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Integrated Reports and Board's Diversity:
An international perspective

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ABSTRACT

Organizations currently must report to a broader audience, capturing the attention of several categories of stakeholders, who want to know why, where and how companies create and add value. These stakeholders, including investors, also want to know how Organizations deal with responsibility and sustainability issues, contributing to the emerging of Integrated Reporting. Integrated Reporting is as an innovation in promoting a holistic and integrated vision of the business, where the Board of Directors must play an important role. This chapter covers diversity of Directors seated on the Board of Directors of those Organizations that are integrated reporters, comparing two groups: those who are <IR> Reference and those that are <IR> Regular reporters. The difference of these two groups is focused in the quality of integrated reports. Results show that organizations with larger Boards, higher proportion of non-executive directors and a higher proportion of women on the Board have a higher probability of preparing a <IR> Reference report (higher quality), while duality role of CEO inverts the probability, and no relationship is found with board experience.

Keywords: Integrated Reporting, IIRC, Board of Directors, Diversity, <IR> Reference Reports, <IR> Regular Reports.

INTRODUCTION

Corporate Social Responsibility and Corporate Sustainability are distinct concepts, but the literature exposes a growing tendency towards a more integrated approach to both topics that incorporates social, environmental and economic perspectives. This integrate approach can be potentially achieved through the preparation of the so-called "integrated report", a recent channel used by Organizations to communicate the way they create value through short, medium and long term. Organizations currently must report to a broader audience than shareholders, capturing the attention of several categories of stakeholders, who want to know why, where and how companies create and add value, and how they deal with responsibility and sustainability issues, contributing to the emerging of Integrated Reporting. While it is still voluntary in almost all the world, it is indeed gradually encouraged and supported by regulators, institutional investors and organizations, as an innovative nature in promoting a holistic and integrated vision of the Organization, where the Board of Directors must play an important role (defining strategies, promoting policies and implementing best practices).

The main issue addressed in this chapter is an analysis of the different characteristics of Directors seated on the Board of Organizations preparing "Integrated Reports". As such, two different groups are created: the main focus, comprising all the organizations that prepared an integrated report that is considered a benchmark or that has obtained a premium; the control group, covering all the other organizations that also prepare an integrated report. The sample includes almost 380 entities all over the world identified as <IR> preparers, from whom people expect to be accountable for the transparency of their external communication process. Characteristics such has the role duality, the board size, the independence, the gender diversity and the experience of boards members are stressed and compared. Results show that larger Boards, with a larger proportion of non-executive directors and a higher proportion of women as directors on the board have higher likelihood of producing an Integrated report that is highlighted as <IR> Reference, while the dual role of the CEO negatively influences the recognition of leading practices of the integrated reports. This last result is not maintained if unlisted entities are removed. Due to the international context of all the entities included in the sample, institutional characteristics of the countries are also used for control issues. The findings will be of practical interest to investors (shareholders) and executives when evaluating the board composition and the perspectives of being engaged with the integrated reporting commitment.

BACKGROUND

Social, environmental and economic perspectives of firms running businesses are traditionally included in the scope of Corporate Social Responsibility and Corporate Sustainability concepts. Beyond their importance, there are an awareness about how to facilitate the dialogue between reporting companies, users and other relevant stakeholders. Some Organizations are engaged in promoting communication not just about the perspectives mentioned, but about value creation, assuming that this would be the next step in the evolution of corporate reporting. The most important Organization leading this process is the International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, standard setters, the accounting profession and even NGOs.

The role of IIRC has been increasing since its foundation in 2010. Currently, the IIRC intends to establish integrated reporting and thinking within 'mainstream business practice'. This integrate approach can be potentially achieved through the preparation of the so-called "integrated report", a recent channel used by Organizations to communicate the way they create value through short, medium and long term. Organizations currently must report to a broader audience than shareholders, capturing the attention of several categories of stakeholders, who want to know why, where and how companies create and add value, and how they deal with responsibility and sustainability issues, contributing to the emerging of Integrated Reporting. Since the Board of Directors represent the interest of the shareholders, and act in the firm's social interest, one of its key is to outline a value creation pattern. So, Board of directors should have an active role in the integrated thinking phase (strategic orientations) and in the drafting of integrated report (relevant financial and non-financial information on critical issues).

Characteristics of Directors seated on the Board of Organizations preparing "Integrated Reports", such has the role duality, the board size, the independence, the gender diversity and the experience of boards members, are stressed and compared. Due the international context of all the entities included in the sample, institutional characteristics of the countries where their companies are playing are also used for control issues.

