

The effect of corruption and culture on mandatory disclosure compliance levels: goodwill reporting in Europe.

Francesco Mazzi, Richard Slack and Ioannis Tsalavoutas*

Forthcoming in *Journal of International Accounting Auditing and Taxation*

July, 2017

Acknowledgements

We gratefully acknowledge helpful comments received from the Editor (Robert Larson), two anonymous reviewers, Subhash Abhayawansa, Paul André, Walid Ben Amar, Sidney Gray, Niclas Hellman, Lee Parker, Luc Paugam, Annalisa Prencipe, Alain Schatt, Christian Stadler, the participants of the 38th Annual Congress of the EAA (Glasgow, May, 2015), the seminar participants at Adam Business School at the University of Glasgow (June, 2015), the participants of the Financial Reporting and Business Communication Conference FRBC (Bristol, July, 2015), and the participants of the 11th EUFIN Workshop (Paris, September 2015). Francesco Mazzi thanks the Ordine Dottori Commercialisti ed Esperti Contabili (ODCEC) of Florence and Fondazione Dottori Commercialisti ed Esperti Contabili (FDCEC) of Florence for financial support.

* Corresponding author

Francesco Mazzi (The University of Florence, Economics and Management School, Accounting and Finance Division, Via delle Pannette 9, Building D6, 50127, Florence, Italy. E-mail: francesco.mazzi@unifi.it); **Richard Slack** (Durham University Business School, Queen's Campus, H115, Wolfson Building, University Boulevard, Thornaby, Stockton on Tees, TS17 6BH, England, UK. E-mail: Richard.slack@durham.ac.uk); **Ioannis Tsalavoutas** (University of Glasgow, Adam Smith Business School, West quadrangle, Main Building, Room G683, University Avenue, Glasgow, G12 8QQ, Scotland, UK. E-mail: Ioannis.Tsalavoutas@glasgow.ac.uk).

**The effect of corruption and culture on mandatory disclosure compliance levels:
goodwill reporting in Europe.**

Abstract

While responding to calls for research and regulatory concerns regarding the influence of country level characteristics on the completeness and quality of financial statements, we examine the simultaneous influences of corruption and culture on levels of compliance with mandatory disclosure requirements. We use a panel dataset of European companies, for 2008 to 2011, and measure compliance with IFRS goodwill disclosure requirements utilising a disclosure index. Corruption is measured using the Corruption Perception Index (CPI) and Schwartz (2008) bipolar cultural dimensions are used as measures of culture. We find that compliance levels vary significantly across sample firms, countries and over time. The level of corruption and two of the three cultural dimensions (Hierarchy and Mastery) are significantly related to these levels of compliance. These findings also hold for the changes in compliance levels over time. On that basis, the paper makes original contributions to our understanding of determinants of compliance levels with IFRS mandatory disclosure requirements.

Keywords: Compliance; Corruption; Culture; Disclosure, Goodwill.

1. Introduction

International Financial Reporting Standards (IFRS) provide a framework for mandatory accounting disclosures by companies. Such a framework is designed to facilitate an increase in information transparency and reduce economic value uncertainty (Barth and Schipper, 2007; Hope, 2003; Leuz and Wysocki, 2016). Deriving from this, Abdullah et al. (2015, p. 330) assert that “unlike voluntary disclosures, mandatory disclosures compel companies to make public both proprietary and non-proprietary information (Leuz and Wysocki, 2008) and both ‘good’ and ‘bad’ news (Verrecchia, 2001)”. Motivated by similar arguments, Mobus (2005) argues that mandatory accounting disclosures are a potential tool of public policy. However, managers assess the cost/benefit arising from the ‘regulatory risk’ (c.f., Adams, 1994; Mayorga, 2013) of omission and non-compliance with IFRS disclosure requirements and effectively make disclosure choices. As Giner and Pardo (2015, p. 22) observe, levels of compliance are subject to “managerial discretion versus transparency of providing information about the underlying economics of the firm”.

Indeed, there is evidence in the practice-based and academic literatures that companies rarely fully comply with IFRS accounting disclosure requirements, even in developed countries/markets (e.g., ESMA, 2013; Glaum et al., 2013; Tsalavoutas et al., 2014). There is also evidence of non-compliance in non-IFRS reporters in developed markets. For example, Ayers et al. (2015, p. 61) reported: “some of the largest and most sophisticated firms in the US capital markets do not comply with mandatory disclosure requirements”. Such findings are in contrast with the “implicit assumption in most [accounting] studies that preparers’ level of compliance [and mandatory disclosure] is even across all reporting jurisdictions” (Amiraslani et al., 2013, p. 18). The importance of compliance is explicitly recognised with Hodgdon et al. (2008, p. 1) asserting that “the extent of compliance with accounting standards

is as important as the standards themselves”. Thus, examining levels of compliance with IFRS’ requirements and, more specifically, the underlying determining factors is pertinent.

In this study, we examine corruption and culture as two country-level influences of levels of compliance with IFRS mandatory disclosure requirements in relation to goodwill (as required by IFRS 3 Business Combinations and IAS 36 Impairment of assets). Our motivation is as follows. Jaggi and Low (2000, p. 517) stated that “future studies could develop a disclosure index, which is directly based on financial disclosures contained in the firms’ financial statements ... and to provide a better insight into the association *between cultural values and financial disclosures*” (emphasis added). Likewise, Hope (2003) argues that it is “premature to write off culture as an important factor in the financial reporting environment” (p. 218). Further, in his conclusion, he stressed the need for studies to investigate “whether variations in culture are associated with specific accounting choices” and that “such disclosure studies can be informative for researchers and standard setters alike” (ibid: p. 242). However, whilst there have been these explicit calls for research in relation to culture and compliance with mandatory disclosures, Akman (2011, p. 6) laments that “the effect of cultural dimensions on financial disclosure has not been studied after the widespread use of International Financial Reporting Standards”.

In relation to corruption, Malagueño et al. (2010) noted the relative lack of cross-country empirical research between accounting and corruption (and similarly see Riahi-Belkaoui, 2004; DiRienzo et al, 2007). More recently, Houqe and Monem (2016, p. 364) confirmed that despite the increased attention to corruption in the management and international business literatures “research literature linking corruption with accounting is sparse”. Similarly, Lourenço et al., (2017, p. 4) highlight that “accounting researchers have left the relation between accounting and corruption almost untouched”. This lack of research in the area is important given that Brown et al. (2014), who studied the effect of enforcement bodies and

auditing with regard to financial reporting transparency in Europe, recognise that culture and legal setting (including corruption, see La Porta et al, 1998) will affect the output of financial reporting.

Thus, corruption levels and cultural traits in a country may play a significant role in helping to explain non-compliance with mandatory disclosure requirements. Further, recent studies that report country level enforcement is a key determinant of compliance, either ignore corruption and culture (Tsalavoutas et al., 2014) or only very narrowly examine such influences, as determinants of compliance levels (e.g., Glaum et al, 2013 uses only one aspect of culture and ignores corruption). Finally, prior studies on the determinants of compliance with mandatory disclosures tend to be either country case studies and/or focus on a single year immediately following the widespread adoption of IFRS in 2005 (e.g., Glaum et al., 2013; Tsalavoutas, 2011; Verriest et al., 2013).

Goodwill is specifically examined as both the academic and practice-based literatures highlight its economic importance (EFRAG, 2016; Tsalavoutas et al., 2014), complexity and the use of managerial assumptions around its impairment testing (ESMA, 2015; Giner and Pardo, 2015; Mazzi et al., 2016; Petersen and Plenborg, 2010) and its continued presence on IASB agendas (EFRAG, 2016). Within Europe, the topic has attracted considerable attention from ESMA (2013; 2015). Based on a sample of 16 European countries, we employ 779 firm-year observations, constituents of the Standard and Poor's Europe 350 (S&P EU350) index, for the period 2008-2011. This allows for the possibility of non-compliance in the early years of transition to IFRS being influenced by non-familiarity with the standards' requirements (c.f., Kvaal and Nobes, 2012). We use a checklist for goodwill related disclosure required by IFRS 3 and IAS 36 and manually collected data for scoring our sample firms' levels of compliance. Our checklist approach (after controlling for materiality and relevance) is able to capture the extent of omission of mandatory disclosures and thus a lack of compliance with

accounting standards. Corruption is measured according to the Corruption Perception Index (CPI) calculated by Transparency International. We measure cultural values using Schwartz's (2008) cultural dimensions, since prior studies suggest that these capture more aspects of culture than Hofstede's cultural values (Ng et al., 2007; Steenkamp, 2001). As Schwartz's cultural dimensions are created loosely as seven dimensions comprising three pairs of opposite values, we test one cultural dimension from each pair: hierarchy, mastery and embeddedness.

Our findings show that corruption, hierarchy and mastery are significantly related to goodwill disclosure compliance levels, while Embeddedness seems not to play a role in explaining compliance when corruption is simultaneously considered. Additionally, we demonstrate that the changes in compliance over time are also related to the levels of corruption, hierarchy and mastery in a country. Thus, we contribute to the mandatory disclosure literature by revealing that corruption and culture are key determinants of compliance levels and their change over time. Additionally, we extend the knowledge from Glaum et al. (2013) and Tsalavoutas et al. (2014) in that strong enforcement mechanisms alone are not a sufficient condition for financial reporting compliance and transparency at a country level (c.f, Brown et al., 2014). These results are robust to several sensitivity tests, including different model specification and alternative measures for corruption and culture and controlling for other types of quality of corporate reporting. As we discuss in our conclusions, these findings raise wider policy implications pertinent to investors, wider users of financial statements, regulators and standard setters concerned with non-compliance and the transparency of financial reporting (Abdullah et al., 2015; IASB, 2013; Schipper, 2007) at a country level.

The remainder of the paper is organised as follows. Section 2, initially considers the importance goodwill and then provides coverage of the literature with regard to corruption,

culture and accounting and associated hypothesis development. Section 3 describes the approach adopted in measuring our key variables, the methods employed, and sample selection process. Section 4 presents and discusses the empirical findings. Section 5 illustrates additional tests and Section 6 concludes the paper by outlining the contributions arising from this research. It also discusses limitations and avenues for further research.

2. Literature review and hypotheses development

2.1 Importance of goodwill related disclosures

In order to examine the potential effect of corruption and cultural traits on the extent of compliance with mandatory disclosure requirements across countries, the research sought to identify an accounting area/topic which would be deemed as important and of particular interest for companies' managers but also investors and regulators. With this in mind, we focus specifically on goodwill related disclosures as required by IFRS 3 and IAS 36.

Firstly, goodwill is a material component of companies' total assets (Tsalavoutas et al., 2014). For example, in 2011, goodwill represented an average 34% of net assets and 26% of market capitalisation across the 328 largest firms in the EU (EFRAG, 2016). Goodwill's total value across these firms was 1.33 trillion Euros in that year. Hence, goodwill is of significance due to its information content in relation to the economic value of an enterprise (Al-Jifri and Citron, 2009; Barth and Clinch, 1996), while providing insights into proprietary information (Li et al., 2011).

Secondly, Mazzi et al. (2016) who survey CFOs of Italian listed firms and Petersen and Plenborg (2010) who survey Danish listed companies report complimentary evidence that preparers view IAS 36 as a complex standard. For instance, it demands specific knowledge of valuation techniques that inevitably involve substantial judgement and is atypical amongst IFRS's. Following on from this, the estimation of goodwill recoverable amount relies on

management assumptions and estimations that enable financial statement users to gather information about a firm's private information (Dye, 1985). The latter is evidenced through those disclosures that relate to goodwill impairment (Bens et al., 2011; Li et al., 2011) that convey future economic information and managerial judgement concerning a predicted fall in future earnings and hence the carrying value of goodwill. Giner and Pardo (2015) highlighted non-compliance and managerial discretion with regard to accounting for goodwill in Spain. They demonstrated that impairments around goodwill are managed with discretion and, as a consequence, compliance with the disclosures around goodwill could be similarly managed.

Finally, arising from these complexities and in-part concerns over compliance, goodwill accounting is an ongoing research agenda item for IASB, for instance the goodwill and impairment project and continuing review following the post implementation review of IFRS 3 (IASB, 2015). Prior to this, the German Financial Reporting Enforcement Panel (FREP) in their compliance review identified goodwill and impairment testing as one of their major areas of concern in respect of German listed companies (FREP, 2011). Hence, Giner and Pardo (2015, p. 36) note that goodwill remains "the subject of intense debate in academia, and in the professional and regulatory worlds".

2.2 Corruption, accounting disclosure and compliance

Prior empirical research has, almost universally, found that corruption has an adverse impact on business activity due to a lack of transparency and the misallocation and inefficient use of resources (e.g., Bryant and Javalgi, 2015; Voyer and Beamish, 2004). Corruption is commonly defined as the "abuse of entrusted power for private gain" (Transparency International, 2009, p. 7). Drawing on the management literature, in environments where corruption is strong, corruption is collectively 'normalized' (Ashforth and Anand, 2003) and is associated with a gradual erosion of moral agency over time (Ashforth et al., 2008; Brief et

al., 2001; Fleming and Zyglidopoulos, 2008). Thus, as put forward by Ashforth and Anand (2003, p. 8), “once a corrupt decision or act produces a positive outcome and is included in organizational memory, it is likely to be used again in the future” and this is not perceived as unacceptable. Hence, in such environments, based on the rational expectation of a profit-maximising agent (Kimbrow, 2002), some managers may use this non-market mechanism to improve their own well-being through exercising undue discretion (Hamir, 1999) with regard to a lack of compliance.

In an accounting context, the adverse effect of corruption is mostly highlighted by research on earnings opacity¹ and earnings management (e.g., Bhattacharya et al., 2002; Kimbro 2002; Picur, 2004; Riahi-Belkaoui, 2004; Riahi-Belkaoui and AlNajjar, 2006). For instance, Picur, (2004, p. 104) who examined a sample of 34 countries concluded that, “earning opacity, as a measure of the low quality of accounting, [is] predisposed to a climate of corruption”. Hence, the accountability and transparency of accounting information is diminished. Similarly, Riahi-Belkaoui, (2004, p. 82), using a cross-country longitudinal dataset covering the period 1985 to 1998 observed that “corruption creates a climate conducive to a low quality accounting” and finds that earnings opacity is positively related to the presence of corruption in a given country. Furthermore, Fan et al. (2014) highlight the link of accounting opacity and corruption in China, whereby managers distort accounting information to cover their expropriation of interests from common investors. Recently, Lourenço et al., (2017) who utilise data from 33 countries worldwide find that country perceived corruption is related to higher incentives for firms to manipulate earnings in the case of emerging countries. They contend that “a wide diversity of behaviours may be encompassed within the notion of earnings management, ranging from those which comply

¹ Earnings opacity, like earnings management, can be defined as the alteration or design of firms' reported economic performance by insiders to either “mislead some stakeholders” or to “influence contractual outcomes” (Healy and Wahlen, 1999).

with the accounting standards in place to those that violate said standards” (ibid, p. 3). Such earnings manipulation is broadly reflective of managerial judgements in the financial reporting process (Healy and Wahlen, 1999; Dechow and Skinner, 2000).

The findings on corruption and earnings opacity/management are in line with the commonly held view that corruption is widespread in countries with a lack of transparency which fosters information asymmetry (Kimbrow, 2002; DiRienzo et al., 2007; Malagueño et al., 2010). Indeed, whilst there has been very limited direct research on corruption and accounting disclosure (as noted by Houque and Monem, 2016), nonetheless, prior research has generally shown a negative relationship between levels of corruption and levels of information transparency in general (DiRienzo et al., 2007; Everett et al., 2007; Halter et al., 2009). Specifically, DiRienzo et al (2007) using cluster analysis across a set of 85 countries affirm that “highly corrupt countries may restrict the free flow of information” (p. 329). This tension between corruption and transparency was highlighted by Houque and Monem (2016 p. 363) who find that the “extent of disclosure [is] negatively related to perceived corruption in a country”.² Prior research has also shown that companies in countries with high levels of corruption tend to have lower levels of corporate social performance disclosures (Baldini et al., 2016; Ioannou and Serafeim, 2012). On voluntary disclosure specifically, in a two country African study, Agyei-Mensah, (2017a) examined the impact of corruption on the levels of forward-looking disclosures in the period 2011 to 2013. The study found a negative association between such disclosures in a highly corrupt environment (Ghana) compared to a low corrupt environment (Botswana). The research thus indicated the relationship between the level of corruption and the “transparency level of listed firms” (p. 284).

