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Abstract

Purpose: This study examines if and to what extent corporate governance characteristics could influence the choice of companies to voluntary publish a sustainability report, an integrated report or both of them.

Design/methodology/approach: Through a multinomial regression analysis, this study tests our arguments in a sample of 2,119 European listed firms that adopt integrated or sustainability reporting or both of them for the period 2015-2018.

Findings: Our results find that sustainability reporting is associated with board size, board independence, board diversity gender, a two tier board structure, CEO duality and the presence of a CSR committee. The adoption of integrated reporting is influenced by board size, board diversity gender, board meeting frequency, a two tier board structure, CEO duality, the presence of an audit, compensation and nomination committees composed by a majority of independent directors, and of a CSR committee. Finally, those companies that adopt both a sustainability and an integrated report are associated with board size, board diversity gender, board meeting frequency and the presence of a CSR committee. Hence, it is possible to note that although these reporting devices share some commonalities, integrated reporting result to be much more articulated, thus requiring more competences, discussion and alignment between management and shareholders' interests.

Research implications/limitations: This study contributes to the literature in two ways. Firstly, it proposes an incremental analysis of the relationship between corporate governance characteristics and voluntary disclosure of integrated reporting. Secondly, the above is examined in a comparative way to the adoption of sustainability reporting.

Practitioner implications: This study provides useful insights for managers and policy makers to better understand which is the board composition that can best encourage a company to pursue a strategy based on sustainable development.

Originality/value: This study offers a unique perspective on the interconnection between corporate governance and non-financial reporting. It is the first study analysing the adoption of integrated and sustainability report, through the eyes of board composition, in a comparative manner.

Keywords: Corporate Governance, Corporate Board, Sustainability Reporting, Integrated Reporting

1. INTRODUCTION

Corporate reporting and corporate governance are closely linked and their respective evolution influences each other. The way in which companies report externally on their activities and performances can be seen as the result of the mindsets and behaviour of those who govern them, namely the board and the management team. By adopting certain strategies, structures and internal procedures, they can also convey messages and diffuse an internal culture that points to a certain direction as opposed to others.

Therefore, it is not surprising that with the expansion of voluntary disclosure, and in particular, of reporting formats other than the traditional financial ones, a growing level of attention has started being paid to the corporate governance determinants that lie behind the decision to adopt these non-financial formats.

At an institutional level, national corporate governance codes have moved towards the recognition and inclusion of this new, non-financial, language.

From an academic viewpoint, many studies, based on several theories such as the agency, stakeholder, resource based-view, legitimation, signaling and the proprietary cost theories, have investigated the corporate governance mechanisms as explanatory factors of different types of disclosure such as the CSR and IC disclosures. However, few studies (Frias Aceituno et al., 2013b; Frias-Aceituno et al., 2014; Melloni et al. 2016, Fiori et al., 2016; Busco et al., 2019; Wang et al. 2019; Velte and Gerwanski, 2020) have so far analysed the influence of corporate governance variables on the adoption of integrated reporting. Even fewer have done so in a comparative way with sustainability report (Jensen and Berg, 2012 have examined the comparison between these two reporting tools from an institutional viewpoint and not from a company's one). This is mainly because integrated report is often conceived as the evolutionary step of sustainability report. However, this is not the case. An integrated report differs from a sustainability report at least in three main respects, purpose, audience and scope. The purpose of an integrated report is to explain financial capital providers how an organization will continue to create value over time, while from a sustainability report perspective, the focus is on communicating the organizational social and environmental impacts as well as its strategies and goals. It derives that the target audience of an integrated report is embodied by providers of financial capital first and then all stakeholders. A sustainability report addresses all stakeholders. Finally, in terms of scope, an integrated report covers strategic, governance, performance aspects with a multi-capital view, a sustainability report is mainly centred on ESG elements. (FAQs, IIRC website, https://integratedreporting.org/faqs/#how-does-an-integrated-report-differ-from-a-sustainability-report).

In order to fill this gap, the aim of this paper is to investigate if and to what extent corporate board characteristics can be a determinant for the adoption of integrated reporting, sustainability reporting or both of them. On the basis of a multinomial logistic regression, we analyse a sample of 2,119 international listed companies that have adopted either an integrated or a sustainability report, or both of them, for the period 2015-2018. Our results demonstrate that, although often conceived as similar, these two reporting tools present significant differences, especially when it comes to corporate boards. Sustainability reporting is associated with board size, board independence, board diversity gender, a two tier board structure, CEO duality and the presence of a CSR committee. The adoption of integrated reporting is influenced by board size, board diversity gender, board meeting frequency, a two tier board structure, CEO duality, the presence of an audit, compensation and nomination committees composed by a majority of independent directors, and of a CSR committee. Finally, those companies that adopt both a sustainability and an integrated report are associated with board size, board diversity gender, board meeting frequency and the presence of a CSR committee. Hence, it is possible to note that although these reporting devices share some commonalities, integrated reporting result to be much more articulated, thus requiring more competences, discussion and alignment between management and shareholders' interests.

This way, our study intends to make several contributions to the literature on non-financial reporting. At first, it complements previous research on the role of corporate governance in influencing the voluntary adoption of integrated reporting, by using new board characteristics such as the structure, the independence, the activity and the diversity. In addition, we extend the findings of previous studies by comparing the role played by certain features of corporate governance in the adoption of integrated reporting with the influence of the same characteristics on the voluntary adoption of sustainability reporting. This way, it offers useful insights for better understanding the existing similarities and differences amongst these two reporting formats.

The paper is organised as follows. Section 2 describes the literature that addresses the corporate governance mechanisms in the remit of corporate social disclosure, intellectual capital and integrated reporting and draws on this literature to formulate the research hypotheses. Section 3 explains the research methodology, the data and sample, while Section 4 discusses the results. Section 5 concludes the work, by illustrating the limitations and suggesting future research paths.

2. THEORY, LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This section provides an overview of the theoretical and empirical literature regarding the linkages between CSR disclosure, intellectual capital disclosure, integrating reporting and corporate governance. The hypothesis are then developed.

2.1. Corporate Governance and CSR Disclosure

In the early 2000s, many scandals in developed markets have increased the attention of academics and practitioners on the CSR disclosure that is considered an instrument to increase the reputation of companies and the CSR awareness (Carroll, 2015). CSR disclosure is interrelated to Corporate Governance on the basis of different theories: agency theory, stakeholder theory and signalling theory. According to the agency theory (Jensen and Meckling, 1976), financial and non financial disclosure cold be used to reduce monitoring and bonding costs. Therefore, CSR disclosure could mitigate the agency problem by monitoring, supervising, and reporting the firm's short-term and long-term interests and goals (Chang et al., 2017).

