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Article

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Exploring the perspectives of integrated reporting for future research opportunities

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Abstract: This paper investigates the perspectives of integrated reporting as an emerging field in mainstream academic literature. The current state of research and its development are explored by using the Structured Literature Review (SLR) method on publications indexed in Clarivate Analytics' Web of Science. An analytical framework is designed for applying the coding procedure. The findings suggest an evolution of integrated reporting research from the phase of spreading awareness regarding the new reporting paradigm towards an impact analysis phase. The accounting and audit journals are noted to have greatly contributed to the shift of IR literature towards studying the integrated reporting as a reporting practice. A further purpose is to examine newly developed research interest in integrated reporting and to establish future paths to be followed. Future research might bring to discussion possible links between integrated reporting, governance and integrated thinking. The complex interrelationships influencing the companies' ability to create value for the multi-stakeholders need to frame the practice-oriented research.

Keywords: Integrated reporting, structured literature review, IR literature, meta-analysis

JEL codes: M14, M41

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1. Introduction

In the last years, the focus on economic, social and environmental reporting had increasingly become significant, as corporate collapses, the global financial crisis, social and environmental matters, or climate change became current concerns (Haji & Anifowose, 2017). In order to answer these issues, the organizations had to remodel their corporate reporting practices, transiting from mandatory reporting to voluntary disclosure. This approach is increasing in usage as it provides more relevant information and creates the premises for an improved corporate transparency and accountability (Dumay *et al.*, 2016; Vaz *et al.*, 2016). In this context, integrated reporting is gaining considerable momentum as it sets out to redirect the thinking of corporate actors towards voluntary material disclosure - reporting information considered essential for the stakeholders. This contributes to the further integration of sustainability and has consequences on corporate strategic planning and decision-making (Gunaratne & Senaratne, 2017).

The International Integrated Reporting Council (IIRC) has introduced integrated reporting as the most recent reporting practice that will serve as a replacement to the actual reporting system (Brown & Dillard, 2014). This emerging corporate reporting initiative addresses the limitations of traditional financial reporting, usually criticized for its great amount of information as well as for the disconnected manner used to present that information (Zhou *et al.*, 2017). Along with IIRC' attempts to globally introduce integrated reporting practices, the academic body started to spread awareness related to this innovative approach to corporate reporting. In recent years, integrated reporting literature has vastly expanded, especially after the IIRC Framework's publication in December 2013. Therefore, leading academic journals have begun to frequently cover this topic and it became an attention attracting subject, especially in accounting research.

The aim of this paper is to investigate the state of integrated reporting as an emerging field in mainstream academic literature as well as to examine the actual condition of this newly developed research interest. In order to study integrated reporting research development, a review of the publications indexed in Clarivate Analytics' Web of Science (formerly known as Thomson Reuters database) was carried out. This database was chosen as the indexed articles are enjoying the widest readership and are the most cited by specialists (Lungu *et al.*, 2016). Therefore, a scientific paper available in Web of Science has a recognized quality and exposure to the international scientific community (Lungu *et al.*, 2009).

This paper employs a Structured Literature Review (SLR) method (Massaro *et al.*, 2016) which allows to provide insightful and effective findings that are different from the traditional literature reviews. The main reason of adopting a SLR methodology resides the fact that integrated reporting is in its “early stages of development” (Petticrew & Roberts, 2008: 21 quoted in Dumay *et al.*, 2016), and a small number of specialists could have accumulated sufficient knowledge on this theme to make a valid traditional literature review (Dumay *et al.*, 2016).

In this respect, our paper approaches two research questions, focusing on <IR> literature.

RQ1. How have the integrated reporting field developed in recent years?

RQ2. How and why is the research field changing?

RQ2.1 How global is the integrated reporting research and is there a shift in its perspective?

RQ2.2. What are the best research practices in integrated reporting?

RQ2.3. Is there a connectivity between the criteria of IR frameworks and the focus of IR literature?

This study is not first in line to conduct a comprehensive literature analysis, as reviews on integrated reporting were previously carried out (e.g. Dumay *et al.*, 2016; De Villiers *et al.*, 2014). The previous studies focus on the emergence of integrated reporting literature, analyzing the first stage of this process. This paper does not aim to reconstitute or re-analyze the previous works. The purpose here is to develop new insights based on prior findings and to extend the sample used by the authors in their respective literature reviews, covering the period of time that could not be previously included. Another aim of this study is to identify future research perspectives, based on the literature gaps found in the newest published articles.

The remainder of this paper is organized as follows: Section 2 offers a brief review in order to present the background of integrated reporting and to establish the general state of contemporary literature. Section 3 explains the key methodological aspects of the SRL method, as well as the articles selection process and the analytical framework definition. Section 4 describes the research findings and provides insights on the integrated reporting literature. Section 5 presents the concluding remarks of this study and outlines an agenda for future research as depicted in the analyzed articles.

2. Literature review – integrated reporting background

The topic of integrated reporting is lately enjoying a great amount of global attention from scholars, specialists, managers, organizations, audit firms and mass media. This section analyzes the academic literature in order to explain the background of integrated reporting as well as to document the journey of this practice since its beginnings.

Designing an integrated corporate reporting system is not an area of recent interest and its introduction dates two decades ago. In 1995, John Elkington presented a famous expression "People, Planet and Profit" which became known as the Triple Bottom Line (TBL). The concept was proposed by the author as a method to achieve sustainable development by combining social, environmental and economic disclosures (Dumay *et al.*, 2016). Since then, this model has enjoyed a great amount of notoriety not only among companies but also for consultancy firms and agencies, accounting professions, and even NGOs (Rambaud & Richard, 2015). The TBL concept was created to change the traditional reporting focus of providing financial information to shareholders towards offering non-financial disclosures, as the company's economic added value was not adequate to create sustainable results (Caraianni *et al.*, 2015). The TBL model has created a solid foundation on which sustainability reporting and research have developed under the inclusive stakeholder view (Gleeson-White, 2014 cited by Dumay *et al.*, 2016).

At country's lever, the South Africa is the first to create in 1994, a Code of Corporate Governance to extend the financial disclosure requirements with social, environmental and governance elements, known as King Report on Governance. The concept of integrated sustainable reporting is introduced subsequently in the second version of the Report. In 2010, the third version of King's Report became compulsory for the companies listed on Johannesburg Stock Exchange, setting South Africa as the first country with mandatory integrated reporting (Dumay *et al.*, 2016).

While the social and environmental reporting practices began to globally expand, policy development became necessary. Voluntary reporting standards and guidelines were created as a way to guide organizations' initiatives to successfully engage in sustainable reporting (Buhr *et al.*, 2014). In this context, the Institute of Social and Ethical Accountability (AccountAbility) and the Global Reporting Initiative (GRI) were among the organizations that developed the most compelling and extensively adopted reporting and assurance standards for social and environmental reporting (De Villiers *et al.*, 2014).

Undoubtedly, the most prominent standards have been those elaborated by the GRI. This multi-stakeholder cooperation managed to formulate and establish a generally accepted framework for environmental, social and economic reporting (Buhr *et al.* 2014). One purpose of the social and environmental reporting regulation was to create the basis for enhanced credibility and comparability in the reporting practice. However, as the GRI guidelines started to standardize more and more social, environmental and governance issues, the sustainability reports also became more elaborate and extensive. Apart from these characteristics, further developments and valid evidence need to be addressed to improve corporate policy and practice (De Villiers *et al.*, 2014).

