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Does an improved type of reporting lead to a better financial performance?

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Abstract:

Research question: Is there a link between the type of report that a company publishes and its financial performance? **Motivation**: I draw on previous research that analyses the impact of integrated reporting on the firm's valuation (Arguelles *et al.*, 2015; Lee & Yeo, 2016; Barth *et al.*, 2017; Zhou *et al.*, 2017; Cosma *et al.*, 2018) conducted mainly on South African samples (where integrated reporting is a mandatory practice) in order to develop an idea for future research based on early practices, a wider geographical distribution and an industry frequently eliminated from this type of studies. **Idea**: This paper aims to examine whether there is an association between publishing an improved type of report (e.g. integrated report) and financial performance indicators. **Data**: There were considered the 2013 and 2014 reports of 22 insurance companies listed to a stock exchange. **Tools**: There were applied different regressions with various variables (report type, integrated report, company size, leverage, return on assets, return on equity, Tobin's Q and sustainability ranking) using the data sourced manually from the companies' reports. **Findings**: Naming the 2013 report as "integrated" leads to changes in firm valuation (a positive and significant association between integrated report variable and Tobin's Q), but does not cause improvements in terms of profitability (ROA or ROE). **Contribution**: This study contributes to the literature that examines the benefits of integrated reporting, without considering only mandatory cases and in the context of an influential industry, often eliminated from other studies.

Keywords: Integrated reporting, insurance companies, financial performance

JEL codes: M14, Q56

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1. Introduction

Currently, International Financial Reporting Standards (IFRS) are the most used referential in financial reporting worldwide. However, this referential is based on financial information and users (especially investors) claim for more non-financial aspects to be disclosed, such as: sustainable development actions, corporate social responsibility, environmental issues, intellectual and relational capital, risk reporting, forward-looking information (IIRC, 2015). An improved type of reporting is expected to be brought by integrated reporting (IR). This approach proposes combining financial and nonfinancial information within one document, which presents how environmental and social performance and a good corporate governance contribute to obtaining a higher financial performance (Eccles & Serafeim, 2011).

The current promoter of IR is the International Integrated Reporting Council (IIRC) founded in 2010 with the stated aim of developing an international framework. The final version of this framework was released in December 2013 after the discussion paper received over 200 responses from companies and organizations in more than 30 countries (IIRC, 2011).

Although integrated reporting is mandatory in only one country in the world (South Africa), many companies publish integrated reports voluntarily, with or without referencing the International Integrated Reporting Framework (IIRF). Eccles and Saltzman (2011) identified three categories of benefits coming from this phenomenon: internal benefits (e.g. a better allocation of resources), external benefits (e.g. company's inclusion in sustainability indices) and reduced regulatory risk (e.g. the preparation for a wave of global regulation).

This paper has as objective to investigate the nature of the impact of a company's decision to publish an integrated report over its financial performance or firm valuation. Through 'financial performance', I refer to improved values for profitability indicators like return on assets (ROA) and for firm value (Tobin's Q). Improved values for these indicators refer to the idea that a company's financial performance should be the first to be affected through a change in the improvement of its communication channel (annual reporting). This means that, for instance, if a company decides to issue a report containing also non-financial information (e.g. sustainability report, integrated report, etc.), this should first bring an increase in its financial performance, meaning higher values for indicators like ROA.

In order to achieve this objective, various statistical models were designed considering a sample composed by 22 insurance firms from all over the world.

This research is based mainly on insurance companies as the insurance industry has attracted academic scholars' attention with studies on different topics like risk (Bongini *et al.*, 2017; Gaganis *et al.*, 2015; Zheng & Cui, 2014), regulations (Gaganis *et al.*, 2016; Gaganis *et al.*, 2015; Pasiouras & Gaganis, 2013), organization and efficiency Biener & Eling, 2012), intellectual capital (Zakery & Afrazeh, 2015; Chen *et al.*, 2014; Lu *et al.*, 2014a), pricing strategies (Pantelous & Passalidou, 2015). The insurance sector is a growing part of the financial industry with the main role to spread financial losses and also transfer risk to an entity better equipped to withstand it (Das *et al.*, 2003).

Financial industry was traditionally regarded as being relatively stable, until the financial crisis that began in 2007. In the insurance field, the only case of failure was the American International Group (AIG), which is only one of the companies included in this research's sample. The insurance companies showed a much stronger resilience compared with banks and were more a stabilizing factor in the financial system (Bongini *et al.*, 2017). My choice for this sector comes from the idea that it represents a more stable part of the financial industry than banks and that it is connected to many other sectors as detailed further. Several of these authors framed their studies in their homeland and few of them explained why they had chosen insurance sector. For instance, Pasiouras and Gaganis (2013) motivate the choice for insurance sector through the fact that it contributes significantly to the economic growth and it also has significant potential to bring a negative impact to the economy, being of major importance for various stakeholders. I think that insurance sector is highly connected with the society. This means that we cannot live without insurance (based on the unpredictable world we live in) and insurance companies cannot exist without us demanding for insurance. Hence, these firms are very entitled to show to the world that they care about more than profits. Moreover, they can always choose one report in this aim, e.g. an integrated report and this decision should benefit them through achieving better results over time.

Currently, to the best of my knowledge, there are no studies examining the impact of issuing an integrated report over the company's financial performance in the financial industry and even less, in the insurance sector. This paper has several contributions. First, a practical contribution: it provides additional evidence about the influence of the reporting type over a company's financial performance. In this regard, the novelty comes from the approach of an industry on which many other sectors are heavily reliant: manufacturing, medical, legal, accounting professions, aviation, banking, etc. (Das *et al.*, 2003). In essence, each company looks for being profitable (in terms of assets or equity) and for being able to constantly attract financing through a good image on the capital market. Hence, if one can bring any prove that choosing a certain type of report (from the category of the reports that include also non-financial information) can improve the financial performance of a company, it will contribute to the understanding of integrated reporting in practice. Second, this study can give an impetus to other companies from the financial

industry to analyse and approach the concept and practice of integrated reporting or any other form of non-financial reporting. This study is based on early forms that use the title of "integrated report" and, even if the sample is not very big (and consequently, not very representative for a larger population or for formulating a general conclusion), it brings a contribution through the manner in which the idea is approached. The study takes for granted what the report's title says, considering that the company provided an actual integrated report. In this research I tried to find a connection between declaring that one embraced a certain phenomenon and what would this bring in real life (in actual numbers). I consider the sample size is not relevant because this paper is more similar to an experiment on what it is possible to happen at a larger scale.

This paper is structured as follows: the next part contains the literature review on other studies conducted in IR's concept, practice and impact. Section three describes the hypotheses and the research method. Section four presents the results of the study. The last part includes conclusions and limitations of this study, as well as possible directions for future research.

2. Integrated reporting concept, practice and impact

According to the IIRF, the objective of an integrated report is to explain the value creation process to the providers of financial capital and it should benefit all stakeholders interested in this process. More specifically, it's about a single document showing a mix of financial and nonfinancial information, the link between the two types of performance and how these create value for shareholders and other stakeholders. (Eccles & Armbrester, 2011). There is no mandatory disclosure requirement for an integrated report. The IIRF provides a series of guiding principles, content elements and a list of six capitals that could contribute to value creation. However, it can be observed that the concept itself is designed to bring first a better financial performance.

Integrated reporting is a concept based on the integration of the information published in financial reports and sustainability reports into a single report (Van Bommel, 2014), providing an universal language that facilitates the comparison of the information. Taking into account that the IASB Conceptual Framework states that the information from financial statements is aimed to investors (Ristea *et al.*, 2006), it can be deduced that financial reports and sustainability reports, integrated in a single document, cumulate their individual benefits and can help to attract investors. Therefore, integrated reporting has the potential to be an important reporting tool to capture the attention of providers of financial capital if it also brings economic benefits for them.

