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THE RELATIONSHIP BETWEEN BOARD'S DIVERSITY AND THE REPUTATION OF INTEGRATED REPORTS

(Postgraduate student)

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Scientific area: h) Corporate Social Responsibility

Key Words: Integrated reporting, IIRC database, Boards, Board diversity

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Abstract

The integrated reporting arises as an answer to the insufficiency of traditional financial report and the emergent need to disclose non-financial information to stakeholders, and it is proposed by the International Integrated Reporting Council. Given the influence of corporate governance on corporate disclosure and the key role of the companies' board of directors in managing the disclosure of a wide range of information, the present study aims to analyze how some corporate governance characteristics may influence the reputation of integrated reports, distinguishing between <IR> reference reports and <IR> regular reports. The sample of this study comprises 374 <IR> reporters extracted from the IIRC Examples Database. The results show that the size and the experience of the board of directors does not influence the reputation of the integrated reports. In turn, the independence of the board and gender diversity influence positively the reputation of integrated reports, while role duality seems to influence negatively.

1. Introduction

Company reports need to adapt to the constant changes through economic turmoil, new regulatory initiatives, and new business priorities over time (ACCA, 2013). While more and more companies are disclosing sustainability and CSR information, there is still little connection between such information and financial information. Consequently, to solve all these problems, the International Integrated Reporting Council (IIRC) proposed the integrated report, as an evolution of corporate reporting, focusing on conciseness, strategic relevance and future orientation.

The definition of integrated reporting is given by IIRC, who defined it as a process that results in a periodic integrated report by an organization, about how its strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term (IIRC, 2013). According to IIRC (2013), an integrated report aims to benefit all stakeholders that are interested in the creation of value of an organization, including employees, customers, suppliers, business partners, local communities, legislators, regulators and policy-makers.

Integrated reporting is an emerging international corporate reporting initiative to address limitations to existing corporate reporting approaches (Zhou et al., 2017). According to Cohen & Simnett (2015), integrated reporting is seen as the next step in evolution of corporate reporting. Research on integrated reporting has been emerging, but gaps exist. A gap was noted related with the need to analyze how boards' diversity has ability to influence the best practices in doing a well reputed integrated report. Our work intends to contribute to this gap.

This study aims to analyze the influence of some boards' diversity characteristics on the reputation of the integrated reports, contributing to a better understanding of the factors influencing a reporter to be considered as a reference, and contributes to a higher reputation. The sample consists in 374 reporters extracted from the IIRC Examples Database, considered as <IR> reporters. These reporters are classified by the IIRC Examples Database into two sub-groups of entities: those classified as <IR> reference reporters and those as <IR> regular reporters.

Main findings indicate that the characteristics that most influence positively the reputation of the integrated reports are the independence of the board and the gender diversity, which means that boards of directors with more non-executive directors and more women as directors produce integrated reports of higher reputation. On the other hand, the role duality of the CEO has a negative influence on the reputation of integrated reports. Board size and board experience are not statistically significant, so there is no relationship of both variables and the reputation of the integrated reports.

In the following section is presented a review of the previous literature and the development of hypotheses. Thereafter, is explained the research design, is presented the results of the study and the respective conclusions.

2. Literature review and hypotheses

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). Integrated reporting is an expression of integrated thinking, which 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 IIRC was formally established in August 2010 by the collaboration of two organizations, the Prince’s Accounting for Sustainability Project (A4S) and the GRI, and consists in a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. This coalition is seeking to promote communication about value creation, making it the next step in the evolution of corporate reporting (IIRC, 2013). The council of IIRC includes a wide set of groups working together and comprises 67 members. These members have leading roles in regulatory bodies such as the International Accounting Standards Board (IASB) and the American Institute of Certified Public Accountants (AICPA); international accounting bodies like the International Federation of Accountants (IFAC); Big 4 accounting firms such as Deloitte, Ernst & Young, KPMG and PwC International; international organizations with sustainability agenda like the GRI; international bodies such as The World Bank; organizations such as Microsoft and Nestlé; investment groups and academics such as Professor Mervyn King, chairman of the IIRC and Professor Robert Eccles from Harvard Business School (IIRC, 2013; Cheng et al., 2014).

Entities preparing an integrated report support its content in the guidelines proposed by the International <IR> Framework issued by IIRC. This 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). However, 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).