Following this line of argument, and pertinent to this research, Houque and Monem (2016 p. 366) argue that “corruption is about secrecy (Shleifer & Vishny, 1993), then it follows that

² It is noted that the disclosure captured in their research is based on a World Bank country disclosure index, including both mandatory and voluntary items, as a year on year change between 0 to 10.

greater disclosure of sensitive transactions would be associated with lower perceived corruption”. Further, Riahi-Belkaoui and AlNajjar, (2006, p. 189) observe that “it is the social and economic climate (which includes corruption) rather than the technical accounting climate that is at the core of the lack of accounting quality in general”. Indeed, in a subsequent study on Ghana and Botswana, Agyei-Mensah, (2017b) significantly found that levels of compliance in relation to IFRS 7 were related to levels of high (Ghana) and low (Botswana) levels of corruption. Thus, he asserted that “corruption enables poor disclosure and compliance with IFRS 7 requirements. One way of hiding corrupt practices is for companies to disclose scanty information” (ibid, p. 1)³ (c.f. Giner and Pardo, 2015; Hamir, 1999).

In the context of our study, mandatory goodwill disclosures are designed to help convey future economic information concerning future earnings and hence value. As such, goodwill disclosures, and specifically those involving impairment, would be regarded as ‘sensitive’ following the assertion of Houqe and Monem (2016) (and also see discussion in 2.1 above). Thus, in a society with higher levels of corruption it follows that there will be a lower level of compliance with goodwill related mandatory disclosure requirements. Hence, we test the following hypothesis:

H1: Levels of compliance with mandatory goodwill disclosures are negatively associated with the level of corruption in a country.

2.3 Culture, accounting disclosure and compliance

It is well recognised that companies’ accounting practices are associated with the cultural context within which they operate. For example earnings management (Han et al., 2010; Nabar and Boonlert-U-Thai, 2007), tax evasion (Tsakumis et al., 2007), carbon disclosure propensity (Luo et al., 2016) and corporate governance practices (Duong et al., 2016; Griffin

³ We note that the research is limited by its scope and also from relatively small sample size (30 and 28 companies for Ghana and Botswana respectively).

et al., 2017) have been linked to differing national cultures. Additionally, at a conceptual level, Jaggi (1975) argued that the cultural environments of a country would have a strong influence on financial disclosures by firms in that country. Reflecting on this, Gray (1988) modelling for the cultural dimensions developed by Hofstede (1980) found that financial disclosures in different countries are influenced by underlying cultural traits, shaping managers' internal and external financial reporting choices. Further, Salter and Niswander (1995, p. 394) asserted that Gray's model helps to "explain cross-national differences in accounting structure and practice, which is particularly strong in explaining differential financial reporting practices".

Empirically, however, there is mixed evidence regarding culture and accounting disclosure. Whilst Zarzeski (1996) found that the impact of cultural values on corporate disclosures by international firms is insignificant, this was based on a combination of voluntary disclosures and basic mandatory requirements such as the existence of a balance sheet and comparative figures. Jaggi and Low (2000) used the International Financial Reporting Index (IFRI) for Industrial Companies scores which captures actual disclosures and not disclosures required by accounting standards. Based on this, they conclude that "cultural values have an insignificant impact on financial disclosures by firms from common law countries, and the results on firms from code law countries provide mixed signals" (p. 495). In contrast, Archambault and Archambault (2003) found that accounting disclosure is strongly influenced by culture, concluding that disclosure is a function of national-level factors. Hope (2003), drawing on Hofstede (1980) and Schwartz (1994), likewise found that firm level annual report disclosure (which includes voluntary reporting), based on scores calculated by the Center for International Financial Analysis and Research (CIFAR), is significantly related to national culture. Thus, Hope (2003, p. 221) concluded that it makes "intuitive sense that the environment in which the firm operates affects financial reporting and disclosures. [...] One

such element of the environment is culture”. Orij (2010) using a single year, cross-country, study highlighted the significance of culture in relation to voluntary social disclosure. Finally, Schultz and López (2001: 276) report that “cultural differences play a special role in defining the differences in the ... individual judgments related to accounting measurements and disclosures”. Whilst the above largely historic studies provide some initial insights, they fail to fully capture the dimension of compliance with IFRS mandated disclosures, post 2005 in particular. Instead, their findings are based on only voluntary disclosures and at best a mix of voluntary and mandatory disclosures. To the best of our knowledge, it is only the single-year (2005) study by Glaum et al. (2013) that has considered only a single element of culture – while ignoring the potential concurrent effect of Corruption, and compliance with IFRS mandatory disclosure. They report that their measure of conservatism is negatively associated with disclosure compliance. Thus, by specifically examining the role of culture and corruption simultaneously on compliance with mandated disclosures under IFRS for the period 2008-2011, this research adds evidence regarding the potential influence of the dimensions of culture on non-compliant behaviour and responds directly to calls of prior literature for such an examination (see Akman, 2011; Jaggi and Low, 2000; Husted, 1999; Hope, 2003.)

One of the challenges faced in the literature in dealing with culture is the specification of cultural variables to be used in the research. For instance, Sekely and Collins (1998, p. 89) note that “cultural factors cover a wide spectrum and include the whole set of social norms...which make one social environment different from another and give each a shape of its own”. To address this issue, many prior studies have adopted Hofstede’s four cultural dimensions: individualism-collectivism; uncertainty avoidance; masculinity-femininity, and, power-distance (e.g., Gleason et al., 2000; Han et al., 2010; Tsakumis et al., 2007). However, Hofstede’s cultural dimensions have been subject to criticism, especially with regard to being outdated (see Baskerville, 2003; Jaggi and Low 2000; McSweeney, 2002). Additionally,

Hofstede relied on IBM employees which has been criticised on the basis that not all employees share a similar work culture. Additionally, within-country differences are ignored (Heidhues and Patel, 2011).

Recognising these criticisms, other research has previously drawn on Schwartz, for instance Chui et al. (2002) and Ding et al. (2005), both of whom used Schwartz (1994). Schwartz's approach to culture differs from prior cultural conceptualisations (Hofstede, 2001; Inglehart and Barker, 2000) as it adopted an a priori theorisation followed by empirical testing. The resulting cultural dimensions were based upon large scale country-level survey data with respondents from 38 countries rating the importance of 56 cultural value items as guiding principles in their own lives. Fairbairn (2014, p. 41) commented thus: "Hofstede's dimensions are conceptualised as individual level dimensions (Schwartz, 2006) [being] disjointed or disconnected whereas Schwartz's cultural dimensions provide a more encompassing view of culture". Interested readers could see Ng et al. (2007) and Fairbairn (2014) for a fuller discussion of Schwartz and the development of cultural dimensions.

More recently, and in a specific accounting context, Glaum et al. (2013) drew upon Schwartz's updated measures (i.e., Schwartz, 2008) who conceptualised culture as seven cultural value orientations comprised of three bi-polar dimensions, Hierarchy vs. Egalitarianism; Mastery vs. Harmony; Embeddedness vs. Autonomy as shown in Figure 1. We also use this framework to develop our hypotheses.

[INSERT FIGURE 1 ABOUT HERE]

Specifically, for each pair, one of the dimensions is selected for developing our hypotheses, given their inverse bipolar relationship, for testing the relation of cultural values and levels of compliance. Further, we draw on psychology and agency theory literatures (c.f., Chui et al., 2002; Haigh, 2006). The psychology based literature highlights the 'locus of control' as a means through which individuals through their own actions and decisions

influence outcomes (Duffy et al., 1977). Grounded on this, agency theory recognises managers' opportunistic motivations and aspirations for the pursuit of personal goals and tries to explain managers' behaviours with regard to accounting choices (Haigh, 2006).

First, with respect to Hierarchy, this dimension includes the values of *wealth*, *social power* and *authority*. This dimension has a high score when the distribution of power and resources in society is unequal, with those at the top of the hierarchy having considerable influence and social power which is respected and not challenged by others in society. The latter is reflected in the inclusion of the value *humble* in this dimension. The hierarchical pyramid structure contrasts to egalitarianism that represents a more equal sharing of power in society.

Jaggi and Low (2000) and Hope (2003) both suggest that differences in disclosure levels can be explained by the level of secrecy within a culture associated with a hierarchical culture. They add that this could be particularly true of disclosures relating to expected future performance of specific segments of the firm. In our case, this is also particularly relevant given that some goodwill impairment disclosures have to be reported across segments. In our context, in a hierarchical society, managers within a firm would view themselves as being at the top of the hierarchy compared to shareholders and other stakeholders. This suggests that the distance between managers as agents and stakeholders as principals is amplified, giving rise to higher agency costs. Managers in countries with high Hierarchy values, would maintain as much control over their firm as possible, thus preserving firm specific and proprietary information, the latter being a key feature of goodwill related disclosure. Based on the above discussion we test the following hypothesis:

H2: Levels of compliance with mandatory goodwill disclosures are negatively associated with the level of Hierarchy in a country.

Second, within societies with high levels of Mastery the values of *being capable, influential, ambitious, successful* and *choosing one's own goals* prevail. Effectively, self-assertion and the desire to get ahead of others accentuate active mastery (Chui et al., 2002) in pursuit of individual goals thereby enhancing reputation and reducing personal levels of career risk.

Based upon this, one could foresee the agency issue associated with asymmetric information and career concerns as motivating managers to withhold or delay bad news (Hermalin and Weisbach, 2012; Kothari et al., 2009; Verrecchia, 2001) with consequent lower levels of compliance. Indeed, Kothari et al. (2009), present evidence from management forecasts, albeit based on voluntary information, that, on average, managers delay the release of bad news relative to good news.

In contrast to this, there are arguments suggesting that the values within Mastery would motivate managers to demonstrate a more compliant behavior hence resulting in higher levels of company disclosure compliance. First, consistent with the 'regulatory risk' argument advanced by Abdullah et al. (2015), the litigation cost hypothesis (c.f., Skinner, 1994; 1997) asserts that, in a capital markets setting, managers may incur reputational costs if they do not disclose bad news in a timely manner (and see Baginski et al., 2002; Karpoff, 2008; Marinovic and Varas, 2016). In support of this, Mayorga (2013, p. 1150), based on interviews with managers responsible for companies' mandatory disclosures, reports that their disclosure decisions are positively influenced inter alia by 'perceived regulatory and litigation risks'. Managers may also face personal litigation due to a delay in any disclosure or from a lack of compliance (Brown et al., 2014; Johnson et al., 2001; Lev, 1995).

Second, and consistent with management talent signalling hypothesis (Trueman, 1986), prior literature indicates that high levels of mandatory disclosure provided by companies are associated with lower cost of equity capital (Paugum and Ramond, 2015) and higher market values (André et al., 2017; Tsalavoutas and Dionysiou, 2014), hence, resulting in a tangible

benefit for the shareholders. In support of this, prior research contends that institutional investors and financial analysts demand greater transparency and penalise firms that have a reputation of withholding bad news by choosing not to hold or follow their stocks (Ajinkya et al., 2005). Thus, in our context, in a society with high levels of Mastery, managers, through disclosure, would signal their credibility to shareholders and also reducing litigation and reputational risks, thus portraying compliant behaviour. This would be particularly relevant as it would be perceived to help them become more successful in their competitive environment (Jaggi and Low, 2000). Based on this, we test the following hypothesis:

H3: Levels of compliance with mandatory goodwill disclosures are positively associated with the level of Mastery in a country.

Finally, the third dimension, Embeddedness is characterised *inter alia* by the value items of *respecting tradition, social order, obedience, politeness, preserving public image, and self-discipline*. Countries with high Embeddedness scores value close knit, harmonious relationships within their communities. Embeddedness strengthens societal relations by removing boundaries between the person and the group in society. The individual's personal objectives coincide with the objectives of the group. Managers in these countries, through obedience to accounting standards, are thus more likely to act in alignment with the interest of shareholders. Thus, in such countries, one would expect high levels of compliance, demonstrative of an environment in which agency costs are minimised (Chui et al., 2002, with reference to Jensen and Meckling, 1976). This would suggest that managers would comply with the accounting standards by providing the required disclosures to preserve the relationship they have with their shareholders and other stakeholders. Based on this, we test the following hypothesis:

H4: Levels of compliance with mandatory goodwill disclosures are positively associated with the level of Embeddedness in a country.

3. Research design

3.1 Sample selection process

We use a final panel of 779 firm-year observations, relating to 222 firms, based on the non-financial companies included in the S&P EU350 for the period 2008 to 2011. This period marks the immediate reporting periods after the onset of the financial crisis in 2007, prior to which there had been a surge in mergers and acquisitions (Ernst and Young, 2009; Giner and Pardo, 2015) with, significantly, goodwill accounting for nearly 50% of the value of acquired companies. The sample selection process, detailing the criteria on which firms are selected, is reported in Panel A of Table 1. In line with prior literature (e.g., Al-Akra et al., 2010), we excluded financial companies. Beyond firm selection, 109 firm-year observations are additionally dropped because they either have a negative book value of equity in any given year or their value of goodwill is immaterial. Goodwill is deemed material if it is greater than 5% of book value of equity (ESMA, 2011) and only firms with such levels of goodwill are maintained in the sample.⁴ Panel B disaggregates our sample observations across countries and industries.

[INSERT TABLE 1 ABOUT HERE]

⁴ The sample thus reflects the composition of the S&P EU350 index with some countries, such as the UK and France having a high number of companies participating, in comparison to others with very low representation (e.g., Greece and Ireland). This distribution is similar to that of prior research using large listed companies in Europe (e.g., Glaum et al., 2013; Kvaal and Nobes, 2012; Verriest et al., 2013). However, arguably, our results could be biased because of this uneven representation. To detect any such sensitivity, we replicate our analyses in the following way. First, we exclude the countries with the fewest observations (i.e., Greece and Ireland). Second, we also exclude Austria which has exactly ten observations. In both cases, the results illustrate that the analyses presented in the paper below and the deriving conclusions do not change.

3.2 Measurement of compliance with goodwill disclosure levels

We use the disclosure checklists developed and validated by Mazzi et al. (2017) to score the compliance levels for each firm.⁵ These checklists contain items relevant to goodwill disclosures as required by IAS 36 and IFRS 3. Given that goodwill is material for all our sample firms, all items in these lists are applicable unless they relate to non-material impairment losses and non-material business combinations. Thus, we also applied criteria for ensuring that specific items related to material goodwill impairment losses (equal or more than 5% of goodwill, as at the start of year), individually material business combinations, and individually immaterial but material collectively business combinations (purchase price accounts equal or more than 5% of the company's total assets or sales) are applicable (Mazzi et al., 2017). The process of calculating disclosure levels for all sample firms is as follows. If a required item is disclosed, it is scored as 1 and if not, it is scored as 0. In case an item is not applicable to a company, it is scored as 'not applicable' (NA) (Cooke, 1992).

To ensure the reliability of the coding against the checklist, the whole annual report, including the notes to the financial statements, was read and coded by two of the authors independently. As a further check, the pdf version was also searched during the coding process using relevant keywords: IAS 36, IFRS 3, business combination, impairment, goodwill, acquisition, negative goodwill, and bargain purchase. The authors then compared results to resolve any differences for the final agreed sample. This process enabled us to identify all relevant disclosures and, importantly, those instances where companies do not provide information about material items and thus do not comply with the standards' requirements.

A disclosure index for each company is then calculated as the ratio of the total items disclosed to the number of items applicable:

⁵ We thank Mazzi et al. (2017) for providing us with their checklists for the purposes of our study.

$$\text{Disc}_j = \frac{T = \sum_{i=1}^n d_{i,j}}{T = \sum_{i=1}^m d_{i,j}} \quad (1)$$

where Disc_j is the total compliance score for each company and $0 \leq \text{Disc}_j \leq 1$. T is the total number of items disclosed (d_i) by company j and M is the maximum number of applicable disclosure items for company j (e.g., Glaum et al., 2013; Hodgdon et al., 2008; Tsalavoutas, 2011).