Most of the studies in the area of IR practice analyse the IR's impact on various aspects such as: environmental, social and governance (ESG) issues (Wulf *et al.*, 2014; Turturea, 2015; Maniora, 2017), sustainability issues (Zappettini & Unerman, 2016; Stacchezzini *et al.*, 2016), disclosure mechanisms (Stubbs & Higgins, 2014), managerial perception (Perego *et al.*, 2016), business model disclosures (Melloni *et al.*, 2016; Maniora, 2017), intellectual capital disclosure (Melloni, 2015), the system of economic security (Kaspina & Molotov, 2016).

This paper is built on the idea that integrated thinking (the core concept of IR) is expected to improve a company's reporting quality and the people in it and, so, bring financial benefits to a company that takes this decision (Cheng *et al.*, 2014; de Villiers *et al.*, 2014). There are few studies (Steyn, 2014; Arguelles *et al.*, 2015; Bernardi & Stark, 2016; Lee & Yeo, 2016; Baboukardos & Rimmel, 2016; Barth *et al.*, 2017; Zhou *et al.*, 2017; Cosma *et al.*, 2018) that analyse the IR's impact on a company's financial indicators, but most of them are conducted on samples consisting of South African companies listed at the Johannesburg Stock Exchange (JSE) where IR is a mandatory practice. The most important findings of these articles are detailed further.

Zhou *et al.* (2017) bring a contribution to the IR benefits literature through a study that uses a sample of 443 company-year observations listed at JSE with fiscal years ending 2009 to 2012. Their results show that an integrated report provides more useful information to investors and analysts in assessing the future financial performance of a company than the current reporting. Based on the idea that IR is intended to link ESG and financial performance, Bernardi and Stark (2016) study the impact of mandatory IR on the accuracy of analysts' forecasts of earnings. The authors conclude that, in the context of firms outside the financial sector, there is no robust association between ESG disclosure levels and analyst forecast accuracy before the introduction of mandatory IR and that environmental disclosure levels are associated with analyst forecast accuracy after the introduction of mandatory IR (Bernardi & Stark, 2016).

With the purpose to examine if the value relevance of summary accounting information of listed companies at JSE has enhanced after the mandatory adoption of IR under King III, Baboukardos and Rimmel (2016) indicate that the association between financial and non-financial information leads to an increase of the value relevance of the companies' earnings. This is similar to Lee and Yeo (2016) findings who show that IR disclosures have a positive influence over firm valuation after mandatory IR implementation. Moreover, this association is more pronounced in companies with higher organizational complexity and with higher external financial needs (Lee & Yeo, 2016). In addition, based on an international sample of voluntary early adoption firms, Arguelles *et al.* (2015) prove that disclosure made under the IR idea are valued by the capital market and this value registers increases over time.

Barth *et al.* (2017) implemented a model to study the relationship between an integrated report quality and stock liquidity or firm value through its components, e.g. expected cash flows and cost of capital. The analysis was based on companies listed at the JSE and their main conclusion was that there is a link between an integrated report quality and firm value mostly by increasing future cash flows. There is also a positive association between integrated reporting quality and stock liquidity. Using an event study methodology, Cosma *et al.* (2018) measure stock price effect on IR award announcements and conclude that even the nomination to a type of award causes changes on the capital market. Moreover, high quality IR disclosure generates a "substantial positive reaction on the part of shareholders" in all industries, especially in the case of non-financial companies (Cosma *et al.*, 2018).

Considering a sample formed by South African listed companies, Steyn (2014) uses a survey to analyse CEOs' and CFOs' perspectives on the organizational benefits and implementation changes of the IR. The study concludes, among others, that economic value creation is not an outcome in companies that implemented IR, nor are better resource allocation or cost reduction.

Based on the composition of the IIRC Council, Flower (2015) argues that IR is designed to bring more economic benefits for investors than value for society. This is supported by Stubbs and Higgins (2018) in their paper that studies the users' perspective (financial stakeholders) on IR. They contribute with evidence that IR privileges financial value creation over stewardship of environmental and social capital (Stubbs & Higgins, 2018).

On the other hand, there are empirical studies that analyze the relationship between CSR or sustainability-related disclosures and the financial performance of a company, in the context of various industries and based on other type of reports – not integrated (Lu *et al.*, 2014b; Soytas *et al.*, 2017). Interestingly, all these lead to different results: some positive, some negative, some inconclusive. For instance, Ioannou and Serafeim (2017) examine the consequences of mandatory CSR reporting in China, Malaysia, Denmark and South Africa. One of their main conclusion states that increases in mandatory sustainability related disclosures are positively associated with increases in firm valuation (Ioannou & Serafeim, 2017). These make this area even more interesting for a new study concretized into this paper that is trying to contribute to the literature, starting from the idea that IR is perceived as a mix of financial and non-financial information.

Therefore, one can conclude that it is expected that an evolved form of reporting chosen voluntarily by a firm, it is designed to and it should bring first a better financial performance for that firm. Also, previous studies exclude financial companies as being perceived "poorly connected to environmental impacts"

(Cosma *et al.*, 2018). By contrary, this study considers financial sector, with a focus on insurance companies.

3. Research method

This paper's aim is to see if there is an association between publishing a type of report (e.g. integrated report) and a better financial performance of a company. This study is not intended to analyse if a report entitled 'integrated' it is actually integrated, nor that a 'sustainability report' is actually prepared in accordance with an existing framework in this regard; therefore, there was not studied the degree of compliance with the IIRF or with GRI guidelines. These aspects were considered only when classifying the reports considered. This research tries to find a connection between deciding to issue a complete and a better report (e.g. integrated report) and some financial benefits as outcome of this decision.

3.1 Hypotheses development

According to the IIRF, an integrated report is linked to value creation over time and it is focused on the providers of financial capital (IIRC, 2013: 7). It is also meant to develop integrated thinking within an organization with the purpose of improving decision-making processes and a better allocation of financial capital. Given this focus on value creation and financial capital, it should be assumed that IR is connected with a better financial performance of a company. This leads to the following main hypothesis (idea of the paper):
Hypothesis (H1): *There is a positive association between the type of report issued by an insurance company and its financial performance; the decision to publish an integrate report leads to an increase of the financial performance indicators*.

A better financial performance could be shown through different indicators, so the main hypothesis will be detailed in subordinated hypotheses.

The main purpose of the existence of a business is to be profitable, to be efficient. From the perspective of the shareholders, a good financial performance is first reflected by high profitability. For them (shareholders), profitability is often measured through the return on equity (ROE) ratio. This shows what per cent of the equity invested returns as net profit at the end of the year. In addition, another indicator mostly used to assess profitability is ROA (return on assets). This ratio measures what per cent of the capital invested in assets returns as net profit at the end of the financial year. Therefore, considering the internal benefits of integrated reporting mentioned in the introduction (Eccles and Saltzman, 2011), I formulate the following two hypotheses:

Hypothesis (H2): *The type of reporting chosen by an insurance company is associated with better profitability in terms of ROA.*
Hypothesis (H3): *The type of reporting chosen by an insurance company is associated with better profitability in terms of ROE.*

The market's assessment of the firm value (its similarity with its book value) is another sign of a good financial performance. Being listed on a stock exchange gives international acknowledge and varies the financing opportunities (Saudagaran, 1988; Biddle & Saudagaran, 1991). If the market evaluates a company favorable, it suggests a true and reliable image reflected by its financial accounts. In addition, this image can be presented through a superior type of reporting, e.g. integrated reporting. This reasoning makes me expect a positive relationship between the adoption of integrated reporting and a company's market expectations about growth. Hence, the fourth hypothesis is:

Hypothesis (H4): *The type of reporting chosen by an insurance company is associated with better market expectations about growth*.

