

# THE QUALITY ASSESSMENT OF INTEGRATED REPORTING: A STRUCTURED LITERATURE REVIEW

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## ABSTRACT

**Purpose:** In December 2022, the European Union implemented the Corporate Sustainability Reporting Directive. It is intended to strengthen non-financial and financial information in corporate reporting to meet the growing requirements of an organization's stakeholders. The quality of this information is essential to increase the usefulness of stakeholders' decisions. Therefore, the article aims to give a comprehensive overview of the relevant literature that assesses characteristics for the quality of Integrated Reporting. On the one hand, it analyses the insights and reviews the critiques associated with quality assessment. On the other hand, the paper outlines future research paths to clarify which quality-enhancing elements in Integrated Reporting are essential.

**Design / Methodology / Approach:** The research is based on a qualitative research design. It develops a structured literature review and sheds light on the empirical state of the art. The papers are examined by using document analysis and structured content analysis.

**Findings:** The results highlight that the research field of Integrated Reporting is becoming increasingly important; most of the papers come from Italy. The results indicate that the quality of integrated reports is significantly related to company-specific factors. However, the results also show that there are still many open future research paths to fully capture the quality assessment of Integrated Reporting.

**Research Implications / Limitations:** The paper reveals the classical limitations of qualitative research. In addition, due to the tight inclusion criteria and novelty of the research field, the sample size is limited.

**Contribution / Originality / Value:** This paper presents a state-of-the-art structured literature review. It offers insights into the quality assessment of Integrated Reporting and the corresponding decision's usefulness of information. To the researcher's knowledge, no paper investigates this topic with a wide-ranging structured literature review. Consequently, the paper adds value to academia, practitioners, and standard setters.

**Keywords:** Integrated Reporting, <IR>, quality assessment, structured literature review, corporate reporting

**JEL Classification:** L20, M10, M14, M40

**Paper Classification:** Literature Review



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## INTRODUCTION

In 2022, the European Union reached another milestone within its initiative to build a sustainable financial ecosystem and implemented the Corporate Sustainability Reporting Directive (CSRD) (European Union, 2022). The CSRD is intended to revise and strengthen the existing rules of the Non-Financial Reporting Directive (NFRD) (European Union, 2014). The overall purpose is to ensure that companies report reliable, consistent, and comparable sustainability information to meet the increased information needs of investors and other stakeholders. Since the financial market crisis in 2008/2009, companies have been very active concerning their information policy on non-financial reporting to close the corresponding lack of information (Cheng et al., 2014, p. 91; Eccles and Krzus, 2010, pp. 9–10; 207–208). However, it is often criticised that this process is accompanied by a greenwashing strategy (Huang and Watson, 2015). In addition, the volume of information is increasing, without, however, having a concrete reference to the strategic orientation of the company (Zhou et al., 2017, p. 95) or concern being non-integrated and compartmentalised (Bernardi and Stark, 2018, p. 16). Finally, companies thus tend to create an information overload due to the overwhelming and increasing reporting landscape (de Villiers et al., 2014, p. 1045).

Despite the existing reporting diversity, it should be noted that financial and non-financial information is often not connected or integrated into corporate reporting (Velte, 2021a, p. 2). Against the background of these challenges, the International Integrated Reporting Council (IIRC) published a principles-based framework for Integrated Reporting (<IR>) for the first time in 2013 (International Integrated Reporting Council (IIRC), 2013). After a multi-stage consultation process close to the capital markets, the Framework was revised in 2021 and superseded the version of 2013 (International Integrated Reporting Council (IIRC), 2021a). <IR> is a holistic and multi-capital approach focussing on the value creation process over the short, medium, and long term. The primary purpose of <IR> is to increase the quality of information and disclosure. Thus, on the one hand, transparency is to be increased, and on the other hand, the decision-making process of investors is to be improved (International Integrated Reporting Council (IIRC), 2021a, p. 2). To fulfil the requirements of the NFRD and the CSRD, companies may refer to national, Union-based, or international frameworks (European Union, 2014, p. 2, 2022, p. 26). Therefore, <IR> complies with the CSRD and is considered a possible approach to support the sustainable development of the economy and meet corporate reporting demands (Biondi et al., 2020, p. 890).

Against this background, it is essential to examine whether the quality of integrated reports can be measured and, if so, how. The researcher identified a significant research gap in a meta-analysis of the quality assessment of <IR> and its determinants. Literature on <IR> is steadily growing but is still an emerging and sparse research field. While the researcher determined that previous and scattered (structured) literature reviews on <IR> exist in a more general manner (Dumay et al., 2016; Kannenberg and Schreck, 2019; Velte, 2021a; Velte and Stawinoga, 2017; de Villiers et al., 2014; de Villiers, Hsiao and Maroun, 2017; de Villiers, Venter and Hsiao, 2017; Vitolla, Raimo and Rubino, 2019), the researcher did not find any structured literature review (SLR) on prior studies on the quality assessment of <IR>.

Thus, this study aims to address this research gap by conducting an SLR to identify the current empirical state of the quality assessment of <IR>. In the context of the continuing novelty of <IR>,

an SLR provides insights into the nascent research field (Bracci et al., 2019, p. 104; Dumay et al., 2016, p. 168; Massaro et al., 2016, pp. 769–770). In this context, and in contrast to previous *<IR>* studies, the researcher presents new insights into the emerging research field. To achieve this, the researcher provides a clear research framework to examine the main features of *<IR>* quality assessment within financial reporting and accounting literature. Doing so allows the researcher to answer three research questions which are the fundamental basis of an SLR (Massaro et al., 2016):

**RQ1:** How is research for inquiring into *<IR>*, and especially *<IR>* quality assessment, developing?

**RQ2:** What is the focus and critique of the *<IR>* literature on quality assessment?

**RQ3:** What is the future for *<IR>*, and especially *<IR>* quality assessment research?

The paper proceeds as follows. To shed more light on the *<IR>* approach, Section 2 introduces the field of *<IR>* clearly and places it in the context of the reporting landscape. After-wards, Section 3 sets out the paper's methodology and the advantages of an SLR over other types of literature analysis. Subsequently, Section 4 outlines a structured and concrete pro-cess to conduct an SLR and already contains the first descriptive findings from the analysis. Then, Section 5 lays out the insights and critiques on the quality assessment of *<IR>* and defines the future research path. While Section 6 discusses the limitations and challenges of the study, Section 7 concludes and provides final remarks.

## THEORETICAL BACKGROUND AND CONTEXT

Despite the earlier changes affecting the reporting landscape, ensuring the three dimensions of information is essential. According to Krzus (2011, pp. 274–275), the dimensions include information relevance, focus, and complexity. This is to meet the requirements of the share-holders and stakeholders, as well as the company's needs. Not least because of this, corporate reports almost exclusively based on financial information are developing via the triple bottom line approach to sustainability into integrated reports.

The triangle of information is based on conceptual theories and thus represents the rationale for voluntary and integrated reporting (Camilleri, 2018, p. 569). Agency theory suggests that the agent and the principal maximise their utility (Eisenhardt, 1989). Due to this agency relationship (Jensen and Meckling, 1976, p. 308), information asymmetries arise that some-times harbour conflict potential (Pfaff and Zweifel, 1998, p. 184; Spremann, 1990, pp. 562–563). To counteract this, Spence (1973, p. 355) sees the solution in corporate reporting to reduce these information asymmetries. Stewardship theory, which can also explain reporting efforts, is a counterpart to agency theory (Dumay et al., 2019, p. 29). It assumes that collaborative behaviour generates utility and managers pursue exclusively collective and trustworthy purposes (Davis et al., 1997, p. 20). While these two theories do not fully cover a holistic or *<IR>* approach, legitimacy theory indicates a social contract between the company and its environment (Shocker and Sethi, 1973, p. 97). As a result, corporate reporting is thus more adapted to the requirements of the environment (Camilleri, 2015; Deegan and Unerman, 2011, p. 325). By including environmental and social issues alongside the economic component, companies legitimise themselves because they align more with the expectations and demands of investors and stakeholders (Deegan and Unerman, 2011, p. 323). Institution-al theory

should be seen in a very similar context. Organisations are assumed to react to institutional pressure by adopting specific rules or processes (Suchman, 1995). This change is then rewarded by higher legitimacy (Meyer and Rowan, 1977). Therefore, the approach of voluntary corporate reporting can also be explained by market pressure exerted by stake-holders, competition, governments, or other institutions (Camilleri, 2018, pp. 570–571).

