The Role of Stakeholder Engagement in the Measurement, Management, and Reporting of Intellectual Capital: A Qualitative Analysis on Integrated Reporting Practices

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Purpose – Previous studies suggest that integrated reporting (IR) process is able to improve the measurement, management, and reporting of Intellectual Capital (IC) because it helps to develop internal awareness within the organization of the value creation mechanisms. The aim of this study is to understand how stakeholder engagement, which represents a crucial activity in the IR process, influences the measurement, management, and reporting of IC. We analyse this issue from a performative perspective by investigating how the stakeholder engagement process is realized in different business contexts and how it affects the internal awareness about IC, especially about relational capital, which includes the dimension of relationship with the external stakeholders.

Research design/Methodology – In the empirical analysis this paper adopts a qualitative approach based on a multiple case studies method on three Italian companies operating in different business contexts and adopting IR. Semi-structured interviews, with open answer questions, were conducted.

Findings – The empirical investigation shows that stakeholder engagement process improves internal awareness within the organization of the value creation mechanisms associated with the management, measurement and reporting of IC.

Value/Practical Implications – This paper presents both theoretical and practical implications. Firstly, it contributes to the prior literature on the role of IR in improving IC information and it offers an overview on how stakeholder engagement is implemented. Secondly, the analysis of the case studies shows the contribution of stakeholder engagement in the process

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* This paper represents the results of a joint research project carried out by the four authors. However, the various sections of the paper are divided as follows: sections 1 and 3: F. Badia; sections 2 and 3: G. Dicuonzo; section 4: S. Petruzzelli; section 5: V. Dell'Atti.

of measurement, management and reporting of IC. These results could help companies to enhance the awareness on the usefulness to engage properly their stakeholders.

Keywords – Integrated Reporting; Intellectual Capital; Stakeholder Engagement; Performative Approach; Case Studies Method.

1. *Introduction*

Since the 1990s, practitioners and academics have shown an increasing interest in intellectual capital (IC), as it has been considered a critical resource in the value creation process (Roos & Roos, 1997; Stewart, 1997). This issue remains relevant due to the changing competitive conditions that have necessitated constant investments in intangible assets. The challenges of rethinking the organization that arise from the increased importance of intangibles call for an in-depth reflection on how these resources are measured, managed, and visualized (Lev & Zambon, 2003). Despite the proliferation of IC frameworks, some studies have shown the inadequacy of these models as their adoption by companies fails to enter into routine (Chiucchi, 2013a). In this context, the spread of a plethora of IC measurement, management, and disclosure practices has fostered the development of research in this field with the aim of narrowing the gap between IC theory and practice (Dumay, 2009).

To explore the actual role and effects of IC, Mouritsen (2006) compared two different approaches: the ostensive and the performative approaches. The first approach presumes that a single model can fit all organizations to explain a phenomenon such as IC. The second approach assumes that the analysis of IC elements is dynamic and therefore it depends on the specific business context. Other studies contribute to this stream of literature about 'IC in action,' (Guthrie *et al.*, 2012) focusing on how firms mobilize IC (Catasús *et al.*, 2007) or investigating how measuring IC can favor IC mobilization (Chiucchi, 2013b).

However, despite the belief that IC information leads benefits (Marr *et al.*, 2003), there is evidence that there is a gap between internal and external information flows provided by companies (Zambon & Guenther, 2011). The main reason is that IC reporting has evolved on a voluntary basis, without an acknowledged standard able to foster companies' proactive behavior to disclose IC elements (Guthrie & Petty, 2000; Melloni, 2015) the key components of intellectual capital are poorly understood, inadequately identified, inefficiently managed, and not reported within a consistent framework when reported at all. Second, the main areas of intellectual capital reporting *focus* on human resources; technology and intellectual property rights; and organisational and workplace structure. Third, even in an Australian enterprise thought 'ofâbest practice' in this regard, a comprehensive management framework for intellectual capital is yet to be developed, especially for collecting and reporting intellectual capital formation. In conclusion, Australian companies do not compare favourably with several European firms in their ability to measure and report their intellectual capital in the annual report. Introduction this study examines the proposition that knowledge management is an important strategy to large companies and that this will be reflected by way of disclosure of intellectual capital items in the firm's annual report. Supporting this expectation is considerable evidence, in particular from Europe, of the genesis of reporting frameworks that demonstrate a previously unseen level of public disclosure with respect to the intangible assets of firms (Organisation for Economic Co-operation and Development, 2000. To overcome the deficiencies in IC reporting, numerous initiatives have been launched jointly from academics and professional bodies.