As it is highly probable that the actual compliance score may not be normally distributed (Cooke, 1998), in our multivariate analysis, we also employ an alternative disclosure measure: we transform disclosure scores in a percentile rank (DiscRank) (e.g., Glaum et al., 2013; Nikolaev and Van Lent, 2005; Tsalavoutas, 2011). DiscRank is less sensitive to outliers (Cooke, 1998), it has a normal distribution (McCabe, 1989) and corrects for kurtosis and skewness (Tsalavoutas, 2011). We first employ dense ranking (to overcome the possibility that different companies may have the same level of disclosure scores (ties)) and then calculate DiscRank:

$$\text{DiscRank}_{j,t} = \frac{\text{Rank}_{j,t} - 1}{\text{MaxDense}_t - 1} \quad (2)$$

where $\text{DiscRank}_{j,t}$ is the percentile rank of firm j during year t , $\text{Rank}_{j,t}$ is j 's rank/position and MaxDense_t is the sample size less the number of ties for year t . DiscRank_t varies between 0 and 1, with 1 indicating the highest level of compliance. Firms are ranked in ascending order, so that DiscRank increases with disclosure levels.⁶

⁶ It is noted that both the actual score and DiscRank result in the dependent variable being bounded between 0 and 1. Thus, it is possible that the OLS regression parameters may suggest expected compliance greater than 1 (Cooke, 1998). To account for this, we have also performed a Tobit regression as a sensitivity test. Untabulated results are almost identical to those under the OLS regression presented in the paper.

3.3 Empirical models

Prior empirical literature has shown that financial reporting quality is determined by a number of factors. These include “incentives faced by management, enforcement and capital-market supervision” (Tsalavoutas et al., 2014: 44; with reference to Ball et al. 2003; Hope 2003; Leuz et al. 2003; Bushman et al. 2004; Francis et al. 2005; Francis and Wang 2008). In line with this, it is commonly argued and empirically shown that compliance with mandated disclosure is a function of both company-level and country-level determinants (Al-Shammari et al., 2008; Glaum et al., 2013; Tsalavoutas et al., 2014).

We examine the association between compliance with goodwill related disclosure requirements, the level of corruption and cultural traits in a country by estimating the following OLS regression model:

$$\begin{aligned} \text{Disclosure} = & b_0 + b_1\text{CPI} + b_2\text{Hierarchy} + b_3\text{Mastery} + b_4\text{Embeddedness} + b_5\text{GdwBV} \\ & + b_6\text{MaterialIL} + b_7\text{MaterialBC} + b_8\text{MrktMet} + b_9\text{Size} + \\ & b_{10}\text{Leverage} + b_{11}\text{Liquidity} + b_{12}\text{ROA} + b_{13}\text{StrategicOwn} + \\ & b_{14}\text{Audit} + b_{15}\text{Enforcement} + b_{16}\text{AbsDisc} + \text{Industry fixed effects} \\ & + \text{Year fixed effects} + \varepsilon \end{aligned} \quad (3)$$

where:

Disclosure = Disc and DiscRank as defined in Section 3.2

CPI = Corruption Perception Index from Transparency International

Hierarchy = country cultural dimension provided by Schwartz (2008)

Mastery = country cultural dimension provided by Schwartz (2008)

Embeddedness = country cultural dimension provided by Schwartz (2008)

GdwBV = percentage of goodwill on book value of equity

MaterialIL = dummy variable indicating whether a firm experienced a material impairment loss

MaterialBC	= dummy variable indicating whether a firm experienced a material business combination
MrktMet	= dummy variable indicating whether a firm met the market expectation ⁷ with regard to recognition of goodwill impairment loss
Size	= natural logarithm of market value at beginning of year
Leverage	= total debt divided by book value of equity
Liquidity	= current assets divided by current liabilities
ROA	= net income divided by total assets
StrategicOwn	= the aggregate % of ownership held by institutional investors and pension funds who hold more than 5% of companies' shares ⁸
Audit	= quality of the public company auditors' working environment measured in 2008 as provided by Brown et al. (2014)
Enforcement	= degree of accounting enforcement activity measured in 2008 as provided by Brown et al. (2014)
AbsDisc	= differences between countries national GAAPs and IFRSs as provided by Ding et al. (2007)

We report all the variables employed in our models together with their sources in the Appendix. The control variables we include in our analysis have been identified in the prior

⁷ According to Ramanna and Watts (2012), if book-to-market<1 in year t-2 and book-to-market>1 in year t-1 and t, then the market expects an impairment loss.

⁸ We acknowledge that this variable may not capture institutional/pension fund ownership of 3%-4% which might be common in large firms. As a result, arguably, *StrategicOwn* may not to be the best proxy for large/concentrated ownership. On that basis, we proceed by downloading additional data from the database ASSET4 from Thomson Reuters and we capture the % ownership of the single biggest owner (by voting power) (CGSRDP045). The Pearson correlation between size and this variable is positive and significant (0.084, p<0.05), as would be expected. We also replicate our tests by substituting our *StrategicOwn* metric and this new variable. The results of these tests indicate a significant and negative association between concentrated ownership and compliance as one would expect and the results regarding our main hypotheses remain the same.

empirical research related to determinants of mandatory disclosure levels and research related to goodwill and its impairment testing.⁹

In line with prior literature (e.g., Archambault and Archambault, 2003; Hope, 2003; Orij 2010), we select culture and corruption values based on the country of domicile of each company in our sample.¹⁰ The CPI is a combination of polls drawing on corruption-related data collected by a variety of reputable institutions. It is calculated each year and scores countries on how corrupt their public sectors are seen to be. The index captures the informed views of analysts, businesspeople and experts in countries around the world. It has been validated in 2012 by the European Commission's Joint Research Centre (ECJRC) which stated that CPI is "conceptually and statistically coherent and with a balanced structure" (ECJRC, 2012, p. 21). We note that CPI reports countries with high transparency as top scorers, while highly corrupt countries as the lowest scorers. Thus, with respect to H1, we expect a positive sign of the coefficient for CPI (i.e., the higher the index, the lower the corruption, and as a result the higher the compliance with accounting standards).

With regard to the data around the cultural dimensions, we use the 2008 release of Schwartz's dataset as reported in Schwartz (2008). As the revised 2008 dimensions are based on survey results for the period between 1993 to 2007, they are consistent with the first year of the period we focus on. Given that changes in cultural values take place slowly (Schwartz, 2008), these dimensions appropriately reflect the cultural characteristics across the countries in our sample, for the longitudinal period studied.

⁹ Details on the rationale and theoretical justifications for the inclusion of these control variables can be found in Al-Shammari et al., (2008); Glaum et al., (2013); Tsalavoutas et al., (2014; chapter 5), Ramanna and Watts (2012) and Knauer and Wohrmann, (2016).

¹⁰ We acknowledge that the Chief Executive Officer (CEO) and Chief Financial Officer (CFO) of each company may have a different cultural and corruption background, compared to the country in which the firm is domiciled. Thus, we conducted the following test. We randomly selected 20 firms from our sample and manually collected the names of each CEO and CFO from the annual report for the period examined. We then checked their nationality through the database BoardEx and found that less than 5% of the firms appointed a CEO and/or CFO from a country that is different from the country of domicile of the company.

In order to test H1-H4, we run the full model reported in Equation (3) when both culture and corruption levels are considered simultaneously. In addition, we estimate Equation (3) considering corruption only, without taking into account the influence of culture. And, we examine the potential effect of cultural traits only (without corruption) on compliance levels. We do these tests, to show the individual effects of corruption and culture. However, such testing alone is inherently impaired by an omitted variable (i.e., the country characteristic absent in each regression) which may lead to incorrect conclusions regarding either the key variable of interest or the control variables included in these regressions. Hence, such analyses highlight the importance of including both corruption and culture as potential determinants of compliance levels.

In all regressions, we add industry fixed effect based on Industry Classification Benchmark Level 2 industry classification. Further, we also control for cross-sectional and time series correlation by clustering by firm and adding year fixed-effects. Moreover, we winsorise all the continuous variables at the 2% level on both tails of the distribution. Finally, in Section 5, we discuss a range of sensitivity tests.

4. Results

4.1 Compliance with mandatory goodwill disclosures: descriptive statistics

The compliance levels for mandatory goodwill disclosures are presented in Table 2. Panel A shows descriptive statistics for the full sample. The mean (median) degree of compliance varies from a minimum of 77.1% (78.2%) in 2008 to a maximum of 86.2% (87.5%) in 2010. Moreover, in each year there are firms that provide all the information required in IFRS 3 and IAS 36. However, consistent with prior studies (e.g., Al-Akra et al., 2010; Al-Shammari et al., 2008; Glaum et al., 2013; Hodgdon et al., 2008; Tsalavoutas, 2011), high variation among

firms' compliance levels of disclosure is observed. The standard deviation is around 12.0% while minimum compliance levels are about 33%.

The specific paragraphs that are characterised by lower levels of compliance are those that ask companies to portray or discuss proprietary and sensitive information. For example, a qualitative description of the factors that make up the goodwill recognised (para B65-e, IFRS 3), the amount of impairment losses recognised across reported segments (para 129 a, IAS 36), a description of management's approach to determining the value(s) assigned to each key assumption in its cash flow projections for the calculation of the recoverable amount of each cash generating units (para 134 d, IAS 36), and the main events and circumstances that led to the recognition of aggregate impairment losses (para 131 b, IAS 36). These elements of disclosure are of concern to users of financial statements (FRC, 2014; Henning et al., 2000). This is because they, *inter alia*, act as an "important input to users' assessment of the amount, timing and uncertainty of (the prospect for) future net cash inflows to the entity" (ASBJ et al., 2014, p. 41). In fact, financial statement preparers themselves, view such disclosures as important to shareholders by helping to ensure that companies disclose decision-useful proprietary information (ASBJ et al., 2014).

Given that compliance levels seem to increase over time, panel B presents the results of a Cuzick test (a non-parametric test for trend across ordered groups, see Cuzick (1985)). This indicates a significant ($p < 0.01$) positive trend in compliance from 2008 to 2011, suggesting that sample firms tend to provide an increasing amount of information throughout the period examined. We also investigate this trend with Mann-Whitney and *T*-tests for each pair of consecutive years in our sample. A statistically significant ($p < 0.01$) increase from 2008 to 2009 and from 2009 to 2010 is reported, while the compliance level with goodwill related disclosure seems to decrease slightly from 2010 to 2011.

These results are confirmed by the information provided in Panel C. There are far more companies in the band of 91% to 100% in 2011 compared to 2008 (68 versus 26 respectively). Additionally, a much smaller number of companies in the bands of 31% to 60% features in 2011 compared to 2008 (6 versus 14 respectively).

This overall gradual increase in compliance over time may be the result of a learning curve in implementing and complying with IFRS. In view of this, when we run our multivariate analyses for testing our hypotheses, we replicate the tests by substituting the dependent variable of actual compliance levels with the difference from year to year. Effectively, these analyses shed more light as to whether not only firms operating in countries with specific cultural and corruption characteristics tend to comply more or less in general, but also whether the compliance levels in those countries increase at a higher or lower rate over time. We discuss these results within sub-sections 4.3 and 4.4.

Panel D provides the mean (median) levels of disclosure for each country during the period examined. Descriptive statistics provide a *prima facie* confirmation that compliance levels may vary according to shared country-level characteristics such as corruption and culture. For example, the average compliance level for firms operating in Scandinavian countries such as Denmark, Norway, Sweden and Finland is above 80%, whereas, Spanish and Portuguese firms comply on average with less than 75% of the items required by IFRS 3 and IAS 36. Untabulated analysis of variance (ANOVA) suggests that the differences in these mean values across these countries are statistically significant at the 1% level.

[INSERT TABLE 2 ABOUT HERE]

Table 3 (Panel A) shows descriptive statistics for CPI and Schwartz's (2008) cultural dimensions used in our analysis, at a country level. This shows a range of values between all of the countries for corruption, and in relation to the relevant cultural dimensions. The corruption scores are presented annually and show that Scandinavian countries (e.g.,

Denmark, Finland, and Sweden) are those in which the lowest corruption is perceived according to CPI, while Greece and Italy are considered the countries with the highest corruption levels.

To highlight the variation in cultural dimensions within our sample we note the following. Countries with low scores for Hierarchy are Norway, Italy, Belgium, and Austria while highest values are shown for UK and Switzerland. Furthermore, Greece, Portugal, Ireland, the UK and Netherlands are the countries with highest Mastery scores. In contrast, Finland and France show the lowest scores for Mastery. Moving on to Embeddedness, we note that Germany, Austria and Sweden have low scores for Embeddedness compared to those in Italy, Norway and Portugal.

[INSERT TABLE 3 ABOUT HERE]

Table 3 (Panel B) shows descriptive statistics for all the variables used in our analysis. These reveal, *inter alia*, that a large proportion of our sample firms have a significant amount of goodwill on their balance sheets (mean (median) goodwill to book value of equity (GdwBV) is 71.7% (51.6%)), have conducted material business combinations (mean MaterialBC is 73.4%) and meet the market expectations in terms of recognising a goodwill impairment loss (mean MrktMet is 72.8%),

4.2 Univariate analysis (H1 - H4)

Table 4 presents Pearson's correlation coefficients between all variables. Our two measures for compliance with goodwill disclosure (Disc and DiscRank) correlate highly positively and significantly (0.964, $p < 0.01$). Following the literature suggesting interdependence of corruption and cultural variables, CPI shows positive correlation coefficients with Hierarchy and Mastery (0.091 and 0.138, significant at the 5% and 1% levels respectively). The correlation between CPI and Embeddedness is negative, with a correlation coefficient of -

0.495 ($p < 0.01$). These correlation coefficients mean that the higher Embeddedness, lower Mastery and lower Hierarchy are associated with higher levels of perceived corruption in a country.¹¹ Further, cultural dimensions (Hierarchy, Mastery, and Embeddedness) correlate positively and significantly ($p < 0.01$) which confirms that these variables are capturing different aspects of the same underlying phenomenon, namely national culture.

Consistent with our first hypothesis, preliminary evidence shows a positive and statistically significant correlation between compliance levels and CPI ($p < 0.01$). However, we notice no significant univariate correlation between Hierarchy and compliance levels (H2). A positive and statistically significant correlation between compliance levels and Mastery (H3) is observed ($p < 0.01$), as hypothesised. No significant univariate correlation is observed between Embeddedness and compliance levels (H4). These results are based on a univariate correlation, which may be affected by correlated omitted variables. Thus, results are further explored with multivariate analysis in the following section.

Compliance with goodwill disclosure is also positively correlated with the presence of a material impairment loss (MaterialIL, $p < 0.01$) and negatively associated with material business combinations (MaterialBC, $p < 0.01$). This implies that when experiencing a material impairment loss (business combination) firms tend to disclose (withhold) more, albeit not necessarily fully compliant, information in their annual report. Finally, we note that, in line with prior literature (Glaum et al., 2013; Tsalavoutas et al., 2014), both Audit and Enforcement document a positive and highly significant relation with our measures for disclosure (significant at 1% level).

[INSERT TABLE 4 ABOUT HERE]

¹¹ The aforementioned relationships within cultural dimensions and between these and corruption may be a potential cause of concern in estimating Equation (3). We explicitly deal with potential endogeneity problems as discussed in the sensitivity analyses - see Section 5.

4.3 Multivariate analyses (H1 – H4)

Table 5 reports results for multivariate analysis testing the effect of country cultural dimensions and corruption on compliance levels with goodwill related disclosure. Models 1 and 2 consider corruption only in estimating Equation (3), while models 3 and 4 examine the potential effect of cultural traits only. More importantly for this research, models 5 and 6 simultaneously capture both culture and corruption as determinants of compliance with goodwill disclosure requirements and hence, provide the testing of our hypotheses.