Integrated reporting has the dual objective of providing external information and contribute to better internal decisions (Barth et al., 2017). Organizations, thus, explain how they creates value over time. To understand this process of value creation, IIRC defines some fundamental concepts, such as the capitals that a company uses and affects and the value creation for the organization and for others. 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). Beyond this, the <IR> Framework informs how integrated reports are prepared and how information is presented (including content elements), specifying the information that should be included in the report.

Research on integrated reporting has been emerging. Some theoretical studies had focused on presenting the concept of integrated reporting, debating key issues related to the integrated reporting framework development. Cheng et al. (2014) introduced the concept of integrated reporting, its background from the inception of the IIRC in 2010, discussed issues about the Consultation Draft of the Framework and provide a range of potential further research issues related to the development and implementation of integrated reporting. Morros (2016) also synthetize the meaning of the emerging field of integrated reporting, as well as contribute with issues for future research.

Motivations and benefits for integrated reporting are also under research. There are prior studies suggesting that the development of an integrated report brings real benefits for the company. According to Eccles & Saltzman (2011), the motivation for adopting integrated report arises from three classes of benefits. The first is internal benefits, including better resource allocation decisions, greater engagement with shareholders and other stakeholders and lower reputational risk. The second is external market benefits, including meeting the needs of mainstream investors who want ESG information, appearing on sustainability indices, and ensuring that data vendors report accurate non-financial information on the company. The third benefit is managing regulatory risk, including being prepared for a likely wave of global regulation, responding to requests from stock exchanges, and having a seat at the table as frameworks and standards are developed. However, Eccles & Armbrester (2011) argue that the external market benefits are harder to measure because few companies have been practicing integrated reporting, and most of them for a short period of time. Despite this, they believe that these benefits will grow stronger over time as the company, stakeholders, analysts and investors learn how to use non-financial information. Nonetheless, these benefits were identified at a very early stage of the integrated report, and there were not many companies at that time producing these reports, which could make these benefits merely theoretical, leading to the need for further research and evidence to corroborate them. For Morros (2016), the benefits associated to the integrated reporting are emphasis in the need for a long-term planning, encourage thinking about the business model beyond the money flow, focus on creating value across the six capitals, develop a culture of collaboration and getting senior executives and the board involved in considering these reported issues.

Some prior studies have used a qualitative approach, conducting interviews and surveys to gather information regarding the perception of various stakeholders in the adoption of integrated reporting practices (e.g. Steyn, 2014; James, 2015; Stubbs & Higgins, 2018). Steyn (2014) interviewed the senior executives of listed companies on the Johannesburg Stock Exchange in South Africa, where exists a mandatory regulatory regime, regarding the benefits and motivations for preparing an integrated report. He found that these companies attribute value to the process of integrated reporting primarily from the perspective of their corporate image, investor needs, and stakeholder engagement and relations. James (2015) investigated the accounting majors' perceptions regarding sustainability and integrated reporting, applying a survey to a group of accounting majors at a Western Region University. He pretended to focus on the perceived benefits to multiple stakeholders, the expected scope and type of issues reported, the reporting time frame and the need for high-quality global sustainability and integrated reporting standards. The results showed that overall accounting majors tend to support both sustainability and integrated reporting, and most of participants in the survey felt that companies should issue integrated instead of stand-alone reports, contributing to enhance the value and comparability of annual reporting. Stubbs & Higgins (2018) also found evidence in favor of integrated reports rather than sustainability reports. Through an investigation of the preferences of some users of non-financial reporting for regulatory or voluntary approaches, their research findings underlined that exists more support for voluntary approaches. However, although most of the participants felt that is too early for a regulatory reform, they support mandatory integrated report, arguing that voluntary sustainability reporting has not led to more substantive disclosures or has increased the quality of reporting.

Not all authors share the same views related to the adoption of the integrated reporting and its benefits for the company. Stacchezzini et al. (2016) obtained pessimistic evidences about the ability of this type of report to integrate corporate sustainability management, concluding that companies disclose little forward-looking information about their sustainability actions and do not provide enough information about their sustainability performance when their social and environmental results are bad. These authors also said 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 (Economic, Social and Governance) issues into the business model and the related economic and ESG performance changes. This author matched companies using integrated reporting with companies applying (i) no ESG reporting, (ii) stand-alone ESG reporting or (iii) ESG reporting in the annual report. Maniora (2017) concluded that companies do not benefit in terms of economic and sustainability performance by switching from stand-alone ESG reporting to integrated reports, arguing that stand-alone reporting leads more attention to ESG issues and increases their awareness among managers, employees and other stakeholders.