Contrary to agency theory, under the stakeholder theory, the company communicates to different stakeholders the organization's short-term and long-term vision and strategies in order to have success and survive in the long run. Therefore, the organization's disclosure practices could potentially create value for the society, disclosing for example economic, environmental, social and ethical information to diverse interest groups such as suppliers, creditors, activist groups, the government, the media, customers as well as the general public (Mainardes et al., 2011).

Finally, the signalling theory (Akerlof, 1970) assumes that firms use financial information as a tool to give signals to the market. Sustainability or CSR reports signal to stakeholders and society about corporate governance, financial stability, environmental strategy, CSR implementation, climate change commitment, transparency, and stakeholder engagement (Connelly et al, 2011; Ching and Gerab, 2017). Therefore, these signals could reduce information asymmetry between organizations and their different stakeholders (insiders and outsiders).

Given these premises on the theoretical background, empirical literature review study the influence of board characteristics on the voluntary adoption of CSR disclosure. However, the main findings of these studies are controversial. For example, Lim et al. (2008) find that board size is significantly associated with CSR disclosures, while Razak and Mustapha (2013) show an insignificant relationship between the board size and the CSR disclosure. Many of the recent studies have based only on some specific countries (e.g. Comyns, 2016; Chang et al. 2017; Fernandez et al., 2018; Khan et al., 2019) or the authors do not control for affecting determinants of disclosure, establishing limitations for interpretation results.

2.2. Corporate Governance and Intellectual Capital Disclosure

In addition to ESG factors, corporate governance has demonstrated to be a critical factor in influencing the intellectual capital disclosure (ICD) because the management can determine the level of disclosure, thus reducing investor's uncertainty about the impact of intellectual capital on the firms'value. However, as compared to the CSR strand of literature, few empirical studies have investigated the association between corporate board characteristics and IC disclosure (Cerbioni and Parbonetti, 2007; Li et al., 2008; Abeysekera, 2010; Hidalgo et al., 2011; Rashid et al., 2012; Muttakin et al., 2015; Baldini and Liberatore, 2016; Rodrigues et al., 2016; Tejedo-Romero et al., 2017, Nadeem, 2019).

In the European context, Cerbioni and Parbonetti first (2007) and Li et al. (2008) after, found that some of them can influence the disclosure (in terms of quantity and/or quality) of intellectual capital. Identifying a sample of 54 European biotechnology firms listed on the stock market of a European country, Cerbioni and Parbonetti (2007) have analysed the impact of a company's board size, composition (in terms of proportion of independent outside directors), CEO duality and board structure on the type and amount of intellectual capital an organisation discloses. The examination is conducted on their Operating Financial Reviews in the period from 2002 and 2014 (included). Evidence demonstrates that board structure, CEO duality and size are negatively correlated to disclosure, while the proportion of independent directors is positively associated. However, in terms of quality of the disclosure, it is found that the presence of independent directors affects only information on internal capital. This is not the case for the disclosure of forward-looking information and bad news. Li et al. (2008) have examined if and how the corporate governance characteristics of 100 UK firms listed on the London Stock Exchange and belonging to seven intellectual capital-intensive industries can influence intellectual capital disclosure in annual reports. The time period is for financial year-ends between March 2004 and February 2005. Taking into consideration five characteristics (board composition in terms of proportion of independent non-executive directors, role duality – where the same person undertakes both the role of chief executive and chairman –, ownership structure/share concentration, audit committee size and frequency of meetings, they observe that role duality is not found to influence intellectual capital disclosure and that share ownership concentration is negatively associated to it, this meaning that in the presence of dominant shareholders there is less pressure for the reporting of this type of information. The other three variables are found to be significantly and positively associated. As for the influence that corporate governance mechanisms have on the disclosure on the three sub-categories of intellectual capital, human, structural/organisational, and relational, it results that the presence of independent non-executive directors results in the disclosure of more information related to human, structural and relational capitals, while the presence of block shareholders appears to lead to more disclosure on relational capital. In Italy, Baldini and Liberatore (2016) study the association between some corporate governance internal mechanisms and the level of ICD in general and of its main components, investigating the annual reports of 172 listed companies at 31st December 2010. Their findings indicated that only board size and board independence have a significant positive effect on ICD. In Portugal, Rodrigues et al. (2016) explore the influence of boards of directors on the voluntary disclosure of information concerning intellectual capital of 15 listed companies over a period of five years during the Portuguese financial crisis. In analysing IC disclosure in annual, sustainability and integrated reports, they find that it remains constant even during this particular time. More specifically, it increases with dual corporate governance models and with a larger board size up to a maximum point (thus confirming a quadratic relationship), but is reduced by CEO duality and by a higher proportion of independent directors on boards. The presence of women on the board is not found to be statistically significant. In Spain, Tejedo-Romero et al. (2017), analysing the annual reports of 35 listed companies over a period of five years, examine the effect of the board size, board independence and CEO duality on ICD. Their results find that board size and CEO/Chairman separation are positively affecting ICD. Conversely, board independence has negative effect on the ICD.

In developing countries, Abeysekera (2010) explores the influence of board size on six types of ICD, conducting this analysis on the annual reports of 26 Kenyan listed companies in 2002 and 2003. They demonstrate that the firms disclosing more tactical internal capital and strategic human capital have larger boards. The positive impact of board size on the ICD disclosure is also confirmed in the Mexican context by the study of Hidalgo et al. (2011). In contrast, they find no association between the CEO duality and independence of the Board and the ICD. In Malaysia, the research of Rashid et al. (2012) investigates the board factors influencing the disclosure of intellectual capital information in an IPO prospectus. Their results provide evidence that the board size and board independence impact positively on the IC disclosure score. Finally, in an emerging country such as Bangladesh, the research of Muttakin et al. (2015) confirms that the independence of directors increases the quantity of disclosure.

In relation to gender diversity, some academics (i.e. Nadeem, 2019) have explored, in detail, the relationship between the presence of the woman in the board and the ICD, demonstrating that several chacteristics of woman can influence companies to improve the disclosure in order to meet the needs of different type stakeholders.

2.3. Corporate Governance and Integrated Reporting

Despite the inherent link that exists between corporate governance and integrated reporting, to date only a peripheral number of studies have investigated which are the board characteristics that can act as determinants of the voluntary adoption and, or the quality, of integrated reporting.