[INSERT TABLE 5 ABOUT HERE]

The results support H1: firms in countries with lower levels of corruption (i.e., higher CPI) are more compliant and, thus, disclose more information. The coefficient for CPI is positive as expected and statistically significant across all relevant model's specification (always at the 1% level). The multivariate analysis also supports H2 and H3, given that the coefficients for hierarchy and mastery are as hypothesised and statistically significant (negative coefficient for Hierarchy, $p < 0.05$ in models 3 and 4, $p < 0.01$ in models 5 and 6; positive coefficient for Mastery, $p < 0.01$ across all models). Drawing on the coefficients for Embeddedness, these are negative and significant ($p < 0.05$) in models 3 and 4 where culture only is considered as determinant of compliance with disclosure requirements. However, indicative of the limitations of models 1-4 which lack one of the two country characteristics, Embeddedness becomes non-significant when we include CPI in the models (i.e., in models 5 and 6). Therefore, our results are not consistent with H4.

As discussed previously (sub-section 4.1), we observed an increase in compliance levels over the sample period (see Table 2). In view of this, we replicate the tests presented above (Table 5) by substituting the actual compliance levels with the difference from year to year (i.e., Δ Disc and Δ DiscRank) and report them in Table 6. Inevitably, this results in the number of observations dropping from 779 to 581, based upon three years of changes. These tests

confirm and extend the reported results relative to our hypotheses, showing also that Corruption and the cultural dimensions of hierarchy and mastery are significant determinants (at the 1% level) of changes in disclosure levels over time. More specifically, these analyses show that the increase in compliance with goodwill related mandatory disclosure over time is more pronounced for firms operating in countries with certain characteristics (low Corruption, low Hierarchy, high Mastery). Hence, not only do companies' compliance levels directionally vary in accordance with these country characteristics (Table 5) but also the compliance levels change over time at a rate which is directionally reflective of these characteristics (Table 6).

[INSERT TABLE 6 ABOUT HERE]

4.4 Discussion of empirical findings in relation to H1 – H4

On reflection of our hypotheses, the following inferences arise from the results presented in Tables 5 and 6. First, the lower the corruption in a country the higher the levels of compliance and increase in compliance levels with goodwill disclosures over time. Prior literature indicates that high levels of corruption are associated with a low quality of accounting (c.f., Fan et al., 2014), as manifested in less transparent financial statements (c.f., Kimbro, 2002; DiRienzo, 2007; Houque and Monem, 2016) and earnings opacity (c.f., Picur, 2004; Riahi-Belkaoui, 2004). Thus, our findings extend this strand of the accounting literature by showing that corruption is also related to compliance levels and change in these levels with mandatory accounting disclosures, in particular with goodwill related disclosures which are sensitive and associated with proprietary information. This serves to confirm the tentative findings of Agyei-Mensah, (2017a; b) in respect of country level corruption and firm levels of accounting disclosure and compliance.

Second, in support of the call for empirical evidence testing this assertion (e.g., Akman, 2011; Hope, 2003; Husted, 1999; Jaggi and Low, 2000), culture is also associated with

compliance levels with accounting disclosures associated with proprietary information, while controlling for the role of corruption. However, not all cultural traits seem to be influencing compliance levels, when corruption levels are also considered (Table 5, models 5 & 6). Our results reveal that in countries with higher values of the hierarchy dimension (i.e., higher values of *wealth, social power* and *authority* in a society) compliance levels and the increase in compliance levels over time tend to be lower. This suggests that the distance between managers as agents and stakeholders as principals is amplified in such societies, giving rise to higher agency costs. Hence, managers in these countries, due to their privileged position, seem to maintain as much control over their firm as possible, thus preserving their control over firm specific and proprietary information. Additionally, in countries with higher values of the mastery dimension (i.e., where higher values of being *independent, capable, influential, ambitious, successful* and *choosing one's own goals* prevail) compliance with mandatory goodwill disclosures and the increase in compliance levels over time are higher. In such environments self-assertion and the desire to get ahead of others accentuate active mastery (Chui et al., 2002), encouraging ambition in pursuit of managers' individual goals. Effectively, in environments with higher mastery values, managers positively influence compliance with mandatory disclosure requirements to signal their credibility and capability to shareholders, to avoid potential litigation risk and reputational harm, and thus portraying compliant behaviour. This is particularly relevant as it is perceived to help them become more successful in their competitive environment (Jaggi and Low, 2000), in line with the market-related measure known as "the market for managerial skills" (Fama and Jensen, 1983a; 1983b). As Leventis (2001, p. 29) explains: "Management reputation, in terms of efficiency and honesty, is reflected in the labour market (Fama, 1980). The labour market, in the long run, rewards managers that have achieved high performance and punishes dishonest and

unsuccessful managers. Thus, managers have incentives to be sound stewards and so to use financial information for the benefit of the company (Coughlan and Schmidt, 1985)".

However, these findings provide no support for our fourth hypothesis. Embeddedness appears not to be associated with compliance levels with goodwill related disclosure or changes in these levels. Although this finding seems somewhat counter-intuitive, it can be interpreted as follows. In Schwartz's (1994) depiction of the cultural dimensions embeddedness was entitled as conservatism. The underlying value items in these dimensions (1994 vs. 2008) are almost identical so although these dimensions have changed their names, the cultural values they represent, do not change. Chui et al. (2002) argue that conservatism occurs in societies where values such as *harmony* and *propriety in person-to-group relations* are favoured. Further, an additional feature of this dimension is that of *respecting the family* and *respecting the elders*. Abdullah et al. (2015), with reference to Ball et al. (2003), indicate that there is no need for mandatory disclosure in such settings. Thus, proprietary information required in goodwill related disclosure is more likely revealed through alternative, informal channels and less through formal annual reports. This line of argument is supported by the findings of Glaum et al. (2013) who report that their measure of conservatism is negatively associated with disclosure compliance. Finally, the component *reciprocation of favours* also present in this dimension is effectively captured by corruption for which we control in our multivariate analyses. Corruption is influenced by social networks (López and Santos, 2014) and networks are favoured in countries with high embeddedness. This makes disclosures in annual reports less relevant. Thus, given the diversity of values included in embeddedness, potentially leading to opposite behaviours with regard to compliance, may result in this dimension having an insignificant overall effect.

Moving to the control variables, goodwill to book value of equity (GdwBV), material impairment loss (MaterialIL), meeting the market expectation in terms of goodwill

impairment loss (MrktMet) and Size are positively and significantly correlated to compliance levels across all models. Similar to the univariate analysis, material business combination (MaterialBC) is significantly and negatively associated to compliance levels. In addition, Leverage, Audit, and AbsDisc seem to play a role in explaining compliance with goodwill related disclosures, albeit not consistent across all models. Such results are broadly in line with previous studies examining the determinants of compliance with mandatory disclosure requirements (e.g., Akhtaruddin, 2005; Al-Shammari et al., 2008; Glaum and Street, 2003; Glaum et al. 2013; Hope, 2003). Finally, with specific regard to enforcement, we note the following. Enforcement has a non-significant coefficient in models 5 and 6, while it only appears to be a significant determinant of compliance levels when only the role of corruption is examined and the role of cultural traits is ignored (i.e., models 1 & 2). This finding supports our simultaneous examination of corruption and culture as potential determinants of compliance levels and reflects on Brown et al.'s (2014) suggestion that culture will influence the output of financial reporting, even when one controls for enforcement.

5. Sensitivity analyses¹²

5.1 Endogeneity

One potential concern with results in Tables 5 and 6 is that corruption is not an exogenous variable. Prior literature argues that Corruption is a cultural phenomenon (e.g., Davis and Ruhe, 2003; Getz and Volkema, 2001; Park, 2003) and that cultural values impact on business practices of which corruption is one form (Husted, 1999). Therefore, we proceed in further analysis with regard to the tests in Tables 5 and 6 and control for potential endogeneity bias in the following way.

¹² Tables reporting these results are available on request.

First, we reflect on the solution to use instrumental variable methods (c.f., Duong et al., 2016; Griffin et al., 2017). However, in our context, it is difficult to find an instrument which is purely exogenous (Larker and Rusticus, 2010).¹³ Thus, we rely on Nikolaev and Van Lent (2005) suggesting that fixed effects estimations in a panel data-set can reduce endogeneity and produce consistent estimators (see Mazzi et al., 2017 for more details) and we rerun our models in Tables 5 and 6 accordingly. Results are qualitatively similar to our main tests.

Second, we consider that cultural dimensions and corruption may have similar traits and thus share large part of their variance. Following Ding et al. (2005), we conduct a factor analysis of the cultural dimensions (hierarchy, mastery, and embeddedness) and the CPI using a principal component extraction method with a varimax rotation. We select factors only if their eigenvalue is greater than one (Hair et al., 1998). The results of this analysis reveal that a two-factor solution clearly appears, explaining 72.6% of the variance, which is in line with the results in Ding et al. (2005). Using the rotated factors, we predict Factor1 which is mainly driven by CPI, and Factor2 which is mainly representative of mastery. We then replicate our multivariate analysis introducing the two above-mentioned factors, which are orthogonal by construction. The results of this analysis show that our new variables correlate positively and significantly with compliance with goodwill accounting disclosure levels across all models. A positive coefficient was expected given the main drivers of the two factors extracted.

Finally, we assume that corruption may be considered a product of culture. In light of this, we adopt a two-step methodology. First, we estimate a regression model where CPI is determined by hierarchy, mastery and embeddedness. Then, we estimate the residuals from this regression in order to identify the variance of corruption which is not explained by

¹³ We acknowledge that Duong et al. (2016) and Griffin et al. (2017) identify innovative datasets for the use of instrumental variables when they examine the influence of culture on corporate governance (e.g., ethical and language fractionalisation (Duong et al., 2016) and the degree to which a language permits pronoun-dropping in a sentence (Griffin et al., 2017)). However, it is difficult to justify why these variables would be correlated with culture but not with corruption in a given country. Hence, we refrain from using them as instruments in our context.

cultural dimensions. We replicate our main tests replacing CPI with the residuals from the regression described above. The results from these tests are qualitatively similar with those presented in Table 5, except for the fact that Embeddedness shows a negative and significant coefficient ($p < 0.01$).

5.2 Alternative cultural dimensions

Another potential concern with our main results is that we rely on Schwartz's (2008) cultural dimensions. However, many prior studies have adopted Hofstede's cultural dimensions (e.g., Gleason et al., 2000; Han et al., 2010; Nabar and Boonlert-U-Thai, 2007), although they have been subject to criticism and may be outdated (Baskerville, 2003; Gernon and Wallace, 1995; McSweeney, 2002). Despite these criticisms, in this section, we provide a set of robustness tests drawing on Hofstede's cultural dimensions.

Although Schwartz's and Hofstede's dimensions do not capture the same cultural phenomena, we matched hierarchy with powerdistance, mastery with masculinity, and embeddedness with individualism (Fairbairn, 2014 p. 117-118). We then replicate our multivariate analysis employing these variables instead. The results of these tests show that Corruption continues to play a role in explaining compliance levels. Powerdistance is positively and significantly ($p < 0.01$) related to Disc and DiscRank, thus confirming results for Hierarchy. Individualism is not significantly related to Disc and DiscRank, thus confirming results for embeddedness. Finally, the coefficient for masculinity is positive as expected albeit not significant.

5.3 Alternative corruption measure

Although the CPI provided by Transparency International was validated in 2012 by the European Commission's Joint Research Centre (ECJRC), we acknowledge that other methods

for measuring Corruption in a country exist. Thus, we run additional tests replacing CPI with a measure for Bribery and Corruption (BribCorr) provided by the International Institute for Management Development (IMD) Yearbook (2013). Since 1989, the yearbook benchmarks the performance of 60 countries, measuring the different facets of competitiveness, grouped into economic performance, government efficiency, business efficiency, and infrastructure. BribCorr offers a reliable proxy for the absence of corruption in a country. Thus, in line with the hypothesis set for CPI, we expect a positive relation between BribCorr and compliance with goodwill related mandatory disclosures levels. Results confirm our main analysis, since the coefficient for BribCorr is positive and significant ($p < 0.01$) across all models, while hierarchy and mastery continue to play a role ($p < 0.01$).

5.4 Controlling for additional country characteristics and proxies of financial reporting quality

Although our regressions control for various country characteristics, one could be concerned that the corruption and cultural dimensions we use capture country characteristics we do not control for. Thus, we expand our analyses by adding a number of variables, in different steps.

First, we add four further country controls as provided by La Porta et al. (2006) and La Porta et al. (1998): a) the index of investigative powers; b) an index reflecting the assessment of the efficiency and integrity of the legal environment; c) rule of law (code vs. common law); and d) an index capturing the companies' transparency, mainly relating to shareholders' and directors' transactions and activities. The results from these tests illustrate that the main analyses presented in the paper and the deriving conclusions do not change.

Second, we subsequently supplement these already augmented regressions by including a control for Investor Protection (La Porta et al., 2008) and Market Development (market capitalization over GDP). The results from these tests indicate that the coefficients of these

new control variables are insignificant and confirm our results for *Corruption*, *Mastery*, and *Embeddedness*. It is only that the coefficient for Hierarchy is still negative, but insignificant. However, we are cautious about these results because, by adding these two additional country variables, our model now includes 12 country variables in total. Thus, there is severe concern of multicollinearity which raises doubts about the reliability of the coefficients obtained.

Third, we consider that the enforcement in the US is very strong and that cross-listing in the US would result in stronger/additional monitoring from shareholders and analysts. Thus, we perceive that such a binary variable may limit the influence of the features (i.e., corruption and culture) of country of domicile. Hence, we generated a dummy variable that takes the value of 1 if the firm is cross-listed in the US and 0 otherwise. Approximately 25% of our sample firms are cross-listed in the US. We then we repeat the tests presented in Tables 5 and 6 while also including *USCrosslisting* as additional control variable in our models. Results obtained show that our main findings are unchanged and the coefficient for this particular variable is negative, as one would expect, but insignificant.

Fourth, arguably, our measure of compliance with goodwill mandatory disclosures could act as a proxy for other types of information quality. As a result, what our results pick up may be the influence of corruption and cultural traits on other types of financial reporting quality. Thus, we collected additional data to further expand our analyses. First, we control for earnings management by computing and introducing absolute value of abnormal working capital accruals scaled by total assets (i.e., AWCA), as developed by De Fond and Park (2001). Second, we count the number of pages of the annual reports of the observations included in the sample and we compute and introduce as an additional control the negative logarithmic transformation of annual report page count (i.e., Readability). The results from these tests illustrate that the analyses presented in the paper and the deriving conclusions do

not change. Further, in most of the regressions performed, the coefficients of these two additional controls are not-significant.

Finally, we reflect on our observation of increasing compliance levels of the sample period (see discussion in sub-section 4.1). Hence, we conduct two tests to control for this. As a first step, we created a trend variable equal to 1 for 2008, 2 for 2009, 3, for 2010 and 4 for 2011 and we included it as a further control variable in our regressions, while excluding the time dummies originally included to avoid multicollinearity. The results obtained indicate that, indeed, the trend variable reports a positive and significant coefficient. However, the results we present in the paper and relate to our hypotheses do not change. As a second step, we reasoned that compliance level of firm i in year t may be affected by the compliance level of the same firm in year $t-1$. This is controlled in the tests reported in Table 6. However, we repeat the analysis reported in Table 5 by including as an additional control the lagged value of compliance level (i.e., L_Disc and $L_DiscRank$). Results obtained show that compliance level at $t-1$ is positively correlated with the compliance level at time t . However, the influence of culture and corruption on compliance level at time t is as we report in Table 5.

6. Conclusions

There is evidence from practice (ESMA, 2013) and academic studies (Glaum et al., 2013; Tsalavoutas et al., 2014) of non-compliance with IFRS mandatory disclosures. In this research, we specifically focus on and measure levels of compliance with goodwill related mandatory disclosures using a panel dataset of European companies, for 2008 to 2011. In doing so, we examined the extent to which corruption and culture, as two country factors, simultaneously influence the level and change over time of the compliance identified.

Our findings reveal varying levels of non-compliance with mandatory disclosure requirements allowing for the conclusion that, although companies are expected to comply

with mandated disclosures, they rarely do so in full. Additionally, we find that higher levels of perceived corruption in a country and higher values of the hierarchy (mastery) dimension are associated with lower (higher) compliance levels and their changes over time.

