 3 Research Design and Sample Selection

#### 3.1 Corporate Governance and Earnings Quality

In order to evaluate our hypothesis, we build a model utilizing the methodologies suggested by Jermias and Gani (2014), Suffian et al. (2015), Lo et al. (2017), and Lazzem and Jilani (2018):

$$\begin{aligned} \text{ABSDAC1} = & \alpha_0 + \alpha_1 \text{CAP}_{it} + \alpha_2 \text{BSIZE}_{it} + \alpha_3 \text{BOARDIND}_{it} + \alpha_4 \text{OWNERS}_{it} + \alpha_5 \text{DUALITY}_{it} + \alpha_6 \text{MTGS}_{it} \\ & + \alpha_7 \text{RETYRS}_{it} + \alpha_8 \text{AUDSIZE}_{it} + \alpha_9 \text{AUDMEET}_{it} + \alpha_{10} \text{AUDIND}_{it} + \alpha_{11} \text{COMPSIZE}_{it} + \alpha_{12} \text{COMEET}_{it} \\ & + \alpha_{13} \text{COMIND}_{it} + \alpha_{14} \text{FSIZE}_{it} + \alpha_{15} \text{BIG4}_{it} + \alpha_{16} \text{OPM}_{i,t-1} + \alpha_{17} \text{MBR}_{i,t-1} + \alpha_{18} \text{OCF}_{i,t-1} + \alpha_{19} \text{LEVERAGE}_{i,t-1} \\ & + \{\text{INDUSTRY FE}\} + \{\text{YEAR FE}\} + e \end{aligned} \quad (2)$$

The variable ABSDAC1 represent the absolute value of the discretionary accruals, which we calculate using Jones' (1991) modified model. The study utilizes the residuals of the estimated model provided below as discretionary accruals (Bartov et al., 2001; Kothari et al., 2004).

$$\text{TA}_{it} = \delta_0 + \delta_1[(\Delta \text{REV} - \Delta \text{REC})]_{it} + \delta_2 \text{PPE}_{it} + \varepsilon \quad (1)$$

Where, TA represents the total accruals in the year (t), A represents its total assets in the previous year (t-1),  $\Delta \text{REV}$  represents the difference in total income between the current year (t) and the previous year (t-1),  $\Delta \text{REC}$  represents the difference in total receivables between the current year (t) and the previous year (t-1), and PPE represents the fixed equipment of the enterprise in the current year (t).

#### 3.2 Sample Selection

The sample consists of firms listed in the FTSE350 for the period 2019-2022. Information regarding the accounting variables was obtained from DataStream, information concerning board and ownership data gathered from BoardEx, and information regarding number of meetings and executive tenure was obtained from FactSet. The sample is restricted to firms with complete data of all the variables needed to perform the statistical analyses. Table 1 summarizes the sample selection. We exclude 88 firms in banking, insurance, and real estate industries because of their high level of industry regulations. From the remaining firms, we exclude firms that do not have at least one usable observation in Datastream (10 firms), BoardEx (18 firms), and FactSet (6 firms). Our final sample consists of 908 firm-year observations from 228 firms.

**Table 1: Sample Distribution**

| <b>Selection Criteria</b>   | <b>Number of Firms</b> |
|---|------------------------|
| <b>Panel A: Firm selection</b>  |                        |
| Total Number in FTSE250   | 350                    |
| Less  |                        |
| Firms in financial, insurance and real estate industries                        | (88)                   |
| Firms without data available in DataStream, BoardEx & FactSet                   | (34)                   |
| <b>Total Sampled Firms</b>  | <b>228</b>             |
| <b>Panel B: Sample Firms according to their primary industry classification</b> |                        |
| Oil and gas   | 11                     |
| Food and Beverage   | 12                     |
| Industrial Goods and Services   | 56                     |
| Personal and Household Goods  | 11                     |
| Retail  | 20                     |
| Media   | 9                      |
| Travel and Leisure  | 23                     |
| Technology  | 15                     |
| Telecommunications  | 6                      |
| Health Care   | 10                     |
| All others  | 55                     |
| <b>Total Sampled Firms</b>  | <b>228</b>             |
| <b>Panel C: Sampled Firms across year</b>                                       |                        |
| 2019  | <b>225</b>             |
| 2020  | <b>227</b>             |
| 2021  | <b>228</b>             |
| 2022  | <b>228</b>             |
| <b>Total firm-year observation</b>  | <b>908</b>             |