LITERATURE REVIEW

Overview about Integrated Reporting

Integrated reporting (<IR>) is "an evolution of corporate reporting, with a focus on conciseness, strategic relevance and future orientation" (IIRC, 2019). In order to make <IR> easy to embrace and comparable across different companies, the International <IR> Framework was developed. According to Professor Mervyn King, IIRC Chairman, this "Framework is a tool for the better articulation of strategy, and to engage investors on a long-term journey to attract investment that will be crucial to achieving sustained, and sustainable, prosperity".

Companies are requiring an evolution in the reporting system, facilitating the communication to stakeholders without the complexity of current reporting requirements. According to IIRC, integrated reporting has been created to enhance accountability, stewardship and trust, and harness the information flow and transparency of business that technology has brought to the modern world. Integrated reporting is an emerging international corporate reporting initiative to address limitations to existing corporate reporting approaches (Zhou, Simnett & Green, 2017), with a focus on conciseness, strategic relevance and future orientation. Integrated reporting requires an integrated thinking within the organization, enabling a better understanding of the organization's ability to create value over time. Integrated thinking is defined by IIRC as "the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects" (IIRC, 2013: 2). Integrated thinking implies a change of thinking within the company, shifting its focus to aligning profit maximization with environmental and social issues (Adams, 2015), leading to better integrated decision-making and actions in view to the creation of value over the short, medium and long term.

The traditional financial report alone is no longer enough to meet the needs of all stakeholders, neither to provide a full picture of the company (Roxana-Ioana & Petru, 2017). Integrated reporting aims to add to the current financial reporting model additional information about a company's strategy, governance and performance. In order to provide a full picture of the company, integrated reporting has been progressively adopted by companies, since the concern with environmental, social and governance (ESG) issues has been gaining importance.

The concern with ESG issues was first introduced by sustainability reporting, being in the origins of integrated reporting. According to Global Reporting Initiative (GRI), a sustainability report is a report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities. A sustainability report also presents the organization's values and governance model and demonstrates the link between its strategy and its commitment to a sustainable global economy. Companies have started formal reporting of their sustainability-related activities through the sustainability report, which is a stand-alone report that intends to supplement the financial information of annual reports. However, this separation of disclosure has led to some criticism, because seems that the non-financial information is not considered with the same priority and relevance as financial information (Pavlopoulos, Magnis & Iatridis, 2017). Eccles & Serafeim (2014) showed some concerns related to sustainability reports and defended that this stand-alone report tends to be published with a lag of several months compared to financial reports, and the information is rarely presented in the context of the business model and the strategy of an organization. This makes it difficult for investors to understand how ESG performance related to financial performance and how sustainability issues affect the value creation process in an organization. Integrated reporting aims to enhance corporate reporting by emphasizing interconnections between different types of information currently reported in stand-alone reports (Zhou et al., 2017).

To prepare a report with these characteristics, there is an International <IR> Framework, which is a voluntary principles-based document, establishing a set of guiding principles and content elements that guide the overall content of an integrated report and explain the fundamental concepts that underpin them (IIRC, 2013). By producing this framework, IIRC does not intend to prescribe a structure that companies should follow strictly, but rather to suggest a set of elements and principles that guide companies to produce their integrated reports (Roxana-Ioana & Petru, 2017).

To better understand the process of value creation, IIRC defines some fundamental concepts, such as the capitals that a company uses and affects, the value creation for the organization and for others and the company's business model. According to IIRC, the capitals contribute to the success for all organizations, and the six capitals are: financial (the source of funds), manufactured (the manufactured physical objects), intellectual (the organizational intangibles), human (the people's competencies and experience), social and relationship (relationships between stakeholders), and natural (the environmental resources). The process of value creation is dependent on an organization's business model, which is the system that transform inputs into outputs and outcomes through the business activities of the organization (IIRC, 2013).

South Africa was the first country to require the mandatory regime for integrated reporting, in March 2010, to all listed companies on the Johannesburg Stock Exchange (JSE), on an "apply or explain" approach (Slack & Tsalavoutas, 2018). Integrated reporting is also part of the listing demands in Brazil (PwC, 2015; Robertson, 2015), country where companies need to explain why they did not prepare an integrated report. Countries strongly supporting the practice of integrated reporting include United Kingdom, Netherlands, Australia, Spain, Singapore, Japan and United States of America (Robertson, 2015).