From these results the following academic contributions as well as practical and social implications arise. First, in the prior cross-country studies that have examined determinants of compliance with IFRS mandatory disclosures (Glaum et al, 2013; Tsalavoutas et al., 2014), the potential influence of Corruption in particular and Culture generally have been ignored. Thus, our analysis reflects on Jaggi and Low (2000), Husted (1999), Hope (2003), Malagueño et al. (2010), Akman (2011) and Houqe and Monem (2016) who explicitly call for such investigations. Second, the prior compliance studies focus on either single countries (e.g., Tsalavoutas, 2011) or a single year immediately following the widespread adoption of IFRS in 2005 (e.g., Glaum et al., 2013; Tsalavoutas, 2011). It is known that, for the latter, compliance levels were sensitive to lack of knowledge and experience effects (Kvaal and Nobes, 2012). In contrast, our research examines a recent longitudinal period which allows us to examine the influence of Corruption and Culture on compliance levels across countries and over time. Finally, given that we control for audit and enforcement mechanisms at a country level, our findings lend support to Nobes (2006), Weetman (2006) and Brown et al. (2014) who argue that strong enforcement mechanisms alone are not a sufficient condition for financial reporting compliance.

As far as practical implications are concerned, first, it has been argued by regulators (IASB, 2013; Mobus, 2005) that mandatory accounting disclosures through IFRS are a potential tool of public policy aiming to increase transparency and comparability of reporting to fulfil the information needs of investors and wider stakeholders (Abdullah et al., 2015; IASB, 2013; Schipper, 2007). Our findings indicate that the extent to which these objectives are achieved is, in part, dependent upon country levels of Corruption and cultural traits. Thus,

the assertion of Hodgdon et al. (2008) concerning the importance of compliance being equal to the importance of the standards themselves remains pertinent: a lack of transparency via non-compliance casts a shadow over the decision-usefulness and stewardship purposes of financial reporting enshrined within the Conceptual Framework (Clements et al., 2009; Frecka, 2007; Schipper, 2007), potentially leading to a loss in investor trust (Chartered Financial Analysts' Institute, 2013). Following on from this, our findings support Verhezen (2010) in the need for regulation to consider and foster a more compliant disclosure culture based on managerial integrity. This would deviate from a focus on enforcement which currently recognises, through its inherent existence, a lack of compliance and moral muteness (Bird and Waters, 1989).

Second, and specifically, with respect to country corruption, the findings would question the assumption advanced in recent research that corruption affects financial reporting practices in a developing country environment (e.g., Lourenço et al., 2017; Agyei-Mensah, 2017b). The results of this research indicate that levels of corruption in a developed country context, such as those in EU countries, also influences the financial reporting process and levels of compliance in particular.

Third, the importance of our findings is enhanced by the fact that they specifically address goodwill related disclosures. Goodwill is of significant economic importance (EFRAG, 2016) and is a complex accounting area, for instance, due to the use of managerial assumptions around its impairment testing (ESMA, 2015; Giner and Pardo, 2015; Mazzi et al., 2016; Petersen and Plenborg, 2010). Further, its continued presence on IASB agendas (EFRAG, 2016) is indicative of regulatory concern. Finally, within Europe specifically, the topic has attracted considerable attention from ESMA (2013; 2015).

From a wider social perspective, the International Ethics Standards Board of Accountants (IESBA) "Code of Ethics for Professional Accountants" issued by the International

Federation of Accountants (IFAC) specifies compliance with accounting standards and regulations to ensure transparency of information. Thus, non-compliance with IFRS mandatory disclosures is also an ethical concern facing the global accounting profession (Choi and Pae, 2011; Labelle et al., 2010; Rockness and Rockness, 2005; Staubus, 2005).

Finally, we observe some limitations of this study, which provide suggestions for future research in this area. First, we only examined compliance relevant to the mandatory reporting requirements for goodwill. Future research could examine other accounting standards/topics to provide further insights. Second, future research could extend the time period of analysis undertaken in this study. We would argue that country features such as culture and corruption do not change significantly within a relatively short period of time (Duong et al., 2016: 68; Houque and Monem, 2016). We would thus contend that the results regarding our hypotheses would not differ if our data finished two-three years later. However, this research specifically examined the period during and immediately after the financial crisis in Europe, it would be interesting to compare levels of mandatory compliance between different periods of economic prosperity (i.e., from 2012 onwards). Third, our research focuses only on European countries. Future studies may wish to extend our analysis regarding the effect of corruption and culture on compliance levels in different jurisdictions, by including other countries which have adopted IFRS or their national standards have substantially converged with IFRS (e.g., South Africa, Malaysia, Australia and China). Fourth, this research was limited to the development and statistical testing of a disclosure index and was based on single measures of corruption and culture. Future research could usefully examine the views of users of financial statements, through interview or survey. Fifth, from our checklist one cannot distinguish if information that is absent is omitted because companies want to prevent the disclosure of good or bad news or simply proprietary information. One can only speculate. One possible way to capture this would be to undertake interviews with management which would be appropriate for a

more qualitative-based study, examining a smaller sample. Finally, after the period we cover in our study, there have been some minor amendments in IAS 36. These relate to fair value measurement information when a company elects fair value less cost to sell as the model for goodwill impairment testing. Hence, we acknowledge that our research instrument cannot capture companies' disclosure practices in this respect and future research can shed light on this.

Appendix – Variables’ definition

VARIABLE	DESCRIPTION	SOURCE AND CODE
Disc	Disclosure level (c.f., Section 3.2 for further information)	Hand-collected
DiscRank	Percentile ranking transformation of Disc (cfr. Section 3.2 for further information)	Hand-collected
CPI	Corruption Perceptions Index – the lower the index the stronger the perceived corruption in a country	Transparency International
Hierarchy	Country cultural dimension	Schwartz (2008)
Mastery	Country cultural dimension	Schwartz (2008)
Embeddedness	Country cultural dimension	Schwartz (2008)
GdwBV	Goodwill to book value of equity	Goodwill: Compustat GDW Book value: Datastream WC03501
MaterialIL	Dummy variable equal to 1 in case a firm experienced a material impairment loss on goodwill (more than 5% of goodwill at beginning of year as reported in the financial statements) and 0 otherwise	Hand-collected
MaterialBC	Dummy variable equal to 1 in case a firm experienced a material business combination (more than 5% of total assets or sales at beginning of year as reported in the financial statements) and 0 otherwise	Hand-collected
Mrktmet	Dummy variable equal to 1 if a firm meets the market expectation with regard to recognition of goodwill impairment loss calculated according to Ramanna and Watts (2012) and 0 otherwise	Hand-collected
Size	Natural logarithm of market value at beginning of year	Market value: Datastream WC08001
Leverage	Ratio between total debt and book value of equity	Total debt: Datastream WC03255 Book value: Datastream WC03501
Liquidity	Ratio between current assets and current liabilities	Current assets: Datastream WC02201 Current liabilities: Datastream WC03101
ROA	Return on assets calculated as the ratio between net income and total assets	Net income: Datastream WC01751 Total assets: Datastream WC02999
StrategicOwn	Proportion of shares belonging to institutional investors and pension funds who hold more than 5% of companies’ shares	% shares inst. inv.: Datastream NOSHIC % shares pen. fund: Datastream NOSHIC Number of Shares: Datastream NOSH
Audit	Index capturing the strength of the auditing mechanisms – the higher the index the stronger the audit mechanisms in a country	Brown et al. (2014)
Enforcement	Index capturing the enforcement of accounting standards – the higher the index the stronger the enforcement mechanisms in a country	Brown et al. (2014)
AbsDisc	Index capturing the differences between countries national GAAPs and IFRSs as the extent to which the rules regarding certain accounting issues are missing in national GAAPs while covered in IFRSs – the higher the index, the higher the difference between GAAPs and IFRSs.	Ding et al. (2007)

References

- Abdullah, M., Evans, L., Fraser, I. and Tsalavoutas, I. (2015), "IFRS Mandatory disclosures in Malaysia: the influence of family control and the value (ir)relevance of compliance levels", *Accounting Forum*, Vol. 39 No. 4, pp. 328-348.
- Accounting Standard Board of Japan (ASBJ), European Financial Reporting Advisory Group (EFRAG) and Organismo Italiano di Contabilità (OIC) (2015) "Should goodwill still not be amortised?", Available at: http://www.efrag.org/files/Goodwill%20Impairment%20and%20Amortisation/140725_Should_goodwill_still_not_be_amortised_Research_Group_paper.pdf (Accessed 20 October 2016).
- Adams, G. (1994), "What is compliance?", *Journal of Financial Regulation and Compliance*, Vol. 2 No. 4, pp. 278-285.
- Agyei-Mensah, B. K. (2017a). "The relationship between corporate governance, corruption and forward-looking information disclosure: a comparative study", *Corporate Governance: The International Journal of Business in Society*, Vol. 17, No. 2, 284-304.
- Agyei-Mensah, B. K. (2017b). "Does the Corruption Perception Level of a Country Affect Listed Firms' IFRS 7 Risk Disclosure Compliance?", *Corporate Governance: The International Journal of Business in Society* (forthcoming), available at: <http://www.emeraldinsight.com/doi/pdfplus/10.1108/CG-10-2016-0195>
- Ajinkya, B.B., Bhorjraj, S., and Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", *Journal of Accounting Research*, Vol. 43 No. 3, pp. 343–376.
- Akhtaruddin, M. (2005), "Corporate mandatory disclosure practices in Bangladesh", *The International Journal of Accounting*, Vol. 40 No. 4, pp. 399-422.
- Akman, N.H. (2011), "The Effect of IFRS Adoption on Financial Disclosure: Does Culture Still Play A Role?", *American International Journal of Contemporary Research*, Vol. 1 No. 1, pp. 6-17.
- Al-Akra, M., Eddie, I., and Jahangir, A.M. (2010), "The association between privatization and voluntary disclosure: Evidence from Jordan", *Accounting and Business Research*, Vol. 40 No. 1, pp. 55-74.
- Al-Jifri, K., and Citron, D. (2009), "The value-relevance of financial statement recognition versus note disclosure: Evidence from goodwill accounting", *European Accounting Review*, Vol. 18 No. 1, pp. 123-140.
- Al-Shammari, B., Brown, P., and Tarca, A. (2008), "An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states", *The International Journal of Accounting*, Vol. 43 No. 4, pp. 425-447.
- Amiraslani, H., Iatridis, G.E., and Pope, P.F. (2013), "Accounting for asset impairment: a test for IFRS compliance across Europe", Available at: http://www.cass.city.ac.uk/_data/assets/pdf_file/0019/160075/CeFARR-Impairment-Research-Report.pdf (Accessed 20 October 2016).
- André P. Dionysiou D. and Tsalavoutas, I. (2017). Mandated disclosures under IAS 36 Impairment of Assets and IAS 38 Intangible Assets: value relevance and analysts' forecasts, *available online in Applied Economics*.
- Archambault, J.J., and Archambault, M.E. (2003), "A multinational test of determinants of corporate disclosure", *The International Journal of Accounting*, Vol. 38 No. 2, pp. 173-194.
- Ashforth, B E, Gioia, D.A Robinson, S. L. & Trevino L. K. 2008. "Re-viewing organizational corruption" *Academy of Management review*, 33: 670-684.
- Ashforth, B. E, & Anand V. 2003. "The normalization of corruption in organizations" *Research in organizational behavior*, 25: 1-52.

- Ayers, B.J., Schwab, C.M., and Utke, S. (2015), "Noncompliance with mandatory disclosure requirements: The magnitude and determinants of undisclosed permanently reinvested earnings", *The Accounting Review*, Vol. 90 No. 1, pp. 59-93.
- Baginski, S., Hassell, J., and Kimbrough, M. (2002), "The effect of legal environment on voluntary disclosure: Evidence from management earnings forecasts issued in U.S. and Canadian markets", *The Accounting Review*, Vol. 77 No. 1, pp. 25-50.
- Baldini, M., Dal Maso, R., Liberatore, G., Mazzi, F., and Terzani, S. (2016). "The role of country-and firm-level determinants in environmental, social, and governance disclosure", *Journal of Business Ethics*: 1-20.
- Ball, R., Robin, A., and Wu, J.S. (2003), "Incentives versus standards: Properties of accounting income in four East Asian countries", *Journal of Accounting and Economics*, Vol. 36 No. 2, pp. 235-270.
- Barth, M.E., and Clinch, G. (1996), "International accounting differences and their relation to share prices: Evidence from U.K., Australian, and Canadian firms", *Contemporary Accounting Research*, Vol. 13 No. 2, pp. 135-170.
- Barth, M.E., and Schipper, K. (2007), "Financial Reporting Transparency", *Journal of Accounting, Auditing & Finance*, Vol. 23 No. 2, pp. 173-190.
- Baskerville, R.F. (2003), "Hofstede never studied culture", *Accounting, Organisations and Society*, Vol. 28 No. 1, pp. 1-14.
- Bens, D., Heltzer, W., and Segal, B. (2011), "The information content of goodwill impairments and SFAS 142", *Journal of Accounting, Auditing and Finance*, Vol. 26 No. 3, pp. 527-555.
- Bird, F.B., and Waters, J.A. (1989), "The moral muteness of managers", *California Management Review*, Vol. 32 No. 1, pp. 73-88.
- Brief, A. P., Buttram, R T & Dukerich, J M. 2001. "Collective corruption in the corporate world: Toward a process model" *Groups at work: Theory and research*, 471: 499.
- Brown, P., Preiato, J., and Tarca, A. (2014), "Measuring country differences in enforcement of accounting standards: an audit and enforcement proxy", *Journal of Business Finance & Accounting*, Vol. 41 No. 1-2, pp. 1-52.
- Bryant, C.E., and Javalgi, R.G. (2015), "Global Economic Integration in Developing Countries: The Role of Corruption and Human Capital Investment", *Journal of Business Ethics*, forthcoming, 1-14.
- Bushman, R., Piotroski, J. and Smith, A. (2004), 'What Determines Corporate Transparency?', *Journal of Accounting Research*, 42 (2): 207–52.
- Chartered Financial Analysts' (CFA) Institute (2013), "Financial reporting disclosures. Investor perspectives on transparency, trust, and volume", Available at: <http://www.cfapubs.org/doi/pdf/10.2469/ccb.v2013.n12.1> (Accessed 20 October 2016).
- Choi, T.H., and Pae, J. (2011), "Business Ethics and Financial Reporting Quality: Evidence from Korea", *Journal of Business Ethics*, Vol. 103 No. 3, pp. 403-427.
- Chui, A.C.W., Lloyd, A.E., and Kwok, C.C.Y. (2002), "The Determination of Capital Structure: Is National Culture a Missing Piece of the Puzzle?", *Journal of International Business Studies*, Vol. 33 No. 1, pp. 99-127.
- Clements, C.E., Neill, J.D., and Stovall, S.O. (2009), "The impact of cultural differences on the convergence of international accounting codes of ethics", *Journal of Business Ethics*, Vol. 90 No. 3, pp. 383-391.
- Cooke, T. (1992), "The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations", *Accounting and Business Research*, Vol. 87 No. 22, pp. 229-237.
- Cooke, T. (1998), "Regression analysis in accounting disclosure studies", *Accounting and Business Research*, Vol. 28 No. 3, pp. 209-224.