## 4 Empirical Results

The descriptive statistics of our variables are displayed in table 2. The mean absolute value of discretionary accruals 1 and 2 is observed to be 0.038 and 0.056, respectively. The volatility of these measures is 2.3% and 5%, accordingly. The mean board capital is approximately 36.4% with a standard deviation of 21.7%. Furthermore, the average size of the boards is approximately 11 directors, with a standard deviation of 4.162. The average level of independence on the boards of firms in the United Kingdom is 76.2%, with a standard deviation of 20.5%. Furthermore, it is worth noting that, on average, 62.4% of the common equity is owned by inside directors. Additionally, in 9.6% of the firms we examined in the UK, the CEO also holds the position of chairman of the board.

**Table 2: Descriptive Statistics**

| Variable | Mean   | Median | SD    | Min     | Max    | Observations |
|----------|--------|--------|-------|---------|--------|--------------|
| ABSDAC1  | 0.038  | 0.029  | 0.023 | 0.000   | 0.405  | 908          |
| ABSDAC2  | 0.056  | 0.044  | 0.050 | 0.000   | 0.517  | 908          |
| CAP      | 0.364  | 0.305  | 0.217 | 0.001   | 0.985  | 908          |
| BSIZE    | 11.054 | 9.252  | 4.162 | 3.000   | 20.000 | 908          |
| BOARDIND | 0.762  | 0.486  | 0.205 | 0.181   | 1.000  | 908          |
| OWNERS   | 0.624  | 0.543  | 0.428 | 0.219   | 0.787  | 908          |
| DUALITY  | 0.096  | 0.000  | 0.178 | 0.000   | 1.000  | 908          |
| MTGS     | 6.750  | 5.200  | 4.784 | 1.000   | 14.000 | 908          |
| RETYRS   | 3.258  | 3.041  | 2.977 | 2.470   | 5.698  | 908          |
| AUDSIZE  | 8.420  | 8.200  | 6.540 | 5.000   | 17.000 | 908          |
| AUDMEET  | 5.540  | 4.940  | 3.780 | 2.000   | 11.000 | 908          |
| AUDIND   | 0.345  | 0.320  | 0.284 | 0.060   | 0.760  | 908          |
| COMPSIZE | 3.620  | 3.300  | 1.450 | 0.000   | 7.000  | 908          |
| COMEET   | 4.240  | 4.050  | 1.890 | 0.000   | 9.000  | 908          |
| COMIND   | 0.320  | 0.300  | 0.140 | 0.000   | 0.680  | 908          |
| FSIZE    | 9.242  | 9.320  | 1.294 | 12.458  | 5.643  | 908          |
| BIG4     | 0.684  | 1.000  | 0.470 | 0.000   | 1.000  | 908          |
| OPM      | 0.195  | 0.167  | 0.125 | -0.297  | 2.114  | 908          |
| MBR      | 4.480  | 2.756  | 5.689 | -19.453 | 24.180 | 908          |
| OCF      | 0.126  | 0.114  | 0.095 | -0.156  | 1.245  | 908          |
| LEVERAGE | 0.268  | 0.211  | 0.160 | 0.000   | 2.058  | 908          |

This table (2) provides the descriptive statistics of the key variables of our research. ABSDAC1 & ABSDAC2 are defined as the absolute value of differential accruals based on the methods of Jones (1991), Bartov et al. (2001) and Kothari et al. (2004). CAP is the board capital of a company expressed as the ratio of the number of directors who are also managing directors in other companies or university professors or senior government officials to the total number of directors on the board. BSIZE represents the total count of directors serving on the company's board. BOARDIND is the board independence which equals the number of outside directors divided by the total number of directors on the board of the company. OWNERS is the ratio of common shares owned by management to total common shares of the firm. DUALITY is a dummy variable indicating whether a firm's CEO is also the chairman of the board. MTGS is the number of board meetings during the year. RETYRS is the number of services provided per year to executives under the Company's pension plan. AUDSIZE is the number of members on the Audit Committee. AUDMEET is the number of meetings of the Audit Committee. AUDIND is the ratio of outsiders to the total number of Audit Committee members. COMPSIZE is the number of members on the compensation committee. COMEET is the number of meetings of the compensation committee. COMIND is the degree of independence of the compensation committee defined as the ratio of outsiders to the total number of compensation committee members. FSIZE is the natural logarithm of the total assets of each company. BIG4 is a dummy variable indicating whether a firm is audited by one of the Big 4 audit firms. OPM refers to the operating profit margin of the company. MBR is the ratio of the market value to the book value of each company. OCF is the firm's cash flow from operations divided by its total assets. LEVERAGE is the financial leverage of the company equal to total debt divided to total equity.