Some studies have been critical about the integrated reporting and its usefulness to investors. Barth et al. (2017) developed a study around the association between integrated reporting quality and firm value, considering two channels – a capital market channel, that reflects the quality of information provided to capital market participants, and a real effects channel, which reflects the quality of internal decision making. The results showed a positive association between the quality of the integrated reporting and firm value, which leads the authors to argue that this result is a consequence of both capital market and real effects. Flower (2015) is one of the most critical, arguing that the IIRC, on his framework, has abandoned sustainability accounting. This author states that the IIRC made a mistake in not obligating companies to report the negative impact of outside sources, such as the environment, and that the IIRC's proposals do not have force enough to have a significant impact on corporate reporting. Based on Flower's study, also Thomson (2015) criticizes the IIRC framework, arguing that the current formal of the integrated report excludes the sustainability programmatic, being too rooted in the business case for sustainability rather than the sustainability case for business.

Regardless of the existence of the <IR> Framework, comparability between integrated reports from different companies is not completely achieved. As any other financial and non-financial report, the board of directors assume the responsibility for its content. So, the decision to choose what to include in the integrated report can be included within corporate governance issues. Corporate governance practices are related to divergences of interests between the managers and the shareholders, which arises from the separation of management and ownership control (Roxana-Ioana & Petru, 2017). Corporate governance has the role of providing a structure that allows companies to achieve their objectives, from action plans and internal controls, performance measurement and corporate disclosure. This 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 (Hurghis, 2017).

According to Fasan & Mio (2016), the board of directors plays a crucial role in influencing company disclosure. These authors also argue that, 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. Among other means, this can be achieved through the dissemination of information (Frias-Aceituno et al., 2013). So, disclosure of information, especially when voluntary, has become an increasingly common and fundamental task for any company, and it important to explore the factors that influence the decision to prepare these voluntary reports.

The main objective of this study is to identify the key factors that influence the reputation of integrated reports. This objective is achieved using a sample of reporters preparing integrated reports, divided into two groups: those classified as <IR> reference reporters and those classified as <IR> regular reporters. We want to capture the effect of board diversity considering a wide range of entities from different geographies, industries and status listings.

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).

Prior studies have investigated the relationship between the diversity of board of directors and different types of disclosure, such as mandatory and non-mandatory voluntary reporting (Haniffa & Cooke, 2002; Rao & Tilt, 2016). There are several studies that analyze the impact that corporate governance has on disclosure of voluntary information, as well as the specifically disclosure of information on sustainability and corporate social responsibility. Considering that the integrated report is a relatively recent type of report, there are still few studies that focus on the impact that corporate governance can have on the decision to publish an integrated report as well as on the quality of its content. Frias-Aceituno et al. (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, but greater independence of the board does not seem to contribute positively to the integration of corporate information. Pavlopoulos et al. (2017) investigated the relationship between integrated reporting disclosure quality and corporate governance mechanisms. The authors constructed an integrated disclosure score index in accordance with the degree of compliance with integrated reporting disclosures, and used various board characteristics, such as independence, duality and diversity. Their findings showed that these board characteristics increase the quality of accounting information. Based on an annual survey by Ernst & Young about the quality of the integrated reports of the top 100 listed companies on Johannesburg Stock Exchange, Buitendag et al. (2017) investigated the impact that entity's characteristics can have on the quality of their integrated reports. Their results for the corporate governance characteristics showed that companies with more women directors and directors of color provided better integrated reports, adding that these companies also tend to have a fewer number of executive directors on their board of directors.

Based on prior research, the hypotheses to be tested in this study are related to certain characteristics of diversity of the boards of directors, namely, size, independence, gender diversity, role duality and experience, controlling for the status listing and geographies of each entity. With these 5 board diversity characteristics are developed 5 hypotheses, which are as follows:

Board Size

There are some empirical studies suggesting a positive association between the size of the board and voluntary disclosure (e.g. Allegrini & Greco, 2013; Samaha et al., 2015), and others that found no association between both variables (e.g. Cheng & Courtenay, 2006). Jizi et al. (2014) and Akbas (2016) found that board size is positively related to environmental and CSR disclosures. Therefore, based on the above conclusions, the following hypothesis is expected:

H_1: *There is a positive association between the size of the board of directors and the higher reputation of the integrated reports.*