In line with the three dimensions of information and the different conceptual theories to explain the rationale for voluntary reporting, *<IR>* is a holistic reporting approach. It combines economic elements with social and environmental dimensions (Velte, 2021a, p. 2). Thus, the report format meets stakeholders' expectations to be informed comprehensively and on all relevant topics. In this context, reporting on value creation, preservation or erosion is seen as the next indispensable step in developing corporate reporting, for which the IIRC was founded in 2010 (International Integrated Reporting Council (IIRC), 2021a, p. 2). Against this background, the International *<IR>* Framework was published for the first time in 2013 (International Integrated Reporting Council (IIRC), 2013). Following an extensive market consultation (International Integrated Reporting Council (IIRC), 2021b), a revision of the International *<IR>* Framework was published in January 2021. The 2021 version thus supersedes the 2013 version (International Integrated Reporting Council (IIRC), 2021a, p. 2). The long-term vision of the IIRC is to establish *<IR>* as the corporate reporting norm. Thus, financial stability can be strengthened on the one hand, and sustainable development can be advanced on the other (International Integrated Reporting Council (IIRC), 2021a, pp. 2, 5). According to the IIRC, an integrated report is defined as follows (International Integrated Reporting Council (IIRC), 2021a, p. 10):

*An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation, preservation or erosion of value over the short, medium and long term.*

Although the symbiosis of economic, social, and environmental factors, *<IR>* is not primarily understood as a pure sustainability reporting format. The explanation of value over time is instead aimed at providers of financial capital. To make this allocation efficient, financial and non-financial information is reported. In addition, *<IR>* benefits all stakeholders who have a legitimate interest in the organisation (International Integrated Reporting Council (IIRC), 2021a, p. 11). Therefore, *<IR>* complies with the CSRD and is considered a possible approach to support the sustainable development of the economy and meet the increasing corporate reporting requirements (Biondi et al., 2020, p. 890; European Union, 2022, p. 29). Essentially, the objective of *<IR>* is to offer the providers of financial capital improved information quality so that they can allocate their capital efficiently. Understanding the different interdependencies and clarifying them to the stakeholders is essential. In this way, it should be avoided that many different, disconnected, and static reports continue to be generated in the future. To ensure this, the *<IR>* Framework comprises three Fundamental Concepts, seven Guiding Principles and eight Content Elements. The Fundamental Concepts are intended to underpin and reinforce the requirements derived from the *<IR>* Framework (International Integrated Reporting Council (IIRC), 2021a, p. 15). While the seven Guiding Principles form the basis for the preparation and presentation of the integrated report and address related content (International Integrated Reporting Council (IIRC), 2021a, p. 25), the eight Content Elements represent the

concretisation and operationalisation of the formulated Guiding Principles (International Integrated Reporting Council (IIRC), 2021a, p. 38). The three components are summarised in Table 1.

**Table 1 Overview of <IR>**

Fundamental Concepts	Guiding Principles	Content Elements
<ul style="list-style-type: none"><li>• Value creation for the organisation and others</li><li>• The capitals</li><li>• The value creation process</li></ul>	<ul style="list-style-type: none"><li>• Strategic focus and future orientation</li><li>• Connectivity of information</li><li>• Stakeholder relationships</li><li>• Materiality</li><li>• Conciseness</li><li>• Reliability and completeness</li><li>• Consistency and comparability</li></ul>	<ul style="list-style-type: none"><li>• Organizational overview and external environment</li><li>• Governance</li><li>• Business model</li><li>• Risk and opportunities</li><li>• Strategy and resource allocation</li><li>• Performance</li><li>• Outlook</li><li>• Basis of preparation and presentation</li></ul>
Source: International Integrated Reporting Council (IIRC), 2021a, pp. 15–23.	Source: International Integrated Reporting Council (IIRC), 2021a, pp. 15–23.	Source: International Integrated Reporting Council (IIRC), 2021a, pp. 15–23.

Source: Created by the researcher according to International Integrated Reporting Council (IIRC), 2021

All these factors serve the overarching purpose of revealing a company's contribution to value creation. For this purpose, the capitals represent the crucial success factors of the organisation and are thus the essential parameters of value creation. The symbiosis and connection of financial and non-financial elements is once again made clear: In addition to the classic economic components (financial capital), there are two social dimensions (human capital; social and relationship capital), an environmental dimension (natural capital), and intellectual capital (International Integrated Reporting Council (IIRC), 2021a, pp. 18–20). The capitals are transformed in the value creation process as either created, preserved, or eroded (International Integrated Reporting Council (IIRC), 2021a, pp. 21–23). The high degree of abstraction of the Fundamental Concepts makes operationalisation indispensable, as expressed in the Guiding Principles and the Content Elements. A basis of <IR> that towers above all is the principles-based approach. The intention is to create an appropriate balance between flexibility and prescription to recognise the individual characteristics of the organisation adequately (Busco et al., 2013, pp. 12–13; International Integrated Reporting Council (IIRC), 2021a, pp. 5, 11). In concrete terms, this means the focus is on the actual materiality of information (International Integrated Reporting Council (IIRC), 2021a, pp. 5, 11). Furthermore, the Content Elements are derived from questions an organisation needs to answer in the reporting process to underpin the principle-based approach (International Integrated Reporting Council (IIRC), 2021a, p. 38).

Previous studies show some benefits associated with using <IR>. Conclusively, the combination of communication, risk management, and cost benefits represents internal and external benefits (Eccles and Krzus, 2010, pp. 146–161; Roth, 2014, p. 65). Furthermore, <IR> leads to identifying and assessing risks and strengthening the decision-making process, as now more non-financial aspects are included in addition to financial indicators. However, the almost incredible benefits of <IR> may

affect the target group on these reports, since it gets concessive and integrated information to allocate their capital more efficiently (Vitolla and Raimo, 2018, p. 245). In conclusion, *<IR>* is a holistic management approach that presents financial and non-financial information in an appropriate and aggregated form to meet and satisfy shareholder and stakeholder requirements (Haller, 2017, p. 443).

However, for *<IR>* to reach its full potential, a certain level of quality is required. Many papers indicate that high *<IR>* quality is associated with specific effects and vice versa (Chouaibi et al., 2021; Cortesi and Vena, 2019; Pistoni et al., 2018; Pozzoli and Gesuele, 2016; Vitolla, Raimo, Rubino and Garzoni, 2020; Zhou et al., 2017; Zúñiga et al., 2020). However, it should also be noted that these studies use different approaches to determine and measure the quality of an integrated report, according to the IIRC Framework. An over-view of the methods used so far to assess *<IR>* quality does not exist in the scientific and academic literature, so a significant research gap has opened in this context, which this study can now close. This approach will be pursued in future research to develop a generally good approach to quality measurement, and this will ensure that quality can be assessed transparently and uniformly by all stakeholders. This holistic approach to quality measurement should also make it possible to identify further potentials of *<IR>*.

## METHODOLOGY

This paper employs an SLR to answer the three research questions listed above. The paper's methodology is like the previously conducted SLRs in this research field (Dumay et al., 2015, 2016; Dumay and Cai, 2014, 2015; Dumay and Garanina, 2013; Guthrie and Dumay, 2019). Generally, a literature review describes a systematic way to collect and analyse previous research (Tranfield et al., 2003, p. 207). Well-conducted literature reviews expand academic knowledge, facilitate theory development (Webster and Watson, 2002, p. xiii), and provide an overview of multidisciplinary research fields (Snyder, 2019, p. 333). There are several approaches and a widely expanding literature review continuum to carry out a literature review, such as rapid reviews, traditional authorship reviews, narrative reviews, research synthesis and meta-analysis, systematic literature reviews, and structured literature reviews (Ascani et al., 2021, p. 4; Massaro et al., 2016, p. 769). Since many traditional reviews are not systematically conducted and, thus, lack thoroughness (Tranfield et al., 2003, p. 207), this paper follows an SLR approach. Many scientific papers focus on conducting a systematic review, especially in medical science, where this method was initially developed (Davis et al., 2014; Liberati et al., 2009; Moher et al., 2016). However, SLRs were also established in social science (Davis et al., 2014; Palmatier et al., 2018; Tranfield et al., 2003). A paper by Massaro et al. (2016) focuses on systematic literature reviews in accounting and gives valuable impetus for this research study.

The paper's methodology is based on an SLR because research on *<IR>* is still in an embryonic but evolving stage (de Villiers et al., 2014, p. 1043). In the context of the continuing novelty of the research field of *<IR>*, an SLR provides insights into the nascent topic (Bracci et al., 2019, p. 104; Dumay et al., 2016, p. 168; Massaro et al., 2016, pp. 769–770). Against this background, reviews lend themselves to presenting a specific overview of a topic on the one hand and thus presenting the current state of research. On the other hand, they can also identify research gaps and future research

fields and support theory development (Snyder, 2019, p. 334; Torraco, 2005, p. 364). Using an SLR, relevant research can be identified and critically evaluated to adequately answer a specific research question (Liberati et al., 2009). This dedicated and explicit approach can minimize bias and thus promote reliable findings (Moher et al., 2016, p. 3). The approach is intended to ensure that insights into the quality assessment of integrated reports can be elaborated (Dumay et al., 2016, p. 168). To contribute to academic research, a literature review needs to have both depth and rigor. Moreover, the quality of the review is defined by replicability and usefulness for scholars and practitioners (Palmatier et al., 2018) and the generalizability of the findings (Denyer and Tranfield, 2006, p. 217). According to Massaro et al. (2016), the process of an SLR is based on a stringent logical procedure. Besides, this approach ensures a set of rules for data analysis and its interpretation to meet the criteria mentioned above (Bracci et al., 2019, p. 105; Tranfield et al., 2003, p. 209).