In the view of an integrated report developed based on mixing a sustainability report with a financial one (Van Bommel, 2014), it could be considered that IR might be also the sign of a better ESG performance. The connection between IR and CSR is still under debate; more specific, researchers are asked to investigate what is the "extent to which IR is a simple reflection of a CSR implementation" and what is the "extent to which IR is a driver of changes to CSR implementation" (Lueg *et al.*, 2016). In addition, scholars request empirical evidence about the link between sustainability actions and performance indicators and about the role of IR in communicating sustainability (Stacchezzini *et al.*, 2016). This is why the following hypothesis is proposed to be also checked in this study:

Hypothesis (H5): *The type of reporting chosen by an insurance company is associated with a better ESG ranking*.

The main hypothesis (H1) will be supported if hypotheses H2, H3 and H4 will be validated by the analysis.

3.2 Sample construction and data sourcing

To achieve these objectives, I built a sample of 22 listed insurance companies from all over the world, as it will be explained in the following paragraphs.

I started from the sample used in a study conducted by Mazars in 2015 consisting of 22 insurance and reinsurance firms (Mazars, 2015). Mazars performed that study in order to identify key trends in this type of companies' reporting based on the

requirements of the IIRF. The sample was prepared with inputs from IR Insurance Network participants and it was intended to show a balanced image in terms of typologies of reports and geographical location (Mazars, 2015). Mazars classifies the reports considered into three categories: financial, management and integrated. These categories were not assumed by the analysis conducted in this study, but they represent a starting point for thinking about one of the variables used in the models.

As it can be observed from the elaboration of the hypotheses, I will also consider a variable related to ESG performance in the models that will be used. The sustainability ratings for each company were sourced from a Sustainalytics report (Sustainalytics, 2015). The report is made on insurance sector, considering insurers and reinsurers from all over the world. The study addresses three themes (environmental, social and governance) focused on a set of three key ESG issues considered to be fundamentally important for investors: Responsible Finance, Financial Product Governance and Business Ethics differenced by sustainability and business impacts and their potential to generate material risks and opportunities for Insurance industry investors. The top industry performers identified in this report are Allianz (Germany), Storebrand (Norway) and Swiss Re (Switzerland). Sustainalytics declares these companies as "well positioned to deliver shareholder value going forward" (Sustainalytics, 2015). Three of the companies from Mazars' sample were not present in the Sustainalytics ranking and therefore eliminated from this study's sample. However, because I focus on companies that issue an integrated report, I checked the presence in the IIRC database of all the companies from the Sustainalitycs report. This comparison enriched this study's sample with four new companies, among which one it is not listed to a stock exchange.

Hence, the final sample of companies considered for this study consists of 22 companies that are presented in Table 1 explained further.

Aegon publishes an *Annual Integrated Review 2013* prepared in accordance with both IIRC and GRI guidelines. Generali has an *Annual integrated report* which is prepared based on the principles included in the International Integrated Reporting Framework (IIRF). Sanlam's and Santam's integrated reports 2013 are declared to be made in accordance with the IIRF and King III requirements. Although it entitles its annual report as being integrated, Discovery Holdings Limited prepares both, its annual report and its Sustainable Development Report 2013, in accordance with GRI G3.1 guidelines. All of these companies are considered as issuing an integrated report, as presented in Table 1.

Although it has incorporated in the Sustainability Disclosure Database a so-called *Corporate Citizenship Report* for 2013, AIG does not mention any compliance with GRI guidelines, nor that is this report an integrated one. However, it is a

report containing non-financial information. AXA includes a table at the end of its *Activity and Corporate Responsibility Report 2013* which intends to inform searches based on the GRI guidelines. There is no reference to the words "integrated report". Allianz Group's *Sustainable Development Report* it is supposed to be indexed in GRI database, but it could not be found there, nor on the company's website. Hence, the firm issued some communications on different topics and a climate change booklet, none prepared in accordance with GRI guidelines. Aviva's *Our Wider Impact Report* is not indexed in the GRI Sustainability Database, it is not prepared in accordance with these guidelines, nor does it have any mention about the idea of being an integrated report. However, it contains non-financial information and KPIs. Therefore, these companies were considered as issuing a non-financial report type (1), meaning that they do not mention a reference framework for that report.

Table 1. Selected companies for the research

Company	Country	Type of report 2013	Type of report 2014
Aegon N.V.	Netherlands	Integrated	Integrated
AIG	USA	Non-financial (1)	Non-financial (1)
Allianz Group	Germany	Non-financial (1)	Non-financial (2)
Aviva plc	UK	Non-financial (1)	Non-financial (1)
AXA Group	France	Non-financial (1)	Non-financial (1)
China Life Insurance Company Limited	China	Financial	Financial
China Taiping Insurance Holdings Company Limited	Hong Kong	Financial	Financial
Discovery Holdings Limited	South Africa	Integrated	Integrated
Generali	Italy	Integrated	Integrated
MAPFRE	Spain	Non-financial (2)	Non-financial (2)
MetLife, Inc.	USA	Non-financial (2)	Non-financial (2)
Munich Re	Germany	Non-financial (2)	Non-financial (1)
Old Mutual	UK	Non-financial (2)	Non-financial (2)
PartnerRE	Bermuda	Financial	Financial
Ping An Insurance Group	China	Financial	Financial
Porto Seguros	Brasil	Financial	Financial
Prudential Financial	USA	Non-financial (2)	Non-financial (2)
Prudential plc	UK	Financial	Financial
Sanlam	South Africa	Integrated	Integrated
Santam	South Africa	Integrated	Integrated
Sompo Japan Nipponkoa Holdings	Japan	Non-financial (2)	Integrated
Zurich Insurance Group	Switzerland	Financial	Financial

MAPFRE has the *Corporate Social Responsibility report* drafted in accordance with the GRI guidelines. There is no mention for considering it an integrated report. Metlife's *Global Impact Corporate Responsibility Report* issued for the year 2013 and indexed in GRI Sustainability Database it is designed in accordance with GRI guidelines. Old Mutual Group uses also the GRI guidelines to design its Responsible Business report. The same for Munich Re (Corporate Responsibility Report), Prudential Financial (Sustainability Report) and Sompo Japan Nipponkoa Holdings (CSR Communication Report). As all these companies reference GRI guidelines, their reports were considered as non-financial reports type (2).

For China Life Insurance Company, China Taiping Insurance Holdings Company, PartnerRE, Ping An Insurance Group, Porto Seguros and Prudential plc there were found only financial reports. Zurich Insurance Group does not have a CSR report for 2013 to be indexed in the GRI database, it only publishes some communications about its progress. For that reason, it will be considered only the financial report for this year.

The data needed to determine the values for each independent variable of the models used it was hand collected from the 2014 annual reports of these companies sourced from their websites.

This study is based on 2013 and 2014 reports because I analyzed if the report issued for year 2013 influences the results communicated for year 2014. Moreover, Mazars' report was issued in November 2015 and Sustainalytics' report was issued in June 2015 and these refer to 2014 reports. This paper does not search to identify if the reports are actually integrated or not, it only aims to observe if there is a link between different types of reporting and financial performance indicators. However, the IIRF was issued in December 2013. Hence, companies that wanted to publish an integrated report for this year had very few time to provide such a product. I chose this year because it was the first moment when companies could opt for the preparation of an integrated report based on a reference framework, except for the firms that were experimenting this practice as members of the Pilot Programme initiated by the IIRC in 2010. On the other hand, there is no instrument or assurance tool to verify and guarantee if a report is or not integrated. However, to have some form of guarantee if the reports entitled 'integrated' are somehow recognized as integrated, there was verified the existence of the list of companies with such report in the <IR reporters> section from the IIRC Examples Database.