**Table 3: Correlation Matrix**

|          | (1)      | (2)     | (3)     | (4)      | (5)     | (6)     | (7)    | (8)    | (9)      | (10)    | (11)    | (12)  | (13)     | (14)    | (15) |
|----------|----------|---------|---------|----------|---------|---------|--------|--------|----------|---------|---------|-------|----------|---------|------|
| ABSDAC1  | 1.00     |         |         |          |         |         |        |        |          |         |         |       |          |         |      |
| CAP      | -0.24**  | 1.00    |         |          |         |         |        |        |          |         |         |       |          |         |      |
| BSIZE    | 0.39**   | 0.35**  | 1.00    |          |         |         |        |        |          |         |         |       |          |         |      |
| BOARDIND | -0.41*** | 0.28*** | 0.09*   | 1.00     |         |         |        |        |          |         |         |       |          |         |      |
| OWNERS   | 0.12     | 0.20    | 0.13**  | 0.38*    | 1.00    |         |        |        |          |         |         |       |          |         |      |
| DUALITY  | 0.16**   | -0.34** | 0.11    | -0.24*** | 0.28    | 1.00    |        |        |          |         |         |       |          |         |      |
| MTGS     | -0.09**  | 0.21**  | 0.20**  | 0.10**   | 0.31*   | -0.37** | 1.00   |        |          |         |         |       |          |         |      |
| RETYRS   | 0.25     | 0.36    | 0.23*   | -0.33**  | 0.08**  | 0.20**  | 0.04   | 1.00   |          |         |         |       |          |         |      |
| AUDSIZE  | -0.11*   | 0.39**  | -0.21*  | 0.24***  | 0.24**  | -0.16** | 0.33** | 0.08   | 1.00     |         |         |       |          |         |      |
| AUDMEET  | -0.17**  | 0.24**  | -0.43*  | 0.17*    | 0.13*   | -0.28*  | 0.24*  | 0.12   | 0.28**   | 1.00    |         |       |          |         |      |
| AUDIND   | -0.38*** | 0.40*** | -0.33** | 0.34***  | 0.17**  | -0.15** | 0.19** | 0.16   | -0.19*** | 0.43*** | 1.00    |       |          |         |      |
| BIG4     | -0.30**  | 0.35*   | -0.27** | -0.08*** | 0.20*   | -0.24   | 0.27   | 0.31*  | 0.26**   | 0.28**  | 0.34*** | 1.00  |          |         |      |
| COMPSIZE | -0.21    | 0.17*   | 0.38    | 0.16*    | -0.34** | 0.28    | 0.30   | 0.24*  | 0.20*    | 0.24*   | 0.16*   | 0.27  | 1.00     |         |      |
| COMEET   | -0.29*   | 0.19    | 0.24*   | 0.13     | -0.23   | 0.36    | 0.24*  | 0.17** | 0.11     | 0.10    | 0.21**  | 0.39* | 0.16**   | 1.00    |      |
| COMIND   | -0.33**  | 0.28*** | 0.33**  | 0.26**   | -0.20** | 0.16*   | 0.22** | 0.22** | 0.17**   | 0.37**  | 0.40**  | 0.24* | -0.31*** | 0.28*** | 1.00 |

This table (3) illustrate the Pearson correlations among the variables of our research. \*\*\*, \*\* and \* denote statistical significance at 1%, 5%, and 10% level respectively.

#### 4.1 Corporate Governance and Earnings Quality

The coefficient estimates and t-statistics for model (2) are displayed in Table 4. The first column of the results displays the estimates of model 2 without the inclusion of interaction terms (model 2.1), whereas the second column of the results displays the estimates of model 2 with the addition of interaction terms (model 2.2). Table 4 shows that companies with greater board capital demonstrate reduced earnings management techniques, resulting in enhanced earnings quality. Furthermore, based on the results presented in Table 4, it is evident that there is a significant and positive relationship between the variable BSIZE and the variable ABSDAC1. This suggests that companies with a larger number of directors on their boards tend to have higher levels of discretionary accruals, indicating lower quality of earnings. Furthermore, a higher degree of board independence is associated with higher earnings quality, as seen by the negative and statistically significant association (at the 5% level) between the variable BOARDIND and ABSDAC1. In addition, companies with greater ownership by managers demonstrate improved earnings quality, as the OWNERS is found to have a negative and statistically significant association with ABSDAC1 at a 5% level of significance.