- Coughlan, A.T., and Schmidt, R.M. (1985), "Executive Compensation, Management Turnover and Firm Performance", *Journal of Accounting and Economics*, Vol. 7 No. 1, pp. 42-66.
- Cuzick, J. (1985), "A Wilcoxon-type test for trend", *Statistics in Medicine*, Vol. 87 No. 4, pp. 87-89.
- Davis, J.H., and Ruhe, J.A. (2003), "Perceptions of Country Corruption: Antecedents and Outcomes", *Journal of Business Ethics*, Vol. 43 No. 2, pp. 275-288.
- De Fond, M., and Park, C. (2001), "The reversal effect of abnormal accruals and the market valuation of earnings surprises", *The Accounting Review*, Vol. 76 No. 3, pp. 375-404.
- Dechow, P. and Skinner, D. (2000), "Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators", *Accounting Horizons*, 14(2), 235-250.
- Di Rienzo, C., Das, J., Cord, K., and Burbridge, J. (2007), "Corruption and the role of information", *Journal of International Business*, Vol. 38 No. 2, pp. 320-332.
- Ding, Y., Hope, O.K., Jeanjean, T., and Stolowy, H. (2007), "Differences between domestic accounting standards and IAS: Measurement, determinants and implications", *Journal of Accounting and Public Policy*, Vol. 26 No. 1, pp. 1-38.
- Ding, Y., Jeanjean, T., and Stolowy, H. (2005), "Why do national GAAP differ from IAS? The role of culture", *The International Journal of Accounting*, Vol. 40 No. 4, pp. 325-350.
- Douppnik, T.S. (2008), "Influence of culture on earnings management: A note", *ABACUS*, Vol. 44 No. 3, pp. 317-340.
- Duffy, P.J., Shiflett, S., and Downey, R. (1977), "Locus of control: Dimensionality and predictability using Likert scales", *Journal of Applied Psychology*, Vol. 62 No. 2, pp. 214-219.
- Duong, H. K., Kang, H., & Salter, S. B. (2015). National Culture and Corporate Governance. *Journal of International Accounting Research*, 15(3), 67-96.
- Dye, R.A. (1985), "Strategic accounting choice and the effect of alternative financial reporting requirements", *Journal of Accounting Research*, Vol. 23 No. 2, pp. 544-574.
- Ernst and Young (2009), "Acquisition accounting – what's next for you?", Available at: http://www2.eycom.ch/publications/items/2009_acquisition_accounting/2009_Acquisition_accounting.pdf (Accessed 20 October 2016).
- European Commission Joint Research Centre (ECJRC) (2012), "Corruption Perceptions Index 2012 Statistical Assessment", Available at: http://files.transparency.org/content/download/534/2217/file/JRC_Statistical_Assessment_CPI2012_FINAL.pdf (Accessed 20 October 2016).
- European Financial Reporting Advisory Group (EFRAG) (2016), "Quantitative study on Goodwill and Impairment", Presentation at European Accounting Association Annual Congress, Maastricht, 12 May, 2016.
- European Securities and Markets Authority (ESMA) (2011), "Activity report on IFRS enforcement in 2010", Available at: http://www.esma.europa.eu/system/files/2011_355.pdf (Accessed 20 October 2016).
- European Security and Markets Authority (ESMA) (2013), "European enforcers review of impairment of goodwill and other intangible assets in the IFRS financial statements", Available at: <http://www.esma.europa.eu/system/files/2013-02.pdf> (Accessed 20 October 2016).
- European Security and Markets Authority (ESMA) (2015), "ESMA Report on Enforcement and Regulatory Activities of Accounting Enforcers in 2015", Available at: <https://www.esma.europa.eu/sites/default/files/library/2016->

- 410_esma_report_on_enforcement_and_regulatory_activities_of_accounting_enforcers_in_2015.pdf (Accessed 20 October 2016).
- Everett, J., Neu, D., Rahaman, A.S. (2007), "Accounting and the global fight against corruption", *Accounting, Organisations and Societies*, Vol. 32 No. 5, pp. 513-542.
- Fairbairn, G. (2014), "Capital structure determinants and culture: a look at Small and Medium Enterprises", MPhil Thesis, University of Stirling, UK.
- Fama, E. (1980), "Agency problems and the theory of the firm", *The Journal of Political Economy*, Vol. 88 No. 2, pp. 288-307.
- Fama, E., and Jensen, M.J. (1983a), "Separation of ownership and control", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 301-325.
- Fama, E., and Jensen, M.J. (1983b), "Agency problems and residual claims", *Journal of Law and Economics*, Vol. 26 No. 2, pp. 327-349.
- Fan, J.P.H., Guan, F., Li, Z., and Yang, Y.G. (2014), "Relationship Networks and Earnings Informativeness: Evidence from Corruption Cases", *Journal of Business Finance & Accounting*, Vol. 41 No. 7-8, pp. 831-866.
- Financial Reporting Council (FRC) (2014), "Investor views on intangible assets and their amortization", Available at: <https://www.frc.org.uk/Our-Work/Publications/Accounting-and-Reporting-Policy/Research-Report-Investor-Views-on-Intangible-Asset.pdf> (Accessed 20 October 2016).
- Fleming, P., and Zyglidopoulos S C. 2008. "The escalation of deception in organizations" *Journal of Business Ethics*, 81: 837-850.
- Francis, J. and Wang, D. (2008), 'The Joint Effect of Investor Protection and Big 4 Audits on Earnings Quality Around the World', *Contemporary Accounting Research*, 25 (Spring): 157–95.
- Francis, J., Khurana, I. and Pereira, R. (2005), 'Disclosure Incentives and Effects on Cost of Capital Around the World', *The Accounting Review*, 80 (4): 1125–62.
- Frecka, T.J. (2008), "Ethical Issues in Financial Reporting: Is Intentional Structuring of Lease Contracts to Avoid Capitalization Unethical?", *Journal of Business Ethics*, Vol. 80 No. 1, pp. 45-59.
- FREP (2011), "Annual activity report. German Financial Reporting Enforcement Panel", Available at: http://www.frep.info/docs/jahresberichte/2011/2011_tb_en.pdf (Accessed 20 October 2016).
- Gernon, H., and Wallace, R.S.O. (1995)", "International Accounting Research: A Review of its Ecology, Contending Theories and Methodologies", *Journal of Accounting Literature*, Vol. 14 No. 1, pp. 54-106.
- Getz, K.A., and Volkema, R.J. (2001), "Culture, Perceived Corruption, and Economics. A Model of Predictors and Outcomes", *Business Society*, Vol. 40 No. 1, pp. 7-30.
- Giner, B., and Pardo, F. (2015), "How Ethical are Managers' Goodwill Impairment Decisions in Spanish-Listed Firms?", *Journal of Business Ethics*, Vol. 132 No. 1, pp. 21-40.
- Glaum, M., and Street, D.L. (2003), "Compliance with the disclosure requirements of Germany's new market: IAS versus US GAAP", *Journal of international financial management and accounting*, Vol. 14 No.1, pp. 64-100.
- Glaum, M., Schmidt, P., Street, D.L., and Vogel, S. (2013), "Compliance with IFRS3- and IAS36-required disclosures across 17 European countries: company- and country-level determinants", *Accounting and Business Research*, Vol. 43 No. 3, pp. 163-204.
- Gleason, K.C., Mathus, L.K., and Mathur, I. (2000), "The interrelationship between culture, capital structure, and performance: Evidence from European retailers", *Journal of Business Research*, Vol. 50 No. 2, pp. 185–191.

- Gray, S.J. (1988), "Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally", *Abacus*, Vol. 24 No. 1, pp. 1-15.
- Griffin, D., Guedhami, O., Kwok, C. C., Li, K., & Shao, L. (2017). National culture: The missing country-level determinant of corporate governance. *Journal of International Business Studies*, 1-23.
- Haigh, M. (2006), "Managed investments, managed disclosures: financial services reform in practice", *Accounting, Auditing & Accountability Journal*, Vol. 19 No. 2, pp. 186-204.
- Hair, J.F.J., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998), *Multivariate data analysis*, Prentice-Hall, Upper Saddle River, NJ.
- Halter, M.V., Coutinho de Arruda, M.C., and Halter, R.B. (2009), "Transparency to Reduce Corruption? Dropping hints for private organizations in Brazil", *Journal of Business Ethics*, Vol. 84 No. 3, pp. 373-385.
- Hamir, M. A.. 1999. "Keynote address" in K. Frimpong and G. Jacques (eds.), *Corruption, Democracy and Good Governance in Africa: Essays on Accountability and Ethical Behaviour (Lentswe La Lesedi, Gaborone, Botswana)*: pp. 1-8.
- Han, S., Kang, T., Salter, S., and Yoo, Y.K. (2010), "A cross-country study on the effects of national culture on earnings management", *Journal of International Business Studies*, Vol. 41 No. 1, pp. 123-141.
- Healy, P., and Wahlen, J. (1999), "A review of the earnings management literature and its implications for standard setting", *Accounting Horizons*, Vol. 13 No. 4, pp. 365-383.
- Heidhues, E. and Patel, C. (2011), "A critique of Gray's framework on accounting values using Germany as a case study", *Critical Perspectives on Accounting*, Vol. 22 No. 3, pp. 273-287.
- Henning, S.L., Barry, L.L., and Shaw, W.H. (2000), "Valuation of the components of purchased goodwill", *Journal of Accounting Research*, Vol. 38 No. 2, pp. 375-386.
- Hermalin, B.E., and Weisbach, M.S. (2012), "Information disclosure and corporate governance", *The Journal of Finance*, Vol. 67 No. 2, pp. 195-234.
- Hodgdon, C., Tondkar, R., Harless, D., and Adhikari, W.A. (2008), "Compliance with IFRS disclosure requirements and individual analysts' forecast errors. *Journal of International Accounting, Auditing and Taxation*", Vol. 17 No. 1, pp. 1-13.
- Hofstede, G. (1980), *Culture's consequences: international differences in work-related values*, Sage, Beverly Hills CA.
- Hofstede, G. (2001), *Cultural Consequences: Comparing Values*, Sage, Beverly Hills CA.
- Hope, O.K. (2003), "Firm-level disclosures and the relative roles of culture and legal origin", *Journal of International Financial Management & Accounting*, Vol. 14 No. 3, pp. 218-248.
- Houqe, M. And Monem, R. (2016), "IFRS adoption, extent of disclosure, and perceived corruption: a cross-country study. *The International Journal of Accounting*, 51, 363-378.
- Husted, B.W. (1999), "Wealth, Culture, and Corruption", *Journal of International Business Studies*, Vol. 30 No. 2, pp. 339-359.
- Inglehart, R., and Barker, W.E. (2000), "Modernization, Cultural Change, and the Persistence of Traditional Values", *American Sociological Review*, Vol. 65 No. 1, pp. 19-51.
- Institute for Management Development (IMD) World Competitiveness Center (2013), "IMD World Competitiveness Yearbook (WCY)", Available at: <http://www.imd.org/wcc/wcc-pdf-country-profiles> (Accessed 20 October 2016).
- International Accounting Standard Board (IASB) (2013), "Discussion Forum - Financial Reporting Disclosure. Feedback Statement", Available at: <http://www.ifrs.org/Alerts/PressRelease/Documents/2013/Feedback-Statement->

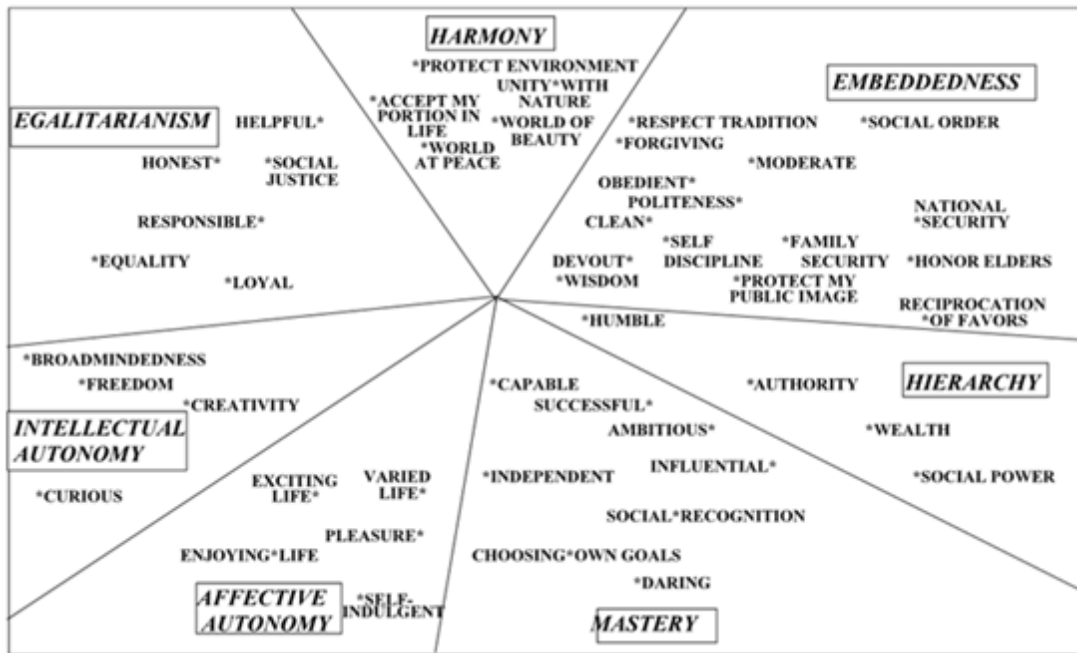
- Discussion-Forum-Financial-Reporting-Disclosure-May-2013.pdf (Accessed 20 October 2016).
- International Accounting Standard Board (IASB) (2015), "Report and Feedback Statement – Post-Implementation Review of IFRS3 Business Combinations", Available at: http://www.ifrs.org/Current-Projects/IASB-Projects/PIR/PIR-IFRS-3/Documents/PIR_IFRS%203-Business-Combinations_FBS_WEBSITE.pdf (Accessed 20 October 2016).
- International Federation of Accountants (IFAC), "Code of Ethics for Professional Accountants", Available at: <https://www.ifac.org/system/files/publications/files/ifac-code-of-ethics-for.pdf> (Accessed 20 October 2016).
- Ioannou, I., and Serafeim, G. (2012). "What drives corporate social performance? The role of nation-level institutions" *Journal of International Business Studies*, 43: 834-864.
- Jaggi, B.L. (1975), "The Impact of the Cultural Environment on Financial Disclosure", *The International Journal of Accounting*, Vol. 10 No. 1, pp. 75-84.
- Jaggi, B.L., and Low, P.Y. (2000), "Impact of culture, market forces, and legal system of financial disclosures", *The International Journal of Accounting*, Vol. 35 No. 4, pp. 495-519.
- Jensen, M.C., and Meckling, W.H. (1976), "Theory of the firm: managerial behavior, agency costs, and ownership structure", *Journal of Financial Economics*, Vol. 3, pp. 305-360.
- Johnson, M.F., Kasznik, R. and Nelson, K.K. (2001), "The impact of securities litigation reform on the disclosure of forward looking information by high technology firms", *Journal of Accounting Research*, Vol. 39 No. 2, pp. 297-327.
- Karpoff, J.M., Lee, D.S., and Martin, G.S. (2008), "The cost to firms of cooking the books", *Journal of Financial and Quantitative Analysis*, Vol. 43 No. 4, pp. 581-611.
- Kimbro, M.B. (2002), "A Cross-Country Empirical Investigation of Corruption and Its Relationship to Economic, Cultural, and Monitoring Institutions: An Examination of the Role of Accounting and Financial Statements Quality", *Journal of Accounting, Auditing & Finance*, Vol. 17 No. 4, pp. 325-350.
- Knauer, T. and Wohrmann, A., 2016. Market reaction to goodwill impairments. *European Accounting Review*, 25 (3), 421–449.
- Kothari, S.P., Shu, S., and Wysocki, P.D. (2009), "Do managers withhold bad news?", *Journal of Accounting Research*, Vol. 47 No. 3, pp. 241-276.
- Kvaal, E., and Nobes, C. (2012), "IFRS policy changes and the continuation of national patterns of IFRS practice", *European Accounting Review*, Vol. 21 No. 2, pp. 343-371.
- Labelle, R., Gargouri, R.M., Francouer, C. (2010), "Ethics, Diversity Management, and Financial Reporting Quality", *Journal of Business Ethics*, Vol. 93 No. 3, pp. 335-353.
- LaPorta, R., F. Lopez-de-Silanes, A. Shleifer and Vishny, R. (1998), "Law and Finance", *Journal of Political Economy*, Vol. 106 No. 6, pp. 113–1155.
- LaPorta, R., Lopez-de-Silanes, F., & Shleifer, A. (2006). What works in securities laws?. "The Journal of Finance", 61(1), 1-32.
- Larker, D.F., and Rusticus, T.O. (2010), "On the use of instrumental variables in accounting research", *Journal of Accounting and Economics*, Vol. 49 No. 2, pp. 186-205.
- Leuz, C., and Wysocki, P. (2008), "Economic consequences of financial reporting and disclosure regulation: a review and suggestions for future research", Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1105398 (Accessed 20 October 2016).
- Leuz, C., and Wysocki, P. (2016), "The Economics of Disclosure and Financial Reporting Regulation: Evidence and Suggestions for Future Research", *Journal of Accounting Research*, Vol. 54 No. 2, pp. 525-622.