Board Independence

Some previous studies suggest a positive association between the proportion of independent directors on the board and voluntary disclosures (e.g. Cheng & Courtenay, 2006; Lim et al., 2007; Samaha et al., 2015). In fact, Lim et al. (2007) defend that boards with a majority of independent directors discloses more forward looking quantitative and strategic voluntary information. Herda et al. (2012) and Jizi et al. (2014) found that companies with more independent directors are more likely to publish stand-alone sustainability reports and better CSR disclosures. On the other hand, Allegrini & Greco (2013) did not found any association between the proportion of independent directors and voluntary disclosure. Haniffa & Cooke (2005) showed that the presence of more non-executive directors on boards does not have a significantly influence on CSR disclosures while Michelon & Parbonetti (2012) and Mahmood et al. (2018) found no association between board independence and sustainability reporting. Frias-Aceituno et al. (2013) suggested that more independent directors do not seems to contribute to the integration of corporate information. Considering the findings of previous studies, the following hypothesis is expected:

H_2: *There is a positive association between the independence of the board of directors and the higher reputation of the integrated reports.*

Gender Diversity

Gender diversity became a widely recognized characteristic of board diversity (Mahmood et al., 2018), being one of the most important factors in the integrated dissemination of information (Frias-Aceituno et al., 2013). Some authors defend that the presence of more women on boards of directors is very beneficial for companies. Dienes & Velte (2016) found evidence that gender diversity has a positive impact on CSR disclosures. These authors state that women can deliver new input to improve CSR activities as well as respective performance. Moreover, Setó-Pamies (2015) suggest that the presence of more women in the top tiers of management can play a key role in driving CSR forward. Al-Shaer & Zaman (2016) suggest that companies with more gender diversity on boards of directors produce higher-quality sustainability reports, and Nadeem et al. (2017) also revealed a significant and positive relationship between female directors and corporate sustainability practices. In this way, a higher proportion of women on boards is expected to contribute positively to the reputation of integrated reporting. Thus, the following hypothesis is expected:

H_3*: *There is a positive association between the presence of women on the board of directors and the higher reputation of the integrated reports.

Role Duality

When the same person occupies cumulatively the positions of CEO and chairman, we are faced with a duality of functions (Prado-Lorenzo & Garcia-Sanchez, 2010). CEO duality can be seen from two different views. The agency theory supports the separation of the two functions, since the concentration of both functions in one person creates abuse of power, undermining the board's independence and reducing the power of the board. On the contrary, the stewardship theory is in favor of linking the two functions in the same person, arguing that, by restricting responsibilities and decisions to a single person, it has a greater understanding and knowledge of the company's operations, which contributes to better decisions taking (Haniffa & Cooke, 2002; Shrivastav & Kalsie, 2016). Empirical studies on the relationship between CEO duality and voluntary 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 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. Due to mixed results in previous research, the following hypothesis is tested, with no expectations on the direction of the association:

***H$_4$*:** *There is an association between the CEO duality role and the higher reputation of the integrated reports.*

Board Experience

Age diversity can be a way to promote the diversity of knowledge and perspectives within the board of directors, bringing together the experience and wisdom of older generations to the dynamism of younger generations (Kang et al., 2007). Age is a feature that reflects directors' business experience, evidencing their maturity in directing the business (Hafsi & Turgut, 2013). These authors argue that younger directors are more sensitive to environmental and ethical issues, which leads that them make more balanced decisions regarding companies' social responsibility behavior. For Hafsi & Turgut (2013), age diversity has a significant negative effect on corporate social performance, that is, the higher the age diversity, the lower the social performance. Post et al. (2011) found that boards whose directors average closer to 56 years in age tend to report more environmental corporate social responsibility information.

For this study, the director's average age will be considered as a proxy for board experience. Based on the idea that the older members of the board of directors contribute with more experience and knowledge, the following hypothesis is formulated:

***H$_5$*:** *There is an association between the board experience and the higher reputation of the integrated reports.*

3. Research Design

3.1 Data and Sample

The sample of this study comprises entities that prepare integrated reports and send them to IIRC website. These integrated reports are obtained through the IIRC Examples Database, which contains the integrated reports of all the entities that refer to the IIRC or the IIRC Framework, which are considered by IIRC as <IR> Reporters. These reporters were divided into two groups: 1) one group that includes entities that are considered as reference reporters; 2) another group with all the other entities publishing an integrated report but that are not considered as reference reporters, but regular reporters. In this study, a reference reporter is any entity whose report was recognized as a leading practice by IIRC, or that was recognized as a leading practice by a reputable award process or through benchmarking (known as recognized reporters in the IIRC Database). The integrated reports needed to perform our research were hand-collected from the IIRC database, and all the data about the characteristics of boards of directors was hand-collected directly from those integrated reports, available at the IIRC database and in entities websites.