The findings also suggest that there is a negative and statistically significant relationship (at least at the 10% level) between executive tenure (RETYRS), the size of the audit committee (AUDITSIZE), the independence of the audit committee (AUDIND), the number of compensation committee meetings (COMEET) with the absolute value of the discretionary accruals (ABSDAC1). Regarding the interaction terms, we note that when a company combines a significant amount of board capital with a high level of board independence, it exhibits an increased degree of earnings quality. According to Table 4, board capital positively impacts the relationship between managerial share ownership and earnings quality. The previously mentioned findings confirm our research hypothesis on the efficacy of corporate governance measures in reducing earnings management practices.

Regarding the accounting variables, our research reveals a significant and beneficial association between company size and leverage with earnings management techniques. In contrast, our findings suggest that firms with a high market-to-book ratio and that are audited by one of the top four audit firms have a high level of earnings quality.

**Table 4: The impact of corporate governance on firms' earnings quality**

| Dependent variable: ABSDAC1 | Model 2.1  | Model 2.2  |
|-----------------------------|------------|------------|
| Constant                    | -0.0029    | -0.0041    |
|                             | (-0.27)    | (-0.45)    |
| CAP                         | -0.0175**  | -0.0197*** |
|                             | (-2.44)    | (-2.70)    |
| BSIZE                       | 0.0046***  | 0.0070**   |
|                             | (2.64)     | (2.32)     |
| BOARDIND                    | -0.0145**  | -0.0206**  |
|                             | (-2.16)    | (-2.30)    |
| OWNERS                      | -0.0545**  | -0.0436**  |
|                             | (-2.36)    | (-2.06)    |
| DUALITY                     | 0.0088**   | 0.0076**   |
|                             | (2.17)     | (2.00)     |
| CAP*BOARDIND                |            | -0.0098*** |
|                             |            | (-2.97)    |
| CAP*OWNERS                  |            | -0.0078**  |
|                             |            | (-2.46)    |
| CAP*DUALITY                 |            | -0.0014    |
|                             |            | (-1.10)    |
| MTGS                        | -0.0125    | -0.0255    |
|                             | (-1.49)    | (-1.06)    |
| RETYRS                      | -0.0098**  | -0.0055**  |
|                             | (-2.30)    | (-2.08)    |
| AUDSIZE                     | -0.0042*   | -0.0031*   |
|                             | (-1.89)    | (-1.81)    |
| AUDMEET                     | -0.0004    | -0.0006    |
|                             | (-1.13)    | (-1.21)    |
| AUDIND                      | -0.0077**  | -0.0042*** |
|                             | (-2.18)    | (-2.76)    |
| COMPSIZE                    | -0.0047*   | -0.0056*   |
|                             | (-1.88)    | (-1.94)    |
| COMEET                      | -0.0072**  | -0.0066**  |
|                             | (-2.10)    | (-2.23)    |
| COMIND                      | -0.0092**  | -0.0087**  |
|                             | (-2.11)    | (-2.43)    |
| FSIZE                       | 0.0154**   | 0.0095**   |
|                             | (2.06)     | (2.11)     |
| BIG4                        | -0.0098**  | -0.0124*** |
|                             | (-2.44)    | (-3.05)    |
| OPM                         | 0.0107     | 0.0083     |
|                             | (1.04)     | (1.20)     |
| MBR                         | -0.0044*** | -0.0016**  |
|                             | (-3.12)    | (-2.41)    |
| OCF                         | 0.0186     | 0.0201     |
|                             | (1.44)     | (1.51)     |
| LEVERAGE                    | 0.0013**   | 0.0109**   |
|                             | (2.43)     | (2.54)     |
| Industry Effects            | Yes        | Yes        |
| Year Effects                | Yes        | Yes        |
| Adj. R <sup>2</sup>         | 35.76%     | 36.24%     |
| Observations                | 402        | 402        |

