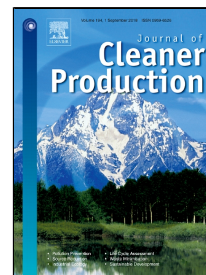


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The influence of culture and corporate governance on corporate social responsibility disclosure: a cross country analysis

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Abstract:

We investigate the effects of national culture and corporate governance on corporate social responsibility reporting and the extent to which corporate governance has a moderating effect on the cultural influences on corporate social responsibility reporting. A total of 403 annual reports, corporate websites and corporate sustainability stand-alone reports pertaining to 203 companies in China, Malaysia, India and the United Kingdom were evaluated. Corporate social responsibility reporting is more prevalent in companies in countries in which the society is individualistic and also in societies where there is low power distance. Corporate social responsibility reporting is enhanced by corporate governance in the form of social responsibility board committees, while government ownership influences the reporting quality of corporate social responsibility reporting. Corporate governance moderates some of the detrimental cultural influences on corporate social responsibility reporting. These findings have implications for the development of guidelines for corporate social responsibility and sustainability reporting across countries. A further contribution is to show that national culture is associated with resistance to reporting corporate social responsibility, but that corporate governance can help to mitigate the influence of national culture.

Key words: Culture, corporate social responsibility reporting, corporate governance, government ownership, corporate social responsibility board committee

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The influence of culture and corporate governance on corporate social responsibility disclosure: a cross country analysis

1. INTRODUCTION

Many studies have observed differences in corporate social responsibility (CSR) reporting across countries (see for example, Ortas et al., 2015; Orij, 2010; Van der Laan Smith et al., 2005). CSR reporting is also influenced by corporate governance (see for example, Fifka and Pobizhan, 2014; Ortas et al., 2015). In order to understand CSR reporting, it is therefore necessary to examine not only how culture can influence both the CSR practices and reporting and the corporate governance practices in a particular country, but also how these factors interact in determining corporate CSR disclosure practice. This issue is of practical concern because there are calls for uniform CSR reporting standards to be applied worldwide, based on the Global Reporting Initiative (GRI) guidelines (Ban, 2012). To assess whether this standardisation is feasible, it is necessary to consider the cultural influences on CSR reporting and to consider how the effect of cultural differences on CSR reporting is moderated by corporate governance; and particularly whether corporate governance is helpful to overcome cultural reluctance to reporting transparency (see Haniffa and Cooke, 2002; Kelton and Yang, 2008).

We are firstly interested in whether cross country differences in CSR reporting are caused by cultural differences. Our first research question examines the effect of cultural influences on CSR reporting for companies in diverse cultural settings. We investigate if the quality and quantity of CSR reporting is influenced by national culture. We suggest that this is likely, because reporting is affected by the cognitive, normative and regulative structures of organizations (DiMaggio and Powell, 1983). The cognitive and normative structures of an organization are influenced by the social norms it accepts (i.e. national culture) and these norms influence how the organisation will tell its story through CSR reporting (Gray et al., 1995; Van der Laan Smith et al., 2005; Orij, 2010).

The second research question examines corporate governance. Previous research has shown an association between corporate governance and corporate transparency. For example, studies have found that companies with more independent directors and more diverse boards provide more voluntary disclosures to improve transparent reporting (see Chen and Jaggi, 2000; Chau and Gray, 2010). These same findings can be examined in the area of CSR disclosures, i.e., do certain board characteristics result in more or better CSR disclosure. We therefore determine if CSR reporting is influenced by the corporate governance structures implemented at the company/organisational level.

Our third research question concerns the interaction of the two previous issues, culture and governance. We consider whether company level corporate governance structures interact with country level cultural factors to influence CSR reporting (Neu et al., 1998; Orij, 2010; Rankin et al., 2011). We assess to what extent corporate governance variables moderate the effects of national culture on CSR reporting.

A total of 203 large corporations operating in eight industries were selected from four countries (the UK, India, Malaysia and China). CSR reporting at the corporate level was evaluated using a comprehensive checklist while cultural factors were based on country level indicators.

We contribute to the literature by showing that CSR reporting practice is more prevalent in countries in which the society is individualistic and also in societies with low power distance. Corporate governance factors, and specifically the presence of CSR committees, improve the quality and quantity of CSR reporting, while government ownership

improves the quality of CSR reporting. Furthermore, corporate governance has a moderating effect on some of the cultural influences, for example in limiting the negative effect of power distance.

The remainder of this paper is organized as follows. Section 2 provides the literature review and Section 3 the hypothesis development. Section 4 describes research design and Section 5 presents the results. In the final section the findings are discussed and conclusions are drawn.

2. LITERATURE REVIEW

We consider the extent to which differences in CSR reporting are influenced by national culture and by institutional factors. Early research on the determinants of CSR reporting considered decision-usefulness explanations and agency explanations, but these were found to be unsatisfactory. Researchers therefore turned to cultural explanations (Deegan, 2002, p. 286; Gray et al., 1995, p. 52). Recent literature also adopts institutional theory to explain variations in sustainability reporting across countries (Fifka and Pobizhan, 2014; Ortas et al., 2015; Joseph et al., 2016; Midin et al., 2017).

Hofstede (1980, p. 5) referred to culture as ‘the collective programming of the minds which distinguishes the members of one group from another’. He expressed national culture in four dimensions, namely: individualism, masculinity, power distance and uncertainty avoidance.¹ Based on Hofstede’s framework, Gray (1988) developed four cultural accounting values, namely: secrecy versus transparency, statutory control versus professionalism, flexibility versus uniformity and optimism versus conservatism. According to Gray (1988), individualism is negatively related to secrecy (i.e., positively related to disclosure), while masculinity, power distance and uncertainty avoidance are all positively related to secrecy (negatively related to disclosure). These predictions have been examined in subsequent studies.

Previous studies have examined the impact of cultural influences and corporate governance on CSR reporting, but they have limitations. Studies by Williams (1999), Hope (2003), Van der Laan Smith et al. (2005), Orij (2010), Romero and Fernandez-Feijoo and Ortas (2015) examined the influence of national culture on voluntary reporting, including in some cases voluntary reporting of CSR or similar information. However, these previous studies usually examined only a limited range of the cultural variables compared to what we examine, and none of them examined the impact of corporate governance.

The prior studies have shown that national culture and institutional factors (i.e. corporate governance mechanisms) are relevant issues for investigation, and that there are some empirical regularities. However the evidence is still somewhat fragmentary. The previous studies did not take into account institutional factors while examining whether national culture explains CSR reporting. Our study makes a contribution in this setting by examining these factors together.

3. HYPOTHESES DEVELOPMENT

Our study relies on two broad theoretical perspectives. The one is the expectation that culture influence many aspects of corporate decisions and actions, including corporate disclosure and more specifically corporate CSR disclosure. The second perspective is the expectation that good corporate governance influences the transparency of corporate communications and disclosures, and more specifically corporate CSR disclosure.

¹ Hofstede’s cultural measurement has been criticised for its methodological and theoretical flaws (see McSweeney, 2002; Baskerville, 2003), Hofstede defends his cultural framework and directly answers these criticisms in several papers (see Hofstede, 2002; Hofstede, 2003; Hofstede, 2006).

We want to examine is the influence of institutional factors on transparency and disclosure. From a theoretical perspective, DiMaggio and Powell (1983) identify regulative/coercive, cognitive/normative, and mimetic structures influencing organisational practices, including disclosure. These structures (termed isomorphisms) explain the similarity of accounting practices across companies. The regulative/coercive structure refers to formal and informal pressures in organizations while the cognitive/normative structures are attributes that are *culturally* or *morally* accepted. In fact Scott (2004) calls these cultural-cognitive elements, thereby emphasising the cultural influence on this element.

Isomorphism (i.e., coercive, normative and mimetic) could result in similarity in the CSR reporting practices of companies in various institutional contexts, i.e., within a specific country or industry, while mimetic isomorphism could explain similarities in a multi-national context, i.e., the cultural-cognitive element could be less important. The regulative/coercive structure is reflected by governance mechanisms companies adopt (i.e., Haniffa and Cooke, 2005; Eng and Mak, 2003). Scott (2004) suggests that the governance structures are a combination of regulative and normative (i.e., cultural-cognitive) elements. Culture therefore plays a role in determining governance structures.

While there is the expectation that culture influences disclosure, previous studies found mixed results (see for example, Hanifa and Cooke, 2002; Orij, 2010). This could be because previous studies did not control for the role of corporate governance and government ownership, which as we have discussed is also influenced by culture and also, at the same time, influence disclosure.