As for the former, Frias-Aceituno et al. (2013b) analysed a sample of 568 companies from 15 countries, for the period 2008 - 2010. They argue that some board characteristics (board size, board diversity, the composition of the board) in reducing the information asymmetries between managers and stakeholders, can impact on the decision to disclose integrated information. The results of this study show that only board size and board gender diversity have a role in the decision of companies to publish the integrated reporting. The same results are confirmed by a later study by Fiori et al. (2016) that examines only the firms partecipating in the IIRC Pilot Programme in 2011. Also Alfiero et al. (2017) in focusing on the European setting observed that in a sample of 1,047 companies adopting this reporting tool in 2015 board size, the presence of women and an average age of 55 years of board members are positively associated. Girella et al. (2019) extend the latter works analysing the companies considered <IR> Reporters by the IIRC according to the <IR> Examples Databases. However, they found that only the size of the board is a determinant, whilst the presence of women and of independent directors are not.

In the impression management strategies literature, Melloni et al. (2016) and Busco et al (2019), adopting a manual content analysis and a statistical investigation of all the reports identified as emerging practices in the IIRC Examples Database and in the Stoxx Europe 600 Index for the period 2002 - 2015, document, respectively, the drivers of the tone of business models and the different levels of information integration. In the first study, the authors find that bigger boards influence the positive tone of business model disclosure, thus decreasing the reports' trasparency and increasing the possible manipulation of information by management. The presence of independent members in the auditing committees is not significantly associated. The results of the second study confirm that only board size influences the levels of integration, the frequencies of meetings and the independence of the boards do not.

Moving to the quality of the reports, Wang et al. (2019), integrating economic-based and socio-political theories, investigate the relationship with traditional and sustainability-oriented corporate governance mechanisms and the credibility of integrated reporting in the South African context. Their results show that traditional corporate governance measures such as the quality of the board and the audit committee (intended as a composite score of independence, diligence, size and expertise of both) have a lower impact than the presence of a high quality sustainability committee and non-financial performance measures in executive compensation. In an international sample of 134 firms selected from the Leading Practices and the <IR> Reporters section of the IIRC Examples Database Vitolla et al. (2019) found that size, independence, gender diversity and activity of the board determines a high quality of the documents, whilst the presence of a CSR committee does not.

2.3. Hypotheses Development

On the basis of the above literature review, the following hypothesis are developed.

Board Size

Board size is considered as one of the main determinants of board effectiveness (Lee and Chen, 2011; Amran et al., 2014). A larger board is more efficient with respect to smaller boards, but it is less effective due to the communication and coordination problems. However, the presence of different expertise and experience in a larger board can increase the quality and quantity of disclosure, reducying the information gap between managers and stakeholders (Akhtaruddin et al., 2009). The existing empirical literature provides a controversial association between board size and CSR disclosure. For example, some studies provide a significant positive relationship between board size and CSD (Veronica Siregar and Bachtiar Y, 2010; Ahmed Haji, 2013; Giannarakis, 2013; Giannarakis, 2014a; Barakat et al., 2015; Majeed et al., 2015; Supriyono et al., 2015; Alotaibi and Hussainey, 2016; Javaid Lone et al., 2016). In contrast, the studies of Razak and Mustapha (2013), Kiliç et al. (2015), Deschênes et al. (2015) and Ling and Sultana (2015) find insignificant and positive impacts of board size on CSR Disclosure. Relating to the voluntary adoption of IC disclosure, the main results of the literature review (Cerbioni and Parbonetti, 2007; Abeysekera, 2010; Hidalgo et al., 2011; Rashid et al., 2012; Baldini and Liberatore, 2016; Rodrigues et al., 2016; Tejedo-Romero et al., 2017) demonstrate that the larger board has a positive and significant effects on IC disclosure. These findings are also confirmed by the researches about Integrated Reporting (Frias-Aceituno et al., 2013b; Fiori et al., 2016; Melloni et al., 2015; Girella et al., 2019; Busco et al., 2019). Hence, we hypothesize that the board size is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting:

H_1: The board size is positively associated with the voluntary adoption of Sustainability Reporting and Integrating Reporting.

Board Activity

Sustainability problems are very important matters to discuss during the board meeting in order to protect the shareholder and stakeholder from social and environmental problems. But, there is no evidence for the significant association between the number of board meetings and CSR disclosure. For example, some academics find an insignificant positive and negative association between frequency of board meetings and CSR Disclosure (Giannarakis, 2013; Ahmed Haji, 2013; Giannarakis, 2014a, 2014b; Alotaibi and Hussainey, 2016). This result is in contrast with the findings of Rodrigues et al. (2016) about IC disclosure and the results of Melloni et al. (2016) and Busco et al. (2019) relating to the business model disclosure in Integrated Reporting. Hence, we hypothesize that the board activity is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting:

H_2: The frequency of board meetings is positively associated with the voluntary adoption of Sustainability Reporting and Integrating Reporting

Board Composition

The composition of the board can influence the effectiveness of the board reducying the agency problems (Akhtaruddin et al., 2009). The presence of non executive directors (NEDs) assure the supervision of the activity of executive directors against the interests of stakeholders (Jensen and Meckling, 1976) and increasing the trasparency.

Some studies find a significant positive and negative relationship between non executive directors (NEDs) and CSR disclosure (Haniffa and Cooke, 2005; Lim et al., 2008: Khan et al., 2013; D.Sundarasen et al., 2016). In contrast, few studies provide no association between NEDs and CSR disclosure (Haniffa and Cooke, 2002; Cullen and Christopher, 2002). The studies about IC disclosure (Cerbioni and Parbonetti, 2007; Li et al., 2008; Rashid et al., 2012; Muttakin et al., 2015; Rodrigues et al., 2016; Romero et al., 2017) provide evidence that the IC disclosure is reduced by a higher proportion of independent directors on boards. In contrast to these results, the literature review of Integrated Reporting (Frias-Aceituno et al., 2013b; Fiori et al., 2016; Girella et al., 2019; Busco et al., 2019) finds no association between the board independence and the voluntary adoption of Integrated Reporting. However, we hypothesize that board independence is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting:

H_3: The presence of non-executive directors is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting.