3.3 Empirical model

I designed statistical models in order to examine whether there is a link between issuing an integrated report and improved values for ROA, ROE or Tobin's Q. The variables used are defined in Table 2.

The variable REPTYPE considers the types of report published by each company in 2013. It takes the following values: 1 if the entity issues only a financial report (e.g. financial statements according to national or international regulations); 2 if, along with its financial report, it issues a non-financial report which does not reference a guiding framework; 3 if, along with its financial report, it issues a non-financial report with reference to a guiding framework; 4 if it issues a so-called integrated report. By non-financial report, I refer to sustainability report, CSR report, etc. The use of these values for this variable rises from the idea that integrated reporting is considered to be the most desirable form of reporting and even the mix between financial and nonfinancial information provided through two different reports represents a first step to take towards it and it should suggest a more complete reporting of a company as compared to the disclosure of financial information only.

Table 2. The models' variables

Name	Meaning	Value/Formula
REPTYPE	Type of report	1 = financial; 2 = non-financial (without guidelines); 3 = non-financial (with guidelines); 4 = integrated
IREP	Integrated report	1 = yes; 0 = no
SIZE	Firm size	Natural logarithm of total sales Ln (total sales)
LEV	Leverage	Total liabilities/Total assets
ROA	Profitability = return on assets	Net profit/Average total assets
ROE	Return on equity	Net profit/Book value of equity
Tobin's Q	Market expectations about growth opportunities/Firm's value	(Total assets – Book value of equity + market value of equity) / Total assets
ESG	Level of ESG disclosure	Sustainability ranking*
ENV	Level of environmental disclosure	Environmental ranking*
SOC	Level of social disclosure	Social ranking*
GOV	Level of governance disclosure	Governance ranking*

(*Source*: *Sustainalytics, 2015, p.63-65)

The variable IREP measures for integrated reporting. It takes value 1 if the report issued is entitled as "integrated" and zero otherwise.

As control variables, I use firm size (SIZE) and debt ratio or leverage (LEV). The company's SIZE was measured by the natural logarithm of total sales. Total assets, sales and market capitalization are the most used proxies for firm size (Dang *et al.*, 2018). In the case of insurance companies, it is not easy to gain customers trust, nor to keep it (Galatro, 2017). For this reason, revenues (including sales) can be

considered the best proxy for firm size in insurance industry. Moreover, this control variable is frequently used by previous studies (Baboukardos & Rimmel, 2016; Zhou *et al.*, 2017; Ioannou & Serafeim, 2017). The debt ratio (LEV) is a key indicator of the degree of leverage used by a company and a good approximation for risk. This variable or others supporting the idea of considering a firm's debt are also used for control in previous studies mentioned before in this paper (Bernardi & Stark, 2016).

For firm valuation, I chose as proxy Tobin's Q ratio, a metric frequently used to capture market growth expectations (Daske *et al.*, 2008). This variable can be also found in previous studies referenced in the section dedicated to literature review on IR's impact (Lee & Yeo, 2016; Ioannou & Serafeim, 2017).

As financial performance indicators, there were considered ROA (return on assets) and ROE (return on equity), being some of the most used financial performance measurements in the CSR literature (Crisóstomo *et al.*, 2011). The calculation formula for these variables is presented in Table 2.

The final variable is sustainability ranking (ESG) detailed on three components - environmental (ENV), social (SOC) and governance (GOV) - referenced from a Sustainalytics report (Sustainalytics, 2015). Generally, to compute a company's ESG performance, authors use own established hierarchies (Crisóstomo *et al.*, 2011) or rankings sourced from well-known information providers such as Bloomberg (Bernardi & Stark, 2016; Ioannou & Serafeim, 2017; Melloni *et al.*, 2017) or Ernst & Young (Barth *et al.*, 2017; Zhou *et al.*, 2018). Using a provider of information and not own developed ratings has the advantage of bringing objectivity to the analysis, which is also the reason why I sourced data for ESG ranking from Sustainalytics report.

In order to check the hypotheses formulated, I use the following models:

(a) The association between the type of reporting and insurance companies' profitability (in terms of ROA – hypothesis H2 and in terms of ROE – hypothesis H3):

$ROA_i = a + b1\ SIZE_i + b2\ LEV_i + b3\ Tobin's\ Q_i + b4\ ESG_i + b5\ REPTYPE_i + b6\ IREP + \mu_j$ (1)

$ROE_i = a + b1\ SIZE_i + b2\ LEV_i + b3\ Tobin's\ Q_i + b4\ ESG_i + b5\ REPTYPE_i + b6\ IREP + \mu_j$ (2)

(b) The association between the type of reporting and insurance companies' value – hypothesis H3:

$Tobin's\ Q_i = a + b1\ ROA_i + b2\ SIZE_i + b3\ LEV_i + b4\ ESG_i + b5\ REPTYPE_i + b6\ IREP + \mu_j$ (3)

(c) The association between the type of reporting and insurance companies' sustainability ranking – hypothesis H4:

$$ESGi = a + b1\ ROAi + b2\ SIZEi + b3\ LEVi + b4\ Tobin's\ Qi + b5\ REPTYPEi + b6\ IREP + \mu j \quad (4)$$

4. Research results

The results section is organized as follows: first, there are presented and analysed descriptive statistics for both, the whole sample and each panel containing different type of reports. Second, there are presented the results from the models' regression.

4.1. Sample's characteristics

Table 3 presents descriptive statistics for the entire sample and Table 4 for each panel that this contains: integrated reports, non-financial reports (with and without guiding framework) and financial reports.

Table 3. Sample's data – descriptive statistics

Item	Min	Max	Mean	Median	Standard dev.
FULL SAMPLE – 22 observations					
ESG	45.50	84.90	65.35	65.70	12.82
ENV	34.40	89.30	61.93	63.40	14.62
SOC	53.00	90.80	69.54	69.05	9.89
GOV	39.30	86.70	66.68	66.80	16.19
ROE	-0.70	0.31	0.12	0.11	0.07
REPTYPE	1.00	4.00	2.41	2.50	1.18
IREP	0.00	1.00	0.23	0.00	0.43
SIZE	7.97	18.01	11.68	10.68	2.65
ROA	-0.70	0.50	0.09	0.06	0.25
LEV	0.02	0.97	0.75	0.86	0.25
Tobin's Q	0.64	1.94	1.12	1.00	0.29

22.73% of the sample issued an integrated report in 2013, namely the following companies: Aegon, Discovery Holdings Limited, Generali, Sanlam and Santam. 60% of these are operating in Life & Health Insurance. Along with its financial statements, 45.46% of the sample issued a non-financial report in 2013, out of which 40% of them do not state to be preparing their reports in accordance with an existing guiding framework. 50% of these are operating in Multi-Line Insurance. 31.82% of the sample disclosed only financial information in 2013 and most of them (57.14%) are operating in Life & Health Insurance.

The mean of the variable REPTYPE variable is 2.41 and the mean for IREP is 0.23. These numbers suggest that the sample contains mostly companies that issued

a non-financial report in 2013, which is expected through the fact that, at the end of this year, the IIRF was released.

