Do revisions in the UK Corporate Governance code effect firm value and earnings management practices?

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Abstract

This paper examines how the revision of the UK Corporate Governance (CG) Codes has affected firm profitability, earnings management and operating expenses in the setting of the FTSE100 listed companies. We employ content analysis in order to explore the implementation of the UK CG Code recommendations by the listed companies of our sample, as well as a quantitative study with a panel data set, to empirically investigate, respectively, the impact of CG Code revisions implementation on profitability, earnings management and operational expenses. Our findings suggest that CG Code revisions are positively associated with profitability and negatively associated with earnings management and operational expenses.

Keywords: corporate governance codes, financial performance, earnings management, operating expenses, gender diversity, cultural diversity, auditor tenure

1. Introduction

Corporate governance codes, are usually not legally binding, and compliance is not compulsory. Listed firms however are expected to either comply with the recommendations of the code or explain why they have chosen not to comply in their annual reports. This approach is designed to give companies flexibility in their governance practices while promoting transparency and accountability. While compliance with corporate governance codes is not compulsory for firms in both Europe and the United States, with certain variations depending on the specific country or region, many firms choose to implement these practices voluntarily. Doing so can have a positive effect on investor relations and access to capital; good corporate governance practices is a sign of a well-managed and responsible company and as a result companies may find it easier to attract capital from a broader range of sources. Investors and creditors are more willing to provide funds to companies with a transparent and accountable governance structure. Also, voluntarily adoption of the recommendations in corporate governance codes can be a proactive measure, that demonstrates commitment to ethical behavior and helps protect and enhance the company's reputation. Additionally, corporate governance codes also often include guidelines for risk management and internal controls. Voluntarily implementing these practices helps firms identify and manage risks effectively, contributing to the long-term stability and sustainability of the business, while at the same time helps manage relationships with the stakeholders, promoting fairness and social responsibility.

Even though extensive research has been undertaken on the content of country corporate governance codes and the effect of their implementation on firm financial performance, very little has been done on how revised corporate governance codes with the introduction of additional recommendations has impacted firms' main indicators like profitability, earnings management as well as operational expenses. Recognizing the fact that context is important in investigating corporate governance issues, we employ a representative sample of 100 listed companies in the London Stock Exchange, the FTSE 100, an index designed to provide a broad representation of the performance of the UK stock market which is often used as a benchmark for investors. Employing panel data between 2003-2022 for 100 listed companies we find evidence that the 2010

UK CG Code revision exerts a positive impact on firm profitability as measured by ROE, Tobin's Q and ROA. Also, it is shown that this positive relationship is due to the inclusion of the variables of gender diversity and auditor tenure, as additional recommendations in the revised 2010 UK CG Code. Our models for earnings management and operating expenses also reveal a negative impact of revised 2010 UK CG Code on them, as expected. Drivers for this outcome were found to be gender diversity and auditor tenure while cultural diversity retained an opposite sign.

The recommendations of the UK Corporate Governance Codes were utilized to construct two key variables ***CODE 1*** and ***CODE 2***, which were used as regressors in the respective models. Content analysis was conducted to construct these variables. ***CODE 1*** and ***CODE 2*** are CG indices that have been created, based on recommendations of the UK CG Codes in the *Board of Directors* and *Accountability & Audit* sections. ***CODE 1*** includes information on corporate governance recommendations included in the UK Corporate Governance Code of 2003/2006/2008[1] and ***CODE 2*** recommendations of the 2010/2012/2014/2016[2]. ***CODE 1*** includes 15 corporate governance recommendations and ***CODE 2*** 18 CG recommendations[3]. Two CG indices were constructed based on the respective recommendations of each CG Code to examine firm's compliance. Governance data (governance recommendations included in the CG Codes) were identified through content analysis of firm's annual reports and contrasted from data downloaded from Refinitve Eikon for each firm included in the sample. Utilizing this data, a CG index score was created for each firm indicating its compliance to the UK CG Codes' recommendations. For each element of the code a dummy variable was created, whereby the value of 1 was assigned to the element if the firm followed the specific recommendation, and 0 otherwise. All elements were added and a percentage was assigned to each firm according to their compliance[4]. Higher scores indicate higher levels of governance compliance.

[1] The 2003, 2006 and 2008 CG Codes contain the exact same recommendations in the Board of Directors and Accountability & Audit sections and are classified as ***CODE 1*** for this study.
[2] The 2010, 2012, 2014, 2016 CG Codes contain the same recommendations in the Board of Directors and Accountability & Audit sections and are classified as ***CODE 2*** for this study.
[3] The 18 elements of ***CODE 2*** include all the 15 elements of ***CODE 1*** and three additional new CG elements (gender diversity, cultural diversity and auditor tenure). The specific recommendations for each code are stated in Appendix 1.
[4] If for example a firm followed 12 out of the 15 elements, the firm was assigned a 12/15=80% score.

Our contribution lies with the finding that the 2010 revision of the code has decisively changed the impact of good governance practices on firm performance due primarily to the addition/introduction of three recommendation variables that is: gender diversity, cultural diversity and auditor tenure.

The rest of the paper is structured as follows: Section 2 provides an overview of prior empirical studies investigating how good governance structures affect company profitability, as well as earnings management and operational expenses. In Section 3, we present the hypotheses development in the context of literature findings. Section 4 provides information on sample selection and data construction as well as description of the data used. Section 5, presents the econometric analysis of the profitability, earnings management and operational expenses in terms of the revised UK CG code. The findings of our empirical study are also discussed in Section 5, and Section 6 draws our concluding remarks.

2. Literature Review

The current literature suggests that improving corporate governance plays an important role as it provides oversight, increases a firm's access to external finance, mitigates scandals, ensures sufficient allocation of resources while also improving the relationship among different stakeholders (Claessens and Yurtoglu, 2012).

In response, corporations such as BlackRock, Vanguard and State Street, which constitute three of the world's largest asset managers with about $11 trillion assets, recently expanded their CG teams to ensure they effectively monitor the activities of the companies they invest in (Marriage, 2017). Such companies have thus employed different corporate governance mechanisms such as executive compensation, debt, board size and the market for corporate control to ensure that their firms are run effectively, and stakeholder groups are protected.

Evidence, however, from past literature has so far provided mixed results regarding corporate governance's effect on firm performance. For example, it is implied that corporate governance is not as effective in emerging markets compared to developed markets, as a typical firm in an emerging market is more likely to have a higher concentration of ownership, more likely to lack

the appropriate mechanisms to enforce shareholders' legal rights, and less transparency (Gibson, 2003).