Board Gender Diversity

Board diversity refers to different several personal characteristics, but one of the most studied by the empirical researches is gender diversity. The woman directors are more participative, democratic and communal than men (Bear et al., 2010). Due to the different skills and knowledge in respect to men, the woman directors are more sensitive to ethical issues, sustainability matters and charitable giving. Therefore, the presence of woman in the board can increase the possibility to satisfy the needs of different stakeholders. However, the main empirical results are contractidory. For example, Giannarakis (2014a), Ibrahim and Hanefah (2016) and Javaid Loneetal (2016) find a significant relation between women directors on the board and CSR disclosure, whereas some authors provide insignificant impact of femal directors on CSR disclosure (Khan et al., 2013; Giannarakis, 2014a; Giannarakis,2014b; D. Sundarasen et al., 2016). The relevance of board gender in influencing the voluntary disclosure is also confirmed by the results of the studies of Rodrigues et al. (2016), Tejedo-Romero et al. (2017) and Nadeem (2019). Relating to the voluntary adoption of Integrated Reporting, Frias-Aceituno et al. (2013) and Fiori et al. (2016), confirm the positive association with gender diversity. Hence, we hypothesize that gender diversity has a positive impact on the voluntary adoption of Sustainability Reporting and Integrated Reporting.

H_4: The presence of the woman on the board is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting.

CEO duality

According to agency theory, CEO duality increases the concentration of managerial power and leads to opportunistic behavior (Fama and Jensen, 1983). Therefore, the CEO duality increases the agency costs and restrict the voluntary disclosure, also regarding the CSR disclosure. However, the empirical researches about CEO duality and CSR disclosure are inconclusive. Some studies find that CEO duality is negatively associated with CSR disclosure (Giannarakis, 2014b; Ling and Sultana, 2015; D.Sundarasen et al., 2016). A possible justification of these results is that the separation between Chairman and CEO helps to take decisions considering the needs of different stakeholder such as communicate environmental, social and ethical information (Michelon and Parbonetti, 2012; Lau et al., 2016). On the contrary, other studies (Al-Janadi et al., 2013), evidence a positive relationship between CEO and CSR disclosure in order to increase their reputation and to maximize their remunerations. The main findings of IC studies (Cerbioni and Parbonetti, 2007; Li et al., 2008; Hidalgo et al., 2011; Rodrigues et al., 2017, Romero et al. 2017) confirm that the separation of roles increases the disclosure. No studies about the voluntary adoption of Integrated Reporting investigate the association of this new reporting with the CEO duality. On the basis of the theoretical background and the results of the empirical studies about different types of disclosure (CSR and IC disclosure), we hypothesize that the CEO duality negatively influences the voluntary adoption of Sustainability Reporting and Integrated Reporting:

H_5: The CEO duality is negatively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting.

Board committees

The board committees comprise the nomination, the compensation and the audit committee. The nomination committee is a mechanism to ensure the board effectiveness, the audit committee operates as a monitoring mechanism to give the possibility of minority shareholders to advocate a nominee. The compensation committee plays a role key in aligning the management's and the shareholders' interests, establishing the remuneration mechanisms. In addition, the audit committee operates as a monitoring mechanism to control the dominance of the board by the executive and the insider. Empirical studies confirm the positive association between the presence of find evidence that the presence of the audit, compensation and nomination committees and the voluntary disclosure (O'Sullivan et al. 2008; Michelon and Parbonetti, 2012; Allegrini and Greco, 2013). However, few studies in CSR reporting (Said et al., 2009) find a positive association between the presence of audit committee and CSR disclosure. This is due to the presence of an audit committee helps to reduce accounting fraud and manipulation. Relating to the IC disclosure, Cerbioni and Parbonetti (2007) find a negative association between the board structure and the IC disclosure.

No previous studies about Integrated Reporting analyse the association between these boards and the voluntary adoption of the new reporting. However, we expect that:

H_6: The presence of audit, nomination and compensation committees, composed by independent directors, is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting.

Board Structure

Although not deeply investigated in the sustainability and in the integrated reporting literature, the board structure type in terms of presence of one-tier or two-tier board can represent a fundamental mechanism for determining the uptake of a voluntary reporting tool. Amongst the few available studies on the topic, Dienes and Velte (2016) have observed that in a country characterised by a two-tier system, as Germany is, only the presence of women on the supervisory board have an impact on the intensity of CSR reporting. This is similar to organisations located in one-tier system countries. Other corporate governance variables examined such as the presence of at least one financial expert and a former manager, the number of board meetings and board size have found to have no influence.

$H_{7:}$ The presence of a two-tier board is positively associated with the voluntary adoption of Sustainability Reporting and Integrated Reporting.

CSR committee

The presence of CSR committee indicates that the company take into consideration the sustainability issues, reducing the conflict of interest between the manager and stakeholders. Based on stakeholder theory, Michelon and Parbonetti (2012) underline that the existence of a CSR committee ensures the stakeholder's engagement process and the quality of CSR disclosure. Previous studies find a positive relationship between the presence of CSR committee and the CSR disclosure (Ienciu, 2012; Michelon and Parbonetti, 2012; Amran et al., 2014). In the Integrated Reporting literature review, Wang et al. (2019), the CSR committee is associated positively to the quality and assurance of Integrated Reports. This leads to our fifth hypothesis:

H_8: The presence of the CSR committee is positively associated with the voluntary adoption of sustainability and integrated reporting.

3. Research design

3.1 Sample selection and data collection

In order to analyse the voluntary adoption of several types of reporting (sustainability reporting, integrating reporting or both sustainability and integrated reporting) by European companies, this paper examined the Eurostoxx 600. The study is based on integrated and/or sustainability reports published between 2015 and 2018. The time frame is chosen because the International Integrated Reporting Framework (IRF) was published for the first time in 2013, but we excluded the first year of the IRF application (2014). The information on whether a company discloses an integrated report was collected via the <IR> Examples Database, <IR> Reporters section. The information on whether a company discloses a sustainability report was collected through the sustainability disclosure database administered by the GRI in lines with the previous studies (Jensen and Berg, 2012; García-Sánchez et al., 2013; Sierra-García et al., 2015; Vaz et al., 2016). When data was not available or unclear in the above databases, we manually checked on the organisation's websites. The list of resulting companies were then cross-referenced to understand whether a company publish both an integrated and a sustainability report. The initial sample is composed by 2,400 observations (700 firm's observation by each year of analysis). After the deletion of missing data values for the independent variables, the sample consists of 486 observations (with 62 integrated reports) in 2015, 508 observations (with 66 integrated reports) in 2016, 546 observations (with 68 integrated reports) in 2017, 579 observations (with 75 integrated reports) in 2018. The economic and corporate governance data related to the independent variables are collected, respectively, by Datastream and Thomson Reuters Asset 4, while the country variables are retrieved from the World Bank open database.