The sample comprises the entities presented in the IIRC database from Europe, Africa, Asia, North American, South America and Australasia. For the reference reporters, was analyzed the last report considered as a reference report in the period between 2013 to 2017, and for the regular reporters was considered the last report available on the entity website.

Table 1 details the construction of the sample. As shown in panel A, the initial sample was the 532 entities considered as <IR> Reporters. Subsequently, some entities were eliminated in accordance with the following criteria: entities with insufficient information about the characteristics of corporate governance; entities whose report was unavailable; entities whose website was unavailable; entities whose report were not in English. Thus, the final sample of this study consists in 374 reporters. Panel B shows the distribution of the sample by type of reporter. In a universe of 374 entities, 136 are <IR> reference reporters and 238 are <IR> regular reporters.

Table 1 - Sample selection

Panel A: Sample selection	**Entities**
<IR> Reporters	532
Entities with insufficient information on corporate governance	(123)
Entities with website without sufficient information available	(27)
Entities with unavailable websites	(6)
Entities with reports without english version	(2)
Final sample	**374**
Panel B: Sample according to type of reporter	
<IR> Reference Reporters	136
<IR> Regular Reporters	238
Final sample	**374**

Table 2 shows the geographical dispersion of the sample. The majority of the reporters are from Africa, Europe and Asia. In a universe of 374 reporters, 130 are from Africa (35%), 126 are from Europe (34%) and 97 are from Asia (25%). The remaining regions have a smaller representation over the total sample, namely, 14 from America (4%) and 7 from Australasia (2%).

Table 2 – Geographical dispersion

Region	<IR> Reporters		<IR> Reference reporters		<IR> Regular reporters	
	N	%	N	%	N	%
Australasia	7	2	4	3	3	1
Europe	126	34	71	52	55	23
Asia	97	25	11	8	86	36
Africa	130	35	42	31	88	37
America[a]	14	4	8	6	6	3
All	**374**	**100**	**136**	**100**	**238**	**100**

[a] Includes North America and South America

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 1 March 2010 all companies listed on the Johannesburg Stock Exchange (JSE) were required to adopt the Integrated Reporting (Hoffman, 2012).

Regarding the type of reporter, most of the <IR> reference reporters are from Europe (52%), followed by Africa, with 31% of reference reporters and 8% from Asia. This evidence shows that the mandatory adoption of the integrated reporting in South Africa does not have a major influence on the reputation of its reports, also consistent with previous research (Lopes & Coelho, 2018).

3.2 Research Model

A logistic regression model to analyze how the reputation of integrated reports may be influenced by some corporate governance characteristics is used, as follows:

$$REPUTATION = \alpha_0 + \alpha_1 BSIZE + \alpha_2 BINDEP + \alpha_3 GENDER + \alpha_4 DUALITY + \alpha_5 BEXPER + \alpha_6 STATUSLIST + \alpha_7 GEOn + \varepsilon \quad (1)$$

where:

REPUTATION, our dependent variable, 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 (Prado-Lorenzo & Garcia-Sanchez, 2010; Frias-Aceituno et al., 2013).

BINDEP represents the independence of the board of directors and, as a proxy variable, is measured by the percentage of non-executive directors (Frias-Aceituno et al., 2013).

GENDER represents the gender diversity of the board of directors and is measured by the percentage of women directors (Setó-Pamies, 2015; Al-Shaer & Zaman, 2016; Nadeem et al., 2017).

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 (Prado-Lorenzo & Garcia-Sanchez, 2010; Nadeem et al., 2017).

BEXPER represents the board experience and, as a proxy variable, is measured by the medium age of board members (Post et al., 2011).

In addition, the status listing and geographic characteristics 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 was used to control the differences between listed and unlisted entities.

GEOn represents the region of origin of each entity, creating 5 dummies for each geography (Australasia, America, Europe, Asia and Africa).