The theoretical basis of corporate governance is routed in agency theory (Alchian and Demsetz, 1972; Jensen and Meckling, 1976), which highlights the conflict of interest between principals and agents (i.e. owners and managers), arising from separating control from ownership within a firm. To amend this issue, agency theory suggests establishing a series of external and internal control mechanisms, all under the umbrella of corporate governance (Haniffa and Hudaib, 2006). The main purpose of corporate governance according to Shleifer and Vishny (1997) is to provide capital providers with a sense of security. In addition to agency theory, managerial signaling theory and information asymmetry theory have also been used to explain the theoretical foundation of the concept of corporate governance (Kapopoulos and Lazaretou, 2007).

Major corporate failures, increased awareness of investors, as well as globalization, are the main triggers that have sparked the popularity of corporate governance codes worldwide (Lopez-Iturriaga and Lopez de Foronda, 2009). A series of corporate fraudulent scandals, due to lack of corporate governance, gave rise to discussions surrounding the need to apply a check and balance mechanism to the business world (Claessens and Yurtoglu, 2012; Davies and Schlitzer, 2008). The emergence of this matter into the spotlight made it a priority for market regulators and governments to issue/emphasize corporate governance regulations or at least codes of best practice.

The first country to do so was the UK, starting with the Cadbury Report in 1992 and then followed by the Higgs Report in 2003. According to Cheffins and Reddy (2022) the 1992 Code of Best Practice was developed by a committee chaired under Sir Adrian Cadbury, revolutionizing UK corporate governance. The Code, which introduced non-statutory best practice provisions with which listed companies could choose not to comply so long as they explained why, has evolved into the more expansive UK Corporate Governance Code of today. Their article argues that after three decades it is time to do away with the code approach and 'comply-or-explain'.

Since the issuance of the Cadbury Report, governments and regulating bodies worldwide have thus attempted to address the issue of corporate governance through introducing corporate governance codes based on implementing a set of rules or principles. More specifically, the gradual increase

in the issuance of Corporate Governance codes has increased from 72 codes across 24 countries in 1999 (Aguilera and Cuervo-Cazurra and Aguilera, 2004) to 189 codes in 63 countries (Zattoni and Cuomo, 2008) in 2008, to 92 countries adopting at least one or multiple Codes in 2013 (Bin Tariq and Abbas, 2013). As of 2019, Codes of good Corporate Governance can be found in more than 140 countries worldwide (International Finance Corporation, 2019). The corporate governance structure in any country is influenced by the de facto realities of the corporate environment in the country as well as the legal and regulatory framework defining the rights and responsibilities of the stakeholders involved (Ashraf and Bin Tariq, 2016).

There is significant empirical evidence that 'good' corporate governance can result in improved financial performance and this acts in favor of shareholders by enabling them to access more capital at a lower cost of capital (Reddy et al., 2010). Moreover, good corporate governance results in the rightful distribution of free cash flows among shareholders instead of expropriated (La Porta et al., 2002), overall reduction of managerial control rights, while ensuring that they will still decide to take on investments that enhance shareholders' value (Shleifer and Vishny, 1997). Therefore, a corporate governance system which is compatible with capital markets and corporate culture will, theoretically, facilitate the business and thus enable a firm to achieve improved financial performance and efficiency. However, no matter how good the intentions behind establishing corporate governance codes/regulation, if they are of poor quality (i.e. no longer relevant, extensive, expensive), they will only result in increased compliance costs for companies without any real benefit in return. For this reason, Cheffins and Reddy (2022) argue that the current UK CG Code's content has nowadays become irrelevant, and disclosure and compliance expectations have escalated to levels that create substantial net costs for companies. Additionally, the Code is now being used to address 'stakeholder' issues for which the Code's shareholder enforcement dependent comply-or-explain mechanism is poorly suited. The Code correspondingly should be abolished, with some key points it addresses being dealt with instead by new disclosure requirements under the Financial Conduct Authority's Listing Rules.

The main strand of research involving country CG Codes examines the extent of CG Code compliance within a country or multiple countries on firm performance. Such studies include: Akkermans et al., 2007; Alves and Mendes, 2004; Berglöf and Pajuste, 2005; Chizema, 2008;

Hooghiemstra and van Ees, (2011); Seidl et al., (2013); Talaulicar and Werder, (2008); Werder et al., (2005), Reddy et al. (2010).

The Cadbury committee's recommendations back in 1992 were among the first corporate governance Codes; Since then, there exist numerous studies that have attempted to evaluate their recommendations through comparison and evaluation of financial performance of listed companies that have adopted or followed those recommendations (e.g. Arcot and Bruno (2006); Dahya and McConnell (2007); Dedman, 2003). Nevertheless, the findings are overall inconclusive, with some evidence suggesting that due to implementing these recommendations, overall board oversight capacity has increased.

Another strand of research examines the content of corporate governance Codes. Research investigates the convergence and/or divergence of the content of country CG Codes based on elements of 'best practice'.

Collier and Zaman (2005) examine 20 European CG codes for evidence of convergence. They find that a degree of convergence towards an Anglo-Saxon model of corporate governance is evident in terms of the audit committee concept. Zattoni and Cuomo (2008) investigate the key reason why Codes of Good Governance have become so widely used in civil law countries. To do so, they collect corporate governance codes developed worldwide at the end of 2005 and classify them according to a country's legal system (i.e. common or civil law). Their findings suggest that issuing codes of civil law countries is mainly driven by legitimation reasons rather than the determination to improve the governance practices of national companies, thus making them a part of the symbolic perspective in line with legitimacy theory. Their findings support the idea that differences among coverage of country CG Codes is illustrated by the characteristics of the respective national corporate governance system and country law.

Hermes et al. (2007) find that the content of corporate governance codes differs across countries within their sample of Eastern European countries. When it comes to determining what is commonly accepted as 'best practice', regarding issues such as disclosure rules, strengthening the rights of shareholders, and modernizing boards, convergence is far from being reached. Kubiceck et al. (2016) on a similar tone, also analyze the corporate governance codes in EU-member states and study the extent to which domestic codes of corporate governance are influenced by the

external force of the EU in this instance or whether they are more influenced by domestic forces representing endogenous stakeholders' interests. Their findings suggest, contrary to Hermes et al. (2007), that codes' quality is significantly strengthened across the member states they use in their sample, as well as a convergence tendency to adhere to international 'best practice.'

Regarding the content of the recommendations set in CG Codes, Zattoni and Cuomo (2010) set out to find whether the increasing the number of non-executive directors is beneficial for the company, holds any merit. Their results show that although 'independence' is often listed as a requirement for non-executive directors, its strictness changes depending on common or civil law legislation; common law countries tend to side more with the investor and aim to ensure stricter criteria to define 'independence' compared to countries in their sample that enforce civil law.