Table 4. Panels' data – descriptive statistics

Item	Min	Max	Mean	Median	Standard dev.
INTEGRATED REPORTS – 5 observations					
ESG	53.10	77.40	69.50	72.90	9.94
ENV	63.20	79.40	67.82	66.40	6.70
SOC	67.50	81.80	73.24	68.00	7.64
GOV	67.70	86.70	78.50	82.80	9.59
ROE	0.04	0.22	0.14	0.19	0.08
SIZE	9.78	11.07	10.22	10.41	0.59
ROA	0.02	0.32	0.11	0.02	0.05
LEV	0.17	0.95	0.70	0.92	0.44
Tobin's Q	0.64	1.70	1.19	1.01	0.24
NON-FINANCIAL REPORTS with framework – 6 observations					
ESG	54.50	82.10	68.12	65.70	9.94
ENV	52.30	89.30	67.45	63.70	13.20
SOC	57.30	75.40	69.17	70.40	6.32
GOV	53.60	85.40	67.68	62.40	13.17
ROE	0.03	0.19	0.09	0.09	0.06
SIZE	7.97	16.86	12.56	12.66	3.31
ROA	0.02	0.26	0.12	0.13	0.10
LEV	0.76	0.94	0.88	0.89	0.07
Tobin's Q	0.97	1.26	1.03	0.99	0.11
NON-FINANCIAL REPORTS without framework – 4 observations					
ESG	52.30	84.90	75.05	81.50	15.25
ENV	47.80	80.80	70.70	77.10	15.43
SOC	62.70	90.80	78.98	81.20	11.76
GOV	45.90	86.30	74.85	83.60	19.35
ROE	0.03	0.09	0.07	0.07	0.02
SIZE	10.46	15.55	11.98	10.95	2.42
ROA	-0.15	0.50	0.21	0.25	0.32
LEV	0.54	0.92	0.71	0.69	0.18
Tobin's Q	0.93	1.19	1.01	0.96	0.12
FINANCIAL REPORTS – 7 observations					
ESG	45.50	70.20	54.49	51.20	9.40
ENV	34.40	64.8	47.97	48.50	10.78
SOC	53.00	74.4	61.81	60.70	7.77
GOV	39.30	70.6	52.7	50.5	11.61
ROE	0.11	0.31	0.17	0.14	0.07
SIZE	8.69	18.01	11.80	10.79	3.12
ROA	-0.70	0.35	-0.04	0.04	0.34
LEV	0.02	0.97	0.71	0.87	0.33
Tobin's Q	0.96	1.94	1.20	1.06	0.35

An interesting result lies in the fact the companies issuing a "so-called" integrated report registered the closest to the sample's mean and obtained the highest average score on return on equity (ROE) ratio (0.14), if there are not taken into the consideration the firms issuing only financial reports. ROA ratio scores from -70%

to 50%, with a mean of 9%, a median of 6% and a standard deviation of 25%. On average, each monetary unit a company from the sample invested in assets returned 0.09 monetary units as net profit. ROA obtains only positive values for firms issuing an integrated or a non-financial report that references a guiding framework. The companies from the other two panels register negative values.

Regarding the sustainability ranking (ESG), scores rate from 45.5 to 84.9 out of a possible total of 100. The mean (median) is 65.35 (65.70), with a standard deviation of 12.82. It seems that the companies from the sample handle better the Social theme out of the ESG ranking with a mean (median) of 69.54 (69.05) and the smallest standard deviation (9.89).

Among the reports containing non-financial information, on average the higher score on ESG ranking was registered by the companies that issue a non-financial report without referencing an existing framework (mean 75.05). Although Sustainalytics has a rigorous process through which it rates companies, this mean obtained by this panel is surprising and worrying at the same time because this institution relies on what companies and other sources communicate, but one cannot give assurance that what is presented in those reports is accurate. Considering the three components of this rating, all panels have better scores for the social component, except the integrated reports which obtain the highest average score for the governance component (78.50). On the other side, firms issuing financial reports rate the smallest ESG score from the four panels with a mean (median) of 54.49 (51.20) and a standard deviation of 9.40.

Tobin's Q ratio registers a mean (median) of 1.12 (1.00) with a standard deviation of 0.29, which suggests that, on average, the companies' market value of assets is close to their book value. Hence, the market is assessing reasonably these firms' value. The companies that issue a financial report obtained the largest mean (1.21), but with the largest standard deviation (0.35). Out of this panel, it stands out China Taiping Insurance with the largest Tobin's Q ratio from the entire sample, showing that the company's market value exceeds its book value with 94%. As for IR adopters, their mean obtained for this variable follows closely in the hierarchy (1.20) and registers a smaller standard deviation (0.24). At the same time, this panel contains the firm with the smallest Tobin's Q value from the entire sample (Aegon), showing that the company's market value reflects its book value only in proportion of 64%.

Regarding the variable SIZE (natural logarithm of total sales), the sample obtains a mean (median) of 11.68 (10.68) with a standard deviation of 2.65. Each panel registers a SIZE's mean close to the sample's mean which suggests that, on average, the companies selected have similar sizes. The mean (median) leverage of

the sample is 0.75 (0.86), with a standard deviation of 0.25, which shows a substantial proportion of the liabilities in total assets. The mean (median) obtained for leverage (LEV) is similar for each panel.

4.2 The influence of integrated reporting on profitability (in terms of ROA and ROE)

The models used to examine if there is a link between integrated reporting and profitability in terms of ROA or ROE are similar; the independent variables are the same, but the dependent variable is changed according to what it is intended to be checked. The correlation coefficient of these two variables is -0.0064, which is suggesting no correlation between them, so they could be used in the same equation without having biased the results of the regression. However, because ROE and ROA are usually considered together (in the same equation) and are correlated, I chose to analyze the impact of the type of report over each one separately and in the same conditions (dependent variables) in order to see if they act in a similar way.

Hence, the models to check the first two hypotheses are:

$ROA_i = a + b1\ SIZE_i + b2\ LEV_i + b3\ Tobin's\ Q_i + b4\ ESG_i + b5\ REPTYPE_i + b6\ IREP + \mu_j$ (1)

$ROE_i = a + b1\ SIZE_i + b2\ LEV_i + b3\ Tobin's\ Q_i + b4\ ESG_i + b5\ REPTYPE_i + b6\ IREP + \mu_j$ (2)

The regression statistics for the first model are presented in Table 5 which shows a correlation coefficient (Multiple R) of 75.43% between ROA and all the independent variables.

The results show that the only variable which is statistically significant for this regression is Tobin's Q (P-value = 0.02), with a positive link with the ROA (coefficient = 0.4756).

Of the independent variables, IREP and LEV have a negative effect on the dependent variable ROA (coefficient = -0.2111; coefficient = -0.2699) and the variables SIZE, ESG and REPTYPE have a positive effect on ROA (coefficient = 0.0131; coefficient = 0.0093; coefficient = 0.0759). All of these variables have P-value > 0.10, so their influence on the dependent variable is almost insignificant.

Table 5. Regression statistics for the model (1)

Regression Statistics	
Multiple R	0.7543
R Square	0.5689
Adjusted R Square	0.3966
Standard Error	0.1942
Observations	22

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	0.7466	0.1244	3.3005	0.0283
Residual	15	0.5655	0.0377		
Total	21	1.3121			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-1.1383	0.3547	-3.2095	0.0059	-1.8943	-0.3823
SIZE	0.0131	0.0195	0.6734	0.5109	-0.0284	0.0547
LEV	-0.2699	0.1786	-1.5116	0.1514	-0.6506	0.1107
Tobin's Q	0.4756	0.1828	2.6015	0.0200	0.0859	0.8654
ESG Ranking	0.0093	0.0039	2.3754	0.0312	0.0010	0.0177
REPTYPE	0.0759	0.0629	1.2076	0.2459	-0.0581	0.2099
IREP	-0.2111	0.1756	-1.2024	0.2479	-0.5853	0.1631

These results do not support hypothesis H2. Hence, issuing a report entitled as "integrated report" is not associated with better profitability in terms of ROA.