We therefore assess whether CSR reporting practices vary across the four countries in our sample and to what extent culture influences CSR reporting in this setting. The following hypotheses are stated:

H₁: The quality and quantity of CSR information are different across China, India, Malaysia and the UK.

H_{1a}: National culture influences the quantity and quality of CSR information across China, India, Malaysia and the UK.

Researchers have documented that CSR disclosures are associated with the role of the board of directors (Fuente et al., 2017) and the CSR board committee (Eberhardt-Toth, 2017). The presence of an environmental committee shows a company's concern with regards to their environmental reputation (Neu et al., 1998) resulting in voluntary disclosure of information relating to environmental issues (Rankin et al., 2011). Fuente et al. (2015) found that 'corporate transparency regarding sustainability is directly linked to the independence and diversity of the directors and to the specialisation of functions through the creation of a specific CSR committee' (page 737). They find that independent directors do not influence CSR disclosure decisions and the existence of a CSR committee ensures high quality CSR reporting.

Eberhardt-Toth (2017) extends prior literature by examining the characteristics of the directors on the CSR board committee. An analysis of 177 companies from the Bloomberg World Index of 2012 confirmed that an effective CSR board committee leads to high quality CSR reporting. Government ownership also has an impact on corporate governance that has been shown to influence the extent of voluntary disclosure of CSR and other information. Directors of companies with a high proportion of state ownership align their decisions with the aspirations of the government and society (Naser et al., 2006; Amran and Devi, 2008; Donnelly and Mulcahy, 2008). Government-owned corporations disclose more CSR information than other corporations (Eng and Mak, 2003; Amran and Devi, 2008; Wang et al. 2008a).

Taking into account the findings of previous studies, we propose the following hypothesis:

H₂: Companies' governance structure influences the quality and quantity of CSR disclosure.

We extend the discussion by examining the interaction of cultural variables with corporate governance in the CSR reporting context. For example it was found that corporate governance could have a different focus in different countries, i.e., it could be shareholder focused (e.g., the US) or stakeholder focussed (e.g., Norway and Denmark) (Van der Laan Smith et al., 2005) Despite international (mainly western) efforts to 'improve' corporate governance in the wake of major losses for shareholders, it would therefore appear that corporate governance is also influenced by national culture, i.e., is it focussed on shareholders or stakeholders (see also Scott, 2004). Also from a theoretical point of view, governance could be focused on agency issues or on resource provision, each focuses resulting in different governance structures (De Villiers et al., 2011); i.e., the appointment of independent directors is an agency focused response while diverse directors and bigger boards will be a resource provision response.

Both CSR disclosure and corporate governance are therefore influenced by cultural aspects. Corporate governance also influences transparency and thereby CSR reporting. Does company level corporate governance structures interact with country level cultural factors and influence CSR reporting in this way? Particularly, is corporate governance helpful to overcome cultural reluctance to reporting CSR information voluntarily? Our third research question concerns the interaction of the two previous issues, culture and governance (Neu et al., 1998; Orij, 2010; Rankin et al., 2011). This leads to the following hypothesis:

H₃: Companies' governance structure interacts with culture in influencing the quality and quantity of CSR disclosure.

4. RESEARCH DESIGN

We choose companies located in China, India and Malaysia because they are economies where increased economic growth can come at the expense of social and environmental development (see Zhang and Wen, 2008; Wang et al. 2008b; Liu et al., 2010). Since 2006, several environmental standards have been drafted and enforced in China. In India, dramatic growth, coupled with an unregulated market structure caused several significant share market scandals in the early 90s. Since then, the country has aggressively developed jurisdiction over matters related to corporate governance. The development includes disclosure of corporate governance (Balasubramanian et al., 2010). Similarly, in Malaysia, the operations of irresponsible local and multinational companies in activities such as logging and bauxite mining have caused public scrutiny (Jonathan, 2016)). This motivates us to examine the culture, corporate governance and CSR reporting in these countries. We added companies from the UK to our sample because the UK is at a relatively advanced stage of development in CSR reporting and practice, and provides a comparison to the other three countries.

The four countries fall into different groups when compared to the median values of the dimensions of culture for all countries (see Appendix B). The UK and India are above the median for individuality, so it could be predicted based on the earlier research that companies in these countries would report more CSR information. The UK, India, and China are all above the median for masculinity, while Malaysia is not (although in this case the difference is not large). India, Malaysia and China are all above the median for power distance, while the UK is below the median. Finally, all four countries have low scores for uncertainty avoidance, and they are all below the median.

The data was obtained from Compustat Global and Mergent Online Database. We controlled for the effects of size and industry in the sample selection process because the

literature suggests that CSR reporting is influenced by these two factors (see Halme and Huse, 1997; Milne and Patten, 2002; Yongvanich and Guthrie, 2005; Deegan and Blomquist, 2006; Guthrie et al., 2008; Belal, 2008). The sample was chosen from eight industries: materials; energy, oil and gas; transportation; manufacturing; automobiles and components; utilities; alcohol, tobacco, casino and gambling and pharmaceutical, biotechnology and drugs. The eight industries were selected because they are sensitive areas where corporate social responsibility issues are likely to be important (e.g., Hackston and Milne, 1996; Newson and Deegan, 2002; Freedman and Jaggi, 2005; Clarkson et al., 2008). We ranked all of the companies in each country based on their market capitalization. Companies from Malaysia, India and the UK were selected from the top 100 lists; whereas Chinese companies were chosen from the top 200 lists because some reports were not available in English. The final selection was 203 companies. We then compared this sample with data from GLOBAL 2000. It was confirmed that we captured all large corporations operating in the selected industries.

Table 1 (Panel A) tabulates the sample companies. Of the sample, 47% were from materials and manufacturing; 93.6% were operating in environmentally sensitive industries while the other 6.4% were in the socially sensitive industries (alcohol, tobacco, casino and gambling).

<< Insert Table 1 >>

A total of 403 observations (reports) were analysed. Table 1 (Panel B) illustrates that all the companies in our study provided at least some CSR disclosure in their annual reports, although the extent of disclosure varied considerably. Of the 203 companies, 65% (132 companies) have CSR sections on their corporate websites. The UK ranked first for the number of reports produced and 41 companies (82%) have stand-alone CSR reports. India ranked second, followed by Malaysia and China. China and Malaysia produced 22 and 28 CSR sections, respectively, as part of their corporate websites; and also produced an equal number (8) of CSR stand-alone reports.

4.1 CSR Disclosure

We conducted content analyses on company annual reports, CSR stand-alone reports and corporate websites of 203 companies following leading research in this area (e.g., Van Staden and Hooks, 2007; Clarkson et al., 2008). Content analysis consists of constructing an index or checklist of items that is regarded as important disclosure items and then reading the reports to determine if the companies made disclosures on these items and if so, how much (extent) information was given and how comprehensively (quality) the item was covered.

We identify CSR information reported based on a disclosure index of 65 items, which were developed from the Global Reporting Initiatives (GRI) indicators (GRI, 2013).² We use the GRI index because it provides an internationally recognized framework for CSR reporting and, thus enable the replication of this study. Other studies such as Hasseldine et al., 2005; Van Staden and Hooks, 2007; Adams and Kuasirikun, 2000 and O'Dwyer and Owen, 2005; Frost et al., 2005 all utilized the GRI as a framework to develop their disclosure indices. For consistency, only one coder was responsible for conducting the entire content analysis. Two additional coders then repeated the analysis for 20 companies to check for internal reliability. The results show a high degree of consistency between all coders.

Both quantity (extent) and quality (comprehensiveness) of CSR disclosure were measured. To compute CSR quantity, sentences that deal with the items in our disclosure

² The index/checklist is available from the authors.

index were identified and added by category – see Appendix C for a breakdown of sentences by category, report and country. The highest extent of disclosure concerned the environment (27%), followed by labour relations (24%), society (18%), CSR profiles (17%) and human rights issues (1.7%). The quality (or comprehensiveness) of the coverage of each topic in our disclosure index was determined using a score from 0 to 4, with ‘0’ for no disclosure; ‘1’ for general rhetorical statement or policy stated; ‘2’ for specific endeavour, descriptive information of implementation and monitoring; ‘3’ for quantitative statement and ‘4’ for the use of targets in addition to the publication of quantified results (in line with extant research in the area, e.g., Van Staden and Hooks, 2007). The scores were computed separately for each mode of reporting.³

<< Insert Table 2 >>

The first three columns of Table 2 present the descriptive statistics of CSR disclosure quantity by country for annual reports, corporate websites and their combination. UK corporations provided the highest extent of disclosure (479.38 sentences) in all modes of reporting, followed by India, Malaysia and China. CSR sentences presented on corporate websites (217.46 sentences) are more than there are in annual reports (85.07 sentences). Across the emerging market countries, Malaysia provided the highest number of CSR sentences in its annual reports, whereas China consistently provided the least CSR disclosure, both in annual reports and on corporate websites. Overall, the results suggest that the setting of CSR reporting is unique for each country.