In this regard, the researcher provides a clear research framework to examine the main features of <IR> quality assessment within the financial reporting and accounting literature. The advantage of an SLR over all kinds of traditional authorship reviews is the empirical basis, which ensures that seminal articles are not missed and that researcher bias, which may arise by subjective analysis (Tranfield et al., 2003, p. 210), can be substantially reduced (Dumay et al., 2015, p. 269; Massaro et al., 2016, pp. 769–770; Petticrew and Roberts, 2008, p. 10). In addition, replicability can be created with the help of an SLR through the dedicated process documentation of the data analysis since the sampling strategy is thus transparently presented (Bracci et al., 2019, p. 105; Massaro et al., 2016). An SLR provides high-quality results and is crucial for developing an evidence base (Cook et al., 1997; Tranfield et al., 2003, p. 209).

Finally, an SLR has been able to show its usefulness in the broad spectrum of accounting literature (Massaro et al., 2016), e.g. intellectual capital and intangible asset disclosure (Bisogno et al., 2018; Castilla-Polo and Ruiz-Rodríguez, 2017; Cuozzo et al., 2017; Secundo et al., 2018), Integrated Reporting (Dumay et al., 2016; Kannenberg and Schreck, 2019; Velte, 2021a; Velte and Stawinoga, 2017; de Villiers et al., 2014; de Villiers, Hsiao and Maroun, 2017; de Villiers, Venter and Hsiao, 2017; Vitolla, Raimo and Rubino, 2019), public sector reporting (Dumay et al., 2015; Manes-Rossi et al., 2020; Santis et al., 2018), or corporate social responsibility reporting (Ascani et al., 2021; Velte, 2021b). As already shown by several studies in higher-ranked journals, combining an SLR's results with a meta-analysis is recommended (Carrillat et al., 2018; Chang and Taylor, 2016; Edeling and Himme, 2018; Verlegh and Steenkamp, 1999). To consolidate the qualitative approach of this paper, a systematic qualitative review underlies this study to analyse and compare the identified papers (Grant and Booth, 2009, pp. 94; 99–100).

The application of an SLR is also recommended in the context of the issues to be investigated in this paper and is based on established papers on conducting high-quality structured literature reviews (Dumay et al., 2016; Massaro et al., 2016; Torraco, 2005). The following section and its subsections outline the methods applied to develop the SLR.

## APPLICATION AND FINDINGS OF THE SLR

### The literature review protocol

According to Massaro et al. (2016), successive steps are necessary to develop an SLR. It is essential to note that an SLR must be understood to be quite successive and fluid. The following sub-sections describe the steps which need to be conducted. However, it should be noted that not all the steps of an SLR provided by Massaro et al. (2016) are carried out. The SLR is so tightly laced to obtain the highest quality evaluation possible from the data set. Against this background, individual steps of his approach no longer seem to be sufficient.

Firstly, it is necessary to outline how the research project is set up. Since this research gap needs a review on the still embryotic research field of <IR> (de Villiers et al., 2014, p. 1043), this SLR will contribute to academic discussion and benefit the readers. The aim of this paper follows the main goals according to Petty and Guthrie (2000, p. 156), namely, to categorise and provide in-formation and to identify further research gaps. Against this background, the definition of a literature review protocol is essential, as it ensures the replicability of the research results so that other researchers can follow up on them (Tranfield et al., 2003, p. 215). In addition, it guides the re-searcher's ideas as to why the SLR was conducted and thus served as documentation. Without such documentation, the reliability criterion would also not be given (Yin, 1994, pp. 36–37).

### The research questions

Based on the motivation for this research project and the research gap to be filled, it is necessary to define the associated research questions. According to Massaro et al. (2016, p. 774), an explicit critique of the research field to be investigated is needed before future research fields are uncovered (Dixon-Woods, 2011, p. 331). To satisfy this, the research should fulfil three tasks: "Insight", "Critique", and "Transformative Redefinitions" (future for research literature) (Alvesson and Deetz, 2000, pp. 17–20). Therefore, it is crucial to formulate at least three research questions that guide the SLR (Massaro et al., 2016, p. 774). Following the three-research-questions-logic according to Massaro et al. (2016), the researcher has formulated the following three research questions.

**RQ1:** How is research for inquiring into <IR>, and especially <IR> quality assessment, developing?

**RQ2:** What is the focus and critique of the <IR> literature on quality assessment?

**RQ3:** What is the future for <IR>, and especially <IR> quality assessment research?

### The literature search

The next step involves selecting relevant studies and conducting the literature search itself. To this end, it is first necessary to define the databases and the keywords to locate the relevant re-search articles for this study (Dixon-Woods, 2011, p. 340). In this research, the researcher selects articles from internationally recognised academic journals covering accounting literature and multidisciplinary journals to be sure to cover as fully as possible the emerging research field <IR>.

The researcher chooses Web of Science as a database since it is one of the most appropriate data warehouses for literature review studies. For instance, a comparison and analysis of Web of Science and Google Scholar are given by Falagas et al. (2008) and Martín-Martín et al. (2018). Afterwards, the researcher defines the relevant keywords for our literature search. The search string was applied only to the title for publications in English. This stems from the fact that the researcher only wanted to identify papers primarily concerned with the quality assessment of <IR>. As stated, the researcher includes accounting, business management, and environmental or sustainability studies to gain the best overview. The search algorithm is as follows:

**Web of Science:**

((TI=("Integrated Reporting" NEAR/2 "Quality") OR TI=("Integrated Reporting" NEAR/2 "Quality" NEAR/0 "Assessment") OR TI=("Integrated Reporting" NEAR/2 "Disclosure" NEAR/0 "Quality"))) AND PY=(2013-2022)

To catch as many relevant studies as possible, no journals were excluded. However, due to <IR> research, books or book chapters were deliberately omitted to reflect the current state of research due to the topicality of <IR> research. The reason for this is that journals are usually more up to date than book publications. As a starting point, the researcher used the implementation of the International Integrated Reporting Framework: the year 2013. The search process was carried out on 16 February 2023.

This search brings out an already limited result. Based on the algorithm, 18 articles could now be identified. In the case of uncertainty about whether a paper should be classified as relevant, predefined inclusion or exclusion criteria apply. If at least one of the following criteria were met, the article was excluded:

- 1) The article does not address <IR> according to the IIRC Framework.
- 2) The article does not focus on the disclosure quality of <IR> itself.
- 3) The article does not show citations or citations per year > 1.

This exclusion was based on the analysis of the title and abstract of an article as well as on its metrics. Especially exclusion criterion no. 3 seemed relevant since the added value to academia does not appear significant.

As a result, after applying the exclusion criteria mentioned above, the researcher identified 12 articles on Web of Science focussing on <IR> and its quality (see Appendix). The researcher stored all relevant papers in a Mendeley database with full referencing details for a better review. The researcher attributes the limited number of research articles on the one hand to the strictly defined search string. On the other hand, it can also be deduced that there is a justification for the research since there is a research gap. The research intends to contribute to closing this gap.

## Article impact

The next step is to analyse and measure the scholarly impact of an article, as researchers certainly have a vested interest in the relevant articles being considered essential. This field is called “citation classics” (Garfield, 1989, p. 5). The most appropriate methods are total citations or the citation per year index (Biemans et al., 2010, p. 462). According to Baldi (1998, p. 892), there is a positive correlation between a citation index and the quality of a paper. Table 2 shows the articles sorted by total citations; citations per year are also included. The researcher uses both methods, as it may be that citations alone are not necessarily purposeful, as older articles may accumulate a higher number of citations (Dumay and Cai, 2014, p. 270), so citations per year has a counterbalancing effect. The proxy of impact is based on metrics since it has already been used for previous studies on accounting (Massaro et al., 2016, p. 781) and <IR> (Dumay et al., 2016).

**Table 2 Overview of reviewed papers and metrics**

No.	Authorship	Title	Year	Citations	
				total	p.a.
1	Pistoni, A., Songini, L. and Bavagnoli, F.	Integrated Reporting Quality: An Empirical Analysis	2018	91	18.20
2	Vitolla, F., Raimo, N. and Rubino, M.	Board characteristics and integrated reporting quality: an agency theory perspective	2020	90	30.00
3	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	The impact of national culture on integrated reporting quality. A stakeholder theory approach	2019	75	18.75
4	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	How pressure from stakeholders affects integrated reporting quality	2019	67	16.75
5	Vitolla, F., Salvi, A., Raimo, N., Petruzzella, F. and Rubino, M.	The impact on the cost of equity capital in the effects of integrated reporting quality	2020	55	18.33
6	Raimo, N., Vitolla, F., Marrone, A. and Rubino, M.	Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint	2021	47	23.50
7	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	The determinants of integrated reporting quality in financial institutions	2020	44	14.67
8	Cortesi, A. and Vena, L.	Disclosure quality under Integrated Reporting: A value relevance approach	2019	40	10.00
9	Cooray, T., Gunarathne, A. D. N. and Senaratne, S.	Does Corporate Governance Affect the Quality of Integrated Reporting?	2020	22	7.33
10	Cosmulese, C. G., Socoliuc, M., Ciubotariu, M.-S., Mihaila, S. and Grosu, V.	An empirical analysis of stakeholders' expectations and integrated reporting quality	2019	13	3.25

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**Table 2 Overview of reviewed papers and metrics (continuation)**

No.	Authorship	Title	Year	Citations	
				total	p.a.
11	Mans-Kemp, N. and van der Lugt, C. T.	Linking integrated reporting quality with sustainability performance and financial performance in South Africa	2020	7	2.33
12	Donkor, A., Djajadikerta, H. G., Mat Roni, S. and Trireksani, T.	Integrated reporting quality and corporate tax avoidance practices in South Africa's listed companies	2022	6	6.00

Source: Created and adjusted by the researcher according to the metrics of Web of Science

As seen from the table, there are no significant ranking differences while comparing citations and citations per year. This can be attributed to the evolving literature base of *<IR>* and new research findings because articles are from the near past. It also has to do with the fact that the reporting format first had to be developed and then established.

## Define the analytical framework

According to Massaro et al. (2016), the next step is to define the analytical framework of the analysis. Because research can be classified in the context of design features, an SLR analysis must define units to conceptualize papers as individual elements to be analysed and measured (Hart, 1998, p. 44; Massaro et al., 2016, p. 783). These units usually emerge during reading (Krippendorff, 2019, p. 103). Since this is already a proven method in research, the researcher applies some criteria in this context that were also used by Dumay et al. (2016); Dumay and Garanina (2013); and Guthrie et al. (2012). This review process was also conducted throughout the SLR analysis. So, the articles were analysed using the criteria jurisdiction, country of research, re-search methods, target group, and organisational focus. However, the researcher has deliberately decided against tabulating the criteria. This is based on the one hand on the small sample size, which was accepted due to the narrowly defined search algorithm. On the other hand, the journal article analysis shows an intense concentration of authors. These two points lead to a tabular anal-ysis not seeming very useful because the results are not very diversified and therefore have mini-mal significance. Nevertheless, these criteria were decisive for the analysis.

## Test literature review validity

In this study, the researcher examined external and internal validity and construct validity (White and McBurney, 2012, p. 142) to reveal the accuracy of the findings (Franklin et al., 2010, p. 362). According to Massaro et al. (2016, p. 787), various tactics exist for this purpose, which are also used to varying degrees in these studies. Several random studies were selected and tested against the categories to test internal validity. From this testing, it was also recognised that the range of categories needed to be adjusted to ensure valid findings. This enabled the researcher to provide detailed information to answer the research questions (Massaro et al., 2016, p. 785). External validity aims to check whether the study results are realisable. To understand whether the papers found through the

database represent the available literature, the researcher reads the abstract and, where necessary, the entire article to exclude non-relevant papers for this SLR. In addition, throughout creating the SLR, the data set was updated to include new, relevant papers. Against this background, and despite the still embryonic stage of literature on <IR>, this data set can represent the available literature in this topic area. Table 3 shows the distribution of articles among the journals.

**Table 3 Distribution among the journals**

No.	Publication Source	Record	% out of 12
1	Business Strategy and the Environment	3	25.00
2	Corporate Social Responsibility and Environmental Management	3	25.00
3	Corporate Governance – The International Journal of Business in Society	1	8.33
4	Economic Research – Ekonomika Istraživanja	1	8.33
5	Journal of Cleaner Production	1	8.33
6	South African Journal of Economic and Management Sciences	1	8.33
7	Sustainability	1	8.33
8	Sustainability Accounting Management and Policy Journal	1	8.33

Source: Created and adjusted by the researcher according to the metrics of Web of Science

The distribution is very fragmented but shows that <IR> is multidisciplinary since publications are distributed among eight different journals. However, it also shows an increased concentration on the first and second journal. Due to the author structure, this does not seem untypical. As shown in Table 4, there has been an increasing interest in the quality assessment of <IR> since 2013 according to the development of citations. In particular, the number of publications increased sharply from 2019 onwards. A significant increase in citations can be seen from 2020 on-wards, which can be attributed to the increased relevance of the research field.

**Table 4 Citations over time**

No.	Authorship	Title	Year	Total Citations				
				2013-2018	2019	2020	2021	2022
1	Pistoni, A., Songini, L. and Bavagnoli, F.	Integrated Reporting Quality: An Empirical Analysis	2018	1	10	26	28	26
2	Vitolla, F., Raimo, N. and Rubino, M.	Board characteristics and integrated reporting quality: an agency theory perspective	2020	0	0	11	41	38
3	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	The impact of national culture on integrated reporting quality. A stakeholder theory approach	2019	0	1	16	31	27

Continuation of the table on the next page

**Table 4 Citations over time (continuation)**

No.	Authorship	Title	Year	Total Citations				
				2013-2018	2019	2020	2021	2022
4	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	How pressure from stakeholders affects integrated reporting quality	2019	0	1	17	27	22
5	Vitolla, F., Salvi, A., Raimo, N., Petruzzella, F. and Rubino, M.	The impact on the cost of equity capital in the effects of integrated reporting quality	2020	0	1	18	14	22
6	Raimo, N., Vitolla, F., Marrone, A. and Rubino, M.	Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint	2021	0	0	0	22	25
7	Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A.	The determinants of integrated reporting quality in financial institutions	2020	0	0	7	21	16
8	Cortesi, A. and Vena, L.	Disclosure quality under Integrated Reporting: A value relevance approach	2019	0	1	9	16	14
9	Cooray, T., Gunarathne, A. D. N. and Senaratne, S.	Does Corporate Governance Affect the Quality of Integrated Reporting?	2020	0	0	3	9	10
10	Cosmulese, C. G., Socoliuc, M., Ciubotariu, M.-S., Mihaila, S. and Grosu, V.	An empirical analysis of stakeholders' expectations and integrated reporting quality	2019	0	0	3	6	4
11	Mans-Kemp, N. and van der Lught, C. T.	Linking integrated reporting quality with sustainability performance and financial performance in South Africa	2020	0	0	0	3	4
12	Donkor, A., Djajadikerta, H. G., Mat Roni, S. and Tireksani, T.	Integrated reporting quality and corporate tax avoidance practices in South Africa's listed companies	2022	0	0	0	0	6

Source: Created and adjusted by the researcher according to the metrics of Web of Science

To support construct validity, the analysis of citations was used to test the importance of the selected articles (Garfield, 1964). Dumay (2014, p. 29) uses, for example, citations per year and total citations. This approach was also conducted in this study, as already described in Table 2.

## Article coding using the analytical framework

It is essential to highlight the study's main findings (Stanley, 2001, p. 135). The first step is determining the technology to use (Massaro et al., 2016, p. 787). Due to the relatively recent re-search and the limited number of studies to answer the research question, special software was explicitly and

deliberately not used. Nevertheless, the researcher uses an Excel spreadsheet to develop tables. Since the underlying analysis is a form of content analysis, the relevant articles were evaluated using document analysis and systematic content analysis. According to Mayring (2016, p. 134), document analysis represents the qualitative design of a study applied here. The global analysis according to Legewie (1994) was used to analyse the corresponding articles, for example in Mock et al. (2021). This offers an efficient and standardized method to perform an in-depth analysis of the articles. To correspond to the underlying research design of the study, the selective, content-structuring method according to Mayring (2014, 2016) is used as the research method. Qualitative content analysis is characterized by material being systematically worked through (Mayring, 2016, p. 114). This process makes it possible to gain new insights and expand the understanding of the topic under investigation (Krippendorff, 2019, p. 24).

## FURTHER DISCUSSION OF FINDINGS

### Insights and critique

This section will now provide answers to RQ1-RQ3. Thus, the SLR continues to follow the SLR scheme, according to Massaro et al. (2016). Derived from the identified categories, insights and critiques will now be exemplarily highlighted in the following sections. It should also be noted that valuable analytical results on RQ1 have already been obtained in analysing the impact of the article and its distribution. However, the required synthesis of the results of an SLR (Petticrew and Roberts, 2008, p. 164) should not be limited in listing facts (Silverman, 2013, p. 342).

After a detailed analysis of the identified articles, it can be concluded that higher quality in *<IR>* is positively determined by profitability, size, financial leverage, and the civil law system. Moreover, company managers thus realize that they should increase the transparency of the information to be disclosed (Vitolla, Raimo, Rubino and Garzoni, 2020). Likewise, the quality of *<IR>* is associated with high levels of ESG performance. Further correlations are also shown in earnings per share (Mans-Kemp and van der Lugt, 2020). A positive relationship has been found in board composition between the size, independence, diversity, and activity of a board with *<IR>* quality (Vitolla, Raimo and Rubino, 2020). However, it has also been examined that the financial expertise of the audit committee has no significant impact on the quality of *<IR>* (Raimo et al., 2021). It is evident that as corporate transparency increases, the quality of *<IR>* increases, too (Donkor et al., 2022). The quality of *<IR>* also indicates a negative relationship with the cost of equity (Vitolla, Salvi, et al., 2019). All around, national culture has even been found to have a direct impact on the quality of *<IR>* (Vitolla, Raimo, Rubino and Garzoni, 2019). Finally, the statements derived from theory can be verified. The extent of the quality of *<IR>* enables a reduction of the prevailing information asymmetry (Cortesi and Vena, 2019). Furthermore, and of course due to the author structure, it became clear during the analysis that eight out of twelve papers originate from Italy.

Due to the critique, it is crucial to respect earlier research while building up the analysis in a focused and critical way (Silverman, 2013, pp. 345–348) to reveal future research opportunities (Massaro et al., 2016, p. 791). It is striking that almost all studies have very similar limitations. Therefore, only one source is cited as an example when referring to the point of criticism. It is inherent to all studies that they show the classical limitations of qualitative research, especially content analysis.

Accordingly, despite all efforts to be objective, subjective residuals cannot be avoided (Krippendorff, 2019), which could lead to a distortion of scientific results. Furthermore, the sample size can also be considered negligible (Cooray et al., 2020, p. 19). The individual analyses show that some results cannot be generalized because they refer to different industries, sectors, or jurisdictions. Especially the comparison between industrial companies and financial institutions is not always easy due to many different circumstances (Velte, 2022, p. 6). In some cases, external rankings are also critical to assess quality (Mans-Kemp and van der Lugt, 2020). The criticism stems from the fact that when these same external rankings are used, it is unclear how the quality assessment took place, even though the ranking methodology may have been disclosed. It has also been noted, among other things, that more attention is sometimes paid to the form of <IR> than to the actual content, which could lead to the quality of such reports suffering (Pistoni et al., 2018).

## Future research paths and questions

In the previous sections, the researcher has outlined that the number of papers dealing with quality assessment of <IR> reports is minimal but distributed across different journal disciplines. This section is primarily intended to answer RQ3. An SLR is particularly appropriate, as a traditional authorship review focuses more on interpreting a text and less on its structured analysis. That is why an SLR can provide empirical support for the researcher's arguments and thus help identify future directions and potential research gaps (Massaro et al., 2016, p. 791).

It is striking that almost all studies have similar potential for future research. Therefore, only one source is cited as an example when referring to this. In addition to the variables already examined in the studies analyzed, there is the possibility of adding other variables to the regression analysis or exchanging them to achieve an apparent significance. Another point that could be taken up in this context is that most quality assessment procedures are mostly hand-collected and based on qualitative research. However, it would be possible to increase the sample to achieve higher generalizability, also given the criticism that most studies focus on specific industries (Vitolla, Raimo, Rubino and Garzoni, 2020, p. 440). Another possibility is that the analyses could be more de-lineated regarding the different corporate governance systems (Vitolla, Raimo and Rubino, 2020, p. 1161). In addition, it is possible to focus the effectiveness and quality of <IR> not only on integrated reports but also on press releases or investor calls (Mans-Kemp and van der Lugt, 2020, p. 9). Finally, future research projects could conduct longitudinal analysis.

## LIMITATIONS

Despite the observance of all scientific conventions and a stringent methodology, this study is also not free of limitations. The data is used to refer exclusively to papers published in scientific journals. Therefore, any books, book sections, conference papers and working papers are not included in the analysis from the outset. Even though the researcher is aware of this limitation, the researcher argues in favour of analysing because the databases allow replicable queries. Against this background, the number of papers examined must also be critically noted. However, this can be countered by bearing in mind the young state of research on <IR>, and, of course, the quality assessment of such reports is

not yet fully developed. Therefore, this SLR inevitably contributes to revealing these gaps and opening the possibility for further researchers to fill the gaps with appropriate research. A certain degree of subjectivity and bias on the researcher's part cannot be ruled out, even though various measures were taken to keep these as low as possible. Even though the SLR methodology is based on predefined, sequential steps to ensure more reliable results than the traditional authorship review, other researchers might interpret the filtered data differently, even if they were to use our analytical framework. Furthermore, it should be noted that the validity of this study is only fully established at the time of this study, which means that future studies may need to change the validity of the results. As mentioned earlier, it must be assumed that an SLR cannot provide a conclusive answer to RQ1-RQ3. In addition, future reviews could use other scientific databases and compare them with the present study. This, in turn, could yield expanded findings that enrich the sands of research. Thus, a complete account of the quality assessment of <IR> could be achieved. Nonetheless, this study does identify research gaps transparently and suggests possible pathways for future research and reviews.

## CONCLUSIONS

This research aims to conduct a dedicated SLR to reveal how and to what extent <IR> is measured qualitatively. The still young research field will be explored and developed more closely. It should be noted that theoretical and practical findings are in the interest of the researcher and the addressees. Thus, the findings of this study are relevant for academics, managers, shareholders, and policymakers. The main conclusions are:

1. The research field of <IR> and the associated quality measurement is gaining increasing importance.
2. The relevance of non-financial assets and value creation is increasingly underlined institutionally. The CSRD implemented by the European Union in December 2022 (European Union, 2022) will give <IR> more impetus.
3. Against this background, the quality assessment of such reports is becoming increasingly important. Standardized mechanisms can develop through uniform quality and characteristics, which in turn ensure that the addressees of <IR> can expect certain comparability among companies. However, a factor that should not be neglected is the materiality determination process underlying the <IR>, which allows the companies to determine and document the relevance of the topics to be reported.
4. Increasing the integrated report's quality positively affects an organization's KPIs. It also reduces the prevailing information asymmetry and, thus, the cost of capital (see Section 5.1).
5. Organizations are therefore advised to deal intensively with <IR> to fully exploit the given potential benefits.
6. The mergers currently observed in the market, for example, the recent merger of the IIRC and the Sustainability Accounting Standards Board into the Value Reporting Foundation, raise the potential for the future quality measurement of such reports to be simplified. This is because mergers could lead to the introduction of standardized formats and, consequently, standardized quality determination characteristics. This is not least illustrated and further

intensified by the fact that the IFRS Foundation finalized the consolidation with the Value Reporting Foundation in August 2022.

It cannot be denied that the research field of <IR> still holds a lot of open and possible research paths, which were highlighted in Section 5.2. The resulting focal points, namely, the use of additional or other variables, as well as the currently used small samples, open the possibility for many researchers to conduct research and further advance the generalizability of the topic. Furthermore, the limitations of this study should not be ignored in a full appreciation of the research findings.

However, and to conclude, <IR> is increasingly becoming part of international reporting. It can be stated that <IR> still has the potential to develop into a reporting format that meets stakeholders' demands for financial and non-financial information. Thus, it would be possible to establish a reporting format that serves the demands and information needs of all key stakeholders. The condensation of information within a report significantly reduces reporting complexity, which has gradually built up over the years. It is, therefore, only appropriate that <IR> continues to receive attention in both academic research and practical application. Ultimately, this will ensure that the addressees of <IR> have an overview of organizations' value transformation over the short, medium, and long term.

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## REFERENCES

1. Alvesson, M., Deetz, S. (2000), *Doing Critical Management Research*, SAGE Publications Ltd, London, doi: 10.4135/9781849208918.
2. Ascani, I., Ciccola, R. and Chiucchi, M. S. (2021), “A structured literature review about the role of management accountants in sustainability accounting and reporting”, *Sustainability (Switzerland)*, Vol. 13, No. 4, pp. 1–25, doi: 10.3390/su13042357.
3. Baldi, S. (1998), “Normative versus social constructivist processes in the allocation of citations: A network-analytic model”, *American Sociological Review*, Vol. 63, No. 6, pp. 829–846, doi: 10.2307/2657504.
4. Bernardi, C., Stark, A. W. (2018), “Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts”, *British Accounting Review*, Vol. 50, No. 1, pp. 16–31, doi: 10.1016/j.bar.2016.10.001.
5. Biemans, W., Griffin, A. and Moenaert, R. (2010), “In search of the classics: A study of the im-pact of JPIM papers from 1984 to 2003”, *Journal of Product Innovation Management*, Vol. 27, No. 4, pp. 461–484, doi: 10.1111/j.1540-5885.2010.00730.x.
6. Biondi, L., Dumay, J. and Monciardini, D. (2020), “Using the International Integrated Reporting Framework to comply with EU Directive 2014/95/EU: can we afford another reporting façade?”, *Meditari Accountancy Research*, Vol. 28, No. 5, pp. 889–914, doi: 10.1108/MEDAR-01-2020-0695.
7. Bisogno, M., Dumay, J., Manes Rossi, F. and Tartaglia Polcini, P. (2018), “Identifying future directions for IC research in education: a literature review”, *Journal of Intellectual Capital*, Vol. 19, No. 1, pp. 10–33, doi: 10.1108/JIC-10-2017-0133.
8. Bracci, E., Papi, L., Bigoni, M., Deidda Gagliardo, E. and Bruns, H. J. (2019), “Public value and public sector accounting research: a structured literature review”, *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 31, No. 1, pp. 103–136, doi: 10.1108/JPBAFM-07-2018-0077.
9. Busco, C., Frigo, M. L., Quattrone, P. and Riccaboni, A. (2013), “Towards integrated reporting: Concepts, elements and principles” in: Busco, C., Frigo, M. L., Riccaboni, A. and Quattrone, P. (Eds.), *Integrated Reporting*, Springer Cham, pp. 3–18.
10. Camilleri, M. A. (2015), “Environmental, social and governance disclosures in Europe”, *Sustainability Accounting, Management and Policy Journal*, Vol. 6, No. 2, pp. 224–242, doi: 10.1108/SAMPJ-10-2014-0065.
11. Camilleri, M. A. (2018), “Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures”, *Corporate Communications: An International Journal*, Vol. 23, No. 4, pp. 567–581, doi: 10.1108/CCIJ-01-2018-0016.
12. Carrillat, F. A., Legoux, R. and Hadida, A. L. (2018), “Debates and assumptions about motion picture performance: a meta-analysis”, *Journal of the Academy of Marketing Science*, Vol. 46, No. 2, pp. 273–299, doi: 10.1007/s11747-017-0561-6.
13. Castilla-Polo, F., Ruiz-Rodríguez, C. (2017), “Content analysis within intangible assets disclosure: a structured literature review”, *Journal of Intellectual Capital*, Vol. 18, No. 3, pp. 506–543, doi: 10.1108/JIC-11-2016-0123.

14. Chang, W., Taylor, S. A. (2016), “The effectiveness of customer participation in new product development: A meta-analysis”, *Journal of Marketing*, Vol. 80, No. 1, pp. 47–64, doi: 10.1509/jm.14.0057.
15. Cheng, M., Green, W., Conradie, P., Konishi, N. and Romi, A. (2014), “The International Integrated Reporting Framework: Key Issues and Future Research Opportunities”, *Journal of Inter-national Financial Management and Accounting*, Vol. 25, No. 1, pp. 90–119, doi: 10.1111/jifm.12015.
16. Chouaibi, S., Chouaibi, Y. and Zouari, G. (2021), “Board characteristics and integrated reporting quality: evidence from ESG European companies”, *EuroMed Journal of Business*, Vol. 17, No. 4, pp. 425-447, doi: 10.1108/emjb-11-2020-0121.
17. Cook, D. J., Mulrow, C. D. and Haynes, R. B. (1997), “Systematic reviews: Synthesis of best evidence for clinical decisions”, *Annals of Internal Medicine*, Vol. 126, No. 5, pp. 376–380, doi: 10.7326/0003-4819-126-5-199703010-00006.
18. Cooray, T., Gunarathne, A. D. N. and Senaratne, S. (2020), “Does corporate governance affect the quality of integrated reporting?”, *Sustainability (Switzerland)*, Vol. 12, No. 10, pp. 1–30, doi: 10.3390/su12104262.
19. Cortesi, A., Vena, L. (2019), “Disclosure quality under Integrated Reporting: A value relevance approach”, *Journal of Cleaner Production*, Vol. 220, pp. 745–755, doi: 10.1016/j.jclepro.2019.02.155.
20. Cuozzo, B., Dumay, J., Palmaccio, M. and Lombardi, R. (2017), “Intellectual capital disclosure: a structured literature review”, *Journal of Intellectual Capital*, Vol. 18, No. 1, pp. 9–28, doi: 10.1108/JIC-10-2016-0104.
21. Davis, J., Mengersen, K., Bennett, S. and Mazerolle, L. (2014), “Viewing systematic reviews and meta-analysis in social research through different lenses”, *SpringerPlus*, Vol. 3, No. 1, pp. 1–9, doi: 10.1186/2193-1801-3-511.
22. Davis, J. H., Schoorman, F. D. and Donaldson, L. (1997), “Toward a stewardship theory of management”, *Academy of Management Review*, Vol. 22, No. 1, pp. 20–47, doi: 10.4324/9781315261102-29.
23. Deegan, C., Unerman, J. (2011), “Unregulated corporate reporting decisions: considerations of systems-oriented theories”, in Deegan, C., Unerman, J. (Eds.), *Financial Accounting Theory*, McGraw-Hill, London, pp. 319-380.
24. Denyer, D., Tranfield, D. (2006), “Using qualitative research synthesis to build an actionable knowledge base”, *Management Decision*, Vol. 44, No. 2, pp. 213–227, doi: 10.1108/00251740610650201.
25. Dixon-Woods, M. (2011), “Systematic reviews and qualitative methods”, in Silverman, D. (Ed.), *Qualitative Research. Issues of Theory, Method and Practice*, 3rd ed., Sage, London, pp. 331–346.
26. Donkor, A., Djajadikerta, H. G., Mat Roni, S. and Trireksani, T. (2022), “Integrated reporting quality and corporate tax avoidance practices in South Africa’s listed companies”, *Sustainability Accounting, Management and Policy Journal*, Vol. 13, No. 4, pp. 899–928, doi: 10.1108/SAMPJ-03-2021-0116.
27. Dumay, J. (2014), “15 years of the Journal of Intellectual Capital and counting: A manifesto for transformational IC research”, *Journal of Intellectual Capital*, Vol. 15, No. 1, pp. 2–37, doi: 10.1108/JIC-09-2013-0098.

28. Dumay, J., Bernardi, C., Guthrie, J. and Demartini, P. (2016), “Integrated reporting: A structured literature review”, *Accounting Forum*, Vol. 40, No. 3, pp. 166–185, doi: 10.1016/j.accfor.2016.06.001.
29. Dumay, J., Cai, L. (2014), “A review and critique of content analysis as a methodology for inquiring into IC disclosure”, *Journal of Intellectual Capital*, Vol. 15, No. 2, pp. 264–290, doi: 10.1108/JIC-01-2014-0010.
30. Dumay, J., Cai, L. (2015), “Using content analysis as a research methodology for investigating intellectual capital disclosure: A critique”, *Journal of Intellectual Capital*, Vol. 16, No. 1, pp. 121–155, doi: 10.1108/JIC-04-2014-0043.
31. Dumay, J., Garanina, T. (2013), “Intellectual capital research: A critical examination of the third stage”, *Journal of Intellectual Capital*, Vol. 14, No. 1, pp. 10–25, doi: 10.1108/14691931311288995.
32. Dumay, J., Guthrie, J. and Puntillo, P. (2015), “IC and public sector: A structured literature re-view”, *Journal of Intellectual Capital*, Vol. 16, No. 2, pp. 267–284, doi: 10.1108/JIC-02-2015-0014.
33. Dumay, J., la Torre, M. and Farneti, F. (2019), “Developing trust through stewardship: Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU”, *Journal of Intellectual Capital*, Vol. 20, No. 1, pp. 11–39, doi: 10.1108/JIC-06-2018-0097.
34. Eccles, R. G., Krzus, M. P. (2010), *One Report: Integrated Reporting for a Sustainable Strategy*, John Wiley & Sons, Hoboken, doi: 10.1002/9781119199960.ch6.
35. Edeling, A., Himme, A. (2018), “When does market share matter? New empirical generalizations from a meta-analysis of the market share-performance relationship”, *Journal of Marketing*, Vol. 82, No. 3, pp. 1–24, doi: 10.1509/jm.16.0250.
36. Eisenhardt, K. M. (1989), “Agency Theory: An Assessment and Review”, *Academy of Management Review*, Vol. 14, No. 1, pp. 57–74, doi: 10.5465/amr.1989.4279003.
37. European Union (2014), “Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards to disclosure of non-financial and diversity information by certain large undertakings and groups”, *Official Journal of the European Union*, Vol. 57, No. L330, pp. 1–19.
38. European Union (2022), “Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting”, *Official Journal of the European Union*, Vol. 65, No. L322, pp. 15–80.
39. Falagas, M. E., Pitsouni, E. I., Malietzis, G. A. and Pappas, G. (2008), “Comparison of PubMed, Scopus, Web of Science, and Google Scholar: strengths and weaknesses”, *The FASEB Journal*, Vol. 22, No. 2, pp. 338–342, doi: 10.1096/fj.07-9492lsf.
40. Franklin, C. S., Cody, P. A. and Ballan, M. (2010), “Reliability and validity in qualitative re-search”, in Thyer, B. (Ed.), *The Handbook of Social Work Research Methods*, 2nd ed., SAGE Publications Inc., London, New Delhi, Singapore, pp. 355–374.
41. Garfield, E. (1964), “‘Science citation index’ – A new dimension in indexing”, *Science*, Vol. 144, No. 3619, pp. 649–654, doi: 10.1126/science.144.3619.649.
42. Garfield, E. (1989), “Citation classics and citation behavior revisited”, *Current Contents*, Vol. 5, pp. 3–8.

43. Grant, M. J., Booth, A. (2009), “A typology of reviews: An analysis of 14 review types and associated methodologies”, *Health Information and Libraries Journal*, Vol. 26, No. 2, pp. 91–108, doi: 10.1111/j.1471-1842.2009.00848.x.
44. Guthrie, J., Dumay, J. (2019), “Intellectual Capital Accounting Research Analysed over the Past Two Decades”, European Conference on Intangibles and Intellectual Capital, Academic Conferences International Limited, Kidmore End, pp. 389–392.
45. Guthrie, J., Ricceri, F. and Dumay, J. (2012), “Reflections and projections: A decade of Intellectual Capital Accounting Research”, *The British Accounting Review*, Vol. 44, No. 2, pp. 68–82, doi: 10.1016/j.bar.2012.03.004.
46. Haller, A. (2017), “Integrated Reporting – Die Zukunft der Unternehmensberichterstattung?”, *Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung*, Vol. 17, No. 10, pp. 442–447.
47. Hart, C. (1998), *Doing a Literature Review: Realising the Social Science Research Imagination*, SAGE Publications Ltd, London, Thousand Oaks, New Delhi.
48. Huang, X. B., Watson, L. (2015), “Corporate social responsibility research in accounting”, *Journal of Accounting Literature*, Vol. 34, pp. 1–16, doi: 10.1016/j.acclit.2015.03.001.
49. International Integrated Reporting Council (IIRC) (2013), *The International Integrated Reporting Framework*, available at: <https://www.integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf> (accessed 9 June 2021).
50. International Integrated Reporting Council (IIRC) (2021a), *International <IR> Framework*, available at: <https://www.integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf> (accessed 9 June 2021).
51. International Integrated Reporting Council (IIRC) (2021b), “IIRC publishes revisions to International <IR> Framework to enable enhanced reporting”, available at: <https://integratedreporting.org/news/iirc-publishes-revisions-to-international-framework-to-enable-enhanced-reporting/> (accessed 9 June 2021).
52. Jensen, M. C., Meckling, W. H. (1976), “Theory of the firm: Managerial behavior, agency costs and ownership structure”, *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305–360.
53. Kannenberg, L., Schreck, P. (2019), “Integrated Reporting: Boon or Bane? A Review of Empirical Research on Its Determinants and Implications”, *Journal of Business Economics*, Vol. 89, doi: 10.1007/s11573-018-0922-8.
54. Krippendorff, K. (2019), *Content Analysis: An Introduction to Its Methodology*, 4th ed., SAGE Publications, Inc., Thousand Oaks, London, New Delhi, Singapore.
55. Krzus, M. P. (2011), “Integrated reporting: if not now, when?”, *Zeitschrift für internationale Rechnungslegung*, Vol. 6, No. 6, pp. 271–276.
56. Legewie, H. (1994), “Globalauswertung von Dokumenten”, in Boehm, A., Mengel, A. and Muhr, T. (Eds.), *Texte Verstehen. Konzepte, Methoden, Werkzeuge*, Universitätsverlag Konstanz, Konstanz, pp. 177–182.
57. Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., et al. (2009), “The PRISMA statement for reporting systematic reviews and meta-analyses of studies that

evaluate healthcare interventions: explanation and elaboration.”, *BMJ (Clinical Research Ed.)*, Vol. 339, doi: 10.1136/bmj.b2700.

58. Manes-Rossi, F., Nicolò, G. and Argento, D. (2020), “Non-financial reporting formats in public sector organizations: a structured literature review”, *Journal of Public Budgeting, Accounting and Financial Management*, doi: 10.1108/JPBAFM-03-2020-0037.

59. Mans-Kemp, N., van der Lugt, C. T. (2020), “Linking integrated reporting quality with sustainability performance and financial performance in South Africa”, *South African Journal of Economic and Management Sciences*, Vol. 23, No. 1, pp. 1–11, doi: 10.4102/sajems.v23i1.3572.

60. Martín-Martín, A., Orduna-Malea, E., Thelwall, M. and Delgado López-Cózar, E. (2018), “Google Scholar, Web of Science, and Scopus: A systematic comparison of citations in 252 subject categories”, *Journal of Informetrics*, Vol. 12, No. 4, pp. 1160–1177, doi: 10.1016/j.joi.2018.09.002.

61. Massaro, M., Dumay, J. and Guthrie, J. (2016), “On the shoulders of giants: undertaking a structured literature review in accounting”, *Accounting, Auditing and Accountability Journal*, Vol. 29, No. 5, pp. 767–801, doi: 10.1108/AAAJ-01-2015-1939.

62. Mayring, P. (2014), *Qualitative Content Analysis: Theoretical Foundation, Basic Procedures and Software Solution*, Klagenfurt, doi: 10.1177/2158244014522633.

63. Mayring, P. (2016), *Einführung in die qualitative Sozialforschung: Eine Anleitung zu qualitativem Denken*, 6th ed., Beltz, Weinheim.

64. Meyer, J. W., Rowan, B. (1977), “Institutionalized Organizations: Formal Structure as Myth and Ceremony”, *American Journal of Sociology*, Vol. 83, No. 2, pp. 340–363.

65. Mock, M., González-Gallego, N. and Razik, S. (2021), “The Role of Integrated Reporting in Enhancing Corporate Transparency and Communication”, *Business Ethics and Leadership*, Vol. 5, No. 4, pp. 76–89, doi: 10.21272/bel.5(4).76-89.2021.

66. Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P., et al. (2016), “Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement”, *Revista Espanola de Nutricion Humana y Dietetica*, Vol. 20, No. 2, pp. 148–160, doi: 10.1186/2046-4053-4-1.

67. Palmatier, R. W., Houston, M. B. and Hulland, J. (2018), “Review articles: purpose, process, and structure”, *Journal of the Academy of Marketing Science*, Vol. 46, No. 1, pp. 1–5, doi: 10.1007/s11747-017-0563-4.

68. Petticrew, M., Roberts, H. (2008), *Systematic Reviews in the Social Sciences: A Practical Guide*, Blackwell Publishing, Malden, Oxford, Carlton, doi: 10.1002/9780470754887.

69. Petty, R., Guthrie, J. (2000), “Intellectual capital literature review: Measurement, reporting and management”, *Journal of Intellectual Capital*, Vol. 1, No. 2, pp. 155–176.

70. Pfaff, D., Zweifel, P. (1998), “Die Principal-Agent-Theorie”, *Wirtschaftswissenschaftliches Studi-um*, Vol. 4, No. 98, pp. 184–190.

71. Pistoni, A., Songini, L. and Bavagnoli, F. (2018), “Integrated Reporting Quality: An Empirical Analysis”, *Corporate Social Responsibility and Environmental Management*, Vol. 25, January, pp. 489–507, doi: 10.1002/csr.1474.

72. Pozzoli, M., Gesuele, B. (2016), “The Quality of Integrated Reporting in the Public Utilities Sector: First Empirical Impressions”, *International Journal of Business Research and Development*, Vol. 5, No. 1, pp. 23–31.
73. Raimo, N., Vitolla, F., Marrone, A. and Rubino, M. (2021), “Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint”, *Business Strategy and the Environment*, Vol. 30, No. 1, pp. 522–534, doi: 10.1002/bse.2635.
74. Roth, H. P. (2014), “Is Integrated Reporting in the Future? Considering the Costs, Benefits, and Role of CPAs”, *The CPA Journal*, March, pp. 62–67.
75. Santis, S., Grossi, G. and Bisogno, M. (2018), “Public sector consolidated financial statements: a structured literature review”, *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 30, No. 2, pp. 230–251, doi: 10.1108/JPBAFM-02-2018-0017.
76. Secundo, G., Massaro, M., Dumay, J. and Bagnoli, C. (2018), “Intellectual capital management in the fourth stage of IC research: A critical case study in university settings”, *Journal of Intellectual Capital*, Vol. 19, No. 1, pp. 157–177, doi: 10.1108/JIC-11-2016-0113.
77. Shocker, A. D., Sethi, S. P. (1973), “An Approach to Incorporating Societal Preferences in Developing Corporate Action Strategies”, *California Management Review*, Vol. 15, No. 4, pp. 97–105, doi: 10.2307/41164466.
78. Silverman, D. (2013), *Doing Qualitative Research: A Practical Handbook*, 4th ed., SAGE Publications, London, Thousand Oaks, New Delhi, Singapore.
79. Snyder, H. (2019), “Literature review as a research methodology: An overview and guidelines”, *Journal of Business Research*, Vol. 104, July, pp. 333–339, doi: 10.1016/j.jbusres.2019.07.039.
80. Spence, M. (1973), “Job Market Signaling”, *The Quarterly Journal of Economics*, Vol. 87, No. 3, pp. 355–374.
81. Spremann, K. (1990), “Asymmetrische Information. (With English summary.)”, *Zeitschrift für Betriebswirtschaft*, Vol. 60, Nos. 5–6, pp. 561–586.
82. Stanley, T. D. (2001), “Wheat from chaff: Meta-analysis as quantitative literature review”, *Journal of Economic Perspectives*, Vol. 15, No. 3, pp. 131–150, doi: 10.1257/jep.15.3.131.
83. Suchman, M. C. (1995), “Managing Legitimacy: Strategic and Institutional Approaches”, *Academy of Management Review*, Vol. 20, No. 3, pp. 571–610, doi: 10.5465/amr.1995.9508080331.
84. Torraco, R. J. (2005), “Writing Integrative Literature Reviews: Guidelines and Examples”, *Human Resource Development Review*, Vol. 4, No. 3, pp. 356–367, doi: 10.1177/1534484305278283.
85. Tranfield, D., Denyer, D. and Smart, P. (2003), “Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review”, *British Journal of Management*, Vol. 14, No. 3, pp. 207–222, doi: 10.1111/1467-8551.00375.
86. Velte, P. (2021a), “Archival Research on Integrated Reporting: A Systematic Review of Main Drivers and the Impact of Integrated Reporting on Firm Value”, *Journal of Management and Governance*, doi: 10.1007/s10997-021-09582-w.
87. Velte, P. (2021b), “Meta-Analyses on Corporate Social Responsibility (CSR): A Literature Review”, *Management Review Quarterly*, doi: 10.1007/s11301-021-00211-2.

88. Velte, P. (2022), “Does sustainable corporate governance have an impact on materiality disclosure quality in integrated reporting? International evidence”, *Sustainable Development*, pp. 1–16, doi: 10.1002/sd.2333.
89. Velte, P., Stawinoga, M. (2017), “Integrated reporting: The current state of empirical research, limitations and future research implications”, *Journal of Management Control*, Vol. 28, No. 3, pp. 275–320, doi: 10.1007/s00187-016-0235-4.
90. Verlegh, P. W. J., Steenkamp, J.-B. E. M. (1999), “A review and meta-analysis of country-of-origin research”, *Journal of Economic Psychology*, Vol. 20, pp. 521–546, doi: 10.1016/S0167-4870(99)00023-9.
91. de Villiers, C., Hsiao, P. C. K. and Maroun, W. (2017), “Developing a conceptual model of influences around integrated reporting, new insights and directions for future research”, *Meditari Accountancy Research*, Vol. 25, No. 4, pp. 450–460, doi: 10.1108/MEDAR-07-2017-0183.
92. de Villiers, C., Rinaldi, L. and Unerman, J. (2014), “Integrated reporting: Insights, gaps and an agenda for future research”, *Accounting, Auditing and Accountability Journal*, Vol. 27, No. 7, pp. 1042–1067, doi: 10.1108/AAAJ-06-2014-1736.
93. de Villiers, C., Venter, E. R. and Hsiao, P. C. K. (2017), “Integrated reporting: background, measurement issues, approaches and an agenda for future research”, *Accounting and Finance*, Vol. 57, No. 4, pp. 937–959, doi: 10.1111/acfi.12246.
94. Vitolla, F., Raimo, N. (2018), “Adoption of Integrated Reporting: Reasons and Benefits – A Case Study Analysis”, *International Journal of Business and Management*, Vol. 13, No. 12, pp. 244–250, doi: 10.5539/ijbm.v13n12p244.
95. Vitolla, F., Raimo, N. and Rubino, M. (2019), “Appreciations, criticisms, determinants, and effects of integrated reporting: A systematic literature review”, *Corporate Social Responsibility and Environmental Management*, Vol. 26, No. 2, pp. 518–528, doi: 10.1002/csr.1734.
96. Vitolla, F., Raimo, N. and Rubino, M. (2020), “Board characteristics and integrated reporting quality: an agency theory perspective”, *Corporate Social Responsibility and Environmental Management*, Vol. 27, No. 2, pp. 1152–1163, doi: 10.1002/csr.1879.
97. Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A. (2019), “The impact of national culture on integrated reporting quality. A stakeholder theory approach”, *Business Strategy and the Environment*, pp. 1–14, doi: 10.1002/bse.2332.
98. Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A. (2020), “The determinants of integrated reporting quality in financial institutions”, *Corporate Governance (Bingley)*, Vol. 20, No. 3, pp. 429–444, doi: 10.1108/CG-07-2019-0202.
99. Vitolla, F., Salvi, A., Raimo, N., Petruzzella, F. and Rubino, M. (2019), “The impact on the cost of equity capital in the effects of integrated reporting quality”, *Business Strategy and the Environment*, pp. 1–11, doi: 10.1002/bse.2384.
100. Webster, J., Watson, R. T. (2002), “Analyzing the Past to Prepare for the Future: Writing a Literature Review”, *MIS Quarterly*, Vol. 26, No. 2, pp. 13–23.
101. White, T. L., McBurney, D. H. (2012), *Research Methods*, 9th ed., Wadsworth Publishing Company, Belmont, CA.

102. Yin, R. K. (1994), *Case Study Research: Design and Methods*, 2nd ed., SAGE Publications, Thousand Oaks, London, New Delhi, doi: 10.1016/j.jada.2010.09.005.
103. Zhou, S., Simnett, R. and Green, W. (2017), “Does Integrated Reporting Matter to the Capital Market?”, *Abacus*, Vol. 53, No. 1, pp. 94–132, doi: 10.1111/abac.12104.
104. Zúñiga, F., Pincheira, R., Walker, J. and Turner, M. (2020), “The effect of integrated reporting quality on market liquidity and analyst forecast error”, *Accounting Research Journal*, Vol. 33, Nos. 4–5, pp. 635–650, doi: 10.1108/ARJ-07-2019-0145.

## APPENDIX

### Integrated Reporting publications reviewed (2013-2022)

Cooray, T., Gunarathne, A. N. and Senaratne, S. (2020), "Does corporate governance affect the quality of integrated reporting?", *Sustainability*, Vol. 12, No. 10, 4262.

Cortesi, A., Vena, L. (2019), "Disclosure quality under Integrated Reporting: A value relevance approach", *Journal of Cleaner Production*, Vol. 222, pp. 745–755.

Cosmulese, C. G., Socoliuc, M., Ciubotariu, M. S., Mihaila, S. and Grosu, V. (2019), "An empirical analysis of stakeholders' expectations and integrated reporting quality", *Economic Research – Ekonomika Istraživanja*, Vol. 32, No. 1, pp. 3963–3986.

Donkor, A., Djajadikerta, H. G., Roni, S. M. and Trireksani, T. (2022), "Integrated reporting quality and corporate tax avoidance practices in South Africa's listed companies", *Sustainability Accounting, Management and Policy Journal*, Vol. 13, No. 4, pp. 899–928.

Mans-Kemp, N., Van der Lugt, C. T. (2020), "Linking integrated reporting quality with sustainability performance and financial performance in South Africa", *South African Journal of Economic and Management Sciences*, Vol. 23, No. 1, pp. 1–11.

Pistoni, A., Songini, L. and Bavagnoli, F. (2018), "Integrated reporting quality: An empirical analysis", *Corporate Social Responsibility and Environmental Management*, Vol. 25, No. 4, pp. 489–507.

Raimo, N., Vitolla, F., Marrone, A. and Rubino, M. (2021), "Do audit committee attributes influence integrated reporting quality? An agency theory viewpoint", *Business Strategy and the Environment*, Vol. 30, No. 1, pp. 522–534.

Vitolla, F., Salvi, A., Raimo, N., Petruzzella, F. and Rubino, M. (2020), "The impact on the cost of equity capital in the effects of integrated reporting quality", *Business Strategy and the Environment*, Vol. 29, No. 2, pp. 519–529.

Vitolla, F., Raimo, N. and Rubino, M. (2020), "Board characteristics and integrated reporting quality: An agency theory perspective", *Corporate Social Responsibility and Environmental Management*, Vol. 27, No. 2, pp. 1152–1163.

Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A. (2019), "How pressure from stakeholders affects integrated reporting quality", *Corporate Social Responsibility and Environmental Management*, Vol. 26, No. 6, pp. 1591–1606.

Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A. (2019), "The impact of national culture on integrated reporting quality. A stakeholder theory approach", *Business Strategy and the Environment*, Vol. 28, No. 8, pp. 1558–1571.

Vitolla, F., Raimo, N., Rubino, M. and Garzoni, A. (2020), "The determinants of integrated reporting quality in financial institutions", *Corporate Governance: The International Journal of Business in Society*, Vol. 20, No. 3, pp. 429–444.