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DOES NATIONAL CULTURE AFFECT INTEGRATED REPORTING QUALITY? A FOCUS ON GLOBE DIMENSIONS

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ABSTRACT

Integrated reporting (IR) is a new form of corporate reporting that aims to provide a holistic picture of an organisation's performance. A critical aspect of IR is the quality of the reports. Although several studies investigate IR, few focus on quality. This study investigates the impact of national culture on IR quality. The results show that IR quality is related to six GLOBE dimensions. Specifically, the results indicate that assertiveness, institutional collectivism, uncertainty avoidance and humane orientation are positively associated to IR quality while performance orientation and future orientation are negatively associated with it. This study contributes to the relevant literature by analysing an additional factor that influences the integrated reporting quality.

KEYWORDS

Integrated reporting; GLOBE; national culture; sustainability reporting; corporate reporting

1. INTRODUCTION

Integrated reporting (IR), developed by the International Integrated Reporting Council (IIRC), aims to represent the firm's value creation in the short, medium, and long term. This new reporting tool, which is an evolution of environmental and sustainability reports, represents the last frontier of corporate communication. It can better represent the company's relationships with its stakeholders. In fact, IR aims to allow stakeholders to more accurately assess the company's ability to create value in the present and future.

This capacity derives from a process that is activated upstream during the drafting of the document: integrated thinking. According to the IIRC (2013), 'Integrated thinking is the active consideration by an organisation of the relationships between its various operating and functional units and the capitals that the organisation uses or affects. Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium, and long term'. The integrated thinking approach leads to the integration of financial and non-financial information in a single report.

IR saw more attention in recent years from both the academic (Vitolla et al., 2018) and professional perspectives. A survey by KPMG (2017) highlights how the practice of IR is constantly growing and evolving from the early stages of the adoption of the IR framework.

However, a remaining critical aspect of IR is the quality of the reports (Pistoni et al., 2018). In fact, although there are several academic contributions on IR, only a few studies focus on quality. This gap in the literature shows the need for further empirical studies on IR quality, and specifically, its determinants, which is still an underdeveloped topic. It is especially essential to analyse the impact of soft variables linked to cultural aspects as determinants of disclosure practices. From this perspective and considering the wide geographical spread of companies that adopt IR, it is highly relevant to study how national culture affects the quality of the reports.

The national cultural dimensions explain the general similarities and the differences in the world's cultures, imply the existence of specific relationships, and determine stakeholders' preferences and actions (Tsakumis, 2007). Different national cultural dimensions reflect the different priorities in accounting practices (Radebaugh, 1983; Gray, 1988) or in the publication of different types of reports (Langlois & Schlegelmilch, 1990; Salter & Niswander, 1995; Neu et al., 1998; Adams & Kuasirikun, 2000; Fernandez-Feijoo et al., 2012). With reference to IR, the different cultural dimensions can also explain the choice to adopt this practice (García-Sánchez et al., 2013).

However, despite the importance of this aspect, the absence of studies investigating the impact of the national cultural context on IR quality is evident. Therefore, this study aims to fill this gap by examining the impact of GLOBE dimensions (House et al., 2004) on IR quality.

The remainder of this article is organized as follows. Following the literature review and the hypotheses development, we present the research methodology. We subsequently describe the results and draw the conclusions in the last section.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Although IR was introduced only a few years ago, prior studies explored several areas of this topic (Vitolla et al., 2019). Scholars focused mainly on the determinants of IR adoption (Jensen & Berg, 2012; Frías-Aceituno et al., 2013a, 2013b, 2014) and on the effects of IR adoption (Lee & Yeo, 2016; Barth et al., 2017; García-Sánchez & Noguera-Gámez, 2017a; Mervelskemper & Streit, 2017; Vitolla & Raimo, 2018; Esch et al., 2019). Other scholars highlighted the praise (Adams & Simnett, 2011; Roth, 2014; Tweedie, 2014) and criticisms of IR (Cheng et al., 2014; Brown & Dillard, 2014; Flower, 2015; Thomson, 2015). Finally, other scholars investigated the role of preparers (McNally et al., 2017; Chaidali & Jones, 2017; Lai et al., 2018) and the relationship between IR and management control systems (Gatti et al., 2018; Chiucchi et al., 2018).

Considering this study's objectives, the literature analysis here focuses primarily on the determinants of IR adoption and quality. Second, we focus on the relationship between national culture and non-financial disclosure. Frías-Aceituno et al. (2013a) find that companies located in civil law countries or in countries with particularly strong legal enforcement mechanisms are more likely to adopt IR. Frías-Aceituno et al. (2013b) underline how larger boards that contain more experienced directors and directors with more diverse backgrounds favour integrating various reports. Alfiero et al. (2018) instead find a positive and significant relationship between board size and board gender diversity and IR adoption. García-Sánchez et al. (2018) find that while a greater level of munificence decreases the disclosure in integrated reporting, companies with stronger boards are more likely to pursue such reporting.