Notes: This table (3) illustrates the results from the estimation of the model (2) below:

$$\begin{aligned} \text{ABSDAC1} = & \alpha_0 + \alpha_1 \text{CAP}_{it} + \alpha_2 \text{BSIZE}_{it} + \alpha_3 \text{BOARDIND}_{it} + \alpha_4 \text{OWNERS}_{it} + \alpha_5 \text{DUALITY}_{it} + \alpha_6 \text{MTGS}_{it} + \\ & \alpha_7 \text{RETYRS}_{it} + \alpha_8 \text{AUDSIZE}_{it} + \alpha_9 \text{AUDMEET}_{it} + \alpha_{10} \text{AUDIND}_{it} + \alpha_{11} \text{COMPSIZE}_{it} + \alpha_{12} \text{COMEET}_{it} + \alpha_{13} \text{COMIND}_{it} \\ & + \alpha_{14} \text{FSIZE}_{it} + \alpha_{15} \text{BIG4}_{it} + \alpha_{16} \text{OPM}_{i,t-1} + \alpha_{17} \text{MBR}_{i,t-1} + \alpha_{18} \text{OCF}_{i,t-1} + \alpha_{19} \text{LEVERAGE}_{i,t-1} + \{\text{INDUSTRY FE}\} + \\ & \{\text{YEAR FE}\} + e \end{aligned}$$

All variables are defined in Appendix. t-statistics are based on standards errors that are clustered by industry sector.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively (two-tailed).



## 5 Sensitivity Test

### 5.1 Corporate Governance and Earnings Quality

To evaluate the strength of our conclusions about the impact of corporate governance on earnings quality, we accomplish a further sensitivity analysis. Based on the studies conducted by Dechow and Dichev (2002), McNichols (2002), and Christensen et al. (2015), we employ the following model to calculate the variation in the company's working capital:

$$\Delta WC_{it} = \gamma_0 + \gamma_1 CFO_{i,t-1} + \gamma_2 CFO_{it} + \gamma_3 CFO_{i,t+1} + \gamma_4 \Delta REV_{it} + \gamma_5 PPE_{it} + e \quad (3)$$

$\Delta WC$  denotes the variation in the firm's working capital from the current year (t) to the previous year (t-1). CFO stands for the cash flow created by the company's operating activities in the previous year ( $CFO_{i,t-1}$ ), the current year ( $CFO_{it}$ ), and the subsequent year ( $CFO_{i,t+1}$ ).  $\Delta REV$  denotes the disparity in the total revenue of the company between the present fiscal year (t) and the preceding fiscal year (t-1). PPE, or "Property, Plant, and Equipment," denotes the tangible assets owned by the corporation during the present fiscal year (t). The residuals generated from estimating equation (3) are directly proportional to the absolute value of the discretionary accruals (ABSDAC2). We are going to compute the following equation using the findings from the research conducted by Jermias and Gani (2014), Suffian et al. (2015), Lo et al. (2017), and Lazzem and Jilani (2018):

$$\begin{aligned} ABSDAC2_{it} = & \beta_0 + \beta_1 CAP_{it} + \beta_2 BSIZE_{it} + \beta_3 BOARDIND_{it} + \beta_4 OWNERS_{it} + \beta_5 DUALITY_{it} + \beta_6 MTGS_{it} + \\ & \beta_7 RETYRS_{it} + \beta_8 AUDSIZE_{it} + \beta_9 AUDMEET_{it} + \beta_{10} AUDIND_{it} + \beta_{11} COMPSIZE_{it} + \beta_{12} COMEET_{it} + \beta_{13} COMIND_{it} \\ & + \beta_{14} FSIZE_{it} + \beta_{15} BIG4_{it} + \beta_{16} OPM_{i,t-1} + \beta_{17} MBR_{i,t-1} + \beta_{18} LEVERAGE_{i,t-1} + \{INDUSTRY\ FE\} + \{YEAR\ FE\} + e \end{aligned} \quad (4)$$

Table 5 presents the outcomes obtained by estimating equation (4). The findings suggest that our initial results, as shown in table 4, are reliable even when using a different measure of earnings quality. Ultimately, the results presented in tables 4 and 5 validate our research inquiry, demonstrating that rigorous corporate governance procedures improve the quality of a company's earnings.