- Leuz, C., Nanda, D.J. and Wysocki, P.D. (2003), 'Earnings Management and Investor Protection: An International Comparison', *Journal of Financial Economics*, 69 (3): 505–27.
- Lev, B. (1995), "Disclosure and litigation", *California Management Review*, Vol. 37 No. 3, pp. 8-28.
- Leventis, S. (2001), "Voluntary disclosure in a European Emerging capital market: the case of the Athens stock exchange", PhD Thesis, Strathclyde University, UK.
- Li, Z., Schroff, P.K., Venkataraman, R., and Zhang, I.V. (2011), "Causes and consequences of goodwill impairment losses", *Review of Accounting Studies*, Vol. 16 No. 4, pp. 745-778.
- Lourenço, I., Rathke, K., Santana, V. and Branco, M. (2017). "The effects of corruption on earnings management". *Corporate Governance: The International Journal of Business in Society*, (forthcoming). Available at <http://www.aeca1.org/xviiencuentroaeca/comunicaciones/54a.pdf>
- Luo, L. L., & Tang, Q. (2015). Does national culture influence corporate carbon disclosure propensity?. *Journal of International Accounting Research*, 15(1), 17-47.
- López, J.A.P., and Santos, J.M.F. (2014), "Does Corruption Have Social Roots? The Role of Culture and Social Capital", *Journal of Business Ethics*, Vol. 122 No. 6, pp. 697-708.
- Malagueño, R., Albrecht, C., Ainge, C., and Stephens, N. (2010), "Accounting and corruption: a cross-country analysis", *Journal of Money Laundering Control*, Vol. 13 No. 4, 372-393.
- Marinovic, I., and Varas, F. (2016), "No news is good news: voluntary disclosure in the face of litigation", *RAND Journal of Economics*, forthcoming.
- Mayorga, D. (2013), "Managing continuous disclosure: Australian evidence", *Accounting, Auditing & Accountability Journal*, Vol. 26 No. 7, pp. 1135-1169.
- Mazzi, F., Andrè, P., Dionysiou, D., and Tsalavoutas, I. (2017), "Compliance with goodwill related mandatory disclosure and the cost of equity capital", *Accounting and Business Research*, Vol. 47 No 3, pp. 268-312.
- Mazzi, F., Liberatore, G., and Tsalavoutas, I. (2016), "Insights on CFOs' perceptions about impairment testing under IAS 36", *Accounting in Europe*, Vol 13 No 3, pp. 353-379.
- McCabe, B.P.M. (1989), "Misspecification tests in econometrics based on ranks", *Journal of Econometrics*, Vol. 40 No. 2, pp. 261-278.
- McSweeney, B. (2002), "Hofstede's model of national cultural differences and their consequences: A triumph of faith – A failure of analysis", *Human Relations*, Vol. 55 No. 1, pp. 89-118.
- Mobus, J. L. (2005), "Mandatory environmental disclosure in a legitimacy theory context", *Accounting, Auditing & Accountability Journal*, Vol. 18 No. 4, pp. 492-517.
- Nabar, S, and Boonlert-U-Thai, K.K. (2007), "Earnings Management, Investor Protection, and National Culture", *Journal of International Accounting Research*, Vol. 6 No. 2, pp. 35-54.
- Ng, S.I., Lee, J.A., and Soutar, G.N. (2007), "Are Hofstede's and Schwartz's value frameworks congruent?", *International Marketing Review*, Vol. 24 No. 2, pp. 164-180.
- Nikolaev, V., and Van Lent, L. (2005), "The endogeneity bias in the relation between cost-of-debt capital and corporate disclosure policy", *European Accounting Review*, Vol. 14 No. 4, pp. 677-724.
- Nobes, C. (2006), "The survival of international differences under IFRS: towards a research agenda", *Accounting and Business Research*, Vol. 36 No. 3, pp. 233-245.
- Orij, R. (2010), "Corporate social disclosure in the context of national culture and stakeholder theory", *Accounting, Auditing & Accountability Journal*, Vol. 23 No. 7, pp. 868-889.

- Park, H. (2003), "Determinants of corruption: a cross-national analysis", *Multinational Business Review*, Vol. 11 No. 2, pp. 29-48.
- Paugam, L., and Ramond, O. (2015), "Effect of impairment-testing disclosures on the cost of equity capital", *Journal of Business, Finance and Accounting*, Vol. 42 No. 5-6, pp. 583-618.
- Petersen, C., and Plenborg, T. (2010), "How do firms implement impairment tests of goodwill?", *ABACUS*, Vol. 46 No. 4, pp. 419-446.
- Picur, R.D. (2004), "Quality of Accounting, Earnings Opacity and Corruption", *Review of Accounting and Finance*, Vol. 3 No. 1, pp. 103-114.
- Ramanna, K., and Watts, R.L. (2012), "Evidence on the use of unverifiable estimates in required goodwill impairment", *Review of Accounting Studies*, Vol. 17 No. 4, pp. 749-780.
- Riahi-Belkaoui, A. (2004), "Effects of Corruption On Earnings Opacity Internationally", *Advances in International Accounting*, Vol. 17, pp. 73-84.
- Riahi-Belkaoui, A. and AlNajjar, F. K. (2006), "Earnings Opacity Internationally and Elements of Social, Economic and Accounting Order", *Review of Accounting and Finance*, 5 (3), 189-203.
- Rockness, H., and Rockness, J. (2005), "Legislated Ethics: From Enron to Sarbanes-Oxley, the Impact on Corporate America", *Journal of Business Ethics*, Vol. 57 No. 1, pp. 31-54.
- Salter, S.B., and Niswander, F. (1995), "Cultural influence on the development of accounting systems internationally: A test of Gray's [1988] theory", *Journal of International Business Studies*, Vol. 26 No. 2, pp. 379-397.
- Schipper, K. (2007), "Required Disclosures in Financial Reporting", *The Accounting Review*, Vol. 82 No. 2, pp. 301-326.
- Schultz, J.J.Jr., and López, T.J. (2001), "The impact of national influence on accounting estimates: Implications for international accounting standard-setters", *The International Journal of Accounting*, Vol. 36 No. 3, pp. 271-290.
- Schwartz, S. (1994), "Beyond individualism/collectivism: new cultural dimensions of values", in Kim. U., Triandis, H., Kagitcibasi, C., Choi, S-C., and Yoon, G. (Ed.), *Individualism and collectivism: theory, method and applications*, Sage, Beverly Hills CA, 85-119.
- Schwartz, S. (2006), "A theory of cultural value orientations: explication and applications", *Comparative Sociology*, Vol. 5, pp. 137-182.
- Schwartz, S. (2008), *Cultural value orientations: nature and implications of national differences*, State University-Higher School of Economics Press, Moscow.
- Sekely, W.S., and Collins, J.M. (1998), "Cultural Influences on International Capital Structure", *Journal of International Business Studies*, Vol. 19 No. 1, pp. 87-100.
- Skinner, D.J. (1994), "Why firms voluntarily disclose bad news?", *Journal of Accounting Research*, Vol. 32 No. 1, pp. 38-61.
- Skinner, D.J. (1997), "Earnings disclosure and stockholder lawsuits", *Journal of Accounting and Economics*, Vol. 23 No. 3, pp. 249-282.
- Staubus, G.J. (2005), "Ethics Failures in Corporate Financial Reporting", *Journal of Business Ethics*, Vol. 57 No. 1, pp. 5-15.
- Steenkamp, J.B.E. (2001), "The role of national culture in international marketing research", *International Marketing Review*, Vol. 18 No. 1, pp. 30-44.
- Transparency International. 2009. Global corruption report: Corruption and the private sector. In *Cambridge Press*.
- Trueman, B. (1986), "Why do managers voluntarily release earnings forecasts?", *Journal of Accounting and Economics*, Vol. 8 No. 1, pp. 53-72.

- Tsakumis, G.T., Curatola, A.P., Porcano, T.M. (2007), "The relation between national cultural dimensions and tax evasion", *Journal of International Accounting, Auditing and Taxation*, Vol. 16 No. 2, pp. 131-147.
- Tsalavoutas, I. (2011), "Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal?", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 27 No. 2, pp. 390-405.
- Tsalavoutas, I., and Dionysiou, D. (2014), "Value relevance of IFRS mandatory disclosure requirements", *Journal of Applied Accounting Research*, Vol. 15 No. 1, pp. 22-42.
- Tsalavoutas, I., André, P., and Dionysiou, D. (2014), "Worldwide application of IFRS 3, IAS 36 and IAS 38, related disclosures, and determinants of non-compliance. ACCA research report No. 134", Available at: <http://www.accaglobal.com/content/dam/acca/global/PDF-technical/financial-reporting/rr-134-001.pdf> (Accessed 20 October 2016).
- Verhezen, P. (2010), "Giving voice in a culture of silence. From a culture of compliance to a culture of integrity", *Journal of Business Ethics*, Vol. 96 No. 2, pp. 187-206.
- Verrecchia, R.E. (2001), "Essays on disclosure", *Journal of Accounting and Economics*, Vol. 32 No. 1-3, pp. 97-180.
- Verriest, A., Gaeremynck, A., and Thornton, D.B. (2013), "The impact of corporate governance on IFRS adoption choices", *European Accounting Review*, Vol. 22 No. 1, pp. 39-77.
- Voyer, P.A., and Beamish, P.W. (2004), "The Effect of Corruption on Japanese Foreign Direct Investment", *Journal of Business Ethics*, Vol. 50 No. 2, pp. 211-224.
- Wallace, R.S.O., and Naser, K. (1995), "Firm-Specific Determinants of the Comprehensiveness of Mandatory Disclosures in the Corporate Annual Reports of Firms Listed on the Stock Exchange of Hong Kong", *Journal of Accounting and Public Policy*, Vol. 14 No. 4, pp. 311-368.
- Weetman, P. (2006), "Discovering the 'international' in accounting and finance", *British Accounting Review*, Vol. 38 No. 4, pp. 351-370.
- Zarzeski, M.T. (1996), "Spontaneous Harmonization Effects of Culture and Market Forces on Accounting Disclosure Practices", *Accounting Horizons*, Vol. 10 No. 1, pp. 18-37.

Figure 1 – Schwartz's (2008) cultural dimensions



Two-dimensional smallest space analysis diagram, showing Schwartz's revised cultural dimensions from 2008 and their value items (Schwartz, 2008: 66).

Table 1 – Sample summary statistics

Panel A – Sample selection process										
The sample selection process considers as a starting point the S&P EU350 constituents as of December 2011.										
<i>n</i> firms dropped	Reason for dropping									
68	classified as Financials									
33	not continuously present in S&P EU350 from 2008 to 2011									
4	reporting under U.S. GAAP									
1	reporting under U.S. GAAP until 2009 and under IFRS from 2010 onwards									
1	split into two companies in 2011									
1	resulted from a merger in 2009									
1	delisted in 2012; annual report for 2011 not publicly available									
2	changed annual report ending period									
5	present twice in the S&P EU350 constituents ^a									
9	no goodwill for at least one financial year examined									
1	2010 annual report not retrievable in English									
2	missing country controls for Luxembourg									
128	total firms excluded									
222	N final sample - firms									
888	n observations: t = 2008; 2009; 2010; 2011									
14	dropped because of negative book value of equity									
95	dropped because goodwill to book value of equity below 5%									
779	final sample – firm-year observations									
Panel B – Sample constituents by Country and Industry										
Country	ICB industry classification^b									TOT
	Basic mat.	Cons. goods	Cons. services	Health care	Indus-trials	Oil and gas	Tech-nology	Telec.	Utilities	
Austria	4	0	0	0	0	2	0	4	0	10
Belgium	6	4	4	4	0	0	0	4	0	22
Denmark	0	4	0	4	0	4	0	0	0	12
Finland	4	0	0	0	8	0	4	0	0	16
France	4	32	36	8	40	4	12	4	16	156
Germany	16	19	8	8	19	0	6	4	8	88
Greece	0	0	0	0	0	0	0	4	0	4
Ireland	0	0	0	0	4	0	0	0	0	4
Italy	0	8	4	0	8	8	4	4	4	40
Netherland	8	8	7	0	4	0	3	4	0	34
Norway	5	0	0	0	4	0	0	4	0	13
Portugal	0	0	0	0	4	0	0	4	4	12
Spain	0	0	0	0	12	8	0	4	4	28
Sweden	8	10	0	0	34	0	4	8	0	64
Switzerland	12	6	0	12	4	0	0	4	0	38
UK	17	40	68	12	52	4	16	10	19	238
<i>TOT</i>	84	131	127	48	193	30	49	62	55	779

^a To avoid double counting, firms that are cross-listed in more than one European market are included in our sample once, based only on the country of primary listing.

^b Based on the Industry Classification Benchmark (ICB) Level 2.

Table 2 – Compliance levels with goodwill mandatory disclosure

Panel A – Descriptive statistics by year										
Statistics	2008	2009	2010	2011	2008-2011					
Mean	0.771	0.815	0.862	0.841	0.822					
St. dev.	0.116	0.117	0.111	0.116	0.120					
Median	0.782	0.824	0.875	0.857	0.833					
Min	0.333	0.500	0.500	0.500	0.333					
Max	1.000	1.000	1.000	1.000	1.000					
<i>N</i>	196	193	195	195	779					
Panel B – Test for trend										
Cuzick test ^a 7.340***										
FOLLOW-UP TEST		2008-2009		2009-2010		2010-2011				
Mann-Whitney ^a		-3.671***		-4.056***		1.076*				
<i>T</i> -test ^a		-3.700***		-4.071***		1.796**				
Panel C – Frequency by level of compliance and year										
Level	2008		2009		2010		2011		2008-2011	
%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
31-40	1	0.5	0	0.0	0	0.0	0	0.0	1	0.1
41-50	3	1.5	3	1.6	2	1.0	1	0.5	9	1.2
51-60	10	5.1	9	4.7	4	2.0	5	2.5	28	3.5
61-70	40	20.4	22	11.4	7	3.6	18	9.2	87	11.2
71-80	55	28.1	42	21.7	36	18.5	36	18.5	169	21.7
81-90	61	31.1	67	34.7	61	31.3	67	34.4	256	32.9
91-100	26	13.3	50	25.9	85	43.6	68	34.9	229	29.4
<i>N</i>	196	100.0	193	100.0	195	100.0	195	100.0	779	100.0
Panel D – Mean (median) by country and year										
Country	2008		2009		2010		2011		2008-2011	
Austria	0.746 (0.746)		0.854 (0.854)		0.839 (0.955)		0.824 (0.857)		0.819 (0.854)	
Belgium	0.713 (0.739)		0.765 (0.833)		0.739 (0.750)		0.738 (0.746)		0.738 (0.750)	
Denmark	0.839 (0.875)		0.917 (0.933)		0.923 (1.000)		0.952 (1.000)		0.908 (0.967)	
Finland	0.777 (0.774)		0.821 (0.813)		0.838 (0.835)		0.926 (0.946)		0.841 (0.850)	
France	0.736 (0.741)		0.754 (0.765)		0.796 (0.813)		0.753 (0.750)		0.760 (0.765)	
Germany	0.761 (0.763)		0.832 (0.846)		0.914 (0.923)		0.895 (0.913)		0.850 (0.878)	
Greece	0.727 (0.727)		0.769 (0.769)		1.000 (1.000)		0.579 (0.579)		0.769 (0.748)	
Ireland	0.857 (0.857)		0.952 (0.952)		1.000 (1.000)		0.950 (0.950)		0.940 (0.951)	
Italy	0.750 (0.771)		0.814 (0.786)		0.872 (0.873)		0.865 (0.847)		0.825 (0.815)	
Netherlands	0.798 (0.792)		0.784 (0.836)		0.842 (0.824)		0.859 (0.901)		0.821 (0.835)	
Norway	0.837 (0.815)		0.776 (0.800)		0.892 (0.941)		0.867 (0.835)		0.845 (0.821)	
Portugal	0.714 (0.706)		0.719 (0.769)		0.681 (0.688)		0.746 (0.765)		0.715 (0.735)	
Spain	0.655 (0.615)		0.699 (0.692)		0.753 (0.765)		0.759 (0.778)		0.717 (0.725)	
Sweden	0.791 (0.786)		0.818 (0.824)		0.889 (0.889)		0.878 (0.867)		0.842 (0.852)	
Switzerland	0.822 (0.824)		0.861 (0.889)		0.916 (0.920)		0.874 (0.894)		0.870 (0.889)	
UK	0.799 (0.825)		0.862 (0.889)		0.897 (0.917)		0.874 (0.889)		0.858 (0.870)	

Disclosure level varies between 0 and 1 and is calculated as the ratio of the total items disclosed by a company to the maximum number of applicable items for that company.