Table 2 (columns four to six) presents the descriptive statistics for the quality scores. QualityAll is generally low at 26.54%; whereas the mean quality score for CSR stand-alone reports and websites (QualityWeb 27.69%) is higher than for annual reports (QualityAR 15.02%). We tested for differences among the quality and quantity scores of all of the countries, using t-tests and Mann-Whitney tests.⁴ The results reported in Table 2 and the results of our t-tests show that the quantity and quality of CSR disclosures are significantly different across the four countries. We therefore find support for Hypothesis 1.

We do a number of reliability tests. First, we determined dichotomous scores (the presence or not) for each item in the CSR disclosure index because dichotomous scores are arguably less subjective than graded scores (see for example, Williams, 1999; Haniffa and Cooke, 2005; Van Staden and Hooks, 2007). A correlation test between the (graded) quality measure (QualityAll) and the dichotomous score was performed. We find a correlation of 0.849 ($p = 0.000$), indicating that a less subjective measure of disclosure quality (the presence or absence of an item) is highly correlated with our graded quality measure, suggesting high levels of accuracy. Furthermore, we find that the quantity of CSR disclosures (QuantityAll) and the quality of CSR disclosures (QualityAll) is highly correlated (R of 0.861 – see Table 4). This provides further evidence of the validity of our disclosure measures.⁵

³ Thus, a company could have multiple scores in separate reports. In the final analysis, we computed a combined score, which took the highest score for each index item. For example, if a company provides policy only disclosure on recycling, the quality score for recycling in the annual report would be ‘2’. If in the CSR report, the disclosure is extended and elaborated to include quantitative information and benchmarking against the past year’s performance, the score for recycling in the CSR report would be ‘4’. Eventually, the combined score for the index item recycling would also ‘4’ (the highest score for either of the annual report or the CSR report).

⁴ The results show, for quality, that the UK and India are both different from all three of the other countries. The only pair of countries for which the difference is not significant is when China and Malaysia are compared. The results for quantity of disclosure are similar.

⁵ The disclosure scores were also compared with the GRI grades awarded to each of the companies being studied. Of the 203 companies, 33 companies (16.3%) used GRI as a framework to prepare CSR reports. The

4.2 Independent Variables

National culture variables are measured using Hofstede's individualism (IND), power distance (PD), uncertainty avoidance (UA) and masculinity index (MAS) (Hofstede, 1991, 2001; Jansen et al., 2009; Waldman et al., 2006; Smith, 2006; Kim and Gray, 2009; Tang and Koveos, 2008). It is expected based on the previous research that IND is positively associated with more disclosure while the other measures are negatively associated (Gray, 1988). We use the rank of the culture score as given in the Hofstede index for each country (see Appendix B). Therefore, a low measure (such as 1 for Power Distance in Malaysia) indicates that the country is rated highly on that dimension. To determine the cultural measure we used in our tests, we first classified the countries into groups according to whether they are above or below the median reported in studies of 51 countries by Hofstede for each dimension (Orij, 2010).⁶ We use measures of whether each dimension of national culture is above the median in our regression analysis, as motivated by the analysis in Orij (2010). The cultural measures are relative rather than absolute (and many countries are not, for example, purely masculine, but will also have feminine characteristics). Therefore, comparing a country's score to the median for the other countries in previous studies will give a measure relative to the other countries.

For our corporate governance constructs we use board composition (BC), board size (CGBS) the existence of a CSR committee on the board (COM) and government ownership in the company (GOVT). Board composition and board size are often used as corporate governance variables (see for example, Haniffa and Cooke, 2005; Donnelly and Mulcahy, 2008; De Villiers et al., 2011) while CSR committee is a new measure. Following the above literature we measure BC as the ratio of non-executive directors to the total number of directors on the board and CGBS as the number of directors on the board. COM is a dichotomous measure, indicating if a company has a CSR committee or not. Government ownership (GOVT) is measured based on a dichotomous scale of '1' for companies with government ownership of more than 50%.

Appendix A shows variable descriptions, and Appendix B the details of the cultural dimensions.

4.3 Control Variables

A CSR assurance statement has been found to improve the credibility of the CSR report (see Simnett et al., 2009). Interview findings of Hammond and Miles (2004) also show that 'the majority of executives suggested that third party verification are one of the characteristics of high quality CSR disclosures' (p. 75). Furthermore, a line of research has generally shown that the credibility of a CSR report is greater when it is assured and when the assurer is a professional accountant (see for example, Coram et al., 2009; Pflugrath et al., 2011). We therefore control for the effect of CSR assurance (ASS) on the quality/quantity of CSR.

The literature shows that the presence of Big-4 audit firms enhances the level of voluntary disclosure in corporate annual reporting (e.g., Ahmed and Courtis, 1999; Wang et al., 2008a). Researchers incorporate Big-4 firms as one of the control variables in the disclosure models of annual reports (see for example, Gul and Leung, 2004; Haniffa and Cooke, 2005; Huafang and Jianguo, 2007; Amran and Devi, 2008; Chau and Gray, 2010) and for corporate website reporting (see Xiao et al., 2004; Kelton and Yang, 2008). Accordingly

correlation tests showed a significant positive relationship between the scores for quality and the GRI grades ($p = 0.000$), indicating that the measures obtained in this research are well matched with those given by the GRI.

⁶ Although Hofstede's measures of national cultural variables were developed some time ago, they are standard measures that are widely used in current research, based on the assumption that fundamental aspects of national culture do not change very much.

we control for the effects of Big-4 audit firms (BIG4). The variable is measured based on a dichotomous basis of '1' if the company was audited by auditors of the Big-4 firm, '0', if otherwise.

The voluntary disclosure literature shows that factors such as globalization, listing status and foreign business affiliation, enhance voluntary disclosure practices (see for example, Chapple and Moon, 2005; Webb et al., 2008; Accordingly, we include two variables that relate to this issue: listing status (LIST) and proportion of subsidiaries in other countries (SUB). Listing status is measured on a dichotomous basis of '1' (if the company is cross-listed on another exchange), otherwise '0'. SUB represents the proportion of subsidiaries in other countries. These measures are consistent with Webb et al. (2008). The variables were hand-collected from the annual reports.

We control for size using the natural log of market capitalization (lnSIZE) as a proxy – we report the actual market capitalisation in table 6. Large companies are likely to provide more voluntary CSR reporting (see for example, Patten, 1992; Hackston and Milne, 1996; Kolk, 2003; KPMG, 2005; Owen, 2007). Our measure, lnSIZE is measured as the natural log of the number of shares in issue at the year-end multiplied by the share price translated into US dollars.⁷ This size measure is included because size might make a difference, but it is less likely to because the companies included in the study were already selected on the basis of large size. Controls for industry are included in this study; this is because the literature suggests that companies operating in environmentally and socially sensitive industries tend to provide more CSR disclosure than their counterparts (see for example, Milne and Patten, 2002; Deegan and Blomquist, 2006; Guthrie et al., 2008; Belal, 2008). Appendix A presents details of the variables measurement, and their sources of information.

4.4 Research Model

We use the following model in our statistical analysis:

$$\text{CSR Disclosure} = \beta_0 + \sum_4^1 B_i \text{National Culture} + \sum_8^5 B_i \text{Corporate Governance} + \beta_9 \\ \text{National Culture} \times \text{Corporate Governance} + \sum_{14}^{10} B_i \text{Control Variables}$$

where CSR Disclosure is represented by the quantity and quality of CSR disclosure; National Culture is represented by individualism, masculinity, and power distance; Corporate Governance is represented by board composition, board size, CSR board committee, and government ownership; and Control Variables for Big-4 auditor type, CSR assurance, listing status, subsidiaries in another country and size are included. Diagram 1 presents a research model and all hypotheses tested in this paper.

<< Insert Diagram 1 >>

5. RESULTS

Table 3 presents descriptive results for all the independent and control variables. For the four cultural measures of interest, table 3 reports the descriptive statistics of the Hofstede rankings (shown as IND, PD, UA and MAS). While there is considerable variation in individualism (standard deviation 13.77) and power distance (15.60) we note relatively little variation in masculinity (5.78) and little variation in uncertainty avoidance (1.70). There will be

⁷ We have used the natural log of SIZE in our analysis as SIZE may not be normally distributed. We conducted sensitivity tests using the raw value of SIZE, but the results are similar.

limitations on use of uncertainty avoidance in our analysis as the four countries are so similar on this dimension that it may not influence disclosure differences. Companies have on average 48% non-executive directors on the board while 27% of the companies in the sample have a CSR committee. The average board size is 10.61 directors. With regards to the control variables, 20.73% of the companies in the sample have government ownership of more than 50% and 74.4% of the annual reports in the sample were audited by Big4 firms. The mean size of companies in our sample is US\$14,793 million.