Aguilera and Cuervo-Cazurra (2004) examine the mechanisms underlying the worldwide implementation of CG codes, which provide a set of 'best practice' recommendations regarding the behavior and structure of a firm's board of directors. Similarly, Aguilera and Cuervo-Cazurra (2009) examine the developments in elements of CG codes and highlight their rapid spread around the world. Although criticism exists, that due to their voluntary nature, they have a limited ability to improve governance practices, evidence indicates that in countries that have adopted them, their governance has improved. However additional reforms are needed.

Another group of studies examine the effect of compliance with corporate governance codes on aspects such as earnings management, financial distress and CEO turnover; such studies include: Dahya et al., 2002; Dedman, 2003; Bravo-Urquiza and Morena-Ureba (2021).

Bravo-Urquiza and Morena-Ureba (2021) analyze whether the compliance with corporate governance codes helps to mitigate the financial distress of firms. Their results reveal that only fulfillment with the recommendations of the board of directors leads to a reduction in the likelihood of financial distress.

3. Hypotheses Development

In general, the evidence is mixed regarding a country's CG Codes compliance and firm performance relationship. Bauer et al. (2004) reported that though firm value is positively related

with governance ratings, firm performance as measured by ROE and Net Profit Margin is negatively related with governance standards. They also report significant differences between Eurozone markets and the UK market. On the other hand, Bauwhede (2009) reports a positive relationship between operating performance and the extent of compliance with international best practices. In support of the above findings several studies make a significant contribution (Bhatt and Bhatt (2017), Rose (2016), Bin Tariq and Abbas (2013)).

In the US context, several studies have attempted to measure investor relations on mandatory adoption of the Sarbanes–Oxley Act by listed companies. Li et al. (2008) and Larcker et al. (2007) and find a positive relationship, while Zhang (2007) and Litvak (2007) report a negative reaction of investors towards adoption of recommendations of Sarbanes–Oxley Act. Similarly, Hadji and Mubaraq (2015) report a negative relationship while Wang et al. (2020) and Stiglabauer and Velte (2014) find insignificant effect.

Deriving from the literature we form the following hypothesis.

H1: There is a *positive relationship* between implementation of a country's CG Codes and firm performance.

The literature on the relationship between implementation of country CG Codes and earnings management presents mixed results. Chen and Zhang (2014) and Alareeni (2018) find a negative relationship between CG Codes implementation and earnings manipulation while Outa et al. (2017) and Grada (2022) find mixed or insignificant results.

In the context of our investigation and considering the literature on the issue we formulate the following hypothesis.

H2: There is a *negative relationship* between implementation of country CG Codes and earnings management.

Hermalin and Weisbach (2012) suggest that improved corporate governance practices, included in revised CG Codes contribute to better resource allocation, better company performance and lower costs. Also, companies that implement CG Codes may enjoy favorable market perceptions and hence lower cost of capital, (Li, 2010). Tricker (2015) suggests that strong corporate governance practices are associated with better risk management and lower operating expenses. Furthermore,

Gompers et al. (2003) states that strong corporate governance is a long- term investment, as such initial expenses will be outweighed by longer term benefits due to sustainable performance. On the other hand, Hitt et al. (2018) points out that higher operating costs will occur as regular audits, and maintaining transparency in the context of CG Codes rises operating expenses.

Keeping in mind that the effect of CG Codes may vary across companies we form the following hypothesis.

H3: There is a *negative relationship* between implementation of country CG Codes and operating expenditures.

The literature associates' gender diverse boards positively with performance. A board that includes women, may enhance creativity and innovation which boosts profitability (Catalyst, 2020). Furthermore, studies suggest that gender diversity in the board may reduce unethical behavior and therefore earnings management (Carter et al., 2010). Even though the effect of gender diversity on operating costs may be context dependent, a diverse board may lead to better cost-effective solutions and the reduction of operating costs (Hoogendoorn et al., 2013).

We formulate the following hypothesis.

H4: There is a *positive relationship* between gender diverse boards in a company and firm profitability while there is a *negative relationship* between gender diversity with earnings management and operational expenses.

Cultural diversity on the board of directors and company profitability depends on several factors and primarily how diversity is embraced, managed, and integrated into the organization's culture and operations. Cultural differences can influence business strategies affecting profitability. Companies that understand and adapt to cultural diversity in the board, may lead to profitability improvement (Hitt, 2016). On the other hand, cultural factors may impact the ethical climate of a business environment, affecting the likelihood of earnings management. Cultural values for example, emphasizing collectivism or individualism may influence ethical decision-making (Hope et al., 2012). Cultural diversity affects operating expenses in various ways, these include labor practices, negotiation skills and communication preferences (Raelin and Bondy, 2013). Cultural diversity overall is content specific and perhaps even company specific.

We formulate the following hypothesis.

H5: There is a posi*tive relationship* between culturally diverse boards and firm profitability while there is also a *positive relationship* between cultural diversity with earnings management and a negative with operational expenses.

The relationship between auditors' tenure and profitability is complex. Some studies suggest that long auditor tenure can lead to improved financial reporting quality, while others argue that long tenure may compromise auditor independence, potentially affecting profitability (DeFond and Zhang, 2014). Furthermore, short auditor tenure has been associated with higher earnings management practices, possibly because new auditors are less familiar with clients' business practices. On the other hand, long auditor tenure may lead to complacency, potentially facilitating earnings management (Carcello et al., 2006). The impact of auditor tenure on operating costs is also not straightforward. The relationship may depend on factors such as the quality of the auditor-client relationship and the effectiveness of the auditing process in detecting and preventing financial misstatements (Christensen et al., 2016).

H6: There is a *positive relationship* between auditor tenure and firm profitability, while there is a *negative relationship* between auditor tenure with earnings management and operational expenses.