In order to enable an efficient reporting practice, Eccles and Krzus (2010) proposed a first version of integrated reporting by introducing a new concept: One report. This concept claimed to present “financial and nonfinancial information in such a way that shows their impact on each other” (Eccles & Krzus, 2010: 10). The book advocates the integrated reporting practice by promoting two main reasons as of why organizations should adopt One Report as their external reporting procedure. The first motivation states that this innovative concept is a key element for a genuine sustainability reporting as it enables an improved risk management and it created opportunities to ensure a sustainable society. The second motivation is improved corporate communication and transparency, as the One Report is concise and it can transmit a single message to all stakeholders (Eccles & Krzus, 2010). The company’s holistic perspective is later considered in Eccles and Krzus (2015) advanced proposal for a new concept, that of materiality matrix. The company’s performance is seen in the context of value created for each stakeholder (Lungu *et al.*, 2017).

All these initiatives proposed improving measures for the existing corporate reporting practices, but the break out point for integrated reporting was the IIRC’s establishment in 2009. Since then, integrated reporting has immediately gained notable importance. Consequently, the IIRC has become the global leading organization in developing policy and practice recommendations in the field of integrated reporting (De Villiers *et al.*, 2014). In addition, integrated reporting has emerged as a key procedure (Chaidali & Jones, 2017) as the annual reporting processes were unsuccessful in disclosing social and environmental issues in a transparent manner.

The IIRC is a “global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs” and brings together “the relevant and informed people and organizations” (IIRC, 2013a) involved in corporate reporting. The main purpose of this organization is to elaborate a conceptual framework which enables

the preparation of a concise, user-centered voluntary report entitled as the integrated report (Cheng *et al.*, 2014). From 2011 to 2014, the IIRC implemented a Pilot Programme, which aimed to build the context for the future conceptual framework (Mio *et al.*, 2016). Additionally, the IIRC used the Pilot Programme with the purpose to generally understand the actual corporate reporting practices (IIRC, 2013b). The pilot program included more than 75 companies and 25 investor bodies. In the first half of 2013, the Consultation Draft was published by the IIRC, with an invitation addressed to any interested party to leave comments and suggestions. In December 2013 the final version of the IIRC Conceptual Framework was published.

Excluding the companies that choose to experiment with integrated reporting in its early stage, South Africa was the first country to require listed companies to provide an integrated report. Specifically, the listed companies on the Johannesburg Stock Exchange were required to adopt integrated reporting practices on a ‘comply or explain’ basis (Cheng *et al.*, 2014). The South African integrated reporting framework had a greater focus on social, environmental and sustainability issues than the IIRC Framework (De Villiers *et al.*, 2014). The IIRC Framework has received critique on this matter, as it focuses to create “value for investors” (Flower, 2015:1) as opposed to the South African framework.

As rapid development and increasing relevance of integrated reporting are the main drivers for academic literature expansion, this new reporting practice is becoming an established emerging research field. Recently, some studies analyzed and reviewed the relevant literature on integrated reporting, such as De Villiers *et al.* (2014), Cheng *et al.* (2014), Dumay *et al.* (2016), Velte and Stawinoga (2017) and De Villiers *et al.* (2017) offering useful insights and understandings as well as research agendas useful for the academics involved in this study area.

3. Research methodology

3.1 Research method

The Structured Literature Review (SRL) method is used for this paper because the ‘integrated reporting’ is a rather new concept (Dumay *et al.*, 2016), placed by Petty and Guthrie (2000) in the stage of raising awareness of its potential. Although, firstly referred to by IIRC in 2010, previous related concepts existed, as ‘integrated sustainability reporting’ concept introduced by King II report. By using the SRL method, the premises required to identify research gaps in literature as well as to formulate research hypotheses and find future research paths may be scientifically

set up. This paper is based on previous works of Dumay *et al.* (2016), Massaro *et al.* (2016), Guthrie *et al.* (2012), and Pisani *et al.* (2017). Proposed by Massaro *et al.* (2016), SLR is a method that favors the development of insights and critique related to the status of a knowledge field, through a systematic review of the academic literature.

The SLR approach offers two specific advantages. First, the SLR method is a tool which increases the objectivity of a literature review, as traditional literature reviews are criticized for being too subjective (Petticrew & Roberts, 2008 cited by Dumay *et al.*, 2016). Nevertheless, the practicality of the traditional literature review cannot be contested, as this is the most common management research technique (Denyer & Tranfield, 2006), in which the researcher compiles and highlights the key findings of previous scientific literature using a subjective and narrative approach. Moreover, the value of traditional literature research resides in the fact that it is “written by someone with a detailed and well-grounded knowledge of the issue” (Petticrew & Roberts, 2008:10 quoted in Dumay *et al.*, 2016). Based on this assertion, Massaro *et al.* (2016) argue that traditional literature reviews could represent sources of compelling insights, nevertheless this depends on the researcher’s knowledge of the studied field. The SLR method complements traditional literature reviews, as this concept helps to achieve legitimate results by providing validity to the review’s results.

The second advantage of the SLR approach lies in the fact that this method offers alternative techniques for experienced academics to open up new research directions, which would be quite difficult to access using a traditional approach. Thus, the SLR method may become an instrument for experienced researchers to advance new research paths by studying a substantial amount of academic literature (Massaro *et al.*, 2016).

When applying the SLR methodology, Massaro *et al.* (2016: 771-772) recommends the following ten steps for a rigorous literature review, that were also applied within this paper:

- (1) “write a literature review protocol;
- (2) define the questions that the literature review is setting out to answer;
- (3) determine the type of studies and carry out a comprehensive literature search;
- (4) measure article impact;
- (5) define an analytical framework;
- (6) establish literature review reliability;
- (7) test literature review validity;

- (8) code data using the developed framework;
- (9) develop insights and critique through analyzing the dataset; and
- (10) develop future research paths and questions”.

The flexibility of this method resides in the feature that the ten steps need not to be chronologically followed. The researcher has the freedom of adding new criteria as he/she advances through the articles’ analysis. Thus, the analytical framework may be reformulated, once the analysis reveals new and significant attributes.

3.2 Research database

The focus of this review is on scientifically validated articles that will ensure the validity of the findings and further discussion. Therefore, the selection of the sampled articles referred to those articles published by peer-reviewed academic journals, excluding other types of publications, such as books or conference proceedings. Critically following the ten steps of a SRL (Massaro *et al.*, 2016), the articles were selected from the Clarivate Analytics Database, covering different economic disciplines. From the articles published during the latest eight years, a final sample of 72 articles was established, after the completion of several phases, described as follows.

First, for the literature search, the primary data source is Clarivate Analytics’ Web of Science Core Collection, internationally recognized and providing a validated tool for measuring the article impact, the Citation Report. A computer-based examination of the database was performed by searching the title, abstract and keywords of all the journals indexed in this database. The research objective of reviewing the integrating reporting literature limited the starting date at January, 2010. A cutting-date of 15th of November, 2017 was adopted. All articles referring to concepts as ‘integrated reporting’, ‘IIRC’ or ‘integrated report’ were selected, saved and organized by categories.