<< Insert Table 3 >>

5.1 Tests for the impact of culture on CSR disclosure

In Table 4, Panel A and Panel B, we report whether the quality and quantity of CSR information disclosed is as expected based on Hofstede's cultural dimensions. The results reported show a positive relationship between individuality and CSR disclosure. The UK and India have higher scores for individuality, and previous research predicts higher scores will be positively associated with disclosure. The results of the t-tests and the Mann-Whitney tests are positive and significant as predicted for both quality and quantity of CSR disclosure. However, the results for MAS are opposite to the prediction. Malaysia (which varies from the other three countries in being below the median for masculinity) is not very far away on the scale from India and China, while the UK has both the highest level of masculinity and the greatest extent of CSR reporting. In our sample, high levels of masculinity (i.e., the UK) were not associated with lower levels of transparency (i.e., more CSR reporting). For power distance, previous research predicts a negative relationship, and the results are negative and significant. The results offer support for Hypothesis 1a, i.e., that culture influences the quantity and quality of CSR information across the four countries in our sample. We are unable to use the same test for a relationship between uncertainty avoidance and CSR because all of our countries have fairly similar ranks for uncertainty avoidance.⁸ Our results are consistent with Gray (1988)'s argument that 'the most important societal values at the level of the accounting subculture would seem to be uncertainty avoidance and individualism' and that masculinity appears to be somewhat less important in the system of accounting values (p. 11).

<< Insert Table 4 >>

These results are broadly consistent with Hypothesis 1a.⁹ It is important to investigate whether these results are influenced by other variables. For example, the UK has larger companies, and a greater frequency of CSR committees; Malaysia has smaller boards; while China has the largest proportion of companies with government ownership. To examine the effect of these issues, we apply multiple regression analysis.

5.2 Correlations

Table 5 reports correlations among the variables. There are significant correlations between three of the cultural variables (IND, MAS and PD) and both the quality and quantity of CSR

⁸ However, we can compare the countries within our sample. India and Malaysia have relatively greater UA compared to the UK and China. Using these differences, we find that the relationship between UA and disclosure is negative and significant (consistent with our predictions).

⁹ Following Orij (2010) we also calculated and tested Secrecy ($SEC = UA + PD - IND$) and Social orientation ($TYP = IND - PD$). For SEC we predicted and found that this would be negatively related to CSR disclosure in countries with high SEC (i.e., India, Malaysia and China in our sample). For TYP we predicted and found that this would be positively related to CSR disclosure in countries with high TYP (i.e., the UK).

disclosure. The correlation between UA and CSR disclosure is not significant, which we relate to the lack of variance in our UA measure. The direction of the relationship between IND and PD is in the direction predicted, however, the direction for MAS is opposite to the prediction, similar to our findings in 5.1. Overall the significant relationships between IND and PD and CSR disclosure offers further support for hypothesis 1a.

There are no serious multicollinearity problems among the independent variables (with no correlation greater than 0.7, with the exception of the national culture variables).¹⁰ Initial tests reveal multicollinearity amongst the four national culture variables. As a result, the cultural variables have been examined one at a time in addition to being included together in the multivariate test.¹¹ The existence of CSR board committees, board composition and board size are significantly associated with the cultural variables and with both CSR disclosure variables.

<< Insert Table 5 >>

5.3 Regression Results

Measures of whether each dimension of national culture is above the median are regressed separately against the dependent variables for CSR QualityAll and QuantityAll. Preliminary tests showed that heteroscedasticity was present, and as a result we used robust t-statistics, and these are presented throughout. Table 6, Panel A presents the results for the regression tests including a base model reporting the coefficients of corporate governance and control variables, and then models including a measure for whether the country ranked above the median for each of the culture variables. Individuality is positively associated with both QualityAll and QuantityAll, which is as we predicted. The result for masculinity is mixed, with a negative but not significant coefficient in the model for QualityAll and a positive and significant coefficient in the model for QuantityAll. This is not consistent with our prediction of a negative association. The results for power distance show a negative and significant relation with QualityAll and negative but no significant relation with QuantityAll. This is reasonably consistent with our prediction. We do not report multiple regression results for uncertainty avoidance because all four of the countries in the study have similar rankings. Our results are broadly consistent with our predictions and with the previous research and support Hypothesis 1a.

<< Insert Table 6 >>

The results also show that COM, the presence of a CSR committee, is positively and significantly associated with quality and quantity of CSR reporting in all of the tests, while government ownership is significantly associated with greater quality but not with greater quantity of CSR disclosure. This is consistent with hypothesis H₂. Among the control variables, CSR assurance and overseas subsidiaries are significantly positively associated with CSR disclosure in most of the models. Listing, and having a Big 4 auditor are positively and significantly associated with disclosure in some of the models.

To investigate the effect of several cultural factors at the same time, Table 6 Panel B reports results where the measures of national culture are included together. These results are similar overall. They show that individuality and masculinity are positively associated with disclosure quantity and quality. The results for power distance are insignificant. CSR committees are significant among the corporate governance variables.

¹⁰ We also tested for multicollinearity using Variance Inflation Factors, and found no evidence that multicollinearity affects the results.

¹¹ Due to the lack of variation in UA, we exclude this variable from our further analysis.

5.4 Tests for interactions and the moderating effect

Cultural differences and organizational factors contribute to systematic differences in institutional factors and management among countries. We argue that the cultural variables interact with organizational factors to influence accounting choice. For example, companies in a collective culture might have a CSR board committee; and that decision influences CSR reporting practice. We introduce interaction variables to the model in order to investigate the effect of organizational factors relevant to each company. These results are reported in Table 7. The results for individuality are positive as predicted, the results for masculinity are mixed as before, and the results for power distance are negative as predicted and also significant for quantity. The interactions for individuality and masculinity are not significant. However, the interaction for power distance is significantly and positively related to Quality. This is a useful result that shows that while countries with higher power distance are less likely to report (high quality) CSR information, corporate governance can counteract that effect to a significant extent. This provides some support for Hypothesis 3.

<< Insert Table 7 >>

6. DISCUSSION AND CONCLUSION

We notice significant differences in CSR reporting between countries. The UK companies provide the highest quantity and quality of reporting. Across the emerging market countries, Chinese companies consistently provided the least CSR disclosure, both in annual reports and on corporate websites; whereas Malaysian companies are shown to have provided the highest amount of CSR in annual reports. We expected cultural differences, based on previous literature (e.g., Haniffa and Cooke, 2005; Orij, 2010; Ortas et al., 2015). While we expected to find more similarity in reporting between the companies in our sample in terms of the mimetic isomorphism argument of institutional theory (DiMaggio and Powell, 1983), we find that cultural influences explain the differences in CSR reporting among the countries, i.e., normative and coercive structures are influenced by country level cultural practices (cultural-cognitive) and that mimicking disclosures from companies in other countries is secondary to the cultural-cognitive influences. Our findings are therefore innovative in showing that when there is a conflict between isomorphism on a global scale and country level cultural differences that could influence governance and disclosure, the country level differences are more important than institutional isomorphism in determining company responses.

In regard to our second hypothesis, we find that some aspects of corporate governance have a positive influence on CSR reporting, i.e., CSR board committee and government ownership. The presence of a committee shows a company's concern for their social and environmental actions and reputation (Neu et al., 1998; Rankin et al., 2011; Eberhardt-Toth, 2017; Fuente et al., 2017). Companies that appoint directors as members of the CSR committee are more committed to providing CSR disclosure than companies that do not engage in this practice. Government ownership impacts the quality but not the quantity of CSR disclosure. Although these results are not entirely consistent, they are generally in accordance with the predictions of Amran and Devi (2008).

Our third objective was to examine the interaction of culture and governance, i.e., does culture interact with governance and influence disclosure in this way? Previous studies have not examined the combined effect of these two forces. We find that the interaction of power distance and CSR committees is positively related to disclosure, suggesting that corporate governance mechanisms can be used to help counteract the negative effect of power distance. This is a useful result that shows that while countries with higher power

distance are less likely to report (high quality) CSR information, corporate governance can counteract that.