4. Sample and Data Description

We chose our sample of the 100 largest companies listed on the London Stock Exchange as they come from various sectors, are diverse, but share certain characteristics and advantages. Among them is their global presence as they operate in many countries and this allows them to mitigate risks arising from a single market. It includes companies from various sectors including finance, energy, healthcare, consumer goods and technology and it is this diversity that helps the overall effect of recessions on the index. Even more important for our study is that they are expected to operate with transparency and implement strong governance practices which improve investor and shareholder trust. Based on the sample of active listed companies in 2022, we constructed an unbalanced panel data set with 100 companies between 2003-2022. The financial data for the dependent and independent variables selected was extracted from Refinitiv Eikon database and contrasted with the annual accounts of companies. We have created the variables ***CODE 1*** and

CODE 2 through content analysis delving into the annual accounts of the listed companies. ***CODE 1*** and ***CODE 2*** are CG indices that have been created based on recommendations of the UK Corporate Governance Codes in the *Board of Directors* and *Accountability & Audit* sections. ***CODE 1*** includes information on corporate governance recommendations included in the UK Corporate Governance Code of 2003/2006/2008[5] and ***CODE 2*** recommendations of the 2010/2012/2014/2016[6]. ***CODE 1*** includes 15 CG recommendations and ***CODE 2*** 18 CG recommendations, the 15 elements found in ***CODE 1*** and 3 new elements: *board gender diversity*, *board cultural diversity*, and *auditor tenure*. Two CG indices were constructed based on these recommendations to examine firm's compliance to the UK CG Code's recommendations. To construct these CG indices, governance data were identified through content analysis of firms' annual reports and contrasted from data downloaded from Refinitiv Eikon for each firm included in the sample. Utilizing this data, a CG index score was created for each firm indicating its compliance to each element, according to the UK CG Codes. For each element of the code a dummy variable was created, whereby the value of 1 was assigned to the element if the firm followed the specific recommendation, and 0 otherwise. All elements were added and a percentage was assigned to each firm according to their compliance[7]. Higher scores indicate higher levels of governance. Appendix A1 shows the elements contained in each ***CODE***.

4.1 Variables

Firm profitability was measured by ROE and Tobin's q, both ratios provide different perspectives on a firm's financial performance. ROE offers insights on the profitability of a company with respect to its equity, while Tobin's q provides information of the market's valuation of a company's assets. ROA was used as a dependent variable in robustness checking of the models results with the two financial performance variables ROE and Tobin's q.

Another dependent variable was earnings management, EM, defined as the absolute value of abnormal working capital accruals using the DeFond and Park (2001) model, and OE, operational

[5] The 2003, 2006 and 2008 CG Codes contain the exact same recommendations in the Board of Directors and Accountability & Audit sections.
[6] The 2010, 2012, 2014, 2016 CG Codes contain the same recommendations in the Board of Directors and Accountability & Audit sections.
[7] If for example a firm followed 12 out of the 15 elements, the firm was assigned a 12/15=80% score.

expenses, defined as the sum of total operating expenses (total selling, general and administrative expenses).

The five models developed, one for each dependent variable above, aimed at quantifying the sign and the impact of each code on the dependent variables as well as the effect of the additionally recommended variables and in the presence of a number of control variables.

The independent variables included were: ***CODE 1***, defined as a dummy variable assuming the value of 1 if ***CODE 1*** had a value of over 70% (median value) and 0 otherwise, ***CODE 2***, defined as a dummy variable assuming the value of 1 if ***CODE 2*** had a value of over 67% (median value) and 0 otherwise Cassell et al (2012), board gender diversity, BGD, defined as the percentage of female members on the board, board cultural diversity, BCD, defined as the percentage of board members that have a cultural background different from the location of the corporate headquarters. Also, auditor tenure, AUD, defined as the number of years the current auditor is serving the firm.

The remaining control variables include: ESG score, defined as an overall company score based on the self-reported information in an environmental, social and corporate governance pillars, provided by Refinitiv Eikon. Market capitalization, LMCAP, as a proxy for firm size and the age of the firm, defined as the number of years each company is listed.

Table 1 below in Panel A defines and describes all variables used, while Panel B provides the descriptive statistics.

TABLE 1 Variables

Panel A: Description of variables

Variable	**Coding**	**Definition**
Return on Assets	**ROA**	The natural logarithm of net income over total assets
Return on Equity	**ROE**	The natural logarithm of net income over total equity
Tobin's Q	**TQ**	The natural logarithm of (market capitalization + Lt debt) / total assets
Earnings Management	**EM**	Absolute value of abnormal working capital accruals using the DeFond and Park (2001) model
UK CG Code (2003-2008)	**CODE 1**	Dummy variable assuming the value of 1 if the Code 1 is implemented and over 70% of the required items are included (median), and 0 otherwise.
UK CG Code (2010-2016)	**CODE 2**	Dummy variable assuming the value of 1 if the Code 2 is implemented and over 67% of the required items are included (median), and 0 otherwise.
Operating expenses	**OE**	The natural logarithm of the sum of total operating expenses (total selling, general and administrative expenses)
Board gender diversity	**BGD**	% of female members on the board

Board cultural diversity	**BCD**	% of board members that have a cultural background different from the location of the corporate headquarters
Auditor tenure	**AUD**	The number of years the current auditor is serving the firm.
ESG Score	**ESG**	Is an overall company score based on the self-reported information in the environmental, social and corporate governance pillars, as provided by Refinitiv Eikon.
Market Capitalization	**LMCAP**	The natural logarithm of market capitalization
Financial Leverage	**LEV**	Ratio of total debt as of the end of the fiscal period to Total Equity for the same period and is expressed as percentage
Number of years listed	**AGE**	The natural logarithm of the number of years each company is listed
Independent Board Members	**IBM**	Independent Directors as a percentage of board members

Panel B: Descriptive statistics

	Mean	**Median**	**Maximum**	**Minimum**	**Std. Dev.**
ROA	1.586	1.830	5.519	-4.605	1.196
ROE	2.878	2.906	7.865	-2.408	0.962
TQ	20.861	20.735	24.776	13.710	1.651
EM	-0.0006	0.0003	0.287	-0.567	0.045
OE	0.0154	0.002	0.430	-0.029	0.046
CODE1	0.669	0.733	1.000	0.000	0.214
CODE2	0.666	0.722	1.000	0.000	0.213
BGD	20.665	20.000	62.50	0.000	12.933
BCD	10.505	10.505	21.000	0.010	6.064
AUD	7.549	6.000	27.000	1.000	5.747
ESG	55.005	54.688	93.899	4.432	19.172
LMCAP	22.809	22.709	26.353	17.325	1.547
LEV	4.167	4.268	10.191	-5.214	1.377
AGE	3.516	3.850	5.136	0.000	1.108

IBM	61.94	61.53	100	0.000	13.25

5. Empirical Analysis and Discussion of Results

Our panel data contains information on both the dynamic behavior of selected companies through time, as well as the individual differences among them. Nevertheless, some of the companies participating have missing observations and this renders our sample unbalanced. The first question posed is whether an unbalanced sample is caused by panel attrition. If so, random sampling does not hold, and this will directly affect the validity of drawing inference about the population of the shipping companies we are studying.

A simple test was suggested by Verbeek and Nijman (1992) in the context of both random and fixed effects estimation, where we define and add the lagged selection indicator, $s_{i,t-1}$, to the equation, estimate the models by fixed effects (on the unbalanced panel), and do a t-test (perhaps making it fully robust) for the significance of $s_{i,t-1}$ (see Table A1 in the Appendix).