Table I reports the country distribution. It shows that companies located in the UK (22%) and France (15%) disclose proportionally the highest number of sustainability reports. The companies located in the UK (20%), Netherlands (20%) and France (15%) disclose proportionally the highest number of integrated reports. Finally companies located in the UK (46%), Switzerland (14%) and Italy (14%) publish the highest number of both integrated reports and sustainability reports.

Table II presents the sector distribution showing that industrial, financial and consumer discretionary's ones disclose the highest number of sustainability and integrated reports and both the types of reports in the sample.

[Insert Table I and Table II About Here]

3.1. Regression Models

The regression analysis builds on a multinomial logistic regression in order to evaluate the probability for each firm to develop an integrated report or a sustainability report or both of them, considering the above described independent variables related to board characteristics.

Applicating this model to our data, we obtained the following three equations:

$$Log\left(\frac{P(1)}{P(0)}\right) = \beta_0 + + \ \beta_1(board\ size)_i + \beta_2\ (board\ meeting\ frequency)_i + \beta_3\ (board\ diversity\ gender)_i + \beta_4(board\ indipendence)_i + \beta_5(CEO\ Duality = 1)_i + \beta_6\ (indepcom = 1)_i + \beta\,_7(Board\ Structure\ Type = 1{,}2{,}3)_i + \beta_8(CSR\ committee)_i + \beta_9(size)_i + \beta_{10}(ROA)_i + \beta_{11}(leverage)_i + \beta_{12}(market\ to\ book\ value)_i + \beta_{13}(COMMON)i + \beta_{14}\ (LEGAL\ RIGHT)i + \beta_{15}(DISCSC)i + \beta_{16}(YEAR\ 2015)i + \beta_{17}(YEAR\ 2016)i + \beta_{18}(YEAR\ 2017)i + \beta_{19}(YEAR\ 2018)i + \varepsilon_{i.}$$

$$Log\left(\frac{P(2)}{P(0)}\right) = \beta_0 + \ \beta_1(board\ size)_i + \ \beta_2(board\ meeting\ frequency)_i + \beta_3\ (board\ diversity\ gender)_i + \beta_4(board\ indipendence\ )_i + \ \beta_5(CEO\ Duality = 1)_i + \beta_6(indepcom = 1)_i + \beta_7(CSR\ committee)_i + \ \beta_8(\ Baord\ Structure\ Type = 1{,}2{,}3)_i + \ \beta_9(size)_i + \beta_{10}(ROA)_i + \beta_{11}(leverage)_i + \beta_{12}(\ market\ to\ book\ value)_i + \beta_{12}(market\ to\ book\ value)_i + \mathrm{\beta}_{13}(COMMON)\mathrm{i} + \mathrm{\beta}_{14}(LEGAL\ RIGHT)\mathrm{i} + \ \mathrm{\beta}_{15}(\mathrm{DISCSC})\mathrm{i} + \ \mathrm{\beta}_{16}(\mathrm{YEAR\ 2015})\mathrm{i}\ \beta_{17}(YEAR\ 2016\ )i + \beta_{18}(YEAR\ 2017)i + \beta_{19}(YEAR\ 2018)i + \varepsilon_{i.}$$

$$Log\left(\frac{P(3)}{P(0)}\right) = \beta_0 + \ \beta_1(board\ size)_i + \ \beta_2(board\ meeting\ frequency)_i + \beta_3\ (board\ diversity\ gender)_i + \beta_4(board\ indipendence)_i + \ \beta_5(CEO\ Duality = 1)_i + \beta_6(indepcom = 1)_i + \beta_7(CSR\ committee)_i + \ \beta_8(Baord\ Structure\ Type = 1{,}2{,}3\ )_i + \ \beta_9(size)_i + \beta_{10}(ROA)_i + \beta_{11}(leverage)_i + \beta_{12}(market\ to\ book\ value)_i + \mathrm{\beta}_{13}(\ COMMON)\mathrm{i} + \mathrm{\beta}_{14}(LEGAL\ RIGHT)\mathrm{i} + \ \mathrm{\beta}_{15}(\mathrm{DISCSC})\mathrm{i} + \ \mathrm{\beta}_{16}(\mathrm{YEAR\ 2015})\mathrm{i}\ \beta_{17}(\ YEAR\ 2016)i + \beta_{18}(YEAR\ 2017)i + \beta_{19}(YEAR\ 2018)i + \varepsilon_{i.}$$

The dependent variable is represented by a categorial variable that takes value 0 if a firm presents an annual report (AN), 1 if a firm presents only a sustainability report in addition to the annual report (SR), and 2 if a firm develops only an integrated report (IR) (Jensen et al., 2013; Sanchez et al., 2013, Frias-Aceituno et al., 2013a, Frias Aceituno et al., 2014) and 3 if a firm develops both an integrated report (IR) and a sustainability report (SR). As independent variables, we focus on eight main variables. Some of them, namely board size, board activity, board diversity gender, board independence and CEO duality, have already been used by previous studies to examine the association between corporate governance and integrated reporting (Alfiero et al., 2018; Fasan and Mio, 2017; Girella et al., 2019). Others have been much more used in the investigation of the adoption of sustainability reporting, but not yet in the integrated reporting one (Haji and Anifowose, Velte, 2018 and Wang et al., 2019 have in fact used these variables to investigate the quality of integrated reporting). These are board committee and CSR committee. The variable board size is measured as the total number of board members, the variable board frequency meeting is measured as the total number of meetings held in a year, the variable board gender diversity is measured as the percentage of female directors on the board, the variable board independence is measured as the number of independent directors on the board (i.e. Frias Aceituno et al.2013a, Fiori et al. 2016, Girella et al., 2019). CEO duality is a dummy variable that equals 0 if the chairman and the CEO are embodied by the same person, otherwise 1 (i.e. Adel et al., 2019). The variable independent committee is a dummy variable with the value of 1 if a company has the audit, compensation and nomination committees composed by a majority of independent directors (Cerbioni and Parbonetti, 2007; Allegrini and Greco, 2013). Board structure type is a nominal variable with the value of 1 if the company has a unitary board, the value of 2 if the company has a two-tier board and the value of 3 if the company has a mixed board. CSR committee is a dummy variable with the value of 1 if a company has a board- CSR committee and 0 otherwise (i.e. Said et al., 2009).