**Table 5: The impact of corporate governance on earnings quality**

| Dependent Variable: ABSDAC2 | Model 4.1 | Model 4.2  |
|-----------------------------|-----------|------------|
| Constant                    | -0.0033   | -0.0094    |
|                             | (-0.49)   | (-1.05)    |
| CAP                         | -0.0236** | -0.0267**  |
|                             | (-2.21)   | (-2.38)    |
| BSIZE                       | 0.0097*** | 0.0124**   |
|                             | (2.43)    | (2.20)     |
| BOARDIND                    | -0.0208** | -0.0343**  |
|                             | (-2.27)   | (-2.14)    |
| OWNERS                      | -0.0227*  | -0.0311**  |
|                             | (-1.94)   | (-2.03)    |
| DUALITY                     | 0.0106    | 0.0093     |
|                             | (1.55)    | (1.31)     |
| CAP*BOARDIND                |           | -0.0118*** |
|                             |           | (-2.78)    |
| CAP*OWNERS                  |           | -0.0127*** |
|                             |           | (-2.90)    |
| CAP*DUALITY                 |           | -0.0004    |
|                             |           | (-1.07)    |
| MTGS                        | -0.0208   | -0.0309    |
|                             | (-1.53)   | (-1.42)    |
| RETYRS                      | -0.0064** | -0.0076**  |
|                             | (-2.42)   | (-2.19)    |
| AUDSIZE                     | -0.0087*  | -0.0056**  |
|                             | (-1.93)   | (-1.98)    |
| AUDMEET                     | -0.0021   | -0.0033    |
|                             | (-0.97)   | (-1.04)    |
| AUDIND                      | -0.0098** | -0.0117**  |
|                             | (-2.24)   | (-2.36)    |
| COMPSIZE                    | 0.0023**  | 0.0087**   |
|                             | (1.99)    | (2.01)     |
| COMEET                      | 0.0116    | 0.0121     |
|                             | (1.47)    | (1.54)     |
| COMIND                      | -0.0046** | -0.0108**  |
|                             | (-2.29)   | (-2.27)    |
| FSIZE                       | 0.0107**  | 0.0084     |
|                             | (2.04)    | (2.16)     |
| BIG4                        | -0.0126** | -0.0207**  |
|                             | (-2.12)   | (-2.39)    |
| OPM                         | 0.0148    | 0.0096     |
|                             | (1.84)    | (1.59)     |
| MBR                         | -0.0157** | -0.0146**  |
|                             | (-2.28)   | (-2.23)    |
| LEVERAGE                    | 0.0079**  | 0.0112***  |
|                             | (2.32)    | (2.70)     |
| Industry Effects            | Yes       | Yes        |
| Year Effects                | Yes       | Yes        |
| Adj. R <sup>2</sup>         | 37.42%    | 38.33%     |
| Observations                | 402       | 402        |

**Notes:** This table (4) illustrates the results from the estimation of the model (4) below:

$$\text{ABSDAC2}_{it} = \beta_0 + \beta_1 \text{CAP}_{it} + \beta_2 \text{BSIZE}_{it} + \beta_3 \text{BOARDIND}_{it} + \beta_4 \text{OWNERS}_{it} + \beta_5 \text{DUALITY}_{it} + \beta_6 \text{MTGS}_{it} + \beta_7 \text{RETYRS}_{it} + \beta_8 \text{AUDSIZE}_{it} + \beta_9 \text{AUDMEET}_{it} + \beta_{10} \text{AUDIND}_{it} + \beta_{11} \text{COMPSIZE}_{it} + \beta_{12} \text{COMEET}_{it} + \beta_{13} \text{COMIND}_{it} + \beta_{14} \text{FSIZE}_{it} + \beta_{15} \text{BIG4}_{it} + \beta_{16} \text{OPM}_{i,t-1} + \beta_{17} \text{MBR}_{i,t-1} + \beta_{18} \text{LEVERAGE}_{i,t-1} + \{\text{INDUSTRY FE}\} + \{\text{YEAR FE}\} + e$$

All variables are defined in Appendix. t-statistics are based on standard errors that are clustered by industry sector.

\*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1% levels, respectively (two-tailed).