Frías-Aceituno et al. (2014) add that firm size and profitability have a positive influence on a firm's choice to adopt IR. D'Este et al. (2012) find a positive and significant relationship between the territorial connotation and the adoption of IR. Lai et al. (2016) find a positive relationship between environmental, social and governance (ESG) disclosure ratings and the IR implementation. Sierra-Garcia et al. (2015) highlight how companies whose CSR reports are subject to assurance are more inclined to adopt IR. Vaz et al. (2016) add that companies located in countries with 'comply or explain' IR regulation are more likely to adopt IR.

While many researchers studied the determinants of IR implementation, only a few focused on the determinants of quality. Bavagnoli et al. (2018) highlight how the quality of IR is positively associated with the assurance score and with the location of companies in Europe and in countries with mandatory IR. Considering the existing studies on the determinants of IR, there is a clear absence of contributions on the relationship between national culture and IR quality, though researchers studied the impact of national culture in relation to other types of non-financial disclosure.

From this perspective, Luo and Tang (2013) focus on the impact of national culture on voluntary carbon disclosure, suggesting that firms in countries characterised by individualism and uncertainty avoidance are more likely to disclose carbon information, while masculinity and power distance are likely to have the opposite effect on disclosure. With regard to sustainability disclosure, Coulmont et al. (2015) find that firms in countries characterised by higher degrees of power distance, individualistic countries, and countries with higher indulgence scores are less likely to obtain a higher-level Global Reporting Initiative (GRI) guidelines

application (A). Masculinity, uncertainty avoidance, and long-term orientation have no statistically significant effect. Using the same sample, the authors also find that firms in countries with higher degrees of power distance and high indulgence scores are less likely to seek external assurance. García-Sánchez et al. (2013) examine the impact of the Hofstede national cultural system on the choices to adopt IR. They find that companies located in countries with stronger collectivist and feminist values are in the vanguard of information integration. The studies analysed show the importance of national culture, which represents the values of local stakeholders, in firms' decisions on non-financial disclosure.

In the field of studies on national culture, with particular reference to sustainability and non-financial disclosure (Ringov & Zollo, 2007; Park et al., 2007; Vachon, 2010; Cox et al., 2011; García-Sánchez et al., 2013; Luo & Tang, 2013; Coulmont et al., 2015), most scholars have adopted Hofstede's dimensions (Hofstede et al., 2010) as national culture measures. Diversely, we implement the GLOBE scheme (House et al., 2004) and in this way, we advance an alternative but at the same time valid approach to investigate socio-economic phenomena within different cross-cultural environments. The application of GLOBE cultural dimensions allows us to take into account other dimensions not included in Hofstede's study; in fact, the GLOBE study focuses on the following nine national cultural dimensions: performance orientation, assertiveness, future orientation, humane orientation, institutional collectivism, in-group collectivism, gender egalitarianism, power distance, uncertainty avoidance.

Therefore, in order to examine the impact of national culture on IR quality, we refer to the national culture dimensions on the basis of the study conducted by Parboteeah et al. (2012) concerning the relationship between cultural context and propensity to support sustainability initiatives. Thus, we analyse the impact of the following dimensions:

- performance orientation that expresses the extent to which achievement is valued;
- assertiveness that refers to the way in which individuals cultivate the social relationships;
- institutional collectivism that expresses the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action;
- uncertainty avoidance that refers to the degree to which individuals reject unknown situations;
- future orientation that expresses the degree to which individuals behave in a long-term oriented perspective;
- humane orientation that expresses the degree to which individuals value generosity, caring for the weak and loyalty.

By the way, we do not consider the other three dimensions, namely power distance, in-group collectivism and gender egalitarianism in order to avoid high correlations among our variables as suggested by previous studies (Peterson and Castro, 2006). In the light of this premise, we introduce the following hypotheses:

H1: Companies based in higher performance-oriented countries provide lower quality integrated reports.

H2: Companies based in higher assertive countries provide lower quality integrated reports.

H3: Companies based in higher collectivist countries provide higher quality integrated reports.

H4: Companies based in higher uncertainty avoidance countries provide higher quality integrated reports.

H5: Companies based in higher future orientation countries provide lower quality integrated reports.

H6: Companies based in higher human-oriented countries provide higher quality integrated reports.