Given $y_{it} = x_{it}\beta + u_{it}$ we define

$$s_{it} = \begin{cases} 1 \; if \; (x_{it}, y_{it}) observable \\ 0 \qquad\qquad\qquad otherwise \end{cases}$$

Under the null hypothesis, u_{it} is uncorrelated with s_{ir} for all r, and so selection in the previous period should not be significant in the equation at time t. We run the above test, found it insignificant, and proceeded with the standard methods for panel estimation.

We investigate the causal relationship between CODE 1 of 2003 and CODE 2 of 2010 as well as their impact on the profitability of our sample of public companies through unbalanced panel data analysis. Furthermore, we extract the main additional items of CODE 2 and investigate their effect on Profitability, Earnings Management and Operating Expenses. This allows us to explore company heterogeneity and draw conclusions that explain it. Drawing from the literature we specify our models as follows:

$$PROF_{it} = f(CODE_{it}, LEV_{it}, LMCAP_{it}, ESG_{it}, IBM_{it}, AGE_{it}) \qquad \text{(Eq. 1)}$$

$$PROF_{it} = f(ESG_{it}, LEV_{it}, LMCAP_{it}, BGD_{it}, BCD, AUD_{it}, IBM, AGE_{it}) \quad \text{(Eq. 2)}$$

where $PROF_{it} = ROE_{it}/ROA_{it}/TQ_{it}$ and $CODE_{it} = CODE1_{it}/CODE2_{it}$

$$EM_{it}/OE_{it} = f(CODE_{it}, LEV_{it}, LMCAP_{it}, ESG_{it}, IBM_{it}, AGE_{it}) \quad \text{(Eq. 3)}$$

$$EM_{it}/OE_{it} = f(ESG_{it}, LEV_{it}, LMCAP_{it}, BGD_{it}, BCD, AUD_{it}, IBM, AGE_{it}) \quad \text{(Eq. 4)}$$

i = number of companies in our study, i.e., 100 companies, and

t = number of years in our study, i.e., 19 years.

Initially, we the compared fixed and random effects estimations using Hausman test for unbalanced panel data (Wooldridge, 2010), and proceeded with fixed effects estimation. Table 2 shows that in all five equations of our model the null hypothesis of random effects is rejected at 1% level of significance.

TABLE 2 Hausman Test

Dependent Variable	Chi-Sq Statistic	P-value	Regression Model
ROE	267.431	0.000	Random Effects
ROA	394.130	0.000	Random Effects
TQ	65.873	0.000	Random Effects
EM	70.560	0.000	Random Effects
OE	257.250	0.000	Random Effects

We estimate separately Eq. 1 and Eq. 2 for ROE and TQ, respectively, as the dependent variables and then we run a robustness check with ROA as the dependent variable. We initially estimate with panel least squares using fixed effects and robust errors. A rather extensive number of regressors was found to be insignificantly different from zero and some with a puzzling sign. The presence of leverage, and corporate governance variables of ESG, IBM, in our model impinge on the presence of endogeneity, even though fixed effects are expected to control for the impact of omitted variables in our model.

We proceed by selecting Fixed Effects 2SLS as the appropriate method of estimation but, again, some coefficients had a puzzling sign in the context of finance and with low significance. We believe the cause of this to be a serial correlation between one or more of the regressors with the error term in both equations of our model. As a result, our estimates are not efficient. Therefore, we decided to use a dynamic Generalized Method of Moments (GMM) approach that can effectively address arbitrary patterns of autocorrelation and heteroskedasticity (Ahn et al., 2001). HAC standard errors are considered to be robust in terms of both heteroscedasticity and autocorrelation. The rationale behind the GMM method is given below.

Assume that we have $Y_{it} = X_{it}\beta + u_{it}$

and $u_{it} = \alpha_\iota + \varepsilon_{it}$where i=1, …126 and t=1, ...13.

If some of the variables are endogenous and correlated with the error term, we can find a set of instruments $Z1, \dots Zn$ correlated with the X's but not with the error term, which can be used in the estimation. We then use Z to solve the orthogonality conditions $E(Z_\iota' u_i) = 0$ in terms of β (Wooldridge, 2010).

The challenge of using this method is to choose appropriate instruments. To choose the instruments we follow the well-known methodology by Lewbel (1997) and Tsionas (2012), who showed that if we have a functional form $Y = f(X, Z)$, $Y = ROE_i$ for the first equation in our model, and $Y = TQ_i$ for the second equation in our model, but also $Y = ROA_i$ and $Y = EM_i$ and $Y = OE_i$ where X are endogenous, $X = (LEV, ESG)$ and Z predetermined, $Z = (LMCAP, AGE)$

we define valid instruments expressed in deviation form as $x \times z$, $x \times y$, $z \times y$, but also $x \times x$ and $y \times y$. In total we use 10 instruments.

We present our results based on Arellano and Bond's (1991) methodology on dynamic panels in Tables 3, 4, 5, 6 and 7.

TABLE 3 that follows shows the empirical results for ROE in 3 different model versions. Model (1) shows that CODE 1 has a negative and significant impact on company profitability. The control variables of ESG, IBM, LMCAP, AGE and LEV have the expected signs and are significant at 1% level of significance. Model (2) shows that CODE 2, has a positive and significant impact on ROE while the control variables maintain their significance and the expected signs. In Model (3) we have extracted the important additions to CODE 2 from CODE 1 namely, BGD, BCD and AUD.

We observe that gender differences, BGD, has a positive and significant impact on ROE and also cultural differences, BCD, have a significant and positive impact on ROE. On the other hand, AUD has a significant but negative impact as expected.

TABLE 3 – Accounting Codes and CODE 2 main items' impact on ROE (Arelano-Bond GMM)

Independent Variables	Model (1)	Model (2)	Model (3)
ROE (-1)	0.138*** (0.007)	0.138*** (0.008)	0.234*** (0.001)
CODE 1	-0.141*** (0.009)	-	-
CODE 2	-	0.124*** (0.013)	-
BGD			0.443*** (0.044)
BCD			0.151*** (0.008)
AUD			-0.462*** (0.095)
ESG	0.254*** (0.051)	0.255*** (0.057)	0.097** (0.044)
LMCAP	0.356*** (0.011)	0.354*** (0.012)	0.144*** (0.006)
LEV	-0.086*** (0.007)	-0.089*** (0.007)	-0.095*** (0.008)
LAGE	-0.901*** (0.024)	-0.878*** (0.026)	-0.041*** (0.002)
IBM	0.037*** (0.014)	0.015 (0.022)	0.201*** (0.035)
Prob.(J-statistic)	0.530	0.522	0.527

Note: *Figures in ( ) are standard errors. *, ** and ***, indicate significance at the 10%, 5% and 1% levels, respectively. The selected method of estimation is the Arelano-Bond GMM.*

Table 4 that follows shows the empirical results for TQ in 3 different model versions. So we look at profitability from the perspective of Tobin's q. Model (1) shows that CODE1 has a negative and significant impact on company profitability. The control variables of ESG, IBM and LEV have the expected signs and are significant at 1% level of significance. Model (2) shows that CODE 2, has a positive and significant impact on TQ while the control variables maintain their significance and the expected signs. In Model (3) we have extracted the important additions to CODE 2 from CODE 1 namely, BGD, BCD and AUD. We observe that gender differences, BGD, has a positive and significant impact on TQ and cultural differences, BCD, have a significant positive impact on TQ. On the other hand, AUD has a significant negative impact as expected.