In particular, these initiatives have led in the last years to guidelines or statements for the preparation of extra-financial disclosure on IC, often through specific documents called IC reports (Burgman & Roos, 2007; Mouritsen, Johansen *et al.*, 2001) reports, guidelines, compendiums, annual reports, opinions, submissions and legislation. Findings – Eight determining forces are identified that make the basis of the case for the provision of operating and IC information: the long-standing global dominance and growth of the US economy; the emergence of business models other than the value chain (especially the emergence of network businesses. However, despite some attempts and a rich literature production, the disclosure of specific IC reports has been an unsuccessful experience (Chiucchi, 2013b), enough to be declared 'dead' in 2012 (Dumay, 2016). The proposal of IR fits in this route, introducing a new perspective for IC reporting (Dumay *et al.*, 2016). The International Integrated Reporting Council (IIRC) has released the International <IR> Framework to improve the quality of information available to providers of financial capital (IIRC, 2013), also related to IC.

Given the rapid development of Integrated Reporting (IR) practices worldwide, IR Framework appears to be very relevant (de Villiers *et al.*, 2014). Although some studies impose a critical reflection on the future of IR (de Villiers & Sharma, 2017), this result is not surprising because IR presents several benefits: greater clarity, improvement in the decision-making process, deeper engagement and lower reputational risk (Krzus, 2011).

In essence, IR is a process that helps to develop internal awareness within the organization about the value creation mechanisms and to promote a more cohesive and efficient approach to corporate reporting, encouraging dialogue with stakeholders. IR represents a useful instrument to provide relevant and material information arranged in a systematic way to offer a complete picture of firms' value creation (Eccles *et al.*, 2014).

A criticism that has been moved towards the IR approach is related to the financial characterization of the 'value creation' (Flower, 2015). For the IIRC Framework the meaning attributed to the word 'value' should be interpreted in financial terms: value to the 'providers of financial capital' (IIRC 2013, par. 1.7). However, especially for the IC literature, the word 'value' should embrace broader interpretations, like 'value to society', 'value to stakeholders' and 'value to present and future generations' (de Villiers & Sharma, 2017).

In the path of IR adoption, the stakeholder engagement process plays an important role, because it allows IR's preparers to identify the relevant themes for stakeholders (Adams *et al.*, 2016), thus ensuring the convergence of information disclosed (including IC) with information requested or considered material by stakeholders. According to a performative approach, this process can contribute to clarify the priorities for the company in the relations system with the stakeholders and to catalyze some change in action about this dimension.

Moving from these considerations, the investigation aimed at answering two research questions:

1) *How can IR process facilitate awareness of the value creation mechanisms associated with the management, measurement, and reporting of IC through stakeholder engagement?*
2) *How can the stakeholder engagement process spur changes in management behaviors in different business contexts?*

In the empirical analysis, this paper proposes a multiple case study. For each of three case studies examined, semi-structured interviews with open-answer questions were conducted (Qu & Dumay, 2011). Specifically, we interviewed managers who were responsible for IR, to identify the central and significant aspects of stakeholder engagement.

This paper presents both theoretical and practical implications. Regarding theory, it extends prior literature on the role of IR in improving IC information and it contributes to the debate on the relevance of stakeholder engagement in IR process. From a management perspective, the analysis of case studies shows how stakeholder engagement affects the process of measurement, management, and reporting IC, helping companies to enhance awareness of its usefulness to engage their stakeholders properly.

The remainder of this paper is structured as follows. Section 2 provides a review of the relevant literature. Section 3 describes the research method. Section 4 provides the main results and discusses the findings, and Section 5 presents the conclusions.

2. Literature Review

In the knowledge economy, both the development and the management of knowledge resources are considered relevant to the competitive success of companies. Since 1997, when Stewart defined the values created by knowledge resources as 'intellectual capital' (Stewart, 1997), the theme of IC has garnered the interest of academics and practitioners. In the literature, IC is '*intellectual material, knowledge, experience, intellectual property, information… that can be put to use to create wealth*', and it represents a source of long-term value creation for organizations (Edvinsson, 1997). According to a more widespread classification, IC is composed of three distinct elements: internal or structural capital (i.e., intellectual property, information systems, corporate culture, management processes), external or relational capital (i.e., brands, customers, distribution channels, licensing agreements) and human capital (i.e., know-how, entrepreneurial spirit, education).

The emergence of IC as a key driver for companies has raised questions about its management, measurement, and reporting. From the analysis of prior studies, it appears that two perspectives of investigation have been pursued: internal and external perspective.