Overall, our findings demonstrate the effect of culture in the CSR reporting context. While institutional theory suggest high levels of isomorphism (i.e., similarities in reporting) between companies, we find that the quality and quantity CSR reporting in each country is different and is influenced by cultural influences of the country and that cultural factors can explain the differences in CSR reporting that we observe between the countries. This has important implications, i.e., cultural differences are stronger than institutional pressures. Furthermore our results indicate that corporate governance factors, and specifically a CSR committee, influence both the quality and quantity of CSR reporting, whereas government ownership influences only the quality of reporting. Corporate governance has a moderating effect on some of the cultural influences and, for example, limits the negative effects (significant lower quality reporting) of power distance. These findings have implications for setting and implementing global reporting standards (e.g., the GRI standards), as it highlights the importance of cultural differences which could impact cross-country comparability. Culture could influence the application of these guidelines and standards in practice, while good corporate governance, particularly from CSR committees, could mitigate some of the adverse cultural effects.

Limitations

The findings of this study should be interpreted with several limitations. Firstly, only four countries are analysed and compared for their cultural dimensions. Our analysis is therefore based on how each country is placed relative to the median on these cultural dimensions. If we had used other countries, or included more countries in the sample, our results may have been different. Secondly, the generalizability of the research findings is limited to those countries being studied because data for this research was hand-collected, obtained from a single time frame and there is a possibility that other variables which influence the CSR reporting of a company may have been excluded. Thirdly, the sample was selected after omitting missing data and data which was not presented in the English language. Finally, any limitations in Hofstede's model may have been inherited by this study.

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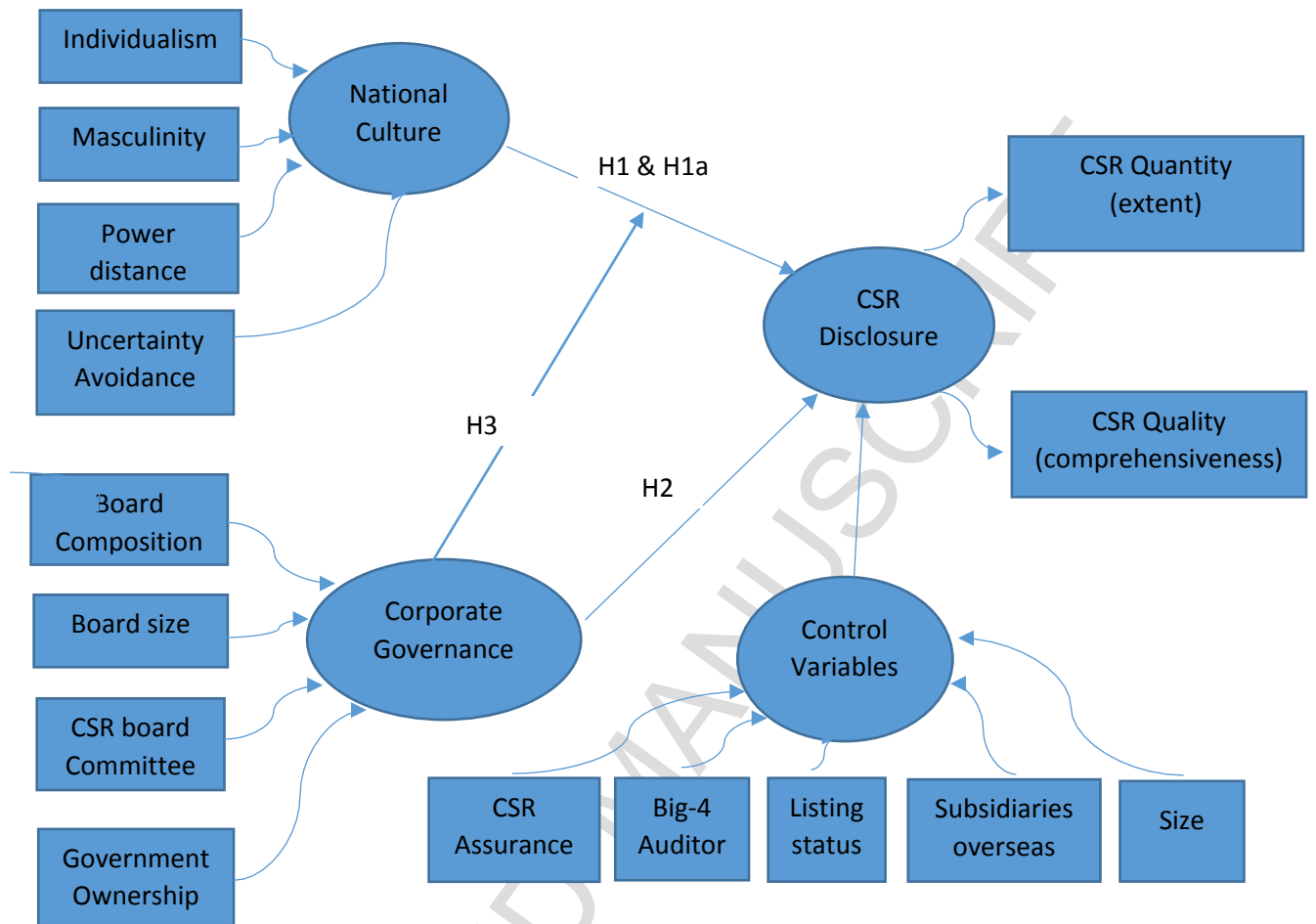
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Diagram 1: Research Model



See Appendix A for variable description and measurement.

Table 1: Country, industry and reporting of sample companies

Panel A: Sample by Industry and Country

| Industry | China | | India | | Malaysia | | UK | | Total | |
|---|--------|---------|--------|---------|----------|---------|--------|---------|--------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Energy Oil and Gas | 7 | 14 | 8 | 15.38 | 5 | 9.80 | 6 | 12 | 26 | 12.81 |
| Materials | 12 | 24 | 20 | 38.46 | 8 | 15.69 | 9 | 18 | 49 | 24.14 |
| Manufacturing | 13 | 26 | 12 | 23.08 | 11 | 21.57 | 10 | 20 | 46 | 22.66 |
| Transportation | 9 | 18 | 1 | 1.92 | 9 | 17.65 | 4 | 8 | 23 | 11.33 |
| Automobiles and Components | 3 | 6 | 3 | 5.77 | 5 | 9.80 | 1 | 2 | 12 | 5.91 |
| Alcohol, Tobacco, Casino and Gambling | 1 | 2 | 1 | 1.92 | 6 | 11.76 | 5 | 10 | 13 | 6.40 |
| Pharmaceutical, Biotechnology and Drugs | 0 | 0 | 4 | 7.69 | 1 | 1.96 | 6 | 12 | 11 | 5.42 |
| Utilities | 5 | 10 | 3 | 5.77 | 6 | 11.76 | 9 | 18 | 23 | 11.33 |
| TOTAL | 50 | 100 | 52 | 100 | 51 | 100 | 50 | 100 | 203 | 100 |

Panel B: Sample by Reports

| Country | Sample | CSR information in Annual Report | CSR section available as part of website | Separate CSR Report available on-Line | Total Observations (reports) |
|----------|--------|----------------------------------|--|---------------------------------------|------------------------------|
| China | 50 | 50 | 22 | 8 | 80 |
| India | 52 | 52 | 32 | 11 | 95 |
| Malaysia | 51 | 51 | 28 | 8 | 87 |
| UK | 50 | 50 | 50 | 41 | 141 |
| TOTAL | 203 | 203 | 132 | 68 | 403 |