The regression statistics for the second model are presented in Table 6 which shows a smaller correlation coefficient (Multiple R) of 69.17% between ROE and all the independent variables.

The results show that the only variable which is statistically significant for this regression is Tobin's Q (P-value = 0.0217), with a positive link with the ROE (coefficient = 0.1486). This is not very surprising as the formula used for both of these indicators is based on the book value of equity.

Of the other independent variables, SIZE, LEV, ESG and REPTYPE have a negative effect on the dependent variable ROE (coefficient = -0.0083; coefficient = -0.0382; coefficient = -0.0001' coefficient = -0.0185) and the variable IREP has a positive effect on ROE (coefficient = 0.0349). However, all of these variables' influence on the dependent variable is almost insignificant (P-value > 0.10).

Table 6. Regression statistics for the model (2)

Regression Statistics	
Multiple R	0.6917
R Square	0.4785
Adjusted R Square	0.2699
Standard Error	0.0616
Observations	22

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	0.0521	0.0087	2.2936	0.0901
Residual	15	0.0568	0.0038		
Total	21	0.1091			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	0.1252	0.1125	1.1127	0.2834	-0.1146	0.3650
SIZE	-0.0083	0.0062	-1.3481	0.1976	-0.0215	0.0048
LEV	-0.0382	0.0567	-0.6737	0.5107	-0.1589	0.0826
Tobin's Q	0.1486	0.0580	2.5622	0.0217	0.0250	0.2722
ESG Ranking	-0.0001	0.0012	-0.0643	0.9496	-0.0027	0.0026
REPTYPE	-0.0185	0.0199	-0.9295	0.3674	-0.0610	0.0240
IREP	0.0349	0.0557	0.6257	0.5409	-0.0839	0.1536

These results do not support hypothesis H3 because it was found an insignificant positive association between ROE and IREP. Hence, issuing a report entitled as "integrated report" does not have any effect on ROE's values.

4.3 The influence of integrated reporting on firm value

The model proposed in order to examine the existence of a link between integrated reporting and firm value (market expectations about growth) is:
Tobin's Qi = a + b1 ROAi + b2 SIZEi + b3 LEVi + b4 ESGi + b5 REPTYPEi + b6 IREP + μj (3)

The regression statistics presented in Table 7 show a correlation coefficient (Multiple R) of 73.97% between Tobin's Q and all the independent variables.

The three variables which are statistically significant for this regression are ROA, ESG and IREP (P-value = 0.02; P-value = 0.041; P-value = 0.0708) and the regression's outputs show a positive association between Tobin's Q and ROA or IREP (coefficient = 0.6537; coefficient = 0.3746) and a negative association between this one and the variable ESG (coefficient = -0.0104).

Table 7. Regression statistics for the model (3)

Regression Statistics	
Multiple R	0.7397
R Square	0.5471
Adjusted R Square	0.3660
Standard Error	0.2276
Observations	22

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	0.9388	0.1565	3.0201	0.0385
Residual	15	0.7772	0.0518		
Total	21	1.7160			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	1.4338	0.3931	3.6475	0.0024	0.5960	2.2717
ROA	0.6537	0.2513	2.6015	0.0200	0.1181	1.1892
SIZE	0.0279	0.0221	1.2632	0.2258	-0.0192	0.0749
LEV	0.1519	0.2213	0.6865	0.5029	-0.3198	0.6236
ESG	-0.0104	0.0047	-2.2353	0.0410	-0.0204	-0.0005
REPTYPE	-0.0898	0.0736	-1.2196	0.2415	-0.2468	0.0672
IREP	0.3746	0.1926	1.9447	0.0708	-0.0360	0.7851

The other independent variables, SIZE, LEV and REPTYPE, have an insignificant effect on the dependent variable (P-value = 0.2258; P-value = 0.5029; P-value = 0.2415).

These results support hypothesis H4 which states that the report type is associated with better values as regards the market expectations about growth (measured through Tobin's Q). This supports the findings of previous studies trying to find benefits offered by integrated reporting in the context of capital market (Arguelles *et al.*, 2015; Barth *et al.*, 2017; Cosma *et al.*, 2018).

4.4 The influence of integrated reporting on ESG ranking

The model proposed in order to examine the existence of a link between integrated reporting and sustainability ranking (ESG) is:
ESGi = a + b1 ROAi + b2 SIZEi + b3 LEVi + b4 Tobin's Qi + b5 REPTYPEi + b6 IREP + μj (4)

The regression statistics are presented in Table 8 which shows a correlation coefficient (Multiple R) of 69.54% between ESG ranking and all the independent variables.

Table 8. Regression statistics for the model (4)

Regression Statistics	
Multiple R	0.6954
R Square	0.4836
Adjusted R Square	0.2770
Standard Error	10.9012
Observations	22

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	6	1669.087	278.1811	2.3409	0.0851
Residual	15	1782.548	118.8365		
Total	21	3451.635			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	74.7043	17.2268	4.3365	0.0006	37.9862	111.4225
ROA	29.3530	12.3573	2.3754	0.0313	3.0140	55.6920
SIZE	0.2760	1.1085	0.2490	0.8068	-2.0868	2.6387
LEV	8.6227	10.5301	0.8189	0.4257	-13.8217	31.0671
Tobin's Q	-23.9401	10.7101	-2.2353	0.0410	-46.7680	-1.1121
REPTYPE	1.7392	3.6699	0.4739	0.6424	-6.0830	9.5614
IREP	4.1401	10.2661	0.4033	0.6924	-17.7415	26.0217

The two variables which are statistically significant for this regression are ROA and Tobin's Q (P-value = 0.0313; P-value = 0.041) and the regression's output show a positive association between ESG ranking and ROA (coefficient = 29.353) and a negative one between ESG and Tobin's Q (coefficient = -23.9401).

The other independent variables, SIZE, LEV, REPTYPE and IREP, have an insignificant effect on the dependent variable (P-value = 0.8068; P-value = 0.4257; P-value = 0.6424; P-value = 0.6924).

These results do not support hypothesis H5 which states that the report type is associated with better ESG ranking. This suggests that there is no link between integrated reporting and ESG ranking. In addition, this supports the debate about the role of IR in communicating sustainability (Stacchezzini *et al.*, 2016) and on the topic related to the link between IR, CSR and sustainability reporting (Higgins *et al.*, 2014; Lueg *et al.*, 2016). Although the link between integrated reporting and sustainability reporting was previously addressed (Van Bommel, 2014; Maniora, 2017), this area is still not clear and needs further attention.

Considering the above results, hypothesis H1 is not considered valid. Although hypothesis H4 was validated, hypotheses H2 and H3 were not supported by the

analysis conducted. Hence, it seems that integrated reporting does not present an association with indicators like ROA or ROE reflecting the financial performance of a company. However, there seems to be a link between the issuing a report entitled "integrated" and the value of a company (its market expectations about growth). This result is consistent with Arguelles *et al.* (2015) and Barth *et al.* (2017). An IR related disclosure increases the firm value that is perceived by the capital market over time (Arguelles *et al.*, 2015) and this one is positively associated with integrated reporting quality when it is mainly driven by the effect of cash flows (Barth *et al.*, 2017). In addition, this study enhances the existence of this relation which was also found in the case of sustainability reporting (as part or predecessor of integrated reporting): Ioannou and Serafeim (2017) prove that an increase in mandatory sustainability disclosures is associated with increases in firm valuation.

5. Conclusions

This study was aimed to investigate if there is a link between issuing a so-called "integrated report" for the year 2013 and a company's financial performance. There were studied the influences of integrated reporting on indicators like ROA, ROE and Tobin's.