Second, the articles’ search results were refined. Out of the six main indexed the Web of Science Core Collection is organised in, two main indexes, reflecting the social science research areas were selected: Social Science Citation Index (SSCI) and Science Citation Index Expanded (SCIE). Further, the Web of Science category was considered, to limit the selection only to accounting-relevant research themes. As this study focuses on integrated reporting literature, the selected categories were: *Business and Finance*, *Management*, *Business*, *Economics* (belonging to the SSCI), and *Engineering*, *Environmental* and *Environmental Sciences* (belonging to the SCIE). Hence, those categories that did not have any relation to the integrated

reporting research area, such as *Medicine General Internal* or *Oncology* were eliminated. Taking in consideration the described criteria, an initial sample of 65 articles published in 24 journals was established.

In order to complete the data set, a manual search on the previously identified journals doubled the computer-based search. The focus was on articles that were not available on the Core Collection. Next, the Clarivate Analytics' Master Journal list was consulted, and the journals' list for the 'Business, Finance' and 'Management' categories were obtained. These categories were chosen based on the inclusion of the most representative academic publications related to the integrated reporting field. Each journal included in these two categories (96 journals for 'Business, Finance' and 198 journals for 'Management') was manually searched for articles, as the probability to identify articles that haven't previously found was quite high. In some cases, the full-text of the articles was analyzed, as the abstract or the keywords did not provide relevant information in order to establish whether the article focused on integrated reporting or not. As a result, seven forthcoming articles were found and included in the data set, which increased the final sample to 72 articles published in 26 journals.

3.3 The analytical framework

The next important step in developing the SLR was to define an analytical framework. To develop the framework, criteria previously used by Dumay *et al.* (2016), Guthrie *et al.* (2012), Dumay and Garanina (2013), and Broadbent and Guthrie (2008) are referred to, analyzed and verified for suitability for the research questions and sample, presented in sections 1 and 3.2 of this paper. To test and to adapt the details of the final criteria used and of the coding system, an initial framework was applied to a six sample articles, independently, by the four authors. During this pre-coding phase, the criteria and attributes were reviewed, changed or removed and new attributes were added.

As a result, outlined in Table 1, a modified and improved analytical framework was applied for the entire database of 72 articles. Eight different criteria, with three to ten attributes are used to characterize the research articles. Details about the changes, improvements and removals are presented further. Explanations related to the criteria/attributes included in the analytical framework, as well as the rules used in the coding process are illustrated in detail.

Table 1. Analytical Framework

A	Jurisdiction	B	Organisational focus
A1	Supra-national/International/Comparative	B1	Publicly listed
A1.1	<i>Supra-national/International/Comparative – General</i>	B2	Private - SMEs
A1.2	<i>Supra-national/International/Comparative – Industry</i>	B3	Private - Others
A1.3	<i>Supra-national/International/Comparative – Organisational</i>	B4	Public sector
A2	National	B5	Not-for-profit
A2.1	<i>National - General</i>	B6	General/Other
A2.2	<i>National - Industry</i>		
A2.3	<i>National - Organisational</i>		
A3	One Organisation		
C	Location of research & Authors' affiliation	D	Data sources
C1	USA/Canada	D1	Corporate information database
C2	Australia	D2	Authors' primary data
C3	United Kingdom	D3	Intergovernmental organization
C4	European Union (UK excluded)	D4	Corporate website or internal data
C5	South Africa	D5	Stock index
C6	Asia-Pacific	D6	Mixed data sources
C7	Other/Mixed	D7	Other
E	Research methodology & Research methods	F	Focus of IR literature
E1	Theoretical	F1	External reporting/Sustainability reporting
	<i>Commentary/Normative/Policy</i>	F2	Auditing and assurance
	<i>Literature review</i>	F3	Accountability and governance
E2	Empirical	F4	Management control/Strategy
E	Research methodology & Research methods	F	Focus of IR literature
E2.1	Qualitative	F5	Performance measurement
	<i>Case Study</i>	F6	IR in practice - general
	<i>Content analysis/Historical analysis</i>	F7	Value creation/Business Model
	<i>Interviews</i>	F8	Integrated thinking/Capitals
E2.2	Quantitative	F9	IR Determinants/benefits
	<i>Statistical and econometric methods</i>	F10	Other (including general)
	<i>Survey/Questionnaire</i>		
	<i>Content analysis/Historical analysis</i>		
	<i>Mixed quantitative</i>		
E2.3	Multiple		

G	Approaches to IR	H	IR Frameworks, models, instruments
G1	King Report on Governance (IRC of South Africa)	H1	None proposed
G2	One Report	H2	Applies or considers previous
G3	IIRC pre-2013 Guidelines	H3	Proposes a new
G4	IIRC, 2013 Guidelines		
G5	GRI Framework		
G6	Multiple frameworks		

(Source: Developed from Dumay *et al.* (2016), Guthrie *et al.* (2012), Dumay and Garanina (2013), Broadbent and Guthrie (2008), and Pisani *et al.* (2017)).

The *Jurisdiction* (A) and *Organisational focus* (B) criteria are adopted from Dumay *et al.* (2016). The first two attributes composing the Jurisdiction criterion (A1 and A2) are further split into a General, Industry or Organisational setting. The articles that do not have an empirical base such as literature reviews or normative research are coded as ‘General’ (A1.1 and A2.1), whereas articles analyzing the integrated reporting focusing on an industry (A1.2 and A2.2) or on organizational setting (A1.3 and A2.3) are coded according to their Supra-national or National approach. The case studies referring to a single organization are classified as A3. The second criterion, Organisational focus (B) consists of six different attributes: B1 Publicly listed, B2 Private – SMEs, B3 Private – Others, B4 Public sector, B5 Not-for-profit, B6 General/Other. The articles which did not fall in the B1–B5 categories or did not adopt an organizational focus (e.g. normative research) are coded as General-other.

The *Location of research* (C) criterion is adapted from Dumay *et al.* (2016), with changes in the coding process. Whether Dumay *et al.* (2016) considered the country of the first author when coding the regional focus or the geographical location of the research, we focused on the location of the companies/countries included in the research. The criterion is divided into six countries/regions (Table 1). European Union (C4) is maintained as in Dumay *et al.* (2016), from which the United Kingdom is excluded, as it is considered separately. A distinct attribute for Australia (previously included in ‘Australasia’) was added along the coding process. The database has been then revised to illustrate this separate location. The reason for this adjustment is a representative contribution on integrated reporting research in the Australian context. The articles that did not have a specific research location, either empirical articles or articles with an international – organizational focus, are categorized as C7 Other.

Dumay’s *et al.* (2016) approach interferes with the discussion of the results, as it allows articles to be coded within this category even if they do not have a definite

regional setting. To overcome this limitation, a specific contribution of this study is the development of a new criterion, emerging from Location of research, namely *Authors' affiliation*. The category was also used by Pisani *et al.* (2017). The purpose of this new criteria, having the same attributes as Location of research, allows to present an in-depth discussion on the second research question of the paper, *RQ2 How and why is the research field changing*. The criterion is used to develop insights regarding the amplitude of the international integrated reporting research. The most engaged locations in integrated reporting research are then compared with the region where the authors are affiliated.