Table 2: Descriptive Statistics of Quantity and Quality of CSR Disclosure

| | Quantity AR | Quantity Web | Quantity All | Quality AR | Quality Web | Quality All |
|-----------------|----------------|-----------------|-----------------|---------------|----------------|----------------|
| Combined | | | | | | |
| N | 203 | 135 | 203 | 203 | 135 | 203 |
| Mean | 85.07 | 217.46 | 229.69 | 15.02 | 27.70 | 26.54 |
| Med | 68 | 112 | 131 | 11.86 | 23.73 | 19.07 |
| STD | 82.09 | 238.33 | 255.07 | 11.48 | 23.15 | 22.24 |
| Range | 559 | 1152 | 1261 | 58.90 | 83.90 | 84.32 |
| Min | 3 | 2 | 3 | 0.42 | 0.42 | 0.42 |
| Max | 562 | 1154 | 1264 | 59.32 | 84.32 | 84.75 |
| China | | | | | | |
| N | 50 | 24 | 50 | 50 | 24 | 50 |
| Mean | 30.14 | 109.42 | 82.66 | 9.13 | 17.74 | 15.62 |
| Med | 17 | 31 | 33.5 | 7.63 | 8.26 | 9.11 |
| STD | 34.24 | 140.12 | 113.09 | 7.52 | 18.71 | 15.44 |
| Range | 132 | 465 | 469 | 31.36 | 49.58 | 54.24 |
| Min | 3 | 2 | 3 | 0.85 | 1.27 | 0.85 |
| Max | 135 | 467 | 472 | 32.20 | 50.85 | 55.08 |
| India | | | | | | |
| N | 52 | 32 | 52 | 52 | 32 | 52 |
| Mean | 76.56 | 210.41 | 206.04 | 13.00 | 26.89 | 24.66 |
| Med | 61.5 | 98 | 109 | 11.02 | 9.75 | 15.47 |
| STD | 66.42 | 228.30 | 222.95 | 9.99 | 27.08 | 23.41 |
| Range | 318 | 876 | 911 | 39.83 | 82.63 | 83.90 |
| Min | 9 | 5 | 11 | 0.42 | 1.69 | 0.42 |
| Max | 327 | 881 | 922 | 40.25 | 84.32 | 84.32 |
| Malaysia | | | | | | |
| N | 51 | 29 | 51 | 51 | 29 | 51 |
| Mean | 88.76 | 113.24 | 153.16 | 11.43 | 13.15 | 15.93 |
| Med | 71 | 39 | 88 | 8.90 | 5.51 | 9.75 |
| STD | 81.60 | 190.53 | 180.49 | 9.86 | 17.06 | 15.53 |
| Range | 369 | 852 | 880 | 58.47 | 56.78 | 70.34 |
| Min | 4 | 5 | 4 | 0.85 | 0.42 | 0.85 |
| Max | 373 | 857 | 884 | 59.32 | 57.20 | 71.19 |
| UK | | | | | | |
| N | 50 | 50 | 50 | 50 | 50 | 50 |
| Mean | 145.10 | 334.28 | 479.38 | 26.69 | 41.42 | 50.25 |
| Med | 126 | 301.5 | 431.5 | 26.69 | 43.86 | 51.06 |
| STD | 91.52 | 257.48 | 279.41 | 9.57 | 17.44 | 12.92 |
| Range | 550 | 1113 | 1167 | 47.03 | 80.51 | 58.05 |
| Min | 12 | 41 | 97 | 5.08 | 3.39 | 26.69 |
| Max | 562 | 1154 | 1264 | 52.12 | 83.90 | 84.75 |

Note: AR = CSR information in the annual report. Web = CSR information on the website, including standalone reports. All = a combined score for all disclosures in the annual report and on the website. Quantity measured in sentences. Quality is measured in percentages.

Table 3: Descriptive statistics

| | Quant- All | Qual- All | IND | PD | UA | MAS | BC | COM | CGBS | GOVT | BIG4 | ASS | LIST | SUB | SIZE |
|-----------|---------------|--------------|-------|-------|-------|-------|------|------|-------|-------|------|------|------|-------|-----------|
| N | 203 | 203 | 203 | 203 | 203 | 203 | 203 | 203 | 203 | 153 | 203 | 203 | 203 | 203 | 203 |
| Mean | 229.69 | 26.54 | 24.28 | 17.35 | 46.98 | 18.55 | 0.48 | 0.27 | 10.61 | 20.73 | 0.74 | 0.20 | 0.15 | 30.67 | 14793.36 |
| Med. | 131 | 19.07 | 21 | 10.5 | 46 | 20.5 | 0.5 | 0 | 10 | 4.00 | 1 | 0 | 0 | 20.83 | 4348.90 |
| Std. Dev. | 255.07 | 22.24 | 13.77 | 15.60 | 1.70 | 5.78 | 0.14 | 0.45 | 2.78 | 28.33 | 0.44 | 0.40 | 0.36 | 32.49 | 52532.45 |
| Range | 1261 | 84.33 | 34 | 42 | 4.5 | 16 | 0.70 | 1 | 13 | 98.38 | 1 | 1 | 1 | 100 | 686190.57 |
| Min | 3 | 0.42 | 3 | 1 | 45 | 9.5 | 0.13 | 0 | 5 | .00 | 0 | 0 | 0 | 0 | 104.03 |
| Max | 1263 | 84.75 | 37 | 43 | 49.5 | 25.5 | 0.83 | 1 | 18 | 98.38 | 1 | 1 | 1 | 100 | 686294.60 |

Table 4:

Panel A: Tests of the difference between quality of CSR disclosure between groups of countries according to cultural dimensions and related factors

| Dimension | Countries with high score on dimension | Mean for CSR quality for countries with high score | Mean for CSR quality for countries without high score | t-stat | sig | Mann-Whitney test sig | Predicted direction | Direction found |
|------------------|---|---|--|---------------|------------|------------------------------|----------------------------|------------------------|
| IND | UK, India | 37.20 | 15.77 | 7.820 | 0.000 | 0.000 | Positive | Positive |
| MAS | UK, India, China | 30.10 | 15.93 | 4.089 | 0.000 | 0.000 | Negative | Positive |
| PD | India, Malaysia, China | 18.79 | 50.25 | -10.941 | 0.000 | 0.000 | Negative | Negative |
| UA | None | N/A | N/A | N/A | N/A | N/A | Negative | N/A |

Panel B: Tests of the difference between quantity of CSR disclosure between groups of countries according to cultural dimensions and related factors

| Dimension | Countries with high score on dimension | Mean for CSR quantity for countries with high score | Mean for CSR quantity for countries without high score | t-stat | sig | Mann-Whitney test sig | Predicted direction | Direction found |
|------------------|---|--|---|---------------|------------|------------------------------|----------------------------|------------------------|
| IND | UK, India | 340.03 | 118.26 | 6.864 | 0.000 | 0.000 | Positive | Positive |
| MAS | UK, India, China | 255.37 | 153.17 | 2.585 | 0.013 | 0.048 | Negative | Positive |
| PD | India, Malaysia, China | 148.09 | 479.38 | -9.608 | 0.000 | 0.000 | Negative | Negative |
| UA | None | N/A | N/A | N/A | N/A | N/A | Negative | N/A |

Note: IND: Individuality; MAS: Masculinity; PD: Power Distance; UA: Uncertainty avoidance. For UA our sample countries do not have enough variation in terms of the culture score used to distinguish highly ranked and other.

Table 5: Pearson correlations

| | QuantityAll | QualityAll | IND | MAS | PD | UA | COM | BC | CGBS | GOVT | BIG4 | ASS | LIST | SUB |
|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| QualityAll | 0.861 | 1 | | | | | | | | | | | | |
| <i>significance</i> | <i>0.000</i> | | | | | | | | | | | | | |
| IND | -0.565 | -0.618 | 1 | | | | | | | | | | | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | | | | | | | | | | | | |
| MAS | -0.477 | -0.564 | 0.834 | 1 | | | | | | | | | | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | | | | | | | | | | | |
| PD | 0.505 | 0.584 | -0.855 | -0.993 | 1 | | | | | | | | | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | | | | | | | | | | |
| UA | -0.066 | -0.005 | 0.170 | -0.398 | 0.365 | 1 | | | | | | | | |
| <i>significance</i> | <i>0.350</i> | <i>0.947</i> | <i>0.016</i> | <i>0.000</i> | <i>0.000</i> | | | | | | | | | |
| COM | 0.560 | 0.613 | -0.501 | -0.488 | 0.506 | 0.055 | 1 | | | | | | | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.439</i> | | | | | | | | |
| BC | 0.246 | 0.240 | -0.483 | -0.395 | 0.419 | -0.080 | 0.241 | 1 | | | | | | |
| <i>significance</i> | <i>0.000</i> | <i>0.001</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.256</i> | <i>0.001</i> | | | | | | | |
| CGBS | 0.171 | 0.152 | -0.204 | -0.216 | 0.175 | -0.002 | 0.094 | -0.093 | 1 | | | | | |
| <i>significance</i> | <i>0.015</i> | <i>0.031</i> | <i>0.004</i> | <i>0.002</i> | <i>0.013</i> | <i>0.977</i> | <i>0.185</i> | <i>0.186</i> | | | | | | |
| GOVT | -0.072 | -0.035 | 0.208 | 0.183 | -0.207 | -0.005 | -0.095 | -0.245 | 0.144 | 1 | | | | |
| <i>significance</i> | <i>0.307</i> | <i>0.621</i> | <i>0.003</i> | <i>0.009</i> | <i>0.003</i> | <i>0.942</i> | <i>0.176</i> | <i>0.000</i> | <i>0.041</i> | | | | | |
| BIG4 | 0.203 | 0.204 | -0.065 | -0.218 | 0.263 | 0.344 | 0.180 | 0.144 | -0.241 | -0.220 | 1 | | | |
| <i>significance</i> | <i>0.004</i> | <i>0.004</i> | <i>0.354</i> | <i>0.002</i> | <i>0.000</i> | <i>0.000</i> | <i>0.010</i> | <i>0.041</i> | <i>0.001</i> | <i>0.002</i> | | | | |
| ASS | 0.668 | 0.726 | -0.501 | -0.477 | 0.493 | 0.033 | 0.439 | 0.197 | 0.172 | -0.094 | 0.127 | 1 | | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.644</i> | <i>0.000</i> | <i>0.005</i> | <i>0.014</i> | <i>0.181</i> | <i>0.072</i> | | | |
| LIST | 0.266 | 0.284 | -0.078 | -0.225 | 0.210 | 0.265 | 0.234 | 0.032 | 0.178 | -0.007 | 0.124 | 0.162 | 1 | |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.267</i> | <i>0.001</i> | <i>0.003</i> | <i>0.000</i> | <i>0.001</i> | <i>0.647</i> | <i>0.011</i> | <i>0.921</i> | <i>0.079</i> | <i>0.021</i> | | |
| SUB | 0.412 | 0.382 | -0.518 | -0.444 | 0.463 | -0.056 | 0.263 | 0.350 | 0.095 | -0.156 | 0.160 | 0.290 | 0.186 | 1 |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.430</i> | <i>0.000</i> | <i>0.000</i> | <i>0.177</i> | <i>0.027</i> | <i>0.023</i> | <i>0.000</i> | <i>0.008</i> | |
| lnSIZE | 0.413 | 0.467 | -0.377 | -0.547 | 0.509 | 0.316 | 0.373 | 0.088 | 0.445 | 0.190 | 0.220 | 0.370 | 0.323 | 0.303 |
| <i>significance</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> | <i>0.210</i> | <i>0.000</i> | <i>0.067</i> | <i>0.755</i> | <i>0.000</i> | <i>0.000</i> | <i>0.000</i> |