^a Cuzick test is a non-parametric test for trend across ordered groups (see Cuzick, 1985). Mann-Whitney and *T*-test examine the median and mean differences between two periods respectively.

*, **, *** denote significance at the 10%, 5% and 1% level respectively.

Table 3 – Descriptive statistics

Panel A – Descriptive statistics for cultural dimensions and corruption								
Country	Corruption Perception Index (CPI)					Cultural dimensions (Schwartz, 2008)		
	<i>CPI 2008</i>	<i>CPI 2009</i>	<i>CPI 2010</i>	<i>CPI 2011</i>	<i>Average CPI</i>	<i>Hierarchy</i>	<i>Mastery</i>	<i>Embeddedness</i>
Austria	8.100	7.900	7.900	7.787	7.922	1.750	3.920	3.110
Belgium	7.300	7.100	7.100	7.487	7.247	1.690	3.840	3.250
Denmark	9.300	9.300	9.300	9.392	9.323	1.860	3.910	3.190
Finland	9.000	8.900	9.200	9.404	9.126	1.800	3.660	3.370
France	6.900	6.900	6.800	7.005	6.901	2.210	3.720	3.200
Germany	7.900	8.000	7.900	8.046	7.962	1.820	3.930	3.095
Greece	4.700	3.800	3.500	3.389	3.847	1.830	4.250	3.410
Ireland	7.700	8.000	8.000	7.536	7.809	2.090	4.040	3.410
Italy	4.800	4.300	3.900	3.907	4.227	1.600	3.810	3.460
Netherland	8.900	8.900	8.800	8.894	8.874	1.910	3.970	3.190
Norway	7.900	8.600	8.600	8.990	8.523	1.490	3.850	3.450
Portugal	6.100	5.800	6.000	6.098	6.000	1.890	4.110	3.430
Spain	6.500	6.100	6.100	6.230	6.233	1.840	3.800	3.310
Sweden	9.300	9.200	9.200	9.298	9.250	1.830	3.810	3.120
Switzerland	9.000	9.000	8.700	8.802	8.876	2.240	3.855	3.190
UK	7.700	7.700	7.600	7.775	7.694	2.330	4.010	3.340

Panel B - Descriptive statistics for dependent and independent variables used in the multivariate analysis					
Variable	Mean	St. Dev.	Min	Median	Max
<i>Disc</i>	0.822	0.120	0.333	0.833	1
<i>DiscRank</i>	0.575	0.278	0.000	0.559	1
<i>CPI</i>	7.585	1.177	3.389	7.700	9.404
<i>Hierarchy</i>	2.061	0.257	1.490	2.210	2.330
<i>Mastery</i>	3.885	0.121	3.660	3.920	4.250
<i>Embeddedness</i>	3.254	0.109	3.095	3.200	3.460
<i>GdwBV</i>	0.717	0.917	0.050	0.516	16.900
<i>MaterialIL</i>	0.087	0.305	0	0	1
<i>MaterialBC</i>	0.734	0.442	0	1	1
<i>MrktMet</i>	0.728	0.500	0	1	1
<i>MV</i>	16,528	21,989	297	7,665	148,082
<i>Size</i>	9.08	1.110	5.697	8.944	11.906
<i>Leverage</i>	1.309	3.862	0.000	0.729	97.937
<i>Liquidity</i>	2.575	18.429	0.195	1.134	286.556
<i>ROA</i>	0.048	0.06	-0.786	0.045	0.356
<i>StrategicOwn</i>	0.062	0.081	0.000	0.050	0.510
<i>Audit</i>	27.529	3.927	17	29	32
<i>Enforcement</i>	18.46	4.282	8	21	22
<i>AbsDisc</i>	6.15	5.254	0	8	18

See Appendix for variables' definitions.

Table 4 – Pearson’s correlation coefficients

	<i>Disc</i>	<i>DiscRank</i>	<i>CPI</i>	<i>Hierarchy</i>	<i>Mastery</i>	<i>Embeddedness</i>	<i>GdwBV</i> ^a	<i>MaterialIL</i>	<i>MaterialBC</i>
<i>Disc</i>	1								
<i>DiscRank</i>	0.964***	1							
<i>CPI</i>	0.195***	0.206***	1						
<i>Hierarchy</i>	0.060	0.063	0.091**	1					
<i>Mastery</i>	0.232***	0.253***	0.138***	0.257***	1				
<i>Embeddedness</i>	0.030	0.028	-0.495***	0.164***	0.326***	1			
<i>GdwBV</i> ^a	0.106***	0.117***	-0.064**	0.215***	0.113***	0.111***	1		
<i>MaterialIL</i>	0.192***	0.209***	0.038	0.021	0.033	0.017	0.018	1	
<i>MaterialBC</i>	-0.142***	-0.129***	0.014	-0.014	-0.082**	-0.042	0.132***	0.015	1
<i>MrktMet</i>	0.044	0.055	0.046	-0.009	0.13***	0.020	0.065*	-0.326***	-0.028
<i>Size</i>	0.048	0.037	-0.054	-0.024	-0.125***	-0.111***	-0.124***	0.063*	0.174***
<i>Leverage</i> ^a	-0.041	-0.023	-0.210***	0.033	0.176***	0.191***	0.397***	0.011	-0.058
<i>Liquidity</i> ^a	0.001	-0.009	0.220***	-0.042	0.001	-0.089**	-0.337***	-0.049	-0.096***
<i>ROA</i> ^a	0.035	0.027	0.229***	0.113***	0.129***	0.024	-0.066**	-0.259***	-0.006
<i>StrategicOwn</i> ^a	-0.003	0.011	0.15***	0.112***	0.133***	0.037	0.072**	0.015	-0.098***
<i>Audit</i>	0.101***	0.100***	-0.103***	0.818***	0.197***	0.395***	0.203***	0.021	-0.051
<i>Enforcement</i>	0.165***	0.174***	-0.050	0.349***	0.513***	0.318***	0.106***	0.039	-0.081**
<i>AbsDisc</i>	-0.187***	-0.189***	-0.198***	-0.507***	-0.543***	-0.348***	-0.197***	-0.079**	0.024

(continued next page)

	<i>MrktMet</i>	<i>Size</i>	<i>Leverage</i> ^a	<i>Liquidity</i> ^a	<i>ROA</i> ^a	<i>StrategicOwn</i> ^a	<i>Audit</i>	<i>Enforcement</i>	<i>AbsDisc</i>
<i>MrktMet</i>	1								
<i>Size</i>	-0.164***	1							
<i>Leverage</i> ^a	0.009	-0.056	1						
<i>Liquidity</i> ^a	0.030	-0.115***	-0.239***	1					
<i>ROA</i> ^a	0.145***	0.158***	-0.086**	0.141***	1				
<i>StrategicOwn</i> ^a	0.066*	-0.351***	0.032	0.133***	-0.038	1			
<i>Audit</i>	0.006	-0.048	0.003	-0.070**	0.103***	0.097***	1		
<i>Enforcement</i>	0.070**	0.077**	-0.034	-0.023	0.084**	-0.076**	0.455***	1	
<i>AbsDisc</i>	-0.036	0.158***	0.040	0.001	-0.126***	-0.233***	-0.623***	-0.333***	1

^a Variables winsorised at the 2nd and 98th percentiles.

*, **, *** denote significance at the 10%, 5% and 1% level respectively.

See Appendix for variables' definitions.

Table 5 – Regression results for determinants of compliance with mandatory goodwill disclosures

VARIABLES	Corruption only		Culture only		Culture and corruption	
	Model 1 <i>Disc</i>	Model 2 <i>DiscRank</i>	Model 3 <i>Disc</i>	Model 4 <i>DiscRank</i>	Model 5 <i>Disc</i>	Model 6 <i>DiscRank</i>
<i>Constant</i>	0.550*** (6.43)	-0.016 (-0.08)	0.197 (0.66)	-1.183* (-1.72)	-0.527 (-1.63)	-2.921*** (-3.93)
<i>CPI</i>	0.020*** (4.95)	0.049*** (4.93)			0.027*** (5.67)	0.065*** (5.45)
<i>Hierarchy</i>			-0.087** (-2.50)	-0.207** (-2.45)	-0.118*** (-3.51)	-0.279*** (-3.53)
<i>Mastery</i>			0.235*** (3.26)	0.649*** (3.85)	0.225*** (3.37)	0.625*** (4.00)
<i>Embeddedness</i>			-0.114** (-2.36)	-0.282** (-2.42)	0.044 (0.90)	0.098 (0.81)
<i>GdwBV</i> ^a	0.037*** (4.16)	0.088*** (4.11)	0.044*** (5.00)	0.105*** (5.01)	0.044*** (5.11)	0.107*** (5.15)
<i>MaterialILL</i>	0.088*** (7.17)	0.218*** (6.98)	0.094*** (7.61)	0.235*** (7.52)	0.087*** (7.23)	0.217*** (7.09)
<i>MaterialBC</i>	-0.034*** (-3.09)	-0.082*** (-3.08)	-0.032*** (-3.02)	-0.078*** (-3.02)	-0.033*** (-3.13)	-0.080*** (-3.14)
<i>MrktMet</i>	0.042*** (4.33)	0.095*** (4.09)	0.038*** (3.92)	0.084*** (3.63)	0.038*** (3.95)	0.083*** (3.63)
<i>Size</i>	0.006** (2.09)	0.016* (1.92)	0.007** (2.19)	0.019* (1.66)	0.009* (1.84)	0.024** (2.14)
<i>Leverage</i> ^a	-0.004 (-0.68)	-0.006 (-0.44)	-0.011** (-2.11)	-0.026** (-2.01)	-0.009* (-1.85)	-0.022* (-1.75)
<i>Liquidity</i> ^a	-0.002 (-0.22)	-0.010 (-0.44)	0.002 (0.21)	-0.001 (-0.03)	-0.002 (-0.26)	-0.010 (-0.48)
<i>ROA</i> ^a	-0.042 (-0.38)	-0.075 (-0.29)	0.049 (0.46)	0.134 (0.54)	-0.094 (-0.88)	-0.211 (-0.84)
<i>StrategicOwn</i> ^a	-0.048 (-0.82)	-0.123 (-0.91)	-0.029 (-0.48)	-0.080 (-0.60)	-0.051 (-0.84)	-0.133 (-0.97)
<i>Audit</i>	-0.001 (-0.09)	-0.001 (-0.19)	0.007* (1.92)	0.016** (2.02)	0.010*** (2.99)	0.024*** (3.17)
<i>Enforcement</i>	0.003** (2.20)	0.007** (2.41)	-0.001 (-0.55)	-0.003 (-0.70)	-0.001 (-0.82)	-0.004 (-0.98)
<i>AbsDisc</i>	-0.003** (-1.99)	-0.006* (-1.93)	-0.001 (-0.40)	-0.001 (-0.06)	0.002 (0.99)	0.006 (1.37)
<i>Industry f.e.</i>	Included	Included	Included	Included	Included	Included
<i>Year f.e.</i>	Included	Included	Included	Included	Included	Included
<i>N</i>	779	779	779	779	779	779
<i>F</i>	14.45***	10.05***	11.75***	7.84***	14.29***	10.59***
<i>R²-adj</i>	0.237	0.185	0.230	0.182	0.263	0.217
<i>Mean VIF</i>	1.73	1.73	2.14	2.14	2.21	2.21

^a Variables winsorised at the 2nd and 98th percentiles.

*, **, *** denote significance at the 10%, 5% and 1% level respectively.

See Appendix for variables' definitions.

Table 6 – Regression results for determinants of changes in compliance with mandatory goodwill disclosures

VARIABLES	Corruption only		Culture only		Culture and corruption	
	Model 7 <i>ΔDisc</i>	Model 8 <i>ΔDiscRank</i>	Model 9 <i>ΔDisc</i>	Model 10 <i>ΔDiscRank</i>	Model 11 <i>ΔDisc</i>	Model 12 <i>ΔDiscRank</i>
<i>Constant</i>	-0.205* (-1.85)	-0.516* (-1.91)	-0.542 (-1.29)	-1.625 (-1.62)	-1.237*** (-2.83)	-3.245*** (-3.09)
<i>CPI</i>	0.018*** (3.29)	0.043*** (3.05)			0.025*** (3.80)	0.058*** (3.46)
<i>Hierarchy</i>			-0.123** (-2.34)	-0.273** (-2.18)	-0.156*** (-2.97)	-0.349*** (-2.85)
<i>Mastery</i>			0.256*** (2.78)	0.673*** (3.01)	0.251*** (2.90)	0.662*** (3.12)
<i>Embeddedness</i>			-0.151** (-1.98)	-0.349* (-1.89)	-0.001 (-0.01)	0.001 (0.01)
<i>GdwBV</i> ^a	0.023 (1.61)	0.062* (1.85)	0.029** (2.04)	0.077** (2.31)	0.029** (2.11)	0.079** (2.39)
<i>MaterialIL</i>	0.082*** (3.76)	0.210*** (3.82)	0.088*** (3.97)	0.224*** (4.04)	0.081*** (3.66)	0.208*** (3.73)
<i>MaterialBC</i>	-0.039** (-2.39)	-0.092** (-2.39)	-0.037** (-2.29)	-0.087** (-2.28)	-0.037** (-2.29)	-0.087** (-2.29)
<i>MrktMet</i>	0.054*** (3.60)	0.119*** (3.30)	0.050*** (3.35)	0.109*** (3.03)	0.050*** (3.41)	0.111*** (3.08)
<i>Size</i>	0.011* (1.68)	0.027* (1.81)	0.013* (1.86)	0.033** (2.04)	0.015** (2.14)	0.038** (2.33)
<i>Leverage</i> ^a	-0.005 (-0.68)	-0.010 (-0.54)	-0.012 (-1.54)	-0.027 (-1.46)	-0.010 (-1.33)	-0.023 (-1.26)
<i>Liquidity</i> ^a	0.001 (0.01)	-0.008 (-0.24)	0.003 (0.25)	-0.001 (-0.01)	-0.001 (-0.04)	-0.009 (-0.29)
<i>ROA</i> ^a	-0.112 (-0.61)	-0.265 (-0.61)	-0.035 (-0.20)	-0.099 (-0.24)	-0.176 (-0.98)	-0.427 (-1.00)
<i>StrategicOwn</i> ^a	-0.048 (-0.51)	-0.065 (-0.31)	-0.023 (-0.25)	-0.011 (-0.05)	-0.044 (-0.47)	-0.059 (-0.28)
<i>Audit</i>	-0.001 (-0.24)	-0.003 (-0.57)	0.009* (1.93)	0.019* (1.70)	0.012*** (2.65)	0.026** (2.43)
<i>Enforcement</i>	0.002 (1.05)	0.006 (1.45)	-0.002 (-0.85)	-0.003 (-0.71)	-0.002 (-1.09)	-0.005 (-0.95)
<i>AbsDisc</i>	-0.001 (-0.10)	-0.001 (-0.26)	0.002 (0.95)	0.005 (1.00)	0.005** (2.06)	0.011** (2.05)
<i>Industry f.e.</i>	Included	Included	Included	Included	Included	Included
<i>Year f.e.</i>	Included	Included	Included	Included	Included	Included
<i>N</i>	581	581	581	581	581	581
<i>F</i>	4.80***	3.83***	4.01***	3.29***	4.77***	4.08***
<i>R²-adj</i>	0.080	0.066	0.082	0.069	0.098	0.084
<i>Mean VIF</i>	1.76	1.76	2.18	2.18	2.25	2.25

^a Variables winsorised at the 2nd and 98th percentiles.

*, **, *** denote significance at the 10%, 5% and 1% level respectively.

See Appendix for variables' definitions.