3. RESEARCH METHODOLOGY

3.1 Sample

As our study population, we selected 117 international companies that adopt IR. We sourced the reports from the 'Leading Practices' and '<IR> Reporters' sections of the IIRC website.

We chose the IIRC website to ensure that the reports complied with the IIRC framework. We considered that the sections of the website above provide reports that represent the 'best practices' indicated in the

'Leading Practices' section compared to the other reports of presumably lower quality in the '<IR> Reporters' section. We analysed the integrated reports from 2017.

3.2 Model specification

Following Ringov and Zollo (2007), we tested the relationship between national culture and IR quality using a regression model. We chose a cross section instead of a panel analysis because there is no variability in the independent variables over time. Specifically, we estimated the following regression (with variables defined in the subsequent sections):

$$\text{IRQUALITY} = \beta_0 + \beta_1 \text{PERFORM} + \beta_2 \text{ASSERT} + \beta_3 \text{INST} - \text{COL} + \beta_4 \text{UNC} - \text{AVD} + \beta_5 \text{FUTURE} + \beta_6 \text{HUMANE} + \beta_7 \text{SIZE} + \beta_8 \text{AGE} + \beta_9 \text{ROE} + \beta_{10} \text{EU} + \beta_{11} \text{ENVSEN} + \varepsilon$$

3.3 Dependent variable

To measure IR quality (IRQUALITY), we used the scoreboard developed by Pistoni et al. (2018). This IR scoreboard focuses on four main elements: background, content, form, and assurance and reliability.

We evaluated the background by determining whether the reports present an introduction that discusses issues such as the objectives of the IR, motivations underlying the choice to adopt IR, the manager in charge of the IR process, beneficiaries of the document, the title of the report, consistency of IR with generally applied disclosure standards, and the CEO's commitment. We assigned a score of 0 when the report omitted an item, and 1 if the report included the item. The maximum score for this area is 7.

We evaluated the content based on the report's compliance with the prescriptions of the IIRC framework, which covers eight elements and two fundamental concepts. The former include strategy and resource allocation; governance, organisational overview and external environment, risks and opportunities, performance, outlook, basis of presentation, and business model. The latter refers to the value creation process and capital. For this area, we assigned a score between 0 (absence) and 5 (very high quality) to each of the ten variables. The maximum score for this area is 50.

We evaluated the form by examining the summary of the report in terms of the number of pages, accessibility, and readability and clarity. We assigned a score from 0 to 5 to each of these three elements. The maximum score for this area is 15.

Finally, we evaluated the element of assurance and reliability based on whether the company conducted an internal audit and/or a third-party verification and whether the organisation received awards and acknowledgments for its own reports. In this area, we assigned a score of 0 for the absence of each of the three items and a score of 1 if the item is present. The maximum score for this area is 3.

We represent the quality score of the report by the sum of the scores of the four areas. Therefore, the maximum quality score of a report is 75.

3.4 Independent variables

We obtained the six dimensions of national cultural values from GLOBE (House et al., 2004) and use them as the firms' cultural values. In other words, every firm in the same country will have the same value score. Therefore, we included the following dimensions in our model: performance orientation (PERFORM), assertiveness (ASSERT), institutional collectivism (INST-COL), uncertainty avoidance (UNC-AVD), future orientation (FUTURE), humane orientation (HUMANE). GLOBE researchers measured cultural dimensions in two different ways: cultural practices (the way things are) and values (the way things should be). In this study, we use the practices values which range from a minimum of 1 to a maximum value of 7.

Performance orientation (PERFORM) refers to the degree to which a collective encourages and rewards (and should encourage and reward) group members for performance improvement and excellence.

Assertiveness (ASSERT) can be defined as the degree to which individuals are (and should be) assertive, confrontational, and aggressive in their relationship with others.

Institutional collectivism (INST-COL) represents the degree to which organizational and societal institutional practices encourage and reward (and should encourage and reward) collective distribution of resources and collective action.

Uncertainty avoidance (UNC-AVD) refers to the extent to which a society, organization, or group relies (and should rely) on social norms, rules, and procedures to alleviate unpredictability of future events.

Future orientation (FUTURE) can be explained as the extent to which individuals engage (and should engage) in future-oriented behaviours such as planning, investing in the future, and delaying gratification.

Finally, humane orientation (HUMANE) measures the degree to which a collective encourages and rewards (and should encourage and reward) individuals for being fair, altruistic, generous, caring, and kind to others.