The 'internal perspective' is related to the consideration of IC information in corporate strategies to gain a competitive advantage and to improve business performance (Teece *et al.*, 2007). This stream of literature points out the potential effects and the benefits arising from the visualization, management, and measurement of IC. Zambon and Marzo (2007) suggest that awareness of IC enhances through its visualization, while Marr *et al.* (2003) emphasize that IC measures help to evaluate the execution of strategy. Analyzing three case studies, Mouritsen *et al.* (2001) prove that the IC statement can mobilize knowledge management and, similarly, Catasús and Gröjer (2006) conclude that the use of human intellectual capital indicators can legitimize or mobilize the organization. Some studies suggest adopting the performative approach to analyze how IC works in a firm (Guthrie *et al.*, 2012; Mouritsen, 2006). This approach assumes that it is not possible to identify a priori the form, function, and role of IC within the organization. Thus, the observation of these elements is dynamic and closely linked to the specific business context.

However, the effective role played by IC measurement in IC practices remains a questionable issue. Dumay and Rooney (2011) demonstrate that IC measures are not necessary to implement effective IC practices, whereas other studies investigate how organizations make sense to IC measurements (Giuliani, 2016) i.e. to analyse the sensemaking, sensegiving, and sensebreaking processes with reference to IC measurements. In order to achieve this aim, a case study, developed adopting an action research approach, will be presented. Design/methodology/approach – This study is based on a case study for which an interventionist research method was adopted. Findings – The main findings are the following. First, the development of an IC project requires the development of an intense sensemaking and sensegiving activity as the managers of an organization need, first, to make sense of this new object (i.e. assign it a meaning or examine the factors that can affect the utilization of IC accounting for managerial purposes (Chiucchi, 2013a).

The 'external perspective' relates to the pressure on companies to disclose the value of their IC to meet the information needs of stakeholders. In this case, the focus is on the usefulness of IC reporting, with the idea that IC information contributes to higher transparency in value creation mechanisms (Edvinsson & Malone, 1997), but is also taken into consideration by investors in their decision-making process (Abhayawansa & Guthrie, 2010). In line with the last assumption, previous studies reveal that voluntary disclosure of IC reduces the price volatility of the shares (Pew Tan *et al.*, 2008) and the cost of capital (Cordazzo, 2007) and ensures an easier and more stable access to the credit market (Lev & Zambon, 2003). Nevertheless, the evidence shows that IC disclosure is scarce and of poor quality, given the tendency to limit information to qualitative aspects (Guthrie & Petty, 2000) the key components of intellectual capital are poorly understood, inadequately identified, inefficiently managed, and not reported within a consistent framework when reported at all. Second, the main areas of intellectual capital reporting focus on human resources; technology and intellectual property rights; and organisational and workplace structure. Third, even in an Australian enterprise thought 'ofàbest practice' in this regard, a comprehensive management framework for intellectual capital is yet to be developed, especially for collecting and reporting intellectual capital formation. In conclusion, Australian companies do not compare favourably with several European firms in their ability to measure and report their intellectual capital in the annual report. Introduction this study examines the proposition that knowledge management is an important strategy to large companies and that this will be reflected by way of disclosure of intellectual capital items in the firm's annual report. Supporting this expectation is considerable evidence, in particular from Europe, of the genesis of reporting frameworks that demonstrate a previously unseen level of public disclosure with respect to the intangible assets of firms (Organisation for Economic Co-operation and Development, 2000). The reason is ascribable to the difficulty in identifying quantitative measures and to firms' aversion to providing confidential information (Bagnoli & Redigolo, 2016).

In this context, several IC frameworks and models have been proposed with the purpose of supporting managers in identifying IC elements (Beattie & Smith, 2013) and thus reducing information asymmetry. The proposals and attempts to concretize these frameworks into IC reporting proposals brought to unsuccessful experiences, at least until 2012 (Dumay, 2016). In the last few years, the IR has emerged as a new way to introduce process of IC measurement and reporting (Dumay *et al.*, 2016).

The IR Framework released by the International Integrated Reporting Council (IIRC) is gaining in popularity, because it can give a more holistic view of companies and provide a more complete representation of how an organization creates value over the time. This initiative is intended to overcome the limit of extant corporate reporting approaches, criticized for their incapacity to offer a company's comprehensive picture, including the connection between adopted strategies and obtained outcomes (Zhou *et al.*, 2017) (ISBN: 0001-3072, ISSN: 14676281, abstract: Integrated reporting <IR>).

As observed by de Villiers *et al.* (2014),

> «the IIRC's mission is to change the condition where financial and non-financial information are accounted for in isolation from each other towards integrated thinking which is embedded within mainstream management and accounting practice enabling integrated reporting to become the corporate reporting norm».