The works of de Villiers, Venter, & Hsiao (2017) and of Cheng et al. (2014) discuss the background to this new tool of communication, and why it is an area of interest for accounting profession, investors, regulators, among others, providing an overview of the literature on the origins of integrated reporting.

Earlier Research about Integrated Reporting

Research about integrated reporting has been emerging, namely, about motivations and benefits. Internal benefits (better resource allocation decisions, greater engagement with shareholders and other stakeholders and lower reputational risk), external market benefits (sustainability indices, report accurate non-financial information), and managing regulatory risk (responding to requests from stock exchanges) are examples of benefits (Eccles & Saltzman, 2011), although external market benefits are harder to measure because few companies have been practicing integrated reporting at the time (Eccles & Armbrester, 2011). Also, Krzus (2011) and Morros (2016) present theoretical benefits of integrated reporting, most of them contributing to the development of a culture of collaboration, getting senior executives sited on the Board engaged with reported issues. Some recent papers (e.g., Velte and Stawinoga, 2017; Vitolla, Raimo & Rubino, 2019) present systematics literature reviews that are helpful to understand the state of the art on integrated reporting, using a wider perspective than the topic explored in this chapter.

A strand of research has produced empirical studies investigating the impact that integrated reporting may have on the reporting practices. Stacchezzini, Melloni, and Lai (2016) obtained unenthusiastic evidences about the ability of this type of report to integrate corporate sustainability management and did not see the integrated report as the most appropriate accounting mechanism for the creation of ethically correct corporate cultures, arguing that in some companies the use of integrated reports is a way to opportunistically manage public impressions on corporate behavior. Maniora (2017) examined the impact of integrated reporting on the integration of ESG issues into the business model and the related economic and ESG performance changes and concluded that companies do not benefit in terms of economic and sustainability performance by switching from stand-alone ESG reporting to integrated reports.

The influence of corporate governance on corporate disclosure arises from the role of the Board of directors in deciding what should be disclosed in annual reports, managing the disclosure of a wide range of information that will have an impact on capital providers (Fasan & Mio, 2016; Hurghis, 2017) and overseeing the creation and execution of management's plans to balance the interests of multiple stakeholders, acting as representatives of shareholders (Harjoto, Laksmana & Lee, 2015). From the agency theory perspective, company disclosure is one of the main tools used to harmonize the interests of managers and shareholders. From a stakeholder theory perspective, the board is responsible for balancing the interests of all stakeholders and safeguarding their interests.

The relationship between corporate governance and board diversity is a relatively new topic (Bing & Amran, 2017). According to Prado-Lorenzo & Garcia-Sanchez (2010), diversity is a characteristic that refers to the board of directors of an organization, characterized by the existence of differences on its members' traits. Therefore, diversity in boards of directors contributes to a greater variety of backgrounds and knowledges, implying different points of view that lead to better strategic decision making (Pechersky, 2016). Rao & Tilt (2016) stated that the diversity of board members provides broad and heterogeneous perspectives to the decision-making process, which is crucial for voluntary and more complex decisions. In this line, some researchers looked to the relationship between board characteristics and the production of integrated reporting. Frías-Aceituno, Rodríguez-Ariza, & García-Sánchez (2013) examined the influence of some board of directors’ characteristics in the degree of information integration and they found that board size and gender diversity are the most influential factors in the decision to disclosure integrated information. Hurghis (2017) investigated whether the production of an integrated report might be influenced by the characteristics of the company's board of directors and he found that only the size of the board have an influence on the extent to which the issued integrated report is in accordance with the international <IR> Framework, arguing that one possible reason for these results is because the <IR> Framework is not mandatory for all the companies. Pavlopoulos et al. (2017) investigated the relationship between integrated reporting disclosure quality and corporate governance mechanisms, found that some characteristics are likely to increase the quality of accounting information, namely, the higher the percentage of independent directors on boards. So far, the best it is known, no study has examined how the diversity characteristics of boards can influence the best practices of integrated reporting. This study intends to fill this gap, investigating whether some characteristics of diversity contribute to a report presenting a higher recognition.