Note: For variable definitions see Appendix A. Because we use the rankings of the cultural variables, the sign for the correlations with the cultural variables is opposite to what we predicted, i.e., a positive correlation with a high level of a cultural variable (e.g. IND and QualityAll) will result in a negative sign as the highest level got the lowest rank. Conversely, a negative correlation with a high level of a cultural variable (e.g. PD and QualityAll) will result in a positive sign.

Table 6: Panel A: Regression of quality and quantity of disclosure on independent and control variables examining each culture measure separately (203 observations)

| | | Base model | | Individuality | | Masculinity | | Power Distance | |
|--------------------------|------|------------|-------------|---------------|-------------|-------------|-------------|----------------|-------------|
| | pred | QualityAll | QuantityAll | QualityAll | QuantityAll | QualityAll | QuantityAll | QualityAll | QuantityAll |
| INDhigh | + | | | 10.837 *** | 62.403 * | | | | |
| MAShigh | - | | | | | -1.084 | 87.099 ** | | |
| PDhigh | - | | | | | | | -8.200 ** | -55.185 |
| COM | + | 14.806 *** | 140.136 *** | 12.585 *** | 127.347 *** | 14.802 *** | 140.464 *** | 12.961 *** | 127.719 *** |
| BC | + | 8.360 | 79.093 | -1.327 | 23.314 | 8.005 | 107.681 | 2.275 | 38.143 |
| CGBS | + | -0.313 | 1.649 | -0.660 ** | -0.351 | -0.336 | 3.505 | -0.323 | 1.582 |
| GOVT | | 4.838 ** | 32.363 | 6.082 ** | 39.526 | 5.006 ** | 18.871 | 5.72 ** | 26.101 |
| BIG4 | | 2.915 | 35.208 | 6.835 *** | 57.775 ** | 3.144 | 16.810 | 1.562 | 276.431 *** |
| ASS | | 27.663 *** | 289.157 *** | 25.401 *** | 276.133 *** | 27.636 *** | 291.283 *** | 25.771 *** | 56.059 |
| LIST | | 6.433 ** | 52.308 | 8.642 *** | 65.030 * | 6.384 * | 56.208 | 6.990 ** | 1.195 *** |
| SUB | | 0.081 ** | 1.366 *** | 0.040 | 1.127 ** | 0.081 ** | 1.371 *** | 0.056 | 3.464 |
| lnSIZE | | 0.994 | 5.070 | 0.752 | 3.680 | 0.833 | 17.982 * | 0.755 | 55.185 |
| Constant | | 5.644 | -29.380 | 11.734 | 5.688 | 6.074 | -64.001 | 11.936 | 12.962 |
| Industry controls | | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. |
| Adj R² | | 0.678 | 0.584 | 0.707 | 0.592 | 0.677 | 0.597 | 0.688 | 0.587 |
| F-statistic | | 25.94 *** | 14.20 *** | 29.91 *** | 13.64 *** | 28.01 *** | 14.11 *** | 29.28 *** | 13.38 *** |

QualityAll is the total score of quality for all reports; QuantityAll is the total score of quantity for all reports; pred is the predicted direction of the relationship. For all other variable definitions, see Appendix A.

*Coefficient is significant at the 0.1 level. **Coefficient is significant at the 0.05 level. ***Coefficient is significant at the 0.01 level. Significance levels are one tailed where a direction is predicted and two-tailed otherwise.

Table 6: Panel B: Regression of quality and quantity of disclosure on independent and control variables examining culture measures simultaneously (203 observations)

| | pred | QualityAll | QuantityAll |
|--------------------------|------|------------|-------------|
| INDhigh | + | 12.716 *** | 123.079 *** |
| MAShigh | - | 6.406 ** | 161.388 *** |
| PDhigh | - | -2.938 | -36.174 |
| COM | + | 11.563 *** | 107.382 *** |
| BC | + | -3.083 | -4.791 |
| CGBS | + | -0.587 | 1.099 |
| GOVT | | 5.622 ** | 25.385 |
| BIG4 | | 5.676 ** | 39.660 |
| ASS | | 24.488 *** | 259.068 *** |
| LIST | | 9.511 ** | 87.086 |
| SUB | | 0.024 | 0.790 *** |
| lnSIZE | | 1.575 ** | 25.199 |
| Constant | | 6.092 ** | -157.996 |
| Industry controls | | Incl. | Incl. |
| Adj R² | | 0.711 | 0.590 |
| F-statistic | | 25.85 *** | 17.47 *** |

QualityAll is the total score of quality for all reports; QuantityAll is the total score of quantity for all reports; pred is the predicted direction of the relationship. For all other variable definitions, see Appendix A.

*Coefficient is significant at the 0.1 level. **Coefficient is significant at the 0.05 level. ***Coefficient is significant at the 0.01 level. Significance levels are one tailed where a direction is predicted and two-tailed otherwise.

Table 7: Regression of quality and quantity of disclosure on independent and control variables including interactions with corporate governance (203 observations)

| | pred | Individuality | | Masculinity | | Power Distance | |
|--------------------|------|---------------|-------------|-------------|-------------|----------------|-------------|
| | | QualityAll | QuantityAll | QualityAll | QuantityAll | QualityAll | QuantityAll |
| INDhigh | + | 11.673 *** | 47.724 * | | | | |
| MAShigh | - | | | -1.054 | 92.462 ** | | |
| PDhigh | - | | | | | -16.581 *** | -85.745 * |
| INDhigh*COM | | -3.984 | 69.972 | | | | |
| MAShigh*COM | | | | -0.296 | -54.536 | | |
| PDhigh*COM | | | | | | 15.412 *** | 56.199 |
| COM | + | 15.347 *** | 78.829 *** | 14.550 ** | 148.636 *** | 19.089 *** | 150.067 *** |
| BC | + | -1.871 | 32.880 | 8.015 | 109.607 | 2.969 | 40.674 |
| CGBS | + | -0.680 ** | 0.006 | -0.335 | 3.685 | -0.226 | 1.935 |
| GOVT | | 5.553 ** | 48.817 * | 5.014 ** | 20.306 | 5.521 ** | 37.573 |
| BIG4 | | 6.887 *** | 56.854 * | 3.138 | 15.679 | 1.326 | 25.239 |
| ASS | | 25.467 *** | 274.954 *** | 27.631 *** | 290.311 *** | 23.614 *** | 268.565 *** |
| LIST | | 8.814 *** | 62.002 * | 6.388 * | 57.023 | 7.657 * | 58.492 |
| SUB | | 0.042 | 1.074 ** | 0.081 ** | 1.336 *** | 0.055 | 1.190 *** |
| lnSIZE | | 0.751 | 3.711 | 0.828 | 16.992 | 0.615 | 2.951 |
| Constant | | 12.074 | -0.290 | 6.145 | -143.587 | 12.144 | 13.721 |
| Industry controls | | Incl. | Incl. | Incl. | Incl. | Incl. | Incl. |
| Adj R ² | | 0.706 | 0.589 | 0.677 | 0.594 | 0.700 | 0.585 |
| F-statistic | | 26.52 *** | 16.32 *** | 26.46 *** | 16.55 *** | 25.81 *** | 16.01 *** |

QualityAll is the total score of quality for all reports; QuantityAll is the total score of quantity for all reports; pred is the predicted direction of the relationship. For all other variable definitions, see Appendix A.