The *Data source* (D) criterion adapted from Pisani *et al.* (2017) includes seven attributes. Attribute D1 Corporate information database refers to data sources such as Compustat, Thompson Reuters, GRI Database or Forbes Global 2000 list. In the D2 Authors' primary data are classified the articles using data collected by authors from interviews, questionnaires or surveys. D3 Intergovernmental (or multi-stakeholder) organization includes data downloaded from the Integrated Reporting Examples Database of the International Integrated Reporting Council. With D4 Corporate website or internal data are coded articles using reports downloaded from the companies' websites or internal documents. Articles using data from stock markets, such as IPO Prospectuses, are coded as D5 Stock index. Finally, in the D6 Multiple sources articles that used 2-3 distinct data sources are included (e.g. Mio *et al.*, 2016 used as data sources information from interviews, internal documents and field observations) and in the D7 Other category were included studies that did not have a data source.

The next criterion is built on Pisani's *et al.* (2017) for *Research methodology* and Dumay's *et al.* (2016) and Guthrie's *et al.* (2012) for *Research methods* employed by the authors of IR research. The Research methodology criterion includes two main attributes: E1 Theoretical (including conceptual articles or literature reviews) and E2 Empirical, each developed on sub-categories according to different related research methods. The Empirical attribute is further sub-categorized within three sub-categories. E2.1 Qualitative includes articles using as main methods case studies, interviews or content analysis with a qualitative approach. E2.2 Quantitative includes studies using a quantitative methodology, such as statistical methods, surveys, content analysis or mixed quantitative methods. E2.3. Multiple includes articles employing both qualitative and quantitative methods. The Research method criterion used by Dumay *et al.* (2016) has the disadvantage of a multiple methodology identification used in the literature. Guthrie *et al.* (2012) outlines that a part of their selected articles proved to be quite hard to classify under a certain attribute, as two or three research methods had been used. The Research method

criterion is relevant, as it provides a more precise representation of the methodology adopted. Therefore, a secondary analysis based on the research methods is carried out to identify the trends in integrated reporting research methodology.

The *Focus of Integrated Reporting (IR) literature* (F) criterion, previously used by Guthrie *et al.* (2012) and Dumay *et al.* (2016) is composed of six attributes: F1 External reporting, F2 Auditing and assurance, F3 Accountability and governance, F4 Management control/Strategy, F5 Performance measurement and F10 Other (including general). Nevertheless, along with the coding process, new attributes were developed, as new focus in integrated reporting research were identified. Using the four new attributes (F6 IR in practice - general, F7 Value creation/Business Model, F8 Integrated thinking/Capitals, F9 IR Determinants/benefits) a more adequate representation of the diverse themes covered by the most recent research may be brought to readers' attention.

The criterion *Approaches to integrated reporting* (G) is developed from Dumay *et al.* (2016) by adding to the original attributes G1 King Report on Governance (IRC South Africa), G2 One Report, G3 IIRC pre-2013 Guidelines, and G4 IIRC 2013 Guidelines, two new attributes G5 GRI Framework and G6 Multiple frameworks. This change was decided as consequence of our initial content analysis and coding process on the six articles. We were observed that a number of articles (especially those published in the pre-IR Framework period) refer to the GRI standards as a start in their review of the integrated reporting. Moreover, it was noticed that a significant part of the articles refers to multiple Frameworks. This trend is also noticed by Dumay *et al.* (2016:175): "some authors use the term <IR> synonymously to describe what we identify as different IR approaches".

Advancing within the frameworks' related analysis, the IR Frameworks, models, instruments (H) criterion is considered with the focus on possible conceptual development of IR in the future. Authors as Dumay *et al.* (2016), Dumay and Garanina (2013) and Guthrie *et al.* (2012) also included this criterion in their research. The attributes included in this category are: None proposed (H1), Applies or considers previous (H2) and Proposes a new (H3).

3.4 Developing literature review reliability

The SLR method applied in this study combined a content analysis of the articles' content with an articles' coding process, carried out manually. As Guthrie *et al.* (2012) argue, the manual coding benefit resides in the use of the implicit knowledge of the researcher for an effective interpretation of metaphorical text or complex information. In order to validate the analytical framework as well as the obtained results, several discussions were held within the research team, after the initial coding of the six articles. Consequently, the criteria and attributes that composed the analytical framework have been established and the coding difficulties were solved. Next, the entire database of articles was analyzed and coded by one of the authors. Content analysis and coding process were doubled by the other three authors using group discussion and critical thinking analysis in those cases where divergent codes were found. Finally, a check of the results was undertaken by the research team to identify any coding errors or discrepancies. The final values of each attribute were recorded, sorted and filtered using Excel spreadsheets.

4. Findings

4.1 Characteristics of integrated reporting research during 2010-2017

As evidenced in Table 2A, 59.7% of the selected articles are published in journals indexed in the 'Business, Finance' category, followed by 'Management' (19.4%) and 'Business' (11.1%). Based on the number of published articles on integrated reporting, the Accounting, Auditing & Accountability Journal is the most active publication in spreading the awareness related to this new research field, with 9 articles published. The special issue from 2014 (Vol. 27, Issue 7) has significantly contributed in introducing the integrated reporting theme into the mainstream literature, with 6 articles, representing 54.5% of the articles published in IR area that year. Other journals interested in publishing integrated reporting articles are the Journal of Intellectual Capital with 11.1% of the sampled articles, followed by Sustainability Accounting, Management and Policy Journal and Critical Perspectives on Accounting with 8.3% of the sampled articles each.

Table 2A. Article Distribution across Academic Journals

Category	Total	%
BUSINESS, FINANCE	43	59.7%
• Abacus	1	1.4%
• Accounting and Business Research	2	2.8%
• Accounting and Finance	1	1.4%
• Accounting, Auditing & Accountability Journal	9	12.5%
• Accounting Horizons	1	1.4%
• Accounting, Organizations and Society	1	1.4%
• Australian Accounting Review	4	5.6%
• British Accounting Review	4	5.6%
• Critical Perspectives on Accounting	6	8.3%
• European Accounting Review	1	1.4%
• Journal of Accounting and Public Policy	2	2.8%
• Journal of International Financial Management & Accounting	1	1.4%
• Managerial Auditing Journal	4	5.6%
• Sustainability Accounting, Management and Policy Journal	6	8.3%
MANAGEMENT	14	19.4%
• Business Strategy and the Environment	2	2.8%
• Corporate Social Responsibility and Environmental Management	3	4.2%
• Journal of Intellectual Capital	8	11.1%
• South African Journal of Economic and Management Sciences	1	1.4%
BUSINESS	8	11.1%
• Business Ethics: A European Review	1	1.4%
• Business Horizons	1	1.4%
• International Business Review	2	2.8%
• Journal of Business Ethics	3	4.2%
• Public Relations Review	1	1.4%
ENGINEERING, ENVIRONMENTAL	5	6.9%
• Journal of Cleaner Production	5	6.9%
ECONOMICS	2	2.8%
• Amfiteatru Economic	1	1.4%
• Ecological Economics	1	1.4%
Total	72	100%