As control variables, following previous studies, we selected the following firms determinants of voluntary adoption of sustainability and integrated reporting (Girella et al., 2019; Lai et al., 2016; Melloni, 2015): size, roa, leverage, market to book ratio and environmental sensitivity. The variable Size is measured by the natural logarithm of total asset, the variable ROA is measured by the return on assets and the variable, Leverage is measured by the debt to asset ratio (Lai et al., 2016). Market to book ratio represents the growth opportunities (Frías-Aceituno et al., 2013a; Frias-Aceituno et al., 2013b, 2014; Lai et al., 2016). The legal framework of the country of residence is taken into account through a dummy variable (Common Law) that equals one for all the firm-year observations operating in a common law country. To test the investor protection exerted by the existing disclosures, the disclosure score provided by the World Bank (DISCSC) is included and measures to which extent investors receive information on ownership and financial data on a scale ranging from zero to ten. To test the strength of the legal right, the variable legal right provided by the World Bank is included. It measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 12, with higher scores indicating that these laws are better designed to expand access to credit. To control for time effects, control variables for 2015, 2016, 2017 and 2018 are included (YEAR2015, YEAR2016, YEAR2017 and YEAR2018). The firm-specific continuous variables are winsorized on a one percent level in line with prior accounting literature about IR (de Villiers and Ma, 2017; Jin et al., 2011).

3.2. Descriptive statistics

Table III provides an overview of the descriptive statistics based on the final sample distinguishing between companies disclosing annual report, sustainability report, integrated report and both sustainability and integrated reports. This table shows the means, standard deviations, minimum and maximum of all the continuous and categorial variables. Considering the total sample, the mean value of board size is 11.03 ± 3.853, while the percentage of female members in the board is 29% ± 11%. The mean value of the number of board meeting is 8.8 ± 3,537 on average. The percentage of the independent members is 63% ± 24%. As for firm's control variables, the mean value of companies' size is 6,6, ROA 5.52, leverage 1.04 and market-to-book ratio 3.1.

Companies disclosing an integrated report are on average characterized by a higher percentage of women in the board, meet more frequently and have an highest number of independent members. With regards to financial characteristics of companies, the size tend to be similar over the period amongst the three groups, while the ROA, leverage and market to book ratio of those issuing an integrated report tend to be higher. Furthermore, integrated reports seem to be disclosed especially in code law countries with lower strength of legal rights and higher investor protection through existing disclosures.

[Insert Table III About Here]

4. RESULTS AND DISCUSSION

The multinomial logistic regression (Table IV) registers several significances.

[Insert Table IV About Here]

Board size has a positive and significant association when the companies publish the integrated report and both the types of report ($\beta_1 = 0.055$ and $p = 0.099$ for SR, $\beta_1 = 0.066$ and $p = 0.001$ for IR, $\beta_1 = 0.095$ and $p = 0.005$ for IR and SR). It indicates that the publication of sustainability reporting and integrated reporting is influenced by having more directors sitting on the board. Therefore, H_1 is supported. The findings of previous works about CSR disclosure (i.e. Javaid Lone et al., 2016), IC disclosure (i.e. Tejedo-Romero et al., 2017) and integrated reporting (i.e. Busco et al., 2019) confirm this result. Larger board with different skills and competences tends to promote an internal culture towards the disclosure of a set of discretionary information as non-financial one still are. However, the coefficient of board size related to the adoption of integrated reporting is higher than the coefficient of board size regarding to the adoption of sustainability reporting, confirming that a larger board can rely on more expertise and experience in order to understand the complexity of several types of information that should be included in the integrated report, such as the description of the different classes of capitals, the business model or strategic assets.

The board meeting frequency has a statistical significance when the companies publish only the integrated reporting or both the reports. (β_2= 0.041, p = 0.114 for SR; β_2= 0.051, p = 0.000 for IR; β_3= 0.075, p = 0.000 for IR and SR), suggesting that the number of meetings of the board influences the adoption of both types of reporting. Therefore, H_2 is confirmed. Also in this case the coefficient is higher in relation to integrated reporting. This result is consistent with the studies by Rodrigues et al. (2016) about IC disclosure, Melloni et al. (2016) and Busco et al. (2019) about integrated reporting. As previously indicated, it seems that the content of this type of reporting requires more time for the discussion, and consequently, more frequent meetings of the board in order to better monitor the information to be disclosed.

Also the variable on board gender diversity is positively and significantly associated with the voluntary adoption of integrated reporting (β_3= 7.2019, p = 0.000), sustainability reporting (β_3= 4.216, p = 0.000) and both the reports (β_3= 5.423, p = 0.000) although its impact is lower in the case of an integrated report. Therefore, H_3 is supported. Empirical evidences about CSR disclosure (i.e. Javaid Loneetal, 2016), IC disclosure (Nadeem, 2019) and integrated reporting (Fiori et al., 2016) provide similar results. The presence of the woman in the board, thanks to their different ethical, socialization and networking skills, can connect the firms to a broader range of stakeholders and, thus enhancing transparency and increasing the information environment. For this reason, the coefficient of the board diversity related to integrated reporting is higher than the same coefficient referring to the sustainability report.

In taking into account board indipendence, the log odds register a negative and significant value for the sustainability report (β_4= -0.74255, p = 0.001), but it does not result to be significant for integrated reporting (β_4= - 0.438, p = 0.403) and integrated reporting and sustainability reporting (β_4= - 0.421, p = 0.269). This implies that the independent director does not sufficiently motivate companies to publish integrated reporting and to reveal more useful information to external stakeholders. Therefore, H4 is not supported. The negative association of board indipendence with the sustainability reporting could be justified by a substitution effect because stakeholders have trust in the presence of independent directors in the board and so they require less information. This is in line with the findings of Haniffa and Cooke (2005).

The dummy variable related to CEO duality registers negative and significant log odds values for companies that publish sustainability only and integrated report only (SR: β_5= -0.486, p = 0.001; IR: β_5=-0.518, p = 0.001). It implies that when the CEO serves also as chairperson this influences negatively the voluntary adoption of non-financial reporting types. Therefore, H_5 is supported. This result is in line with the empirical studies about CSR Disclosure (i.e. D.Sundarasen et al., 2016) and about IC Disclosure (i.e. Cerbioni and Parbonetti, 2007). One possible explanation of this is that the CEO duality could affect the efficiency of the board because it is associated with opportunistic behaviors, which can lead to serve personal interests, elaborating and publishing low quality information.