TABLE 4 – Accounting Codes and CODE 2 main items' impact on TQ (Arelano-Bond GMM)

Independent Variables	Model (1)	Model (2)	Model (3)
TQ (-1)	0.296*** (0.003)	0.297*** (0.003)	0.207*** (0.009)
CODE 1	-0.137*** (0.003)	-	-
CODE 2	-	0.132*** (0.003)	-
BGD			0.291*** (0.025)
BCD			0.069*** (0.007)
AUD			-0.255*** (0.078)
ESG	0.386*** (0.007)	0.367*** (0.006)	0.092*** (0.019)
LMCAP	0.007*** (0.002)	0.004* (0.002)	0.161 (0.005)
LEV	-0.082*** (0.000)	-0.083*** (0.000)	-0.703** (0.268)
LAGE	-0.014*** (0.000)	-0.013*** (0.000)	-0.022*** (0.000)
IBM	0.082*** (0.007)	0.055*** (0.007)	0.137*** (0.024)
Prob.(J-statistic)	0.356	0.355	0.349

*Note: Figures in ( ) are standard errors. *, ** and ***, indicate significance at the 10%, 5% and 1% levels, respectively. The selected method of estimation is the Arelano-Bond GMM.*

5.1 ROBUSTNESS CHECKING

To check the robustness of our results above we employ ROA as our dependent variable and repeat estimation. Table 5 that follows shows the empirical results for ROA in the 3 different model versions. Model (1) shows that CODE 1 has a negative and significant impact on company profitability. The control variables of ESG, and LEV have the expected signs and are significant at 1% level of significance. Model (2) shows that CODE 2, has a positive and significant impact on ROA while the control variables maintain their significance and the expected signs. In Model (3) we have again extracted the important additions to CODE 2 from CODE 1 namely, BGD, BCD and AUD. We observe that gender differences, BGD, has a positive and significant impact on ROA and cultural differences, BCD, have a significant positive impact on ROA. On the other hand, AUD has a significant but negative impact as expected.

TABLE 5 – Accounting Codes and CODE 2 main items' impact on ROA (Arelano-Bond GMM)

Independent Variables	Model (1)	Model (2)	Model (3)
ROA (-1)	0.056*** (0.006)	0.056*** (0.006)	0.095*** (0.003)
CODE 1	-0.859 *** (0.125)	-	-
CODE 2	-	0.392*** (0.128)	-
BGD			0.102*** (0.012)
BCD			0.273*** (0.051)
AUD			-0.160*** (0.022)
ESG	0.083** (0.034)	0.090** (0.035)	0.015*** (0.005)
LMCAP	0.403*** (0.026)	0.413*** (0.025)	0.032*** (0.002)
LEV	-0.145*** (0.009)	-0.146*** (0.009)	-0.142*** (0.012)
LAGE	-0.957*** (0.053)	-0.916*** (0.054)	-0.065*** (0.002)
IBM	-0.026*** (0.003)	-0.027*** (0.003)	-0.097*** (0.012)
Prob.(J-statistic)	0.457	0.453	0.448

Note: *Figures in ( ) are standard errors. *, ** and ***, indicate significance at the 10%, 5% and 1% levels, respectively. The selected method of estimation is the Arelano-Bond GMM.*

Compliance to corporate governance recommendations of UK CG Codes has similar effects on all three performance measures, ROE, Tobin's Q and ROA. More specifically, firms complying to elements of CODE 1 has a significant negative impact on firm performance, while compliance to recommendations of CODE 2 has a significant positive effect on firm performance.

Results found for the negative impact of the implementation of corporate governance recommendations of CODE 1 on firm performance are similar to the findings of Haji and Mubaraq (2015), Wang et al. (2020) and Stiglabauer and Velte (2014). However, this negative relationship becomes positive when firms implement the recommendations of CODE 2, results similar to Bhatt and Bhatt (2017), Rose (2016), Bin Tariq and Abbas (2013). Thus, H1 is accepted.

Various reasons can be attributed to this change in the relationship between implementation of governance recommendations as per the governance codes and firm performance. The positive relationship found between CODE 2 and firm performance in relation to the negative relationship between CODE 1 and firm performance can be attributed to the fact that CODE 2, although a more elaborate code than the original Cadbury Code, is much simpler that its precedent Combined Code, i.e. CODE 1 (Cheffins and Reddy, 2022). Often the costs associated with the implementation of governance code recommendations can exceed the benefits, thus creating a negative affect on firm performance, a fact that explains the negative relationship between CODE 1 and firm performance. Companies incur code-related costs so as to satisfy the UK listing requirements and adhere to the UK CG code by often adopting sub-optimal governance structures that negatively affect firm value. Additionally, investors anticipate impression management behavior, despite firms' compliance to governance recommendations, that qualify for lower cash flows and this also contributes to decreased firm performance (Stiglbauer and Velte, 2014). This relationship changes to a positive one, when CODE 2 recommendations are implemented, indicating that strong corporate governance improves firm performance. These results are consistent with both agency and resource-dependency theories, whereby corporate governance increases firm value. Well-governed firms are considered less risky by investors and thus a lower expected return is applied, leading to increased firm value. In the seminal work of Jensen and Meckling (1976) firms with strong governance have more efficient operations, which provide higher future cash flows, all

leading to a positive impact on firm performance (Bhatt and Bhatt, 2017; Rose 2016; Bauer et al, 2004).

It is important to also state that the three additional recommendations found in CODE 2, i.e. gender diversity, cultural diversity and auditor tenure have an effect on firm performance. More specifically, gender diversity and auditor tenure have a positive relationship with firm performance, in line with H4 and H6, while cultural diversity negatively affects firm performance, contrary to H5.