Table 2B. The Evolution of Integrated Reporting research (2010-2017)

Year of publication	Total	%	Accounting and Audit	%
2010	0	0%	0	0%
2011	1	1%	1	1%
2012	2	3%	1	1%
2013	4	6%	1	1%
2014	11	15%	7	10%
2015	16	22%	11	15%
2016	15	21%	7	10%
2017	23	32%	14	19%
Total	72	100%	42	58%

To respond the first research question *RQ1. How have the integrated reporting field developed in recent years?*, a detailed analysis is performed for the entire database of articles and also for the articles published in accounting and audit journals (Table 2B). The rise of interest in the integrated reporting research area has been fast and relatively recent (Table 2B), 75% of the articles being published during the last three years. The accounting and audit journals are noted to have greatly contributed to the IR literature development, during the starting phase of the process (2010-2014) with 10 of 18 articles published and continuing along the second stage (2015-2017) with 32 articles of 54. In recent years, journals published in other area, such as Management, have begun to focus on this new reporting paradigm, since integrating reporting provides not only a disclosure framework but also a strategic tool – the integrated thinking (IIRC, 2013b).

4.2 Changing in IR research paradigm

It is of a great importance to include in analysis the articles' impact as it serves as a proxy for its quality, since not all articles have the same academic significance. To measure the article impact, Massaro *et al.* (2016) conclude that citations may be used to recognize whether an article is relevant for academic literature and to identify its influence on the academic debate.

For measuring the article impact, the Clarivate Analytics' Web of Science Citation Report is accessed. As Dumay and Dai (2014: 270 cited by Dumay *et al.*, 2016).) state, "one problem with determining the impact from citations alone is that older articles can accumulate more citations". To overcome this constraint, two rankings

included in Citation Report are used: top ten articles by total citations (Table 3) and top ten articles by average citation per year (Table 4).

Table 3. Top ten articles by total citations

No.	Title	Authors	Publication Year	Total Citations
1	Integrated Reporting: Insights, gaps and an agenda for future research	De Villiers <i>et al.</i>	2014	75
2	The Role of the Board in the Dissemination of Integrated Corporate Social Reporting	Frias-Aceituno <i>et al.</i>	2013a	71
3	Integrated Reporting: An Opportunity for Australia's Not-for-Profit Sector	Adams and Simnett.	2011	49
4	Is integrated reporting determined by a country's legal system? An exploratory study	Frias-Aceituno <i>et al.</i>	2013b	48
5	The International Integrated Reporting Council: A story of failure	Flower	2015	47
6	Integrated Reporting and internal mechanisms of change	Stubbs and Higgins	2014	46
7	Integrated reporting: On the need for broadening out and opening up	Brown and Dillard	2014	45
8	The International Integrated Reporting Framework: Key Issues and Future Research Opportunities	Cheng <i>et al.</i>	2014	43
9	The cultural system and integrated reporting	Garcia-Sanchez <i>et al.</i>	2013	41
10	The International Integrated Reporting Council: A call to action	Adams	2015	41

(Source: Clarivate Analytics' Web of Science Citation Report, accessed at 13.03.2018.)

The average citation per year became a proxy index for the impact of integrated reporting area in accounting research. This approach is also used by Dumay *et al.* (2016) and recommended by Massaro *et al.* (2016).

According to the Tables 3 and 4, there are eight articles common to both rankings, all published during 2013-2015. The first ten articles by total citations were cited by more than 40 articles, up to 75 articles (for De Villiers *et al.*, 2014). Contrary to the “strong interest among scholars to cite the latest IR research”, asserted by Dumay *et al.* (2016:170), our extended review shows that the articles published during the most recent two years couldn't enter the top ten articles by citation nor by average citation per year. Nevertheless, the paper of De Villiers *et al.* (2014) has the highest impact on integrated reporting research field, as it has been cited 75 times since it was published, with an average citation of 15 per year.

Table 4. Top ten articles by citation per year

No.	Title	Authors	Publication Year	Average per Year
1	Integrated Reporting: Insights, gaps and an agenda for future research	De Villiers <i>et al.</i>	2014	15
2	The Role of the Board in the Dissemination of Integrated Corporate Social Reporting	Frias-Aceituno <i>et al.</i>	2013a	11.83
3	The International Integrated Reporting Council: A story of failure	Flower	2015	11.75
4	The International Integrated Reporting Council: A call to action	Adams	2015	10.25
5	Integrated Reporting and internal mechanisms of change	Stubbs and Higgins	2014	9.2
6	Integrated reporting: On the need for broadening out and opening up	Brown and Dillard	2014	9
7	The International Integrated Reporting Framework: Key Issues and Future Research Opportunities	Cheng <i>et al.</i>	2014	8.6
8	Is integrated reporting determined by a country's legal system? An exploratory study	Frias-Aceituno <i>et al.</i>	2013b	8
9	Walking the talk(s): Organisational narratives of integrated reporting	Higgins <i>et al.</i>	2014	7.6
10	Explanatory Factors of Integrated Sustainability and Financial Reporting	Frias-Aceituno <i>et al.</i>	2014	7.2

(Source: Clarivate Analytics' Web of Science Citation Report, accessed at 13.03.2018.)

As evidenced in Table 4, articles published during 2013-2015 only are included in the top ten average citation per year ranking, while more recent articles haven't managed to receive enough citations in order to be included in the top ten most cited articles. An explanation for this may be the changing of the literature focus. These findings respond to the second research question *RQ2. How and why is the research field changing?*, especially when the two publishing phases are considered.

If the main objective of the articles published between 2013 and 2015 was to spread awareness regarding the new reporting paradigm, the most recent articles focus on studying the integrated reporting as a reporting practice. Additionally, as the diversity of IR research increased over the time, the authors publishing articles during the last two years have the tendency to refer to the most recognized articles, rather than to articles analyzing particular integrated reporting features.

The most relevant journal in terms of articles published in IR research field remains Accounting, Auditing & Accountability Journal (AAAJ), as Dumay *et al.* (2016) previously observed. Four articles from 2014 AAAJ Special Issue appear in both rankings (Brown & Dillard, 2014; De Villiers *et al.*, 2014; Higgins *et al.*, 2014;

Stubbs & Higgins, 2014). This indicates a significant impact on the academic debate conducted in terms of integrated reporting.

4.3 Meta-analysis

This sub-section provides a meta-analysis of the sampled articles and sets out to offer insights on recent developments of integrated reporting mainstream literature. Dumay *et al.* (2016) state that the integrated reporting literature did not pass the “first stage” of research (as off their cut-off date for paper search, 1 March 2015). Details for the second research question are next addressed to map and assess the evolution of integrated reporting research. The specific contribution would be to establish whether this field moved from a rising awareness phase to an impact analysis phase. The study follows the SLR method, coding the articles according to the analytical framework developed in Section 3.3 of this paper. The following illustrates the SLR’s results, providing examples from the literature and developing insights based on this process.

A. Jurisdiction

The results in Table 5 show that 60% of the articles indicated a Supra-national/International perspective in their endeavor of approaching the integrated reporting. These suggest a broadening of the researchers’ interests in approaching the international aspects characterizing integrated reporting rather than the particular or country-specific level. This evolution was expected, as the IIRC strives to ensure a broad universal adoption of the integrated reporting practice (De Villiers *et al.*, 2014) and this new reporting paradigm has attracted global academic and profession’s attention.