With regard to the variable indepcom, it is positively and significantly associated with the integrated report (β_6= 0.246, p = 0.002), while it is negative and not associated with the sustainability report (β_6= -0,058, p = 0.379) and negative and not associated with the sustainability and integrated reporting (β_6= -0,0276, p = 0.436). It means that the composition of the board influences the voluntary adoption of integrated reporting. Therefore, H_6 is partially supported. The positive association between the presence of audit committee, nomination committee, compensation committee, composed by independent directors, and the voluntary adoption of integrated reporting is in line with the observations of Allegrini and Greco (2013), but it is in contrast with the results of Cerbioni and Parbonetti (2007). It indicates that the board structure aligns the interests of management with those of minority shareholders and stakeholders, reducing the agency costs and enhancing the quality and quantity of the disclosure.

As for the type of board structure, our analysis evidences a positive and significant association between the two tier system and the voluntary adoption of sustainability and integrated reporting (SR: β_7= 1,329419 p = 0.000; IR: β_7= 0,854 p = 0.000). This variable is not significant when companies publish both sustainability and integrated reports.

The presence of a CSR committee is positively and significantly related to the sustainability reporting and integrated reporting and both the reports (SR: β_8= 1,840= 0.000; IR: β_8= 1,551 p = 0.000; IR and SR: β_8 = 1,943 p = 0.000). This indicates that the presence of the CSR committee has an effect on the publication of sustainability reporting and integrated reporting. Therefore, H_7 is supported. In line with previous studies about IC disclosure (i.e.

Michelon and Parbonetti, 2012) and IR (Wang et al., 2019), this result suggests that companies with more effective sustainability-oriented governance mechanisms are more likely to increase the quantity and the quality of the CSR disclosure in order to respect the stakeholders' expectations. The role of this committee is vital when the company would like publish an integrated reporting because this board has the expertise to be more effective in monitoring the quality and credibility of integrated reporting.

Amongst control variables, size registers positive and significant log odds values in both sustainability and integrated report; integrated report value is higher than sustainability report value and ROA, leverage and market to book ratio are not significant for sustainability and integrated reporting. The country variables are not significants in all models.

Similarly, the results of the base models with the additional inclusion of sector and continent fixed effects show that these are not significant.

[Insert Table IV About Here]

5. CONCLUSIONS

The aim of this paper has been to investigate if and to what extent board characteristics can be seen as determinants of voluntary adoption of integrating reporting, as compared with the voluntary adoption of sustainability reporting.

The results support the hypothesis that both traditional corporate governance mechanisms (board size, board activity, board diversity gender, CEO duality) and innovative governance mechanism (nominations, audit and compensation committee, CSR Sustainability Committee) can influence the voluntary adoption of integrated reporting. In particular, larger board size, board activity, and the presence of a nominations, auditing and compensation committee composed by independent directors have a more significant influence on the voluntary adoption of integrated reporting with respect to sustainability reporting.

As for practical implication, our results suggest good and distinctive corporate governance practices that the company could follow to implement integrated reporting as compared to sustainability reporting. As for policy implications, the results indicate that the presence of diversity on the board and the existence of sustainability/CSR committee has a significant positive impact of the voluntary adoption of integrated reporting, regulators may opt for mandating the formation of a sustainability/CSR committee and for promoting diversity on the board of directors.

Our study has a number of limitations, which could offer some indications for future research. Firstly, the sample is composed only by European and listed companies, therefore our findings may not be generalizable to international and small and medium companies. Secondly, sustainability reports are manly referred to as those included in the GRI database. Thus, reports following SASB standards are not explicitly considered. Further research could clearly distinguish in the sample, organisations following GRI and/or SASB standards. Finally, we have not considered all independent variables suggested by the literature on board characteristics, such as the board age and the board skills (Kanageretnam et al., 2007). These variables could be analyzed in future research.

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Table I – Country Distribution

	Total Sample		Annual Report		Sustainability Report		Integrated report		Sustainability Report and Integrated Report	
	N.Observations	%	N.Observations	%	N.Observations	%	N.Observations	%	N.Observations	%
AUSTRIA	34	2%	1	1%	33	2%				
BELGIUM	58	3%	10	7%	44	3%	4	3%		
DENMARK	85	4%	4	3%	77	5%	4	3%	4	3%
FINLAND	60	3%	1	1%	53	3%	2	1%	4	3%
FRANCE	285	14%	4	3%	255	15%	22	15%	5	4%
GERMANY	240	12%	17	12%	211	13%	7	5%		
IRELAND	43	2%	6	4%	37	2%		0%		
ITALY	91	4%	12	9%	51	3%	11	7%	17	14%
LUXEMBOURG	26	1%	8	6%	14	1%	3	2%	1	1%
NETHERLANDS	116	6%	15	11%	72	4%	29	20%		
NORWAY	52	2%	3	2%	49	3%		0%		
POLAND	24	1%	4	3%	16	1%	2	1%	2	2%
PORTUGAL	12	1%		0%	12	1%		0%		
SPAIN	98	5%	6	4%	72	4%	12	8%	8	7%
SWEDEN	190	9%	13	9%	161	10%	10	7%	6	5%
SWITZERLAND	197	9%	15	11%	153	9%	12	8%	17	14%
UK	472	23%	19	14%	369	22%	29	20%	55	46%
Total	2083	100%	138	100%	1679	100%	147	100%	119	100%

Table II – Sector Distribution

	Total Sample		Annual Report		Sustainability Report		Integrated Report		Sustainability Report and integrated Report	
	N.Observations	%	N.Observations	%	N.Observations	%	N.Observations	%	N.Observations	%
Basic Materials	166	8%	8	6%	132	8%	15	10%	11	9,24%
Consumer Discretionary	273	13%	20	14%	221	13%	18	12%	14	11,76%
Consumer Staples	168	8%	9	7%	132	8%	15	10%	12	10,08%
Energy	72	3%	3	2%	62	4%	1	1%	6	5,04%
Financials	370	18%	30	22%	298	18%	28	19%	14	11,76%
Health Care	196	9%	21	15%	148	9%	14	10%	13	10,92%
Industrials	427	21%	19	14%	356	21%	28	19%	24	20,17%
Real Estate	124	6%	11	8%	99	6%	9	6%	5	4,20%
Technology	95	5%	6	4%	78	5%	6	4%	5	4,20%
Telecommunications	84	4%	7	5%	65	4%	8	5%	4	3,36%
Utilities	107	5%	4	3%	87	5%	5	3%	11	9,24%
Total	2082	100%	138	100%	1.678	100%	147	100%	119	100%