4. Results and Discussion

4.1 Descriptive analysis

Table 3 reports the descriptive statistics of the variables used in the empirical analysis, for the entire sample and for the two subgroups of reporters analyzed: <IR> reference reporters and <IR> regular reporters. On average, 36% of the <IR> reporters are <IR> reference reporters.

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 (69%) on the selected entities but there is a weak presence of women as directors (19%). The proportion of entities in which the CEO is also the chairman of the board is very small (9%). 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, on average, an 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. Of the 374 entities in the sample, 91% are listed on a stock exchange. For their region of origin, 35% are from Africa, 34% from Europe, 26% from Asia, 4% from America and 2% from Australasia.

Table 3 - Descriptive statistics

Variables	Mean	Std. Dev.	Median	Min	Max
<IR> Reporters (n=374)					
REPUTATION	0.36	0.48	-	-	-
BSIZE	11.21	3.92	11.00	2.00	31.00
BINDEP	0.69	0.21	0.73	0.00	1.00
GENDER	0.19	0.13	0.18	0.00	0.81
DUALITY[a]	0.09	0.29	-	-	-
BEXPER	57.99	4.29	57.72	41.88	72.67
STATUSLIST[a]	0.91	0.29	-	-	-
AUSTRALASIA[a]	0.02	0.14	-	-	-
AMERICA[a]	0.04	0.19	-	-	-
EUROPE[a]	0.34	0.47	-	-	-
ASIA	0.26	0.44	-	-	-
AFRICA[a]	0.35	0.48	-	-	-
<IR> Reference Reporters (n=136)					
BSIZE	11.90	3.99	11.00	3.00	26.00
BINDEP	0.74	0.17	0.80	0.00	1.00
GENDER	0.24	0.14	0.25	0.00	0.81
DUALITY[a]	0.04	0.19	-	-	-
BEXPER	57.29	3.79	57.67	44.45	66.80
STATUSLIST[a]	0.83	0.38	-	-	-
AUSTRALASIA[a]	0.03	0.17	-	-	-
AMERICA[a]	0.06	0.24	-	-	-
EUROPE[a]	0.52	0.50	-	-	-
ASIA[a]	0.08	0.27	-	-	-
AFRICA[a]	0.31	0.46	-	-	-
<IR> Regular Reporters (n=238)					
BSIZE	10.81	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	58.40	4.51	57.91	41.88	72.67
STATUSLIST[a]	0.95	0.22	-	-	-
AUSTRALASIA[a]	0.01	0.11	-	-	-
AMERICA[a]	0.03	0.16	-	-	-
EUROPE[a]	0.23	0.42	-	-	-
ASIA[a]	0.36	0.48	-	-	-
AFRICA[a]	0.37	0.48	-	-	-

REPUTATION is the reputation 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; STATUSLIST assumes 1 if the entity is listed on a stock exchange and 0 otherwise; AUSTRALASIA, AMERICA, EUROPE, ASIA AND AFRICA are the regions of origin.
[a] These variables, because they are binary, present minimum and maximum values of 0 and 1, respectively.

Comparing <IR> reference reporters with <IR> regular reporters, most of the variables have higher mean values in the first. On average, <IR> reference reporters have larger boards of directors, a larger proportion of independent directors as well as a larger proportion of women directors. On the other hand, <IR> regular reporters have, on average, a higher percentage of CEOs who cumulatively act as chairman of the board, and who also have a higher average age of directors compared to <IR> reference reporters, which means that <IR> regular reporters have older directors.

4.2 Correlation matrix

Table 4 presents the correlations for the continuous variables included in the regression Equation (1). Due to its discrete nature and limited range, the dummy variables were not included in the Pearson correlation analysis.

Table 4 - Correlation matrix

	BSIZE	BINDEP	GENDER	BEXPER
BSIZE	1	-	-	-
BINDEP	-0.024	1	-	-
GENDER	0.143***	0.276***	1	-
BEXPER	-0.135***	-0.163***	-0.235***	1

BSIZE is the number of board members; BINDEP is the proportion of non-executive directors; GENDER is the proportion of women directors; BEXPER is the medium age of board members.
***, ** and * indicate statistical significance at 0.01, 0.05 and 0.10, respectively.

The variable BSIZE is negatively correlated with the variables BINDEP and BEXPER, which means that the larger the size of the boards of directors, the smaller the proportion of non-executive directors and the lesser the experience of their directors. On the other side, the variable BSIZE is positively correlated with the variable GENDER, which indicated that larger boards have higher proportion of women as directors.