In this sense, Integrated Reporting (IR) promotes the connectivity of information through the combination, interrelatedness, and dependencies between the factors that affect the value creation process. IR «attempts to tell a story about an organisation's journey towards reaching its vision» (Abeysekera, 2013), combining financial and non-financial information in a single report. To this end, the IIRC framework requires a clear and complete description of the company's business model, with an emphasis on the inputs that determine the success of the organization. The inputs are represented by the 'capitals' (stock of value), classified in six categories: financial, manufactured, natural, human, intellectual, and social and relationship. The adoption of this categorization is not binding for the organization preparing IR, but it depends on the actual contribution of each capital to the value creation over the short, medium, and long term.

IIRC defines 'intellectual capital' as organizational and knowledge-based intangibles (i.e., patents, copyrights, software, rights and licenses, tacit knowledge, systems, procedures and protocols). The boundaries of this definition are quite limited, and they differ from those proposed in the literature, according to which, in a more comprehensive way, IC includes also human, social, and relationship capital (Busco *et al.*, 2013).

Given the relevance of the intangible inputs in IR, it appears that IC is at the core of IR (Melloni, 2015) current IC Disclosure (ICD). Different from the other traditional forms of voluntary IC reporting, such as IC statement, IR is a process that has the benefit of encouraging constant dialogue with stakeholders. This is in line with an integrated thinking approach, that considers «the capacity of the organization to respond to key stakeholders' legitimate needs and interests» (IIRC, 2013: 2). The rationale of this approach is to understand the relevant themes for stakeholders to satisfy their legitimate expectations (Adams *et al.*, 2016). Although providers of financial capital are identified as the primary users of IR, the benefits of enhancing accountability and stewardship are reflected on all stakeholders, including customers, suppliers, employees, competitors, regulators, governments, and other national institutions. Companies can engage the various groups of stakeholders using different instruments: online survey, multi-stakeholder workshops, round tables, focus groups, single meetings, interviews, digital forum.

Stakeholder engagement can reduce information asymmetry between the company and its external shareholders, and therefore it generates benefits by facilitating mutual interaction, improving corporate reputation, and increasing a firm's market value (Dal Maso *et al.*, 2017) we also explore whether these associations are affected by the cultural traits of the country in which a firm operates. Based on a worldwide sample of firms for the period 2002 to 2014, we document that stakeholder engagement positively influences market-to-book value of equity, without enhancing the value relevance of firm's accounting earnings. Drawing on Schwartz's cultural framework, we show that the results hold only in countries with a low (high. Venturelli *et al.* (2018) propose a model for evaluating the quality of stakeholder engagement, applying content analysis to the relative disclosure.

Through the materiality analysis, companies prioritize matters based on their relative importance, defining the information to be disclosed in IR, as well as the reference to IC information. This process reflects the tendency towards a convergence of stakeholders' perspectives. Thus, according to a performative approach, it can contribute to improving the internal awareness of the value creation mechanisms associated with the management, measurement, and reporting of IC. Furthermore, understanding the material information on IC for stakeholders can foster changes in management behaviors regarding how IC elements are measured, managed, and reported in the IR. However, the extant research provides little insight on how companies engage their stakeholders in the IR process, with specific reference to identifying material information on IC.

Following a performative approach, the empirical analysis aims to fill this research gap, investigating the role played by the stakeholder engagement process.

3. *Research Method*

The research method adopted in this paper is the case study approach, considered useful in collecting data to answer 'how' questions (Eisenhardt, 1989; Yin, 2015). The investigation consists of analyzing three different cases of Italian companies adopting IR, with specific attention to evaluating the stakeholder engagement process. A multiple case study approach is proposed to reinforce the considerations emerging from each of them and observe possible differences between them, using a comparative perspective (Baxter & Jack, 2008).

The cases selected are particularly suitable for this analysis. First, the chosen companies can be considered to be pioneers in the adoption of IR and therefore they are potentially aware of the role of IR in enhancing internal consciousness about IC information through a more proactive stakeholder engagement. Second, they are operating in different business contexts regarding size of the company, industrial sector, equity distribution, relationships with customers, and connection with financial markets. This allows observation of how, through an exploratory approach, different business contexts affect the stakeholder engagement process.

To ensure the validity, reliability, and triangulation of the data, multiple sources of evidence were used (Qu & Dumay, 2011). Specifically, public reports were examined and semi-structured interviews with open-answer questions were conducted. This kind of interview was considered the most useful for this kind of research, cause of its flexibility, accessibility and intelligibility and its capability of disclosing relevant and unseen aspects of human and organizational conduct (Qu & Dumay, 2011: 246). For each company, both managers and external consultants involved in the IR process were interviewed for an average of 60 and 30 minutes respectively. The research interviews considered three profiles of investigation: (1) adoption of IR, (2) contribution of IR to a more effective system of stakeholder engagement, (3) role of stakeholder engagement in the measurement, management, and reporting of IC information.