TABLE III – Descriptive statistics by types of report

	Total Sample				Annual Report				Sustainability Report			
	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max
BOARD SIZE	11,03	3,85	-	25,00	8,82	4,30	-	21,00	11,23	3,83	3,00	25,00
BRD DIVERSITY GENDER	0,30	0,11	-	0,67	0,26	0,13	-	0,55	0,30	0,11	-	0,64
BOARD MEETING FREQUENCY	8,80	3,54	-	43,00	7,81	4,26	-	26,00	8,82	3,47	1,00	43,00
BRD INDIPENDENCE	0,63	0,24	-	1,00	0,59	0,28	-	1,00	0,62	0,23	-	1,00
LNTA	7,21	0,97	-	9,77	6,41	1,97	-	9,33	7,26	0,81	5,35	9,77
LEVERAGE	1,05	1,77	(29,20)	12,09	0,66	2,77	(29,20)	8,16	1,08	1,63	(13,49)	12,09
RETURN ON ASSETS	6,66	6,85	(28,52)	47,74	7,29	8,94	(14,04)	47,74	6,61	6,70	(28,52)	45,49
MRKT VALUE TO BOOK	3,15	3,66	(31,20)	42,86	3,82	5,06	(8,15)	42,86	3,12	3,55	(22,22)	37,54
COMMON LAW/CODE LAW	0,23	0,42	-	1,00	0,17	0,37	-	1,00	0,23	0,42	-	1,00
GDP	1.798,82	1.227,25	-	3.949,55	1.342,09	1.218,16	-	3.949,55	1.830,01	1.245,75	57,74	3.949,55
LEGAL RIGHT	5,45	1,64	-	8,00	4,74	2,18	-	8,00	5,56	1,53	2,00	8,00
ENFDISCLOSURE	6,72	2,95	-	10,00	5,82	3,19	-	10,00	6,79	2,88	-	10,00
CEO DUALITY	0,62	0,48	-	1,00	0,58	0,50	-	1,00	0,63	0,48	-	1,00
CSR SUSTAINABILITY COMMETTEE	0,77	0,42	-	1,00	0,43	0,50	-	1,00	0,79	0,41	-	1,00
INDEPCOMM	0,43	0,50	-	1,00	0,42	0,50	-	1,00	0,43	0,50	-	1,00

	Integrated Report				Sustainability and Integrated Reports			
	Mean	Standard Deviation	Min	Max	Mean	Standard Deviation	Min	Max
BOARD SIZE	10,86	3,35	6,00	24,00	11,22	3,31	5,00	22,00
BRD DIVERSITY GENDER	0,32	0,11	0,08	0,64	0,28	0,11	-	0,67
BOARD MEETING FREQUENCY	9,34	3,49	4,00	32,00	9,02	3,38	1,00	24,00
BRD INDIPENDENCE	0,65	0,23	-	1,00	0,66	0,23	-	1,00
LNTA	7,37	0,88	5,57	9,76	7,25	0,78	5,50	9,30
LEVERAGE	1,25	1,76	(2,07)	10,81	0,87	2,13	(16,97)	10,37
RETURN ON ASSETS	6,96	6,48	(11,78)	39,90	6,28	6,48	(20,95)	42,88
MRKT VALUE TO BOOK	3,25	3,00	(9,50)	15,29	2,60	3,72	(31,20)	10,08
COMMON LAW/CODE LAW	0,20	0,40	-	1,00	0,45	0,50	-	1,00
GDP	1.687,30	1.064,46	60,69	3.949,55	2.068,23	1.008,66	57,74	3.949,55
LEGAL RIGHT	4,85	1,80	-	8,00	5,62	1,77	2,00	7,00
ENFDISCLOSURE	6,50	2,86	-	10,00	7,21	3,51	-	10,00
CEO DUALITY	0,59	0,49	-	1,00	0,67	0,47	-	1,00
CSR SUSTAINABILITY COMMETTEE	0,81	0,39	-	1,00	0,81	0,40	-	1,00
INDEPCOMM	0,44	0,50	-	1,00	0,48	0,50	-	1,00

TABLE IV – Regression Analysis

	Sustainability Report		Integrated Report		Sustainability Report and Integrated Report	
	B	Exp(B)	B	Exp(B)	B	Exp(B)
BOARD SIZE	0.055*	1,062	0,066***	1,026	0,095***	1,084
BOARD INDIPENDENCE	-0,742**	0,746	-0,438	0,867	-0,421	1,709
BOARD DIVERSITY GENDER	7,201***	1,314	4,216***	5,733	5,423***	0,557
BOARD MEETING FREQUENCY	0,041	1,025	0.051***	1,045	0,075***	0,260
BOARD STRUCTURE - UNITARY	-2,115	0,121	0,407	1,502	-1,887	0,000
BOARD STRUCTURE MIXED	-0,190	0,827	-0,042	0,959	-0,120	0,887
BOARD STRUCTURE TWO - TIER	1,329***	1,075	0,854***	0,745	0,095	0,910
LNTA	0,171	1,186	0,408	1,503	0,155	1,168
LEVERAGE	0,072	1,074	0,086	1,089	0,010	1,010
RETURN ON ASSETS	0,011	1,011	0,025	1,025	0,009	1,009
MRKT VALUE TO BOOK	-0,050	0,952	-0,037	0,963	-0,086	0,918
CEO DUALITY	-0.486**	0,923	-0.518**	0,656	-0,153	0,858
INDEPCOMM	-0,058	1,328	0.246**	1,550	0,124	1,133
CSR COMMITEE	1,84***	3,294	1,551***	3,637	1,943***	3,407
COMMON LAW/CODE LAW	0,518	1,679	-0,418	0,658	-1,659	0,190
LEGAL RIGHT	0,185	1,203	-0,182	0,834	-0,113	0,893
GDP	0,000	1,000	0,000	1,000	0,000	1,000
ENFDISCLOSURE	0,024	1,024	0,008	1,008	-0,081	0,922
[YEAR=2015]	-0,671	0,511	-0,848	0,428	-0,417	0,659
[YEAR=2016]	-0,324	0,723	-0,451	0,637	-0,247	0,781
[YEAR=2017]	0,069	1,071	0,123	1,131	0,137	1,146
Pseudo R2	0,1433					
LNR2	432,11***					