One contribution of the paper is the fact that it provides evidence about the link between IR and a company's financial performance in the context of the financial industry, specifically insurance companies. Usually, these firms are eliminated from the sample due to their differences in evaluating assets and in their corporate structures (Frías-Aceituno *et al.*, 2013a; Frías-Aceituno *et al.*, 2013b; Frías-Aceituno *et al.*, 2014). In addition, the financial sector it is characterized through a link with many other industries and as being easily influenced by the economic cycle. Consequently, insurance companies play an important role nowadays because everyone and everything needs insurance in order to be protected for and from any type of activities. I consider that these aspects should offer extra interest in the study of this industry. This is the most capitalized sector in 2016 (Bloomberg, 2016), which suggests the impact of its members' decision-making process on the capital market. Moreover, although small, the study's sample has a wide geographical distribution, unlike focusing on a continent or a country. As stated in the introduction, another contribution comes from the approach: I chose the year at the end of which the IIRF was released in order to see if it brought benefits to early practitioners. This means that it is a difficult task to find an integrated report prepared voluntarily in accordance with the IIRF for the year 2013. This is the reason for which the sample contains so few integrated reports. On the other hand, it is also true that sourcing the sample from the companies that were members of the Pilot Programme could give a certain guarantee that the title reflects the content of the report issued by that firm. However, I cross checked the

list of the companies considered for this research with all the lists of the companies that were part of the Pilot Programme in each year and with the firms posted on the IIRC database as IR reporters. This is how a second contribution takes form: approaching a sample that includes also companies which publish integrated reports voluntarily (unlike many other studies on early adopters based on South African listed firms) and studying the association between having as title "integrated report" and any changes in the financial performance of that reporter. A practical implication of this research is that other insurance companies can choose to adopt integrated reporting if this practice results to bring also financial benefits.

The results of this study should be considered taking into account the construction of the sample. It is a small sample (not appropriate for a quantitative study), but it is used in order to promote an idea based on tests (regression results). The sample size could not be extended due to two causes: first, the year for which the reports were considered (2013); second, sustainability ranking data and companies' market capitalization for year 2014. The author had no access to other provider of sustainability rankings, nor to annual firms' market capitalization. However, almost a quarter of the sample (23%) issued an integrated report for year 2013, as opposed to almost a half of the sample (46%) publishing a non-financial report (with or without reference to a set of existing guidelines). Notwithstanding the small representation in the sample, the descriptive statistics showed that, out of the reports containing also non-financial information, IR companies have the best ROE values and the closest value to the sample's mean for Tobin's Q.

Despite these values, the only regression in which IREP entered with a reliably non-zero coefficient and presented a positive link with the dependent variable was in the case of the influence of integrated reporting on firm's value measured in this paper through Tobin's Q. On the other hand, the outputs of the other regressions did not present any significant association between IREP and a company's profitability in terms of ROA or ROE. These results validated only the hypothesis H4 and invalidated the main hypothesis of the paper, showing no potential link between integrated reporting and financial performance.

IR is a management approach that was designed to be the result of the development of integrating thinking in a company, to support better decisions within it and to create value for various stakeholders over medium and long term (IIRC, 2013). Value creation is connected to performance, in different forms of it and using different resources (capitals). However, the most basic type of performance that a company can and wants to achieve is the financial one, otherwise it cannot continue to exist. Hence, a better management within a company (through developing integrated thinking) should lead to better decisions regarding the business and, eventually to better results. First, it should be translated into an improved financial performance (because this is why a business exists) and then into other types of performance. This study represents a pilot test supporting this

idea. It does not check the compliance of the reports entitled "integrated" with the IIRF, but it analyzes a potential effect of naming the report as integrated on the numbers that reflect the financial performance of a company.

An important limitation of this study lies in the construction of the sample: the number of firms considered and the small number of IR companies. A larger representation of the companies issuing an integrated report would probably have conducted to more reliable results. However, I explained previously the reasons for which this larger representation was not possible.

Future research could increase the number of the IR firms included in the sample, the number of years or the number of variables reflecting financial performance considered for the research. Also, this study is preliminary, since the 2013 reports can be compared in subsequent studies with those issued in other years or with those issued by companies from other industries.

References

Arguelles, M., Balatbat, M., & Green, W. (2015) "Is there an early-mover market value effect for signaling adoption of integrated reporting?", Working paper, University of New South Wales.

Baboukardos, D., & Rimmel, G. (2016) "Value relevance of accounting information under an integrated reporting approach: A research note", *Journal of Accounting and Public Policy*, 35(4): 437-452

Barth, M., E., Cahan, S., F., Chen, L., & Venter, E., R. (2017) "The economic consequences associated with integrated report quality: Capital market and real effects", *Accounting, Organizations and Society*, 62: 43-64

Bernardi, C., & Stark, A., W. (2016) "Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts", *The British Accounting Review* (in press)

Biddle, G., H., & Saudagaran, S., M. (1991) "Foreign Stock Listing: Benefits, Costs and the Accounting Policy Dilemma", *Accounting Horizons*, September 1991, pp. 69-80

Biener, C., & Eling, M. (2012) "Organization and efficiency in the international insurance industry: A cross-frontier analysis", *European Journal of Operational Research*, 221: 454-468

Bloomberg (2016) "Sector Performance", Bloomberg, available online at: http://www.bloomberg.com/research/sectorandindustry/overview/sectorlanding.asp?region=Europe [Accessed on 27 September 2016].

Bongini, P., Nieri, L., Pelagatti, M., & Piccini, A. (2017) "Curbing systemic risk in the insurance sector: A mission impossible?", *The British Accounting Review*, 49: 256-273

Chen, F.-C., Liu, Z.-J., & Kweh, Q.L. (2014) "Intellectual capital and productivity of Malaysian general insurers", *Economic Modelling*, 36: 413-420

Cheng, M., Green, W., Conradie, P., Konishi, N., & Romi, A. (2014) "The International Integrated Reporting Framework: Key Issues and Future Research Opportunities", *Journal of International Financial Management and Accounting*, 25(1): 90-119

Cosma, S., Soana, M.G., & Venturelli, A. (2018) "Does the market reward integrated report quality?", *African Journal of Business Management*, 12(4): 78-91

Crisóstomo, V., L., de Souza Freire, F., & Cortes de Vasconcellos, F. (2011) "Corporate social responsibility, firm value and financial performance in Brazil", *Social Responsibility Journal*, 7(2): 295-309

Dang, C., Li, Z. (F.), & Yang, C. (2018) "Measuring firm size in empirical corporate finance", *Journal of Banking and Finance*, 86: 159-176

Das, U., S., Davies, N., & Podpiera, R. (2003) "Insurance and Issues in Financial Soundness", IMF Working Paper WP/03/138.