More specifically, the first investigative profile aimed to understand the state of progress in the IR process. Therefore, these research interviews focused on the timing and process of implementation of IR (duration, internal resources employed, use of external consultants, certification/assurance process, challenges and emerging difficulties), and the previous presence or current co-existence of other voluntary reporting instruments.

The second profile of analysis was intended to investigate the contribution of IR to a more effective system of stakeholder engagement. With that goal, these research interviews focused on the way stakeholders are engaged in the IR process to mark changes in behaviors and practices and the obtained results in terms of improvement in the relation systems with the stakeholders.

The third profile considered the role of stakeholder engagement in the measurement, management, and reporting of IC information. Therefore, these research interviews studied how stakeholder engagement could affect internal awareness about IC. In this case, IC was intended in a broader sense, including intellectual, human, and social and relationship capital of the IIRC framework.

4. *Results and Discussions*

The results of this investigation are presented in single subsections for each case study, followed by a discussion of the results.

4.1 *Company A*

Case presentation. Company A is a family-owned and unlisted group, operating almost exclusively business-to-business in several contiguous sectors: milling industry, cereal storage, agricultural commodities trading, retail, and production of photovoltaic energy. This group has experienced significant growth in the last decade and may be considered as a leader in wheat processing and trading. Its fundamental figures, as reported in the 2016 consolidated financial statements, are a turnover of 1.5 billion euros, total assets amounting to 558 million euros, and 286 employees.

First profile of investigation. Regarding the state of progress in the IR process, the interviewees explained that the group's attention towards CSR themes and the disclosure of non-financial information developed over time starting in 2013, with the issue of Company A's first sustainability report. The subsequent step was taken in 2014, with the issue of the first Integrated Report. According to the group's CFO:

> «This was quite a natural step because of the need of more qualitative disclosure by different stakeholders on sustainability themes, long-term plans and strategies, intellectual and relational capitals».

As observed by the group's president and CEO, the implementation of the IR process contributed to improved internal awareness by management and employees of this type of reporting and its importance for business aspects such as environmental and social sustainability, intellectual capital, corporate governance, and the effectiveness of the reporting process.

As noted also by the CFO of Company A, the 2014 IR was more like a 'combined report' (combination of financial and sustainability disclosure) rather than a true integrated report, according to the definition given in the 2013 IR Framework. In fact, this first IR does not properly describe capitals and how the group interacts with the external environment and the capitals to create value over time, even though the methodological note explicitly mentions the IIRC's Framework. From 2015 onwards, Company A followed the principles and indication reported in the IR Framework with increasing attention, to be compliant with it. Furthermore, 2015 and 2016 IRs were reviewed by an external auditor for sustainability and non-financial information.

The time needed to implement IR was eight months. The human resources involved in the process formed an interdisciplinary team, composed of 14 internal resources and one external consultant. In this process, eight categories of stakeholders were engaged through online questionnaires. Company A continues to prepare integrated reports on a voluntary basis and has abandoned sustainability reporting because, according to the CFO, their integrated reporting includes sustainability information that meets the GRI's G4 guidelines for sustainability reporting. Major challenges of the whole IR process continue to be: a) obtaining qualitative and quantitative information on environmental and social sustainability matters; b) providing appropriate disclosure of intellectual capital; and c) providing a concise and effective representation of the group's business model, strategies, and value creation process.

Second profile of investigation. With reference to the contribution of IR to a more effective system of stakeholder engagement, Company A conducted a materiality analysis aimed at identifying and prioritizing the matters considered relevant and significant for the group itself and its stakeholders.

In 2016, the stakeholder engagement was conducted through mixed techniques and involved the top management of the group and the board of directors. An important source of information was derived by the distribution of an online survey to more than 100 stakeholders (public authorities, universities, customers, suppliers, banks and providers of financial capital, employees, local communities and associations). Other dialogue initiatives included direct contacts with customers and suppliers, periodic meetings, customers' inspections and supplier audits, feedback regarding quality, activities to support the environment, life cycle assessment, audit of the environmental management system, participations in work groups, projects in collaboration with universities and training schools in Italy and abroad, support of, and participation in, local events and dialogue with representatives of public authorities.