## **6 Conclusion**

Given the significance of business in both the economic and social realms of a country, it is imperative to analyze how efficient corporate governance mechanisms affect many aspects of a company's financial well-being. The objective of this study was to analyze the influence of corporate governance on the earnings quality of firms in the United Kingdom within the COVID-19 pandemic. In order to examine this relationship, we utilized a sample of 228 companies that were included in the FTSE350 index between the years 2019 and 2022. Based on the pertinent findings of prior research on sound corporate governance practices, we propose that stronger corporate governance systems are associated with enhanced earnings quality in firms. Our empirical investigation revealed a positive association between increased board capital, managerial share ownership, and board independence with firms' earnings quality. Furthermore, a substantial quantity of audit committee members, a significant level of audit committee independence, a prolonged executive tenure, and a substantial number of pay committee members all contribute positively to a firm's earnings quality. In addition, companies that have a high ratio of market value to book value and when are audited by one of the four major audit firms (known as the Big 4) have superior earnings quality when compared to companies with contrasting characteristics. On the other hand, companies where the CEO serves as both the Chairman of the Board of Directors and operates with significant levels of debt tend to employ more aggressive strategies to manipulate their earnings, as contrasted with companies with other leadership and capital structures.

The implications of our findings are relevant to stakeholders and regulators. Accounting regulators in the United Kingdom may noticeably that implementing mechanisms to ensure management complies with corporate governance regulations and systems that represent best practices could function as a viable instrument to restrict firms' opportunistic earnings management activities. Therefore, the many governance processes that make up a corporate governance system should collaborate in order to accomplish the most effective and exemplary governance practices and ensure compliance. To summarize, countries with significant instances of earnings manipulation should include this factor in their policy considerations when implementing corporate governance changes. Emphasizing the implementation of best-practice procedures rather than solely focusing on meeting disclosure requirements is crucial for effective corporate governance practices.

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## Appendix

**Table A1: Variable Definition**

| <b>Variable</b>         | <b>Definition</b>   |
|-------------------------|---|
| <b>Earnings Quality</b> | ABSDAC1 represents the absolute value of the firm's discretionary accruals (Jones, 1991, Bartov et al., 2001, and Kothari et al., 2004).  |
|                         | ABSDAC2 is the absolute value of the firm's accruals according to the research of Bartov et al. (2001) and Kothari et al. (2004)  |
| <b>CAP</b>              | CAP is the board capital, which is calculated by dividing the total number of directors on the board by the proportion of directors who concurrently hold the position of CEO, board of directors of FTSE350 firms, faculty at universities, or government officer. |
| <b>BSIZE</b>            | BSIZE refers to the board size which is the overall number of directors serving on a firm's board of directors.   |
| <b>BOARDIND</b>         | BOARDIND refers to board independence which is the ratio of outside directors to the total number of directors on a firm's board.   |
| <b>OWNERS</b>           | OWNERS is the ratio of shares beneficially owned by all directors and executive officers of the firm to total number of common shares.  |
| <b>DUALITY</b>          | DUALITY is a dummy variable equal to 1 if the CEO is also the bank's board chairman, and 0 otherwise  |
| <b>MTGS</b>             | MTGS represents the total count of board meetings conducted within a given year.  |
| <b>RETYRS</b>           | RETYRS represents the total duration of credited services that the named executive officers have accumulated inside the company's pension plan.   |
| <b>AUDSIZE</b>          | AUDSIZE represents the membership count of the audit committee.   |
| <b>AUDMEET</b>          | AUDMEET represents the number of audit committee meetings.  |
| <b>AUDIND</b>           | AUDIND represents the proportion of external members to the audit committee's total membership.   |
| <b>COMPSIZE</b>         | COMPSIZE represents the number of the members comprising the compensation committee.  |
| <b>COMEET</b>           | COMEET represents the number of compensation committee meetings.  |
| <b>COMIND</b>           | COMIND represents the proportion of non-insiders to the total membership of the compensation committee.   |
| <b>FSIZE</b>            | FSIZE, is the natural logarithm of the total assets of each firm.   |
| <b>BIG4</b>             | BIG4 is a dummy variable that takes the value of 1 if a company is audited by one of the four largest audit firms, known as the big-four, and 0 if it is not.   |
| <b>OPM</b>              | The OPM, or operating profit margin, is calculated by dividing the operating income by the total sales of the company.  |
| <b>MBR</b>              | The MBR, or market-to-book ratio, is calculated by dividing the market capitalization by the book value of equity.  |
| <b>OCF</b>              | The OCF, or operating Cash Flow, is calculated by dividing the firm's cash flow from operations by its total assets.  |
| <b>LEVERAGE</b>         | LEVERAGE refers to the financial leverage of a firm which is calculated by dividing the total debt by the total equity.   |