BOARD’S DIVERSITY EVIDENCE

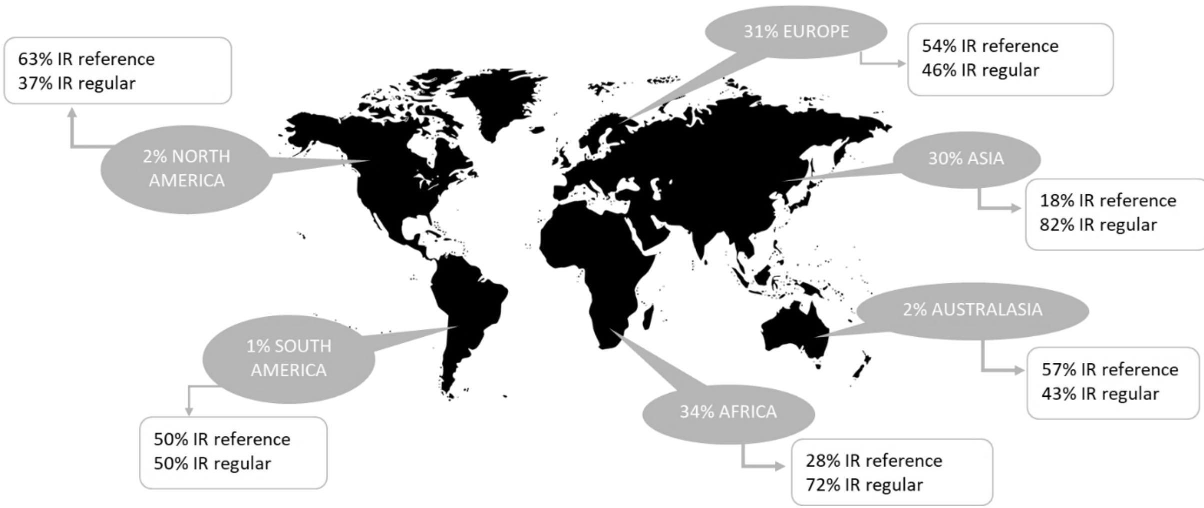
Objective and Sample

The main objective of this chapter is to describe the effect of different characteristics of diversity of Board of directors - board size, board independence, gender diversity, role duality and board experience - on the probability of the integrated reports became recognized by leading practices of the Organizations where those Boards belong to, distinguishing between <IR> Reference reports (the higher quality ones) and <IR> regular reports. The <IR> Reference reports are those reports that are highlighted in the IIRC Examples Database and considered as “best practices” by the IIRC or by a reputable award process or through benchmarking. The <IR> Regular reports are all the other integrated reports that are available in the IIRC Examples Database as examples of companies engaged with the <IR> process. To perform this chapter, the integrated reports were hand-collected from the IIRC Examples Database, and all the data about the characteristics of boards of directors was hand-collected directly from those integrated reports. The sample comprises a total of 377 integrated reports, equivalent to 377 integrated reporters, since only the most recent integrated report for each company were collected.

Geographic Dispersion

Figure 1 shows the geographical dispersion of the sample. Africa is the most representative region (34%) followed by Europe (31%), both representing more than half of the total sample (65%). The geographical analysis is in line with the literature review. The African continent should be where there is a greater predominance of integrated reports, since as from March 2010 all companies listed on the JSE were required to adopt the Integrated Reporting (Hoffman, 2012). Looking within each region, the number of <IR> Reference reporters is equal or exceeds the number of <IR> Regulars reporters only in Europe, Australasia and Americas.

Figure 1 - Geographic dispersion



Mapping the board diversity

This section highlights the characteristics used in prior research related with the potential influence of board diversity in the likelihood of providing voluntary disclosures related with CSR or sustainability reporting. These variables are used but now applied to the context of disclosures related with reporters engaged with the <IR> process. So, firstly the characteristics are explained, and then they are mapped into two groups or organization as follows: i) for each characteristic, the descriptive measure is presented comparing the group of <IR> Reference reporters with the group of <IR> Regular reporters; ii) the results are then decomposed into a map to show diversity along geographic dispersion.

Board Size

The Board Size represents the size of the board of directors and is measured by the number of board members (Frías-Aceituno et al., 2013; Prado-Lorenzo & Garcia-Sanchez, 2010). Larger boards contribute with different backgrounds that provide broader perspectives in controlling area (Pechersky, 2016). Some prior researches suggest a positive association between the size of the board and voluntary disclosure (e.g. Akbas, 2016; Akhtaruddin et al., 2009; Allegrini & Greco, 2013; Handajani, Subroto, Sutrisno & Saraswati, 2014; Jizi, Salama, Dixon & Stratling, 2014; Samaha, Khlif & Hussainey, 2015), while others found no association between both variables (e.g. Cheng & Courtenay, 2006), but Janggu, Darus, Zain, and Sawani (2014) found that board size is the strongest determinant of sustainability disclosures.