Daske, H., Hail, L., Leuz, C., & Verdi, R. (2008) "Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences", *Journal of Accounting Research*, 46(5): 1085-1142

De Villiers, C., Rinaldi, L., & Unerman, J. (2014) "Integrated Reporting: Insights, gaps and an agenda for future research", *Accounting, Auditing & Accountability Journal*, 27(7): 1042-1067

Eccles, R., G., & Armbrester, K. (2011) "Integrated Reporting in the cloud", *IESE Insight*, 8: 13-20

Eccles, R., G., & Saltzman, D. (2011) "Achieving Sustainability Through Integrated Reporting", *Stanford Social Innovation Review*, Summer 2011: 56-61

Eccles, R., G., & Serafeim, G. (2011) "Accelerating the Adoption of Integrated Reporting", in *CSR Index*, InnoVatio Publishing Ltd., pp. 70-92

Flower, J. (2015) "The International Integrated Reporting Council: A story of failure", *Critical Perspectives on Accounting*, 27: 1-17

Frías-Aceituno, J., V., Rodriguez-Ariza, L., & Garcia-Sanchez, I., M. (2013a) "The role of the board in the dissemination of integrated corporate social reporting", *Corporate Social Responsibility and Environmental Management*, 20: 219–233

Frías-Aceituno, J., V., Rodríguez-Ariza, L., & García-Sánchez, I., M. (2013b) "Is integrated reporting determined by a country's legal system? An exploratory study", *Journal of Cleaner Production*, 44: 45-55

Frías-Aceituno, J., V., Rodríguez-Ariza, L., & Garcia-Sánchez, I., M. (2014) "Explanatory Factors of Integrated Sustainability and Financial Reporting", *Business Strategy and the Environment*, 23: 56-72

Galatro, T. (2017). "The Top Sales Challenges that Insurance Companies Face Today", available online at: https://www.surfly.com/blog/top-sales-challenges-insurance-companies-face-today [accessed on 18 January 2019]

Gaganis, C., Hasan, I., & Pasiouras, F. (2016) "Regulations, institutions and income smoothing by managing technical reserves: International evidence from the insurance industry", *Omega*, 59: 113-129

Gaganis, C., Liu, L., & Pasiouras, F. (2015) "Regulations, profitability, and risk-adjusted returns of European insurers: An empirical investigation", *Journal of Financial Stability*, 18: 55-77

IIRC (2011) "Towards Integrated Reporting. Communicating Value in the 21st Century. Summary of Responses to the September 2011 Discussion Paper and Next Steps", International Integrated Reporting Council, available online at: http://integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf [accessed on 24 February 2017]

IIRC (2013) "International Integrated Reporting Framework", International Integrated Reporting Council, available online at: http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf [Accessed on 24 February 2017]

IIRC (2015) "Creating Value. Value for Investors", International Integrated Reporting Council, available online at: http://integratedreporting.org/wp-content/uploads/2015/04/Creating-Value-Investors.pdf [Accessed on 8 October 2016]

Ioannou, I., & Serafeim, G. (2017) "The Consequences of Mandatory Corporate Sustainability Reporting", Harvard Business School Research Working Paper No. 11-100, available online at SSRN Electronic Journal: https://ssrn.com/abstract=1799589 [Accessed on 20 July 2017].

Kaspina, R., G., & Molotov, L., A. (2016) "Corporate integrated reporting: An efficient tool of economic security management", *Academy of Strategic Management Journal*, 15(1): 225-232

Lee, K.-W., & Yeo, G., H.-H. (2016) "The association between integrated reporting and firm valuation", *Review of Quantitative Finance and Accounting*, 47(4): 1221-1250

Lu, W.-M., Wang, W.-K., & Kweh, Q., L. (2014a) "Intellectual capital and performance in the Chinese life insurance industry", *Omega*, 42: 65-74

Lu, W., Chau, K.W., Wang, H., & Pan, W. (2014b) "A decade's debate on the nexus between corporate social and corporate financial performance: a critical review of empirical studies 2002-2011", *Journal of Cleaner Production*, 79: 195-206

Lueg, K., Lueg, R., Andersen, K., & Dancianu, V. (2016) "Integrated reporting with CSR practices: A pragmatic constructivist case study in a Danish cultural setting", *Corporate Communications: An International Journal*, 21(1): 20-35

Maniora, J. (2017) "Is integrated reporting really the superior mechanism for the integration of ethics into the core business model? An empirical analysis", *Journal of Business Ethics*, 140(4): 755-786

Mazars (2015) "Integrated Reporting: How far have we come? A look at insurers annual reports", Mazars, available onine at: http://integratedreporting.org /wp-content/uploads/2016/01/Mazars_Insurers-reports-Benchmark-2015-3.pdf [Accessed on 24 February 2017]

Melloni, G., Caglio, A., & Perego, P. (2017) "Saying more with less? Disclosure conciseness, completeness and balance in Integrated Reports", *Journal of Accounting and Public Policy*, 36(3): 220-238

Melloni, G. (2015) "Intellectual capital disclosure in integrated reporting: an impression management analysis", *Journal of Intellectual Capital*, 16(3): 661-680

Melloni, G., Stacchezzini, R., & Lai, A. (2016) "The tone of business model disclosure: an impression management analysis of the integrated reports", *Journal of Management and Governance*, 20(2): 295-320

Pantelous, A., A., & Passalidou, E. (2015) "Optimal premium pricing strategies for competitive general insurance markets", *Applied Mathematics and Computation*, 259: 858-874

Pasiouras, F., & Gaganis, C. (2013) "Regulations and soundness of insurance firms: International evidence", *Journal of Business Research*, 66: 632-642

Perego, P., Kennedy, S., & Whiteman, G. (2016) "A lot of icing but little cake? Taking integrated reporting forward", *Journal of Cleaner Production*, 136: 53-64

Ristea, M., Olimid, L., & Calu, D., A. (2006) *Compared accounting systems*, Bucharest: CECCAR Publishing.

Saudagaran, S., M. (1988) "An empirical study of selected factors influencing the decision to list on foreign stock exchanges", *Journal of International Business Studies*, Spring 1988: 101-127

Stacchezzini, R., Melloni, G., & Lai, A. (2016) « Sustainability management and reporting: the role of integrated reporting for communicating corporate sustainability management", *Journal of Cleaner Production*, 136: 102-110

Steyn, M. (2014) "Organisational benefits and implementation challenges of mandatory integrated reporting: Perspectives of senior executives at South African listed companies", *Sustainability Accounting, Management and Policy Journal*, 5(4): 476-503

Stubbs, W., & Higgins, C. (2014) "Integrated Reporting and internal mechanisms of change", *Accounting, Auditing & Accountability Journal*, 27(7): 1068-1089

Stubbs, W., & Higgins, C. (2018) "Stakeholders' perspectives on the role of regulatory reform in integrated reporting", *Journal of Business Ethics*, 147(3): 489-508

Sustainalytics (2015) "Sector Report: Insurance. Shedding light on the new industry challenges", Sustainalytics, available online at: http://66-147-250-248.unifiedlayer.com/sector-report-insurance [Accessed on 24 February 2017]

Soytas, M.A., Denizel, M., & Usar, D. (2017) "Corporate Sustainability: Empirical Evidence of Causality on Financial Performance", Working Paper

Turturea, M. (2015) "Social and environmental reporting as a part of the integrated reporting", *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 63(6): 2161-2170

Van Bommel, K. (2014) "Towards a legitimate compromise? An exploration of integrated reporting in the Netherlands", *Accounting, Auditing & Accountability Journal*, 27(7): 1157-1189

Wulf, I., Niemöller, J., & Rentzsch, N. (2014) "Development toward integrated reporting, and its impact on corporate governance: a two-dimensional approach to accounting with reference to the German two-tier system", *Journal of Management Control*, 25(2): 135-164

Zappettini, F., Unerman, J. (2016) "'Mixing' and 'Bending': The recontextualisation of discourses of sustainability in integrated reporting", *Discourse and Communication*, 10(5): 521-542

Zheng, Y., & Cui, W. (2014) "Optimal reinsurance with premium constraint under distortion risk measures", *Insurance: Mathematics and Economics*, 59: 109-120

Zhou, S., Simnett, R., & Green, W. (2017) "Does Integrated Reporting Matter to the Capital Market?", *ABACUS*, 53(1): 94-132

Zhou, S., Simnett, R., & Hoang, H. (2018) "Evaluating combined assurance as a new credibility enhancement technique". *Auditing: A Journal of Practice & Theory* (forthcoming).