Table 5. Jurisdiction

	Jurisdiction	No of articles	Frequency	2010-2014	2015-2017
A1	Supra-national/International/Comparative	43	60%	10	33
A1.1	Supra-national/International/Comparative - General	22	31%	6	16
A1.2	Supra-national/International/Comparative - Industry	2	3%	0	2
A1.3	Supra-national/International/Comparative - Organisational	19	26%	4	15
A2	National	25	35%	8	17
A2.1	National - General	1	1%	1	0
A2.2	National - Industry	0	0%	0	0
A2.3	National - Organisational	24	34%	7	17
A3	One Organisation	4	5%	0	4
	Total	72	100%	18	54

In searching for a response to the *RQ2.1 How global is the integrated reporting research and is there a shift in its perspective?*, a shift of perspective is found. An interesting fact is that the research field seems to have moved from a General approach of integrated reporting towards an Organisational focus when the Dumay's *et al.* (2016) results are taken as reference. Thus, for the international approach, only half of the articles focus on organizations and industries, while 24 of 25 national-oriented articles analyze specific organizations. Furthermore, Dumay *et al.* (2016) notice that the 2011-2014 integrated reporting literature mainly adopts a top-down approach trying to generalize findings for a larger group of companies as opposed to studying one organization's practice. The analysis in our paper, extending the publishing period up until November 2017, provides a similar trend, with only four articles of 72 focusing on a single organization (Beck *et al.*, 2017; Lodhia, 2015; Mio *et al.*, 2016; Veltri & Silvestri, 2015;).

Overall, the number of articles analyzing integrated reporting with an Organisational perspective cover a significant percentage. Whether for international studies, both periods have similar numbers of articles covering General and Organisational focus, the national approach is more organizational-oriented. During the first stage of integrated reporting research, 2010-2014, the main objective could have been spreading awareness through publishing normative-oriented articles. Thus, 7 articles of 18 total articles published during this period have a General focus regarding the Jurisdiction (e.g. Adams & Simett, 2011; Cheng *et al.*, 2014). For the last three years (2015-2017), 36 articles have used an Organisational approach (e.g. Setia *et al.*, 2015; Zhou *et al.*, 2017) while only 16 articles analyzed the integrated reporting based on a top-down perspective (e.g. Humphrey *et al.*, 2017; Lodhia & Stone, 2017). Even so, the articles with a General focus published over the most recent three years have a critical perspective on integrated reporting or its fundamental concepts (e.g. De Villiers and Sharma, 2017; Humphrey *et al.*, 2017).

B. Organisational focus

The global aspect of integrated research (RQ2.1) is supported by the findings on the extent of academic literature in terms of Organisational focus (Table 6). This section's results highlight that more than half of the reviewed articles conduct research on publicly listed entities (e.g. Buitendag *et al.*, 2017; Haji & Anifowose, 2017; Melloni, 2015). The percentage is higher than the Dumay's *et al.* (2016) and may explain the new focus of the latest IR Framework (IIRC, 2013a) towards the 'providers of financial capital'.

Table 6. Organisational focus

Organisational focus		No of articles	Frequency	2010-2014	2015-2017
B1	Publicly listed	39	54%	9	30
B2	Private – SMEs	0	0%	0	0
B3	Private - Others	8	11%	2	6
B4	Public sector	1	1%	0	1
B5	Not-for-profit	1	1%	1	0
B6	General/Other	23	32%	6	17
Total		72	100%	18	54

Only eight articles focus on analyzing the integrated reporting aspects through the lens of private companies (e.g. van Bommel, 2014; Lodhia, 2015), while none of the articles refers to SMEs. An insignificant attention is given to the public-sector (Veltri & Silvestri, 2015) or not-for-profit organizations (Adams & Simett, 2011). Distinctively analyzing the periods reflecting the two stages of research, the identified trend is comparable and no differentiation could be noticed.

The findings are consistent with those of Dumay *et al.* (2016), although the representativeness of articles with a general focus surpass that of the research on publicly listed. Thus, once more it may be argued that the IIRC's statement: "the framework is written primarily in the context of private sector" (IIRC, 2013b: 4) is a steady concern for academics. Even if the IIRC guidelines may be applied by not-for-profit and public-sector organizations, the research in this area has yet to rise.

C. Location of research and authors' affiliation

A specific contribution to research on integrated reporting in terms of its globalization (RQ2.1) is presented in Table 7. The most researched regions are South Africa with 13 (18%) articles, followed by Australia with 7 (10%) articles. Taking in consideration the analyzed sample, the specifics of the European Union, North America or Asia-Pacific haven't played an important role in integrated reporting research, so far, at least. Undoubtedly, the South African context is the leading location of research, as it represents a model for integrated reporting, with almost 24 years of experience in addressing critiques for alternatives to financial corporate reporting and with mandatory requirements for the JSE listed companies.

Table 7. Location of research and authors' affiliation

		Location of research		Authors' affiliation	
		No of articles	Frequency	No of articles	Frequency
C1	USA/Canada	1	1%	2	3%
C2	Australia	7	10%	13	18%
C3	United Kingdom	3	4%	8	11%
C4	European Union	3	4%	22	31%
C5	South Africa	13	18%	4	6%
C6	Asia-Pacific	2	3%	7	10%
C7	Other/Mixed	43	60%	16	22%
Total		72	100%	72	100%

Other locations of research that might have a significant contribution for this reporting system are the United Kingdom or the European Union, as the EU Directive specifically requires listed companies to consider the sustainability-related aspects when they report on their activity. The results are different as compared to Dumay's *et al.* (2016) findings. According to their results, the most active region is the European Union followed by Australia, while the South Africa takes the third place.

To support and validate the findings, Location of Research category is extended with Authors' affiliation (Table 7). The most interested authors in IR research are based in the European Union (22 articles) highlighting an increased interest in the context of adapting the European policies to IR requirements. However, only three articles are studying the integrated reporting practice of this region. A similar conclusion may be drawn in the case of the United Kingdom. From 8 research teams, not counting the mixed teams, only three articles focus on studying the UK's contribution in integrated reporting.

Irrespective authors' affiliation, the global aspect of the integrated reporting (RQ2.1) is preferred to be studied. Inspecting the C7 – Other/Mixed category, it is noted that 13 of 43 articles covering other areas than the first six listed in Table 7 are authored by mixed teams. Three other mixed teams contributed to research from South Africa (Barth *et al.*, 2017; Bernardi & Stark, 2016) and Australia (Higgins *et al.*, 2014).

D. Data sources

Since a key challenge for integrated reporting research is access to data, an analysis on data sources used proves to be quite useful in answering the research question *RQ2.2 What are the best research practices in integrated reporting.* As outlined in Table 8, Author's primary data is one of the most frequent choice for data source,

with 7 articles published between 2010-2014 and 15 articles published between 2015-2017. This type of source is mostly used when the authors gathered data for the specific purpose of the research, usually when interviewing experts or scholars (e.g. Chaidali & Jones, 2017; Higgins *et al.*, 2014) or when a survey is used (e.g. Ballou *et al.*, 2012).