3.5 Control variables

First, we controlled for firm size (SIZE), calculated as the natural logarithm of total assets. Past studies demonstrate the connections between firm size and IR adoption (Frías-Aceituno et al., 2014; Ghani et al., 2018). Then, we included the variable age (AGE), defined as the number of years since the establishment of the company up to the end of 2018, in the regression model as a control for the perceived stability of the firm. We expect that older companies are more likely to have better quality integrated reports than younger companies do.

Moreover, we controlled for return on equity (ROE) because a company's economic performance is a factor that determines the quality of its reports considering that preparing an integrated report has high costs. Companies, depending on their profitability, may allocate more or less resources to the preparation of an integrated report. The firm's location, a dummy variable expressed as (EU), adopted a value of 1 if the company is located in Europe and 0 if otherwise. Environmental sensitivity (ENVSEN) is a dummy variable representing the environmental sensitivity of the industry in which the company operates.

This variable has a value of 1 if the firm's activities have an important impact on the environment. Following Tagesson et al. (2009), Gamerschlag et al. (2011), and Branco and Rodrigues (2008), we considered the following sectors as environmentally sensitive: agriculture, automotive, aviation, chemical, construction, construction materials, energy, energy utilities, forest and paper products, logistics, metal products, mining, railroad, waste management, and water utilities. For the companies operating in other industries, we assigned a value of 0 to this variable.

4. RESULTS

4.1 Descriptive analysis and correlation analysis

The first part of Table 1 provides the descriptive analysis of the variables. The dependent variable, report quality score (IRQUALITY) has a mean value of 56.91, which high quality among the analysed reports on average.

All the six dimensions of national culture have an average value close to 4. We used Pearson rank correlation to explore the relationship between GLOBE dimensions and IR quality. The second part of Table 1 reports the Pearson rank correlation results. There is no indication of an unacceptable level of multicollinearity, as the highest correlation coefficient is 0.776 for future orientation (FUTURE) and uncertainty avoidance (UNC-AVD).

Harmful levels of multicollinearity should not exist until the correlation coefficient reaches ± 0.8 or ± 0.9 (Farrar & Glauber, 1967). Therefore, multicollinearity does not pose a problem in the interpretation of results.

Table 1. Means, standard deviations and correlations †

Variables	Mean	S.D.	IRQUALITY	PERFORM	ASSERT	INST-COL	UNC-AVD	FUTURE	HUMANE	SIZE	AGE	ROE	EU	ENVSEN
IRQUALITY	56.91	7.23	1											
PERFORM	4.25	0.38	-0.259 ***	1										
ASSERT	4.20	0.29	-0.033	0.507 ***	1									
INST-COL	4.40	0.46	-0.124	0.292 ***	0.548 ***	1								
UNC-AVD	4.41	0.54	-0.351 ***	0.620 ***	0.334 ***	0.182 **	1							
FUTURE	4.16	0.50	-0.384 ***	0.830 ***	0.227 ***	0.494 ***	0.776 ***	1						
HUMANE	3.95	0.38	-0.103	0.391 ***	0.266 ***	0.610 ***	0.086	0.512 ***	1					
SIZE	16.13	2.53	0.205 **	0.085	0.075	0.016	0.048	0.026	0.210 **	1				
AGE	59.11	40.31	-0.101	0.096	0.103	0.047	0.189 **	0.174 **	0.005	0.101	1			
ROE	15.74	15.63	-0.210 **	0.111	0.033	0.106	0.172 **	0.181 **	0.220 **	0.101	0.095	1		
EU	0.56	0.49	0.011	0.445 ***	0.187 **	0.477 ***	0.109	0.408 ***	0.687 ***	0.024	0.057	0.023	1	
ENVSEN	0.49	0.50	0.037	0.129	0.069	0.068	0.153 *	0.116	0.052	0.170 **	0.264 ***	0.087	0.043	1

Note: $n = 117$. S.D. = Standard Deviation. † *** = significant at the 1% level; ** = significant at the 5% level; * = significant at the 10% level.

4.2 Multivariate analysis

To test the hypotheses of this study, we conduct linear multiple regression. Table 2 presents the results of the regression between IR quality and GLOBE dimensions. The adjusted R² is 0.264, which indicates that the model can explain about 26.4 per cent of the variance in the dependent variable. This table shows the results of the regression coefficients for all explanatory variables using IRQUALITY as the dependent variable.

The results support Hypothesis 1 (H1). Performance orientation (PERFORM) shows a significantly negative association with the IR quality (IRQUALITY) at $p = 0.096$, suggesting that firms in countries with higher levels of performance orientation are less likely to produce high quality integrated reports.