Board independence

Some previous studies suggest a positive association between the proportion of independent directors on the board and the probability of publish or level of voluntary disclosures (e.g. Akhataruddin et al., 2009; Cheng & Courtenay, 2006; Donnelly & Mulcahy, 2008; Lim, Matolcsy & Chow, 2007; Samaha et al., 2015). Furthermore, Herda, Taylor, and Winterbotham (2012) found that companies with more independent directors are more likely to publish stand-alone sustainability reports and even to publish higher quality sustainability reports, in line with Jizi et al. (2014) for on the quality of CSR disclosure and Fuente, García-Sánchez, and Lozano (2017) on the CSR information disclosed according to the GRI.

However, other studies did not find any association between the independence of board members and the level or quality of voluntary disclosures (including CSR disclosures) (e.g., Allegrini & Greco, 2013; Haniffa & Cooke, 2005; Janggu et al., 2014; Mahmood, Kouser, Ali, Ahmad, & Salman, 2018; Michelon & Parbonetti, 2012).

Gender diversity

Gender diversity became a widely recognized characteristic of board diversity (Mahmood et al., 2018), and one of the most important factors in the integrated dissemination of information (Frías-Aceituno et al., 2013). One of the issues the earlier literature has explored widely is whether the presence of women on the board of directors has an impact on board performance and on voluntary disclosures. Prior findings suggest better level of CSR reporting (Dienes & Velte, 2016; Fernandez-Feijoo, Romero & Ruiz-Blanco, 2014), and higher quality sustainability reports (Al-Shaer & Zaman, 2016). On the other hand, Handajani et al. (2014), found that the increasing number of women on board of directors does not have a positive impact on corporate social disclosure.

Role duality

Duality exists when the same person occupies cumulatively the positions of CEO and chairman (Prado-Lorenzo & Garcia-Sanchez, 2010). Empirical studies on the relationship between CEO duality and the level of disclosure are mixed. Cheng and Courtenay (2006) and Michelon & Parbonetti (2012) demonstrated that CEO duality is not associated with voluntary disclosure. On the other hand, while Allegrini & Greco (2013) and Samaha et al. (2015) obtained evidences of a negative impact of CEO duality on voluntary disclosures, Jizi et al. (2014) found that CEO duality have a positive impact on the CSR disclosure.

Board experience

Age diversity can be seen as a mean of gaining new insights for boards of directors, bringing together younger and older groups, in order to promote the wider level of knowledge of the group as a whole (Hagendorff & Keasey, 2012; Kang, Cheng & Gray, 2007). Age is a feature that reflects directors' business experience, evidencing their maturity in directing the business (Hafsi & Turgut, 2013). Hafsi & Turgut (2013) suggest that age diversity has a significant negative effect on corporate social performance, while Kang et al. (2007) found a preference for directors in the older age, and Post, Rahman, and Rubow (2011) found that boards whose directors average closer to 56 years in age tend to report more environmental corporate social responsibility information. The age of directors of the boards is used as a proxy variable for the board's experience.

Map

The results for the board diversity characteristics are summarized in Table 1. On average, the Board of <IR> Reporters has more directors than the Board of <IR> Regular reporters. Concerning independence, <IR> Reference reporters have higher (lower) percentages of non-executive (executive) directors, from which the percentage of independent non-executive are also higher, compared with <IR> Regular reporters. The percentage of cases with women seated on the Board is also higher in <IR> Reference reporters, where the percentage of reporters for which the CEO is not the same person as the chairman is lower, and the Boards are slightly younger.

The pattern across the geographic regions is presented in Figure 2. The prior conclusions are not equal in every region. The average number of seats in the board of directors in <IR> Reporters is lower in Asia and Australasia, but the percentage of non-executive directors is in line with the prior evidence. Also, South America is the only region where the average percentage of non-executive directors is lower in the group of <IR> Reference reporters than <IR> Regular reporters, and this lower percentage is extensible to independent non-executive directors not only in South America but also in North America and Australasia. The percentage of women seated on the board of directors in Australasian and South America is lower in the <IR> Reference reporters' group. Differences also exist in duality: there is no such role in Africa and Australasia.