According to Company A's CFO, this important and diversified activity of stakeholder engagement was certainly solicited by the need to prepare an IR compliant with the IIRC Framework and the GRI's G4 guidelines. On the other hand, the relevant amount of information and feedback obtained enhanced the quality of the materiality analysis and considerably improved the overall activity of stakeholder engagement and its effectiveness in identifying issues that are relevant for the group and influential for stakeholders for their proper disclosure in the IR. As stated by the partner of the advisory firm (one of the big four) that assisted Company A in the IR process:

> «The stakeholder engagement is essential in understanding key matters relevant both for external stakeholders than for internal ones. Such activity improves internal awareness and gives the right directions for the development of an integrated reporting».

Thanks to the stakeholder engagement, Company A could identify matters like 'growth of human capital', 'responsible supply chain and responsible packaging and labelling', and 'agricultural policies at international level', the importance of which for stakeholders was underestimated before.

Third profile of investigation. Regarding the role of stakeholder engagement in the measurement, management, and reporting of IC information, the interviewees emphasized the relevance of the feedback obtained. As mentioned before, themes like the growth of human capital emerged unexpectedly, and this can be noted by the fact that the related disclosure cannot be considered exhaustive and needs improvements. On the other hand, both the interviews and the review of the 2016 IR show Company A's effort to follow the materiality analysis regarding IC matters by giving importance to human, structural, and relational capital. A confirmation of this may be found in the disclosure regarding items like significant investment in employees training activities; development of managerial skills of managers through specific programs; recruitment activities for talented and young graduates; research and innovation in the industrial sector to improve efficiency, productivity, product quality, and competitiveness (e.g., through the development of technologies for automation and control systems); research projects in partnership with universities; and investments supporting trademarks and brands.

As a result, the analysis of this case study confirmed that stakeholder engagement affected internal awareness about IC. On the other hand, the disclosure of aspects like intellectual capital and the growth of human capital needs improvement and should require more space in the IR document, especially because of the lack of quantitative and forward-looking data. In this regard, the CFO of Company A commented that the use of stakeholder engagement techniques such as specific focus groups could improve the identification, and related disclosure, of key aspects pertaining to these IC themes, together with the implementation of adequate metrics, KPIs, and related processes to gather this data.

4.2 *Company B*

Case presentation. Company B is a service group, operating business-to-business in the transportation and logistics industry. This group is family-owned, and it is not listed on the stock exchange, though it is considering the opportunity for a short-term listing. Key figures, as reported in the 2016 consolidated financial statements, are a turnover of 85 million euros, total assets of 83 million euros, and 152 employees. This group has recorded significant growth in the last 7 years.

First profile of investigation. Moving to the specific profiles of the investigation, as commented during the interview, IR is considered to be a step along the 'Sustainability Path' undertaken by the company in 2014 with its first sustainability report. The reasons that led the directors to undertake this path were both internal and external. As part of the internal motivation, the group's attention towards sustainability issues and the reduction of negative externalities (especially of the environmental type) must be mentioned. External incentives can be traced back to the activity of reporting to the stakeholders, considering the classic CSR themes (economic, environmental, and social sustainability). Consequently, the developmental path towards IR has been naturally determined as a way to describe how the business model contributes to the process of value creation through representation by capitals.

The first IR was prepared in 2015 and, like Company A's first IR, it was more like a 'combined report' rather than a true integrated report. (In fact, this document does not disclose the capitals.) The time required to prepare the 2015 IR was about six months. To implement IR, Company B formed an interdisciplinary team composed of eight internal resources and one external consultant. Both the 2015 and the 2016 integrated annual reports were not subject to assurance regarding non-financial information. The main challenge of the whole process was to collect the great amount of quantitative information needed to comply with GRI standards, although this group did not experience specific organizational difficulties in implementing the IR process, thanks also to the streamlined organizational structure.

Second profile of investigation. Given the recent introduction of IR, Company B invested resources on the stakeholder engagement process, focusing both on the expansion of instruments of dialogue and communication, and on increasing efficiency in the feedback process concerning the requests made by the company's stakeholders. As stated in the last integrated report and confirmed by the interview, the top management of the company devoted attention towards the expectations of the various categories of stakeholders, to integrate them into corporate strategy.

For the preparation of the 2016 IR, the stakeholder engagement was conducted through the submission of an online questionnaire to about 300 stakeholders and by organizing meetings and thematic workshops. The categories of stakeholders involved were human resources, shareholders, customers, suppliers, financial institutions, local authorities, regulatory authorities, local communities, and category and mass media associations. The materiality analysis was conducted in conformity with the instructions contained in the GRI's G4 guidelines and in line with the process provided by AA1000SES, Stakeholder Engagement Standard 2015.