According to agency theory, boards need to focus on their monitoring role so as to control agency problems, whereby gender diverse boards are more independent, coordinated and effective, elements that assist their monitoring role. Gender diverse boards reduce the level of agency conflicts and this positively affects firm value. Diversity on firm's boards provides varied ideas, skills, backgrounds, and perspectives that enhance the decision-making process, increases the board's ability to deal with various opportunities and challenges in the organizational external environment and positively affects firm performance (Sarhan et al., 2019; Ntim, 2015). As per resource dependency theory, gender diverse boards provide the firm connections with its stakeholders, resulting in increased stakeholder appreciation, increased capital inflows, community acceptance, all elements that increase firm value (Sarhan et al., 2019; Ntim, 2015).

The positive relationship between auditor tenure and firm performance indicates that firms that employ external auditors for a longer period of time, are better equipped to provide effective services to UK firms, since they are more familiar with clients' business practices, assist their customers to provide higher quality financial reports and this increases firm value (Carcello et al., 2006; DeFond et al., 2014).

The negative relationship between cultural diversity and firm performance can be attributed to ethnic minorities lacking the skills, qualifications, and experience needed for directorship. Lower level of investment in their education and work experience can limit their effectiveness in their monitoring and advisory roles and this can consequently lead to lower firm value (Sarhan et al., 2019). Additionally, culturally diverse boards have different backgrounds, ideas and perceptions creating a heterogeneous working environment that may hinder communication among board members making the decision-making process less effective and increasing firm and operational risk, all leading to a reduction of firm value (Carter et al.,2010; Sarhan et al., 2019).

5.2 ADDITIONAL HYPOTHESES

TABLE 6 that follows shows the empirical results for earnings management, EM, in 3 different model versions. Model (1) shows that CODE 1 has a positive and significant impact on company profitability. The control variables of ESG, IBM and LEV have the expected signs and are significant at 1% level of significance. Model (2) shows that CODE 2, has a negative and significant impact on EM, while the control variables maintain their significance and the expected signs. In Model (3) we have extracted the important additions to CODE 2 from CODE 1 namely, BGD, BCD and AUD. We observe that gender differences, BGD, has a negative and significant impact on EM while cultural differences, BCD, have a significant but positive impact on EM. On the other hand, AUD has a significant but negative impact as expected.

TABLE 6 – Accounting Codes and CODE 2 main items' impact on EM (Arelano-Bond GMM)

Independent Variables	Model (1)	Model (2)	Model (3)
EM (-1)	-0.229*** (0.000)	-0.228*** (0.000)	-0.310*** (0.000)
CODE 1	0.934*** (0.017)	-	-
CODE 2	-	-0.571*** (0.014)	-
BGD			-0.020*** (0.002)
BCD			0.054*** (0.001)
AUD			-0.023*** (0.000)
ESG	-0.011*** (0.000)	-0.012*** (0.000)	-0.022*** (0.002)
LMCAP	0.013*** (0.000)	0.011*** (0.000)	0.005*** (0.000)
LEV	0.019*** (0.000)	0.019*** (0.000)	0.016*** (0.000)
LAGE	-0.016*** (0.000)	-0.017*** (0.000)	-0.041 (0.001)
IBM	-0.023*** (0.000)	-0.023*** (0.000)	-0.022*** (0.002)
Prob.(J-statistic)	0.406	0.429	0.452

Note: *Figures in ( ) are standard errors. *, ** and ***, indicate significance at the 10%, 5% and 1% levels, respectively. The selected method of estimation is the Arelano-Bond GMM.*

A positive relationship is seen between implementation of CODE 1 and earnings management practices, while this relationship becomes negative when UK firms implement CODE 2, in line with H2.

Recommendations found in CODE 1 do not deter firms from practicing earnings management. Firms merely confirm to recommendations, i.e. merely establishing an audit committee, without adhering to specific governance requirements that more effectively enhance the monitoring role needed to prevent EM, such as establishing an independent audit committee or one with financial experts that enhances governance quality and produces reliable financial information. These positive results between the two variables are similar to Grada (2022) and Outa et al(2017).

The negative relationship between implementation of the governance recommendations of CODE 2 and earnings management, illustrates that effective governance practices applied by UK firms enhance effective monitoring, mitigates information asymmetry, decreases the discrepancy between shareholders and managers so as to alleviate earnings management, similar to results found in Chen and Zhang (2014). Therefore, corporate governance mechanisms improve earnings quality by addressing these issues and minimizing the opportunistic behavior of managers, who often tend to produce financial reports that do not depict the economic realities of their firms (Grada, 2022).

TABLE 7 that follows shows the empirical results for operational expenses, OE, in 3 different model versions. Model (1) shows that CODE 1 has a positive and significant impact on company profitability. The control variables of ESG, IBM and LEV have the expected signs and are significant at 1% level of significance. Model (2) shows that CODE 2, has a negative and significant impact on EM while the control variables maintain their significance and the expected signs. In Model (3) we have extracted the important additions to CODE 2 from CODE 1 namely, BGD, BCD and AUD. Examining the three new recommendations included in the revised 2010 UK CG Code, a significant negative relationship is found between all three gender diversity, cultural diversity & auditor tenure and firm performance. Additionally, both gender diversity and auditor tenure have a significant negative effect on earnings management and operating expenses. Conversely, cultural diversity has a significant positive effect on earnings management but not on operating expenses.

TABLE 7 – Accounting Codes and CODE 2 main items' impact on OE (Arelano-Bond GMM)

Independent Variables	Model (1)	Model (2)	Model (3)
OE (-1)	0.255*** (0.005)	0.257*** (0.007)	0.229*** (0.015)
CODE 1	0.201*** (0.031)	-	-
CODE 2	-	-0.163*** (0.049)	-
BGD			-0.045*** (0.013)
BCD			-0.209*** (0.023)
AUD			-0.011*** (0.003)
ESG	0.016*** (0.000)	0.016*** (0.001)	0.039*** (0.004)
LMCAP	0.075*** (0.005)	0.069*** (0.013)	0.255*** (0.041)
LEV	0.002*** (0.000)	0.002*** (0.000)	0.019*** (0.003)
LAGE	-0.115*** (0.038)	-0.127*** (0.043)	0.003*** (0.000)
IBM	-0.011*** (0.000)	-0.011*** (0.002)	-0.073*** (0.013)
Prob.(J-statistic)	0.479	0.496	0.604

Note: *Figures in ( ) are standard errors. *, ** and ***, indicate significance at the 10%, 5% and 1% levels, respectively. The selected method of estimation is the Arelano-Bond GMM.*

A positive relationship is seen between implementation of governance recommendations of CODE 1 and operating expenses, while this relationship becomes negative when UK firms implement recommendations of CODE 2, confirming H3.