Table 1. Summary of board diversity characteristics between groups

	Board size	**Board Independence (%)**			**Gender diversity (%)**	**Role Duality (%)**	**Board experience**
	Average number of directors	*Executive directors*	*Non-executive directors*	*Independent non-executive directors*	*Woman on board*	*CEO duality*	*Average age of board directors*
<IR> reference reporters	11,89	28	72	58	22	8	57,6
<IR> regular reporters	10,58	35	65	52	16	13	58,5
Full sample	11,03	33	67	54	18	11	58,2

Figure 2. Summary of board diversity characteristics between geographic regions

Testing the hypothesis

Prior research used diversity to explore its relationship with voluntary CSR disclosures, sustainability practices, and similar issues. The relationship with integrated reporting is very scarce. This study explores this issue, considering the range of organizations preparing <IR>, and considering that board diversity potential has an impact on the probability of the <IR> Report is considered of better quality. So, the unique hypothesis is the following:

Hypothesis: There is an association between board diversity and the higher recognition of leading practices of the integrated reports.

In order to test the Hypothesis, each characteristic is included as an independent variable. The following logistic regression model (1) is estimated:

$$RECOGN = \alpha_0 + \alpha_1 BSIZE + \alpha_2 BINDEP + \alpha_3 GENDER + \alpha_4 DUALITY + \alpha_5 BEXPER + \alpha_6 STATUSLIST + \alpha_7 COUNTRY + \varepsilon \qquad (1)$$

Where:
RECOGN is the dependent variable that represents the recognition of leading practices of the integrated reports and is a dummy variable that equals 1 if the entity is considered a <IR> reference reporter and 0 if the entity is considered a <IR> regular reporter.
BSIZE represents the size of the board of directors and is measured by the number of board members (Frías-Aceituno et al., 2013; Prado-Lorenzo & Garcia-Sanchez, 2010).
BINDEP represents the independence of the board of directors and is measured by the percentage of non-executive directors (Frías-Aceituno et al., 2013; Haniffa & Cooke, 2005).
GENDER represents the gender diversity of the board of directors and is measured by the percentage of women directors (Al-Shaer & Zaman, 2016; Nadeem, Zaman & Saleem,, 2017; Setó-Pamies, 2015).
DUALITY represents the role duality of the CEO and is a dummy variable that assumes 1 if the entity's CEO is also the chairman of the board of directors and 0 otherwise (Nadeem et al., 2017; Prado-Lorenzo & Garcia-Sanchez, 2010).
BEXPER represents the board experience and is measured by the average age of board members (Post et al., 2011).

In addition, the status listing and the country institutional variables are included as control variables, as follows:
STATUSLIST is a dummy variable that assumes 1 if the entity is listed on a stock exchange and 0 otherwise. This variable is used to control the differences between listed and unlisted entities.
COUNTRY represents the country institutional variables. The proxy for the institutional variables with the impact on the recognition of the integrated reports follows the same methodology as in De Villiers & Marques (2016) and Cahan et al. (2016), which considered the impact of some nation-level characteristics in CSR disclosures (not tabulated).

Table 2 reports the descriptive statistics of the variables used in the empirical analysis of Equation (1), for the entire sample and for the two subgroups of reporters analyzed: <IR> Reference reporters and <IR> regular reporters. On average, 37% of the <IR> reporters are <IR> reference reporters. This table details more deeply the numbers plugged in Table 1, adding typical statistic descriptive measures. Analyzing the entire sample, on average, boards are composed of about 11 directors, with the smallest board only with 2 members, and the largest with 31 members. It is notable a high percentage of independence of the board (67%) on the selected entities but there is a weak presence of women as directors (18%). The proportion of entities in which the CEO is also the chairman of the board is not high (11%). This reveals that the dual role is not a very common practice in the entities of this study, which is mainly due to the agency theory that defends the separation of both functions (Shrivastav & Kaise, 2016). The boards of directors in the sample have an average age of 58 years, with the youngest board having an average age of 42 years, and the oldest being approximately 73 years. According to Kang et al. (2007), most of the boards are mature and middle-aged. Correlation (not tabulated) between the main independent variables are low, which indicates that multicollinearity problems are minimal.