*Coefficient is significant at the 0.1 level. **Coefficient is significant at the 0.05 level. ***Coefficient is significant at the 0.01 level. Significance levels are one tailed where a direction is predicted and two-tailed otherwise.

Appendix

Appendix A: Variable Measurements and Source of Information

| Variables | Symbol | Operationalization | Source of information |
|--|-------------|---|--|
| Dependent variables: | | | |
| CSR Quality in all reports | QualityAll | Content analysis (Maximum score for each item in CSR index) | Annual report/websites |
| CSR Quantity in all reports | QuantityAll | Content analysis (based on sentences) | Annual report/websites |
| Independent variables: | | | |
| <i>National Culture:</i> | | | |
| Individualism | IND | Ranking of index, by country | Standard measures used in previous literature based on Hofstede (2001) |
| Power Distance | PD | Ranking of index, by country | |
| Uncertainty Avoidance | UA | Ranking of index, by country | |
| Masculinity | MAS | Ranking of index, by country | |
| Individualism above the median | INDhigh | Country score is higher than the median for individuality | Based on Oriji (2010) |
| Power Distance above the median | MAShigh | Country score is higher than the median for masculinity | Based on Oriji (2010) |
| Uncertainty Avoidance above the median | PDhigh | Country score is higher than the median for power distance | Based on Oriji (2010) |
| <i>Corporate Governance:</i> | | | |
| Board composition | BC | Ratio of non-executive directors to total number of directors on the board | Annual Report/Mergent Online |
| Existence of CSR committee in board | COM | If a company has CSR committee - dichotomous | Annual report (hand-collected) |
| Board size | CGBS | Number of board members | Annual report (hand-collected) |
| Government shares | GOVT | Dichotomous measure of whether government ownership is greater than 50% | Annual report (hand-collected) |
| Control Variables: | | | |
| BIG4auditor | BIG4 | If a company is audited by Big-4 Audit firms-dichotomous | Annual report/Mergent Online |
| CSR assurance statement | ASS | If a company has an assurance statement for CSR report | Annual report (hand-collected) |
| Listing | LIST | If a company is cross-listed - dichotomous | Annual report/Mergent Online |
| Subsidiaries | SUB | Proportion of subsidiaries in another country to total number of subsidiaries | Annual report/Mergent Online |
| Size | lnSIZE | Natural log of market capitalization in US dollars | Compustat Global |

Appendix B: Hofstede's Cultural Taxonomies

| Country | Power Distance (PD) | | Individualism (IND) | | Uncertainty Avoidance (UA) | | Masculinity (MAS) | |
|----------|---------------------|-------|---------------------|-------|----------------------------|------|-------------------|---------|
| | Score | Rank | Score | Rank | Score | Rank | Score | Rank |
| UK | 35 | 43 | 89 | 3 (H) | 35 | 47.5 | 66 | 9.5 (H) |
| India | 77 | 10.5 | 48 | 21 | 40 | 45 | 56 | 20.5 |
| Malaysia | 100 | 1 (H) | 26 | 36 | 36 | 46 | 50 | 25.5 |
| China | 68 | 15.5 | 25 | 37 | 29 | 49.5 | 57 | 18.5 |

Sources: Hofstede, 2001

Note: The cultural measures used are the culture score and rank of the culture score for each country. When the rank is used, a low measure (such as 1 for Power Distance in Malaysia) indicates that the country is rated comparatively highly on that dimension (i.e., there are large power distances in Malaysia). We use a measure of whether each country dimension of national culture is ranked above the median for the particular cultural dimension in our regression analysis.

Appendix C: Quantity of CSR Disclosure: percentage of sentences disclosed

| Categories | Panel 1 Quantity of CSR in Annual Report | | | | | Panel 2 Quantity of CSR in Stand-alone reports and websites | | | | | Panel 3 Quantity of CSR in all Reports | | | | |
|------------|---|--------|-----------|-----|-----|--|--------|-----------|-----|-----|---|--------|-----------|-----|-----|
| | Chi na | Ind ia | Mala ysia | UK | All | Chi na | Ind ia | Mala ysia | UK | All | Chi na | Ind ia | Mala ysia | UK | All |
| Mean | 30.1 | 76. | 88.7 | 145 | 85. | 109 | 210 | 113. | 334 | 217 | 82. | 206 | 153. | 479 | 229 |
| Sente nces | 4 | 56 | 6 | .10 | 07 | .42 | .41 | 24 | .28 | .46 | 66 | .04 | 16 | .38 | .69 |
| Break down | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| Env. | 15. | 15. | 15.0 | 22. | 18. | 27. | 28. | 40.7 | 32. | 32. | 23. | 23. | 25.8 | 29. | 27. |
| | 66 | 93 | 4 | 83 | 57 | 90 | 56 | 4 | 36 | 02 | 45 | 87 | 5 | 47 | 04 |
| Society | 7.8 | 26. | 19.2 | 14. | 17. | 19. | 23. | 20.9 | 15. | 18. | 15. | 24. | 19.9 | 14. | 17. |
| | 3 | 02 | 4 | 24 | 71 | 40 | 99 | 5 | 02 | 13 | 19 | 74 | 6 | 79 | 98 |
| LR | 21. | 25. | 22.1 | 30. | 26. | 23. | 16. | 17.3 | 25. | 22. | 23. | 19. | 20.1 | 26. | 23. |
| | 96 | 27 | 8 | 57 | 40 | 92 | 04 | 6 | 39 | 22 | 21 | 47 | 5 | 96 | 77 |
| HR | 0.9 | 0.1 | 0.07 | 2.5 | 1.1 | 0.0 | 3.3 | 1.74 | 1.8 | 2.0 | 0.3 | 2.1 | 0.77 | 2.0 | 1.7 |
| | 3 | 8 | | 1 | 9 | 0 | 3 | | 6 | 2 | 4 | 6 | | 6 | 1 |
| PR | 3.8 | 3.2 | 8.24 | 3.1 | 4.5 | 11. | 5.7 | 3.65 | 8.6 | 7.6 | 8.4 | 4.8 | 6.31 | 6.9 | 6.5 |
| | 5 | 2 | | 0 | 4 | 09 | 8 | | 6 | 6 | 5 | 3 | | 8 | 0 |
| Econ | 19. | 11. | 17.8 | 5.2 | 11. | 2.3 | 4.5 | 0.94 | 1.9 | 2.4 | 8.5 | 7.0 | 10.7 | 2.9 | 5.7 |
| | 38 | 30 | 3 | 4 | 17 | 5 | 9 | | 7 | 9 | 5 | 8 | 3 | 6 | 1 |
| Profile s | 30. | 18. | 17.4 | 21. | 20. | 15. | 17. | 14.6 | 14. | 15. | 20. | 17. | 16.2 | 16. | 17. |
| | 39 | 09 | 1 | 52 | 42 | 34 | 72 | 2 | 73 | 46 | 82 | 86 | 3 | 78 | 30 |
| Total | 100 | 100 | 100. | 100 | 100 | 100 | 100 | 100. | 100 | 100 | 100 | 100 | 100. | 100 | 100 |
| | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |

Note: Env = disclosures on the environment, Society = disclosures on societal issues, LR = disclosures on labour relations, HR = disclosures on human rights issues, PR = disclosures on Public Relations, Econ = economic disclosures, Profiles = CSR profiles of companies.

The influence of culture and corporate governance on corporate social responsibility disclosure: a cross country analysis

Highlights

- Corporate social responsibility reporting is more prevalent in individualistic societies
- Corporate social responsibility reporting is more prevalent in societies with low power distance
- Corporate social responsibility reporting is enhanced by board committees
- Government ownership is associated with higher quality corporate social responsibility reports
- Where cultural influences have a negative impact on corporate social responsibility reporting, corporate governance is able to moderate these detrimental effects