Table 8. Data sources

	Data Sources	No of articles	Frequency	2010-2014	2015-2017
D1	Corporate information database/Corporate general ranking	18	25%	4	14
D2	Authors' primary data	22	31%	7	15
D3	Intergovernmental organization	3	4%	0	3
D4	Corporate website or internal data	8	11%	0	8
D5	Stock index	1	1%	0	1
D6	Mixed data sources	1	1%	0	1
D7	Other	19	27%	7	12
	Total	72	100%	18	54

The corporate information databases, such as Compustat, Thompson Reuters, GRI Database and Corporate ratings (the Forbes Global 2000 list) are the next widely used data sources, with 4 articles published between 2010-2014 and 14 articles published between 2015-2017 (Table 8). Other sources, such as Intergovernmental organization (the IIRC's Examples Database), Stock index (used by Garanina & Dumay, 2017) and Corporate website or internal data are used only for the research conducted after 2015. The article of Mio *et al.* (2016) stands out as it uses three data sources (interview internal documents and field observations) for its case study on Generali's Internal Integrated Report. In the Other category are included conceptual articles and literature reviews which do not use particular data sources.

E. Research methodology and research methods

Table 9 shows the analysis of integrated reporting in terms of research methodology and research methods. There is a substantial and exponential increase of empirical studies in the second part of the period considered in analysis, while theoretical approach has a declining frequency starting with 2015. It is encouraging to see more empirical work in this area, as there have been many requests for these types of studies. Taking a closer look at the empirical category (qualitative, quantitative and mixed research methods listed in Table 9), it's noticed that qualitative and quantitative studies are comparable with around 20 studies per category.

Table 9. Research methodology and research methods

	Research methodology/ methods	No of articles	Frequency	2010-2014	2015-2017
E1	Theoretical	18	25%	6	12
	<i>Commentary/Normative/Policy</i>	16	22%	5	11
	<i>Literature review</i>	2	3%	1	1
E2	Empirical	54	75%		
E2.1	Qualitative	19	27%	4	15
	<i>Case Study</i>	5	7%	0	5
	<i>Content analysis/Historical analysis</i>	1	1%	0	1
	<i>Interviews</i>	13	19%	4	9
E2.2	Quantitative	29	40%	7	22
	<i>Statistical and econometric methods</i>	20	28%	4	16
	<i>Survey/Questionnaire</i>	3	4%	3	0
	<i>Content analysis/Historical analysis</i>	1	1%	0	1
	<i>Mixed quantitative</i>	5	7%	0	5
E2.3	Multiple	6	8%	1	5
	Total	72	100%	18	54

Detailing, the most commonly used are the statistical and econometrical methods and the time-analysis expose that there is an upward trend. Econometrical methods have been rarely used during the first stage of IR research (2011-2014 period), with only four articles (García-Sánchez *et al.*, 2013; Frias-Aceituno *et al.*, 2013a, b, 2014). Nevertheless, during 2015-2017, 16 articles using statistical and econometrical methods are published and their focus is mainly on performance measurement (e.g. Zhou *et al.*, 2017) or integrated reporting determinants (e.g. García-Sánchez & Noguera-Gámez, 2017).

The next most employed method after the Statistical and econometric category is Commentary/Normative/Policy, with 16 articles (22%). This is consistent with Dumay *et al.* (2016) who note the increased importance of Commentary/Normative/Policy, the prevalent method during the 2011-2014 period. Similar to statistical and econometric methods, the number of normative articles increased in usage during the recent years. However, in terms of significance, the findings in Table 9 show a second place for the normative method.

F. Focus of IR literature

The current trends of IR literature are analyzed in order to find a possible connectivity between the criteria of IR frameworks and the focus of IR literature (RQ2.3). The findings show that the focus of IR literature mirrors the new trends in IR frameworks.

Thus, Table 10 indicates the External Reporting/Sustainability Reporting to be the most active area of interest for the research field, with 23 articles (e.g. Ballou *et al.*, 2012; Cheng *et al.*, 2014; Lodhia & Stone, 2017; Stacchezzini *et al.*, 2016). These results are expected, considering the primary purpose of IR Framework: disclosing the long-term value creation process for external users of the company (IIRC, 2013b). They are also correlated with the findings of Dumay *et al.* (2016) noticing the same trend in their study. Likewise, an increasing number of authors claim that integrated reporting has the potential to change the existing corporate reporting practice, as it offers solutions to traditional accounting reporting criticism (Brown & Dillard, 2014; De Villiers *et al.*, 2017; Zhou *et al.*, 2017).

Table 10. Focus of IR literature

	Focus of IR literature	No of articles	Frequency	2010 - 2014	2015-2017
F1	External reporting/Sustainability reporting	23	32%	9	14
F2	Auditing and assurance	4	6%	0	4
F3	Accountability and governance	1	1%	1	0
F4	Management control/Strategy	1	1%	0	1
F5	Performance measurement	6	8%	0	6
F6	IR in practice – general aspects	9	13%	0	9
F7	Value creation/Business Model	6	8%	2	4
F8	Integrated thinking/Capitals	6	8%	1	5
F9	IR Determinants/benefits	11	15%	4	7
F10	Other (including general)	5	7%	1	4
	Total	72	100%	18	54

The second most important focus of the IR literature is analyzing the determinants or benefits of integrated reporting adoption. Although with a lower frequency (15%) as compared to Dumay *et al.* (2016), this research path is approached by 11 articles. Detailing the analysis of the 11 articles on the balance between the articles addressing determinants and benefits of integrated reporting, there is a clear trend towards determinants. Most of the articles focus on studying the impact of industry concentration, company size, profitability, business sector, growth opportunities (Frias-Aceituno *et al.*, 2014), cultural system (Garcia-Sanchez *et al.*, 2013) or legal system influences (Frias-Aceituno *et al.*, 2013b) on the development of integrated reporting.

Extending the characteristics of the Focus of IR literature attribute, we examine how integrated reporting is approached in the practice. The Dumay's *et al.* (2016:177) assertion “that <IR> is not simply accepted as the corporate reporting norm” characterizes the first stage of IR research. In the 2011 – 2014 period the focus of

literature was to popularize the emergent practice and no research on companies' practice using the concepts of integrated reporting was carried out. Moreover, our findings highlight nine articles (13%), published between 2015 and 2017 analyzing general aspects of IR in practice. This aspect is a response to the many demands to study how the integrated reporting is translating in practice. Four articles (Burke & Clark, 2016; Chaidali & Jones, 2017; Perego *et al.*, 2016; Robertson & Samy, 2015) highlight the views of preparers, regulators and academics regarding integrated reporting. Another three articles (Beck *et al.*, 2017; Lodhia, 2015; Veltri & Silvestri, 2015;) study the integrated reporting through the lens of individual companies, and two other articles debate the case of multiple organizations at international (Adams *et al.*, 2016) or national level (Haji & Anifowose, 2017).

Other interesting focuses in the integrated reporting research field are Auditing and assurance (e.g. Maroun, 2017), Performance measurement (e.g. Garcia-Sanchez & Noguera-Gamez, 2017; Zhou *et al.*, 2017), Value creation and Business Model (e.g. Beattie & Smith, 2013; Maniora, 2017) and Integrated thinking/ Capitals (e.g. Coulson *et al.*, 2015; Garanina & Dumay, 2017). Less approached study field of this domain are Accountability and governance and Management control/Strategy with only one paper each.