Table 2. Descriptive statistics

Variable	**Mean**	**Std. Dev.**	**Median**	**Min**	**Max**
<IR> Reporters (n=377)					
Main variables:					
RECOGN	0.37	0.48	-	-	-
BSIZE	11.03	3.92	11.00	2.00	31.00
BINDEP	0.67	0.21	0.71	0.00	1.00
GENDER	0.18	0.13	0.18	0.00	0.81
DUALITY[a]	0.11	0.31	-	-	-
BEXPER	58.2	4.27	57.79	41.88	72.67
<IR> Reference Reporters (n=140)					
Main variables:					
BSIZE	11.89	4.02	11.00	3.00	26.00
BINDEP	0.82	0.19	0.78	0.00	1.00
GENDER	0.22	0.14	0.23	0.00	0.81
DUALITY[a]	0.08	0.26	-	-	-
BEXPER	57.6	3.79	57.68	44.45	66.80
<IR> Regular Reporters (n=237)					
Main variables:					
BSIZE	10.58	3.83	10.00	2.00	31.00
BINDEP	0.65	0.22	0.67	0.00	1.00
GENDER	0.16	0.12	0.16	0.00	0.56
DUALITY[a]	0.12	0.33	-	-	-
BEXPER	58.5	4.49	57.92	41.88	72.67

RECOGN is the recognition of the integrated reports; BSIZE is the number of board members; BINDEP is the proportion of non-executive directors; GENDER is the proportion of women directors; DUALITY assumes 1 if the CEO is also the chairman of the board and 0 otherwise; BEXPER is the medium age of board members; [a]These variables, because they are binary, present minimum and maximum values of 0 and 1, respectively.

Table 3 presents the regression results of Equation (1) after removing outliers by eliminating the observations whose standardized residuals were superior to 2 in absolute value. The coefficient of the variable BSIZE is statistically significant at a significance level of 10% (coefficient = 0.061; p-value = 0.053), suggesting that larger boards contributes positively to the higher recognition of leading practices of the integrated reports. In earlier literature, larger boards are generally positively associated with voluntary disclosures (Akhtaruddin, Hossain & Yao, 2009; Allegrini & Greco, 2013; Samaha et al., 2015), sustainability disclosures (Janggu et al., 2014) and CSR disclosures (Jizi et al., 2014). This result confirms that this positive association also occurs in the relationship between larger boards and the production of integrated reports, leading them to be considered as reference reports. This result is consistent with Frías-Aceituno et al. (2013), who argued that larger boards contribute to better integrating corporate information into integrated reports, being one of the most important factors in integrated information dissemination, and with Hurghis (2017), who argued that board size have an influence on issuing an integrated report according to the <IR> framework.

The variable BINDEP is statistically significant at a significance level of 1% (coefficient = 2.121; p-value = 0.002) suggesting that a higher proportion of non-executive directors on the board positively contributes to the higher recognition of leading practices of the integrated reports. This result is in line with most of the literature review, which suggested that a higher level of independence of the board of directors contributes positively to better disclosure of non-financial information (Lim et al., 2007). This finding supports the study of Pavlopoulos et al. (2017) that defended that a higher proportion of independent directors on board leads to a greater alignment of the integrated reports with the <IR> framework. However, this conclusion does not support the findings obtained by Frías-Aceituno et al. (2013), who argued that greater independence of the board does not contribute to the integration of corporate information. The results are similar if this variable is substituted by the average number of independent non-executive directors (and if both are included, one is dropped).

The variable GENDER is statistically significant at a significance level of 1% (coefficient = 3.995; p-value = 0.000) indicating that a higher proportion of women directors on the board have a positive influence of the higher recognition of leading practices of the integrated reports. This conclusion supports the study of Frías-Aceituno et al. (2013), who defended that gender diversity is one of the most important factors in the integrated dissemination of information. This conclusion is in agreement with different studies that supported the conclusion that a higher proportion of women on board of directors has a positive influence on the disclosure strategy by companies, in terms of sustainability and corporate social responsibility (Al-Shaer & Zaman, 2016; Dienes & Velte, 2016; Fernandez-Feijoo et al., 2014; Nadeem et al., 2017; Setó-Pamies, 2015).

The variable DUALITY is statistically significant at a significance level of 5% (coefficient = -1.227; p-value = 0.027), suggestive of an association between the CEO's duality and the recognition of leading practices of integrated reports. The coefficient of this variable is negative, so it is concluded that entities that have a CEO who is also the chairman of the board of directors tend to produce integrated reports that are not benchmarked. This conclusion seems to show that the concentration of power on only one person compromises the effectiveness of the board (Haniffa & Cooke, 2002), which is reflected in the result of its integrated reports.

The variable BEXPER is not statistically significant (coefficient = -0.046; p-value = 0.175), so, it is not possible to conclude on the cause-effect relationship (positive or negative), with the dependent variable.