The variable BINDEP is positively correlated with the variable GENDER and negatively correlated with the variable BEXPER, which assumes that the higher the proportion of non-executive directors, the greater the proportion of women directors, but lesser the experience of the board, because have more young directors.

The variable GENDER is negatively correlated with the variable BEXPER, which indicates that boards with more women directors tend to have directors with less experience (more young directors).

The correlation between some variables is significant at 1%. The correlations between the variables are low, and there are no correlation coefficients in the sample that are sufficiently high (greater than 0.80), to cause serious problems of multicollinearity.

4.3 Regression results

Table 5 presents the results of the regression analysis of Equation (1). The variable BINDEP is statistically significant at a significance level of 1%, so the hypothesis H_2 is not rejected. The coefficient shows a positive value and it can be concluded that a higher proportion of non-executive directors on the board positively affects the reputation of the integrated reports. This result is in line with most of the literature review, which suggests that a higher level of independence of the board of directors contributes to better disclosure of non-financial information (Lim et al., 2007).

Table 5 - Regression analysis

Variables	**Coefficient**	**p-value**
Constant	-3.521	0.095
Main variables:		
BSIZE	0.013	0.687
BINDEP	2.128	0.003
GENDER	2.328	0.023
DUALITY	-1.217	0.047
BEXPER	0.008	0.837
Control variables:		
STATUSLIST	0.877	0.034
AUSTRALASIA	0.894	0.274
AMERICA	1.685	0.014
EUROPE	1.067	0.000
ASIA	-0.575	0.233
LR Statistic	406.157	
Nagelkerke R^2	0.276	

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; AUSTRALASIA. AMERICA. EUROPE and ASIA are the regions of origin.

The variable GENDER is statistically significant at a significance level of 5%, so the hypothesis H_3 is not rejected. The coefficient of this variable presents a positive value, indicating that a higher proportion of women directors on the board have a positive influence of the reputation of the integrated reports. This conclusion is in line with different studies, because is one of the most important factors in the integrated dissemination of information (Frias-Aceituno et al., 2013).

The variable DUALITY is statistically significant at a significance level of 5%, so the hypothesis H_4, which suggests that there is an association between the CEO's duality and the reputation of integrated reports, is not rejected. 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 of worst reputation. This conclusion shows 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 variables BSIZE and BEXPER, related with hypotheses H_1 and H_5, are not statistically significant, so, it is not possible to conclude on the cause-effect relationship (positive or negative), with the dependent variable.

Regarding the control variables, the variable STATUSLIST is statistically significant at a significance level of 5% and has a positive coefficient, so it is possible to conclude that listed entities produce integrated reports with a higher reputation compared to entities that are not listed on a stock exchange. The reputation of the integrated reports is also related to the regions of origin, especially the reporters from Europe and from America, who tend to produce integrated reports of higher reputation.

5. Conclusion and future research

The current economic context, characterized by globalization and an increasingly competitive environment, leads companies to diversify their responsibilities to any stakeholder and to society. In a world of constant change, corporate reporting must evolve in order to answer the needs of society. While sustainability reporting aims at providing social, environmental and economic information to a wide range of stakeholders, integrated reporting focus on presenting information related to broad risk evaluation and potential future value growth thus appealing to capital providers and potential investors (Morros, 2016).

This study examines the influence of some boards' diversity characteristics on the reputation of the integrated reports, distinguishing between <IR> reference reports and <IR> regular reports, based on a sample of <IR> reporters extracted from the IIRC Examples Database.

Our results show that entities producing higher reputation integrated reports - <IR> reference reporters – have, on average, a larger proportion of non-executive directors and a greater proportion of women as directors on the board, which reveal a greater independence and gender diversity of the board of directors. However, having the CEO acting also as the chairman of the board have a negatively influence on the higher reputation of the reports, that is, entities with role duality of the CEO on board of directors have worst reputation reports. Regarding board size and board experience, the results showed that these variables are not relevant to explain the higher reputation of the integrated reports.

This study is part of a major research that is still ongoing and it correspond to a master thesis, covering additional subsamples from the initial sample and data available only for listed companies. Additional and subsequent research on the influence of firm characteristics and institutional characteristics beyond corporate governance ones are going to be presented in the next stage of this research. The influence of different corporate governance characteristics on integrated reporting practices may also be extended.

6. References

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