The analysis of the last IR and the interview with Company B showed that IR contributed in some way to a more effective system of stakeholder engagement by leading the management of the company to consider the process of value creation, also in the perspective of stakeholders. A limitation that was observed is that the overall process was set according to the GRI-G4 guidelines but without encompassing all the themes pertaining to the IR Framework's six capitals, especially those strictly regarding IC.

Third profile of investigation. With reference to the third profile of analysis, Company's B approach to the stakeholder engagement was driven by the GRI-G4 guidelines, and this influenced the measurement, management, and reporting of IC by limiting the materiality analysis to social, environmental, and financial issues. Because of this, the 2016 integrated report provides limited information about organizational capital (the structural capital of the managerial literature) and does not have a specific section dedicated to intellectual capital *stricto sensu*.

In more general terms, during the interview a certain centrality of IC emerged, especially with reference to human capital and to the importance of innovation and technology in the firm's business; these items, and in particular the human capital, find space in the IR document, although there is little quantitative and forward-looking information.

4.3 *Company C*

Case presentation. Company C is a group listed on the Italian stock exchange, operating in the utility sector (electrical energy, gas, heating networks, waste handling, integrated water cycle, etc.) in Italy and in other European countries. Its essential figures, as reported in the 2016 consolidated financial statements, are: total revenues of 5.0 billion euros, total assets amounting to 10.4 billion euros, and approximately 10,000 employees. With reference to equity distribution, 50% of Company C is held by local authorities, 3% is held by private investors, and the remaining part is floating on the stock market. This Group provides a wide range of activities and covers several local public services for the community, many of them subject to regulation.

First profile of investigation. Regarding the state of progress in the IR process, Company C implemented IR for the first time in 2017, as an evolution of its sustainability reporting. This Group was a forerunner in sustainability reporting; in fact, its first published sustainability reports are dated to 2008 and 2009. According to Company C's CSR manager:

> «The group decided to adopt IR to meet and benefit from the increase

> in sustainability awareness with investors and customers, to improve the internal processes of analysis and evaluation, and to enhance the quality of information to providers of financial capital. All of these aspects contributed to a more cohesive and efficient approach to corporate reporting and processes of value creation. Furthermore, IR helped to improve the process of risk assessment and to align it to CSR policies and practices, thus supporting an effective integrated thinking approach».

In Company C's view, the implementation of IR was a natural evolution of their reporting, aimed at describing the Group's strategic approach and the process of value creation with a forward-looking perspective, which is particularly appreciated by investors, analysts, and rating agencies. It is important to highlight that Company C has not abandoned sustainability reporting. In fact, Company C prepares both IR and sustainability reports because it conceives them as different documents in terms of recipients and nature of information. In particular, sustainability reporting is prepared at territorial level and is considered to be more focused on the disclosure of performance and impact, thus providing useful information to local communities and authorities, while IR is intended primarily for providers of financial capital and gives more comprehensive information, according to Company C's CSR manager.

The implementation of the IR process and the preparation of the integrated report was managed by a specific CSR function. Data collection was organized through worksheets sent to managers of all the corporate functions, territorial locations, and companies within the scope of the IR. The document was submitted to the Board of Directors in line with the deadline for approval of the annual report; it was subject to a subsequent review by an external company, according to the criteria set out in the International Standard on Assurance Engagement 3000 ('ISAE 3000').

Regarding difficulties and barriers faced in the implementation of IR, the interviewee emphasized the efforts in aligning sustainability reporting processes with financial ones, while the most relevant organizational challenges were identified in resistance to change and in ensuring simple and concise storytelling to enable stakeholders to make effective decisions.

Second profile of investigation. Since Company C has been preparing sustainability reports for several years, it is experienced at carrying out materiality analysis through the stakeholder engagement. In fact, this group has implemented an articulated and structured reporting system for the process of stakeholder engagement, with local facilities and internal teams that specifically deal with such a process, and it has developed a specific internal database.

For the preparation of the 2016 integrated report, approximately 240 engagement initiatives were organized, mainly focusing on local communities, institutions, and associations. The stakeholder engagement was conducted through mixed techniques. Specifically, Company C organized multi-stakeholder workshops and round tables (specific forum group programs engaging local communities), submitted an online questionnaire to approximately 120 stakeholders, and analyzed the results of forum groups and of the database of the year's engagement initiatives.

As emerged during the interview with Company C's CSR manager, IR contributed to a more effective system of stakeholder engagement by extending issues and topics to be submitted to a materiality analysis, in addition to those typically investigated for sustainability reporting. In this sense, as indicated in the 2016 integrated report, the materiality analysis resulted in the identification of 23 issues that embrace all six IR capitals and the group's governance system, and this is considered to be an improvement in the relation system with stakeholders.