G. Approaches to IR

Dumay *et al.* (2016: 176) argue that “there is a lack of critical understanding among scholars about what integrated reporting is”. In advancing this argument the RQ 2.3 research question is addressed to find the way the criteria of IR frameworks may be connected with the specific focus of IR literature. The results in Table 11 highlight that the majority of the authors (53%) refer to integrated reporting approaches by citing multiple frameworks, as a way to properly document their research on integrated reporting.

Apart from citing multiple integrated reporting approaches, there are articles referring to a single framework. Frequently, the authors cited the IIRC's International Integrated Reporting Framework (e.g. van Bommel, 2014; Melloni, 2015) or the IIRC pre-2013 Guidelines (the 2011 Discussion Paper). Although South Africa is one of the most interesting research location, with many articles analyzing the integrated reporting practice of the JSE listed companies, only three articles strictly refer to guidelines proposed by King III or IRC of South Africa (e.g. Bernardi & Stark, 2016; Buitendag *et al.*, 2017; Setia *et al.*, 2015).

Table 11. Approaches to IR

Approaches to IR		No of articles	Frequency	2010-2014	2015-2017
G1	King Report on Governance (IRC of South Africa)	3	4%	0	3
G2	One Report	0	0%	0	0
G3	IIRC pre-2013 Guidelines	12	17%	5	7
G4	IIRC, 2013 Guidelines	19	26%	2	17
G5	GRI Framework	0	0%	-	0
G6	Multiple frameworks	38	53%	11	27
Total		72	100%	18	54

5. Discussion and conclusion

5.1 Integrated reporting frameworks, models and instruments

Building on the approaches to integrated reporting, the analysis of the frameworks, models and instruments referred to or proposed by the sampled articles is further discussed. The findings show that 64 of the total 72 articles consider previous frameworks (e.g. Baboukardos & Rimmel, 2016; Coulson *et al.*, 2015; Gunaratne & Senaratne, 2017). These findings are in line with those of Dumay *et al.* (2016) who state that integrated reporting is a new phenomenon and most authors accept previous highly recognized views of this reporting novelty.

However, this sub-section does not aim to establish the fact that all the articles refer to a specific framework or model, but to mainly discover the articles who bring innovations to the academic field. The results show that eight articles (Abeysekera, 2013; Alexander & Blum, 2016; Atkins *et al.*, 2015; Haller & van Staden, 2014; Maroun, 2017; Maas *et al.*, 2016; Oliver *et al.*, 2016; Rambaud & Richard, 2015) took a step forward and proposed frameworks or instruments meant to improve features of integrated reporting practice. As Dumay *et al.* (2016) outline, the main motivation to create a new instrument or framework resides in the need for the development of a significant literature in IR research, with the premises of building a foundation for IR future research.

Abeysekera engaged in framework proposition as early as 2013, when the IIRC's Framework was still under discussion. The articles aimed "to propose a template for integrated reporting in organizations" (Abeysekera, 2013: 227) being the first academic paper to do so. Continuing this trend, Haller and van Staden (2014) propose a 'value added statement' (VAS) which has the potential to serve as a practical and effective reporting instrument for integrated reporting. Another interesting suggestion is made by Maroun (2017) who developed three possible integrated reporting assurance models, based on existing assurance principles

combined with views of 20 audit experts and 20 preparers. The interest of proposing new frameworks and models for integrated reporting shows that this research field is maturing and becoming recognized as a discipline within accounting research.

5.2 Future research

The future research perspectives are the main driver for the integrated reporting impact on the literature. Recommendations on research related to voluntary disclosure literature and the voluntary and the mandatory IFRS adoption literature, may also be applied to IR research (De Villiers *et al.*, 2017). Humphrey *et al.* (2017) advances this idea by discussing the role of IIRC in delivering a fundamental repositioning of the corporate reporting configuration through participative involvement of various groups of stakeholders. Investigations on possible perspectives of integrated reporting are proposed by Chaidalia and Jones (2017) taking into account the central role of collaboration between IR developers and its users. Meanwhile, Lodhia and Stone (2017) see an increased impact of integrated reporting practice when the potential of internet and social media technologies is valorized.

Gunarathne and Senaratne (2017: 541-542) state that it is interesting to study integrated reporting in different locations or industries as “the cultural impact of new managerial technologies” can enhance “the understanding of the global picture of accounting”. This idea, corroborated with the IR framework’s emphasis (IIRC, 2013b) on disclosing how an entity’s strategy is reflected in its business model, may be addressed in future research on integrated thinking. The future approaches of IIRC are brought to attention by Humphrey *et al.* (2017) in terms of focus and trends of integrated reporting practices. They conclude that companies’ choices of supporting, eliminating or ignoring the integrated reporting along with the level of their understanding the significance of integrated reporting might complement the standards setters’ initiatives and efforts. Feng *et al.* (2017) also highlight the lack of practitioners’ understanding that discourages the IR adoption in practice.

Tweedie *et al.* (2017), building on Eccles *et al.* (2015), suggest practitioner-focused research on integrated reporting business model aiming the development of conceptual and practical tools. Likewise, Melloni *et al.* (2017) draw a signal on the decision of whether a mandatory IR reporting is preferable over a voluntary corporate reporting. Further research on associations between dominance of management impression and possible improvements of corporate reporting may respond to the question whether companies could achieve “a better combination of conciseness and completeness in reports” (Melloni *et al.*, 2017: 235). This may generate opportunities for changing the managers and boards of directors’ views on the long-term prospects of their business. Hence, the IIRC envisages that the process of preparing an integrated report will affect managers’ internal decisions by directing them to focus more on the firm’s long-term sustainability than on its short-term financial performance (De Villiers *et al.*, 2017).

Future research might bring to discussion possible links between integrated reporting, governance and integrated thinking. The complex interrelationships influencing the companies' ability to create value for the multi-stakeholders is already referred to in practice as 'integrated thinking'. Adams (2017) finds out that a broader view of value creation applied to contemporary reporting processes may influence the managers' sights and assist the decision-making process. The change in corporate reporting trend from disclosing the impacts towards focusing on the value creation addressed by the developments of IIRC Framework may result in influencing the mindset of corporate leaders and in emergence of new reporting practices (Adams, 2017).

Capital markets and real effects are found in Barth *et al.* (2017) to be the generating elements for promoting corporate integrated thinking and improving integrated reporting quality. However, the authors suggest a group effort of managers, practitioners, standard-setters, regulators, and investors in contributing to the process of integrated reporting globalization. Nevertheless, Maroun's (2017) insights and recommendations on the assurance of integrated reporting are not to be ignored in future research. By including the views of different stakeholders (institutional investors, analysts and international standard-setters) on possible assurance models, Maroun (2017) argue that the IR Framework may be extended in terms of materiality, associated risks and specific assurance procedures.

In conclusion, the findings of this research suggest an evolution of integrated reporting research towards the second stage identified by Dumay *et al.* (2016). We evidenced the movement to an impact analysis phase and the extending research of IR in practice.

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