Table 3. Regression results

Variables	**Coefficient**	**p-value**
Constant	-0.960	0.643
Main variables:		
BSIZE	0.061	0.053
BINDEP	2.121	0.002
GENDER	3.995	0.000
DUALITY	-1.227	0.027
BEXPER	-0.046	0.175
Control variables:		
STATUSLIST	Included	Included
COUNTRY	Included	Included
LR Statistic	410.102	
Nagelkerke R^2	0.229	

BSIZE is the number of board members; BINDEP is the proportion of non-executive directors; GENDER is the proportion of women directors; DUALITY assumes 1 if the CEO is also the chairman of the board and 0 otherwise; BEXPER is the medium age of board members; STATUSLIST assumes 1 if the entity is listed on a stock exchange and 0 otherwise; COUNTRY represents the country institutional variables.

FUTURE RESEARCH DIRECTIONS

The following step to open an avenue to future research is to extent the hypotheses to include a new approach concerning the importance of <IR> to the capital markets. Taking into consideration the existence of some characteristics related to board diversity on the probability of producing a report that is considered as of high quality and supported in best leading practices, the impact of the disclosure of these practices on the market value of organizations is a question for future research.

CONCLUSION

This study examines the influence of some boards' diversity characteristics – board size, board independence, gender diversity, role duality and board experience - on the recognition of leading practices of the integrated reports, distinguishing between <IR> Reference reports (those of higher quality) and <IR> Regular reports (all the others), based on a sample of <IR> Reporters extracted from the IIRC Examples Database. Considered as a whole, the full sample reveals that the average number of directors on the Board is around 11 people, and 18% of the sample have women on that Board. The average age is 58 years. The non-executive directors represent about 67% of the total seats, from which around more than half (54%) are independent. These percentages however are not exactly similar between <IR> Reference reporters and <IR> Regular reporters, and some diversity across different geographic regions also exist.

The results of a logit regression show that larger Boards, with a larger proportion of non-executive directors and a higher proportion of women on the board have higher likelihood of producing an Integrated report that is highlighted as <IR> Reference, thus, of higher quality. This means that the composition of the Board has potential to contribute to the engagement and commitment with the integrated reporting and integrating thinking processes, leading to a better communication between the Boards and all the other stakeholders. However, the results also show that the duality role of the CEO/Chairman negatively influences the recognition of leading practices of the integrated reports, which means that the entities in which the CEO and the chairman of the board are the same person tend to produce integrated reports that are not awarded or considered leading (<IR> regular reporter). On the contrary, when the CEO and the chairman of the board are different, the probability of producing an integrated report of higher recognition (<IR> reference reporter) is greater. However, this relationship changes if unlisted entities are removed, mislaying its significance for the model (results not tabulated). This result suggests that in listed companies, the dual role of the CEO has no influence on the quality of the <IR>. Finally, the results do not find a relationship between the board experience and the likelihood of producing a <IR> report considered as reference.

This study contributes to the literature on the integrated reporting, a new concept that has been growing over the years, requesting new studies to add to the existing literature. It adds to the debate about the relationship between the board's characteristics and the recognition of leading practices of the integrated reports, analyzing if these certain characteristics on the company's board have an influence to produce integrated reports in a way that they are classified a <IR> reference reports. However, suffers from some limitations. First, the IIRC Examples Database only includes the companies that voluntarily send their integrated reports to the database. Second, the choice of the board's diversity characteristics for the study was also limited by the availability of information, having been chosen the variables that allowed to get the maximum of information possible.

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KEY TERMS AND DEFINITIONS

Board of Directors: A group of people with powers, duties, and responsibilities to decide and supervise the activities (strategic and operational) of an organization.

Corporate Reporting: There is no unique definition, but includes the communication helping an organization to demonstrate to shareholders and potential investors its capabilities, opportunities, as well as the management's ability to deal with changes in the business environment.

IIRC: The International Integrated Reporting Council (IIRC) is a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs, promoting communication about value creation as the next step in the evolution of corporate reporting.

Integrated Report: A summarizing communication about how an organization's strategy, governance, performance and forecasts, lead to the creation of value in the short, medium and long term.

Integrated Reporter: An organization that prepares and publish integrated reports.

Integrated Reporting: A process founded in integrated thinking resulting in a periodic integrated report published by an organization about the value creation over time and other related concerns.

Integrated Thinking: Is the active attention by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects and leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term.

<IR> Reference Report: It is an integrated report considered by IIRC as being prepared under best practices or awarded by an external indepe006Edent organization, as included in the IIRC Examples Database.

<IR> Reference Report: It is an integrated report included in the IIRC Examples Database but not considered as <IR> Reference Report.