The governance recommendation in CODE 2 contributed to more effective resource allocation, lower costs and increased firm performance. Companies that implement governance mechanisms are perceived positively by the market, resulting in decreased cost of capital, improved risk management techniques and their initial expenses are outweighed by their long-term benefits as a result of sustainable performance (Hermalin and Weisbach, 2012; Li et al., 2010; Tricker, 2015).

5. Concluding Remarks

The prevalence of country corporate governance codes is an indicator of their importance in enhancing firms' governance. Revisions of country CG codes have aimed to incorporate additions

and/or deletions of governance recommendations so as to ensure improved governance. This study aims to examine both the revised 2010 UK CG Code, as well as specific additional recommendations made to the revised 2010 UK CG code. Utilizing a sample of 100 UK firms listed on the London Stock Exchange with the highest market capitalization, the FTSE 100, this study examines whether the 2010 revised UK CG code has impacted firm performance, earnings management and operational expenses. Additionally, three key recommendations added to the revised 2010 UK Code: *gender diversity, cultural diversity* and *auditor tenure* are examined in connection to these same variables.

Employing performance measures such as ROA, ROE and Tobin's Q we find that the revised 2010 UK CG Code has a significant positive effect on firm performance, while a significant negative effect is found between the revised 2010 UK CG Code and both earnings management and operating expenses. Examining three fundamental new recommendations included in the revised UK CG Code, a significant positive relationship is found between all additions gender diversity, cultural diversity and firm performance, while a significant negative relationship is found between auditor tenure and firm performance. Additionally, both gender diversity and auditor tenure have a significant negative effect on earnings management and operating expenses. Conversely, cultural diversity has a significant positive effect on earnings management and negative on operating expenses. In the context of our sample, before the code2 revision on average the board gender diversity was 13.79% and cultural diversity 8.39%. After 2010 these averages increased to 25.5% and 10.06% respectively.

Limitations should also be considered when interpreting the results of this study. First, this study includes UK firms with large market capitalization, i.e. firms in FTSE 100. Large firms have a greater ability to implement recommendations suggested by the revised CG codes and thus results drawn from large firms should not be generalized to other sized-firms. Future studies could include medium and small sized firms. Second, the analysis is based on the revisions made to the UK CG Code in 2010. A more recent revision of the UK Code has taken place in 2018 and additions/deletions made to this revised code should also be examined in future studies. Finally, recommendations included in the UK CG Codes in relation to the board of directors were primarily examined. A potential opportunity for further research could incorporate other recommendations included in the UK CG code such as directors' remuneration and relation with shareholders.

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Appendix A1

Information on creation of CODE 1 and CODE 2

All data collected includes elements found in the UK Corporate Governance Code in the BOARD OF DIRECTORS and ACCOUNTABILITY & AUDIT section.

Code 1 includes 15 elements of the 2003/2006/2008 UK Corporate Governance Code.

It includes:

	Element	Recommendation in the UK CG Code	Code 2 CG index	Definition
1	number of board meetings	The board should meet sufficiently regularly to discharge its duties effectively	1 per month or 12 per year	the number of board meetings during the year
2	CEO duality	The roles of chairman and chief executive should not be exercised by the same individual	non-existence	does the CEO simultaneously chair the board or

				has the chairman of the board been the CEO of the company?
3	independent board members	at least half the board, excluding the chairman, should comprise non-executive directors determined by the board to be independent.	> 50%	% of independent board members as reported by the company
4	board member term duration	All directors should be subject to election by shareholders at the first annual general meeting after their appointment, and to re-election thereafter at intervals of no more than three years.	< 3 years	the smallest interval of years in which the board members are subject to re-election.
5	nomination committee independence	A majority of members of the nomination committee should be independent non-executive directors	> 50%	percentage of independent board members on the nomination committee as stipulated by the company.
6	board functions policy	There should be a formal schedule of matters specifically reserved for its decision.	existence	does the firm have a policy for maintaining effective board function?
7	board structure policy	The board should include a balance of executive and non-executive directors, such that no individual or small group of individuals can dominate the board's decision taking. There should be a formal, rigorous and transparent procedure for the appointment of new directors to the board. .	existence	does the firm have a policy for maintaining a well-balanced membership of the board?
8	compensation committee independence	The board should establish a remuneration committee of at least three, or in the case of smaller companies, two members, who should all be independent non-executive directors	=100%	percentage of independent board members on the compensation committee as stipulated by the company.
9	internal audit department reporting	The board should maintain a sound system of internal control to safeguard shareholders' investment and the company's assets	existence	does the internal audit dept report to the audit committee?
10	audit committee independence	The board should establish an audit committee of at least three, or in the case of smaller companies, two members, who should all be independent non-executive directors.	=100%	percentage of independent board members on the audit committee as stipulated by the company.
11	board member affiliations	The board should not agree to a full-time executive director taking on more than one non-executive directorship in a FTSE 100 company nor the chairmanship of such a company.	non-existence	average number of other corporate affiliations for the board member
12	audit committee expertise	The board should satisfy itself that at least one member of the audit committee has recent and relevant financial experience.	existence	does the company have an audit committee with at

				least one financial expert?
13	board structure type	As part of their role as members of a unitary board, non-executive directors should constructively challenge and help develop proposals on strategy	one-tier vs. two-tier board	The company has a unitary board structure, a classical two-tier board structure or a mixed two-tiered board structure.
14	succession plan	The board should satisfy itself that plans are in place for orderly succession for appointments to the board and to senior management, so as to maintain an appropriate balance of skills and experience within the company and on the board	existence	does the firm have a succession plan for executive management (key board members) in the event of unforeseen circumstances?
15	external consultant	The board should ensure that directors, especially non-executive directors, have access to independent professional advice at the company's expense where they judge it necessary to discharge their responsibilities as directors. Committees should be provided with sufficient resources to undertake their duties	existence	does the board or board committees have the authority to hire external advisors or consultants without management's approval?

Code 2 includes 18 elements of the 2010/2012/2014/2016 UK Corporate Governance Code.

It includes the 15 elements found in the Code 2 (2003/2006/2008 Code) and 3 new elements:

	Element	**Recommendation in the UK CG Code**	**Code 3 CG index**	**Definition**
1	board gender diversity	The search for board candidates should be conducted, and appointments made, on merit, against objective criteria and with due regard for the benefits of diversity on the board, including gender.	existence	% of female on the board
2	board cultural diversity	The search for board candidates should be conducted, and appointments made, on merit, against objective criteria and with due regard for the benefits of diversity on the board, including gender.	existence	% of board members that have a cultural background different from the location of the corporate headquarters
3	auditor tenure	FTSE 350 companies should put the external audit contract out to tender at least every ten years.	< 10 years	the number of years the current auditor is serving the firm