The results do not support hypothesis 2 (H2). In fact, the findings show a significant and positive association between assertiveness (ASSERT) and IR quality (IRQUALITY) at $p = 0.006$, suggesting that firms in higher assertive countries are more likely to disclose higher quality information in their integrated reports. This is a surprising result that can be explained by the competition deriving from high levels of assertiveness that push managers to disclose higher quality information in relation to the results obtained in order to appear superior than competitors. Therefore, in this perspective, the integrated reporting quality could be seen as a practice of greenwashing.

Institutional collectivism (INST-COL) is significantly and positively associated with IR quality (IRQUALITY) at $p = 0.019$. Accordingly, the results support hypothesis 3 (H3) and suggest that firms in more collectivistic countries are more likely to disclose higher quality information in their integrated reports. Companies operating in more collectivistic societies, guided by values such as harmony, cooperation, loyalty and modesty will be more likely to offer higher quality integrated reports. Additionally, the results support hypothesis 4 (H4). The findings show a significant and positive association between uncertainty avoidance (UNC-AVD) and IR quality (IRQUALITY) at $p = 0.058$, suggesting that firms operating in higher uncertainty avoidance societies characterised by fear of unknown or ambiguous situations, are more likely to disclose higher quality information in their integrated reports.

Then, the results support Hypothesis 5 (H5). In fact, the findings show a significant and negative association between future orientation (FUTURE) and IR quality (IRQUALITY) at $p = 0.002$, suggesting that firms in lower future oriented societies are more likely to disclose higher quality information in their integrated reports. This result can be explained by the timing of the manifestation of the benefits of this type of disclosure. In fact, although the benefits of IR are not as immediate as the costs of preparation, several studies show that they occur in the same or following year after the firm adopts this practice (Lee & Yeo, 2016; Barth et al., 2017; García-Sánchez & Noguera-Gámez, 2017b). Therefore, from this perspective, the focus on short-term conducts to disclose higher quality information.

Finally, humane orientation (HUMANE) is significantly and positively associated with IR quality (IRQUALITY) at $p = 0.092$. Accordingly, the results support hypothesis 6 (H6), suggesting that firms in countries that value the altruism, generosity and fairness will be more likely to provide higher quality integrated reports. It is therefore evident that national culture has a significant influence on corporate disclosure choices, and specifically on the quality of the integrated reports that companies provide.

Table 2. Linear multiple regression results

Variables	Coefficient	Standard error	p-value
Cons	3.970	22.620	0.861
PERFORM	-8.268	4.924	0.096*
ASSERT	15.142	5.389	0.006***
INST-COL	6.773	2.845	0.019**
UNC-AVD	5.361	2.798	0.058*
FUTURE	-13.348	4.112	0.002***
HUMANE	4.292	2.527	0.092*
SIZE	0.888	0.248	0.001***
AGE	-0.020	0.015	0.190
ROE	-0.063	0.038	0.101
EU	-5.007	2.538	0.051*
ENVSEN	0.583	1.257	0.644
N	117		
Adj. R ²	0.264		

*** = significant at the 1% level; ** = significant at the 5% level; * = significant at the 10% level

5. CONCLUSIONS

IR provides a holistic assessment of an organisation in terms of its operations, performance, risks, and opportunities, enabling more sustainable management and guiding the value creation process over time. It integrates the reports that firms previously published separately into a single report that explains the company's ability to generate and maintain value in the short, medium, and long term. However, despite the many benefits of IR (Vitolla et al., 2018), report quality is still a critical factor (Pistoni et al., 2018). This study investigated the influence of the national cultural context on IR quality. Based on GLOBE cultural dimensions, we show that companies operating in countries with a cultural system with less performance orientation, more assertiveness, more institutional-collectivism, more uncertainty avoidance, less future orientation and more humane orientation place a greater emphasis on sustainability issues, ethics, and good governance. Thus, these companies offer higher quality integrated reports.

This study contributes to relevant literature on the factors that influence the quality of IR. The results show that aside from the internal characteristics that previous studies highlight (Bavagnoli et al., 2018), the national culture of the countries in which firms operate also impacts the quality of IR.

The results have important implications, not only for governments and managers, but also for the IIRC. First, policy makers must account for the national culture when they regulate disclosures. The national culture could in fact nullify certain political interventions that aim to regulate different aspects of IR. Second, in the case of internationalisation, managers must account for the culture of the new countries and modify its disclosure strategies to gain acceptance as legitimate actors in the new markets. Third, the IIRC, in developing IR, must consider the specific cultural characteristics of different countries to introduce tools that are global in nature and allow for comparisons between firms, but that are specific to the culture of the country in which the firms operate. In conclusion, future work could extend our results to study the effect of other country-level variables, such as the Worldwide Governance Indicators (WGI), on IR quality.

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