Third profile of investigation. The materiality matrix included in the IR shows several topics that are relevant for IC (e.g., 'relationship with the local community', 'health and safety in the workplace', 'development of human capital', 'technological innovation and smart cities' and 'ESG elements in corporate governance' were evaluated as top issues), thus indicating that intellectual, human, and social and relationship capitals are very important for Company C's stakeholders and for itself. However, both the review of the 2016 IR and the interview with the CSR manager showed that the level of accuracy and completeness of the related disclosure did not fully reflect its importance.

The process of stakeholder engagement increased Company C's internal awareness about IC, as emerged during the interview and as demonstrated by the issues illustrated in the materiality matrix; however, as stated by the CSR manager:

> «Excluding human, social and relationship capital, it is difficult to focus on what is meant by intellectual capital in the strict sense. We considered R&D activities, IT innovation, patents and brands. Despite the results of the stakeholder engagement, we should have dedicated more insights and disclosure on this capital».

It must be considered that this was the first IR prepared by Company C, hence there is room for improvement in the IC disclosure, especially regarding the organizational capital. On the other hand, the robust stakeholder engagement process implemented by this group allows it to catch the relevant IC themes to be measured, managed, and reported in the IR.

4.4 *Discussion*

The comparative analysis of the three case studies allows identification of some similarities and differences among the three companies.

In all three cases analyzed, IR resulted as an evolution with respect to sustainability reporting. In fact, the interviews confirmed that IR is conceived as a further step in corporate disclosure, especially because it provides more comprehensive information and is aimed at explaining the entity's creation of value over time. Companies A and B abandoned sustainability reporting after the implementation of IR, while Company C continues to prepare sustainability reports at territorial level because of the nature of its business activity and the specific request of information.

The analysis of the case studies indicated that the implementation of IR requires time and effort, especially to collect data and to ensure the connectivity of information. On the other hand, the interviewees showed satisfaction with the results obtained from the adoption of IR. All the companies confirmed their willingness to continue IR in the future. This is not an obvious result, if compared with other experiences of practices of realization of IC statements, sustainability reports and social reports in different situations, which often have a non-negligible abandonment rate.

Regarding the contribution of IR to a more effective system of stakeholder engagement, in two cases (Company A and Company C) the implementation of the IR process resulted in several issues and topics to be submitted to materiality analysis, in addition to those typically investigated for sustainability reporting, to consider all the IR Framework's six capitals and their internal and external relevance. This aspect has positively affected the effectiveness of the activity of stakeholder engagement. Moreover, in all three case studies the stakeholder engagement and the related materiality analysis were influenced by IR's approach to identify relevant matters based on their ability to affect value creation, in line with the concept of materiality as stated in the IR Framework (IIRC, 2013: 18-20).

The empirical investigation showed that stakeholder engagement significantly changed internal awareness within each company of the value creation mechanisms associated with the management, measurement, and reporting of IC information. In line with the performative approach (Mouritsen, 2006), the findings show that the IR process seems to be able to mobilize IC, especially because of the positive impact of increased internal awareness. In fact, the stakeholder engagement activity according to the IR Framework specifically needs to consider internal and external relevance of the IC components, thus imposing a reflection on IC management and measurement and so contributing to extending and improving the related disclosure. Moreover, the adoption of IR requires the implementation of an effective integrated thinking process, hence inducing a change in the way organizations design their business and define how each capital, including intellectual capital, contributes to value creation.

A common point of improvement that emerged from the examination of the three case studies is represented by the limited disclosure (in terms both of quantitative and forward-looking information) pertaining to the structural capital, thus confirming a difficulty both in focusing and in describing this important component of the intellectual capital.

5. *Conclusions*

There is still a lack of research about how stakeholder engagement in the IR process affects IC. This paper aims to fill this gap, contributing to the literature on 'IC in action'. By reflecting on the role played by stakeholder engagement in the IR process, this study explores two research questions: 1) *How can IR process facilitate awareness of the value creation mechanisms associated with the management, measurement, and reporting of IC through stakeholder engagement?* and 2) *How can the stakeholder engagement process spur changes in management behaviors in different business contexts?*

The analysis of three case studies related to companies operating in different business contexts is coherent with the performative approach in investigating IC (Mouritsen, 2006).

With reference to the first research question, IR seems to contribute significantly to a more effective system of stakeholder engagement. The materiality analysis represents the key element that encourages a stable, systematic, and proactive dialogue with stakeholders. The empirical results suggest that stakeholder engagement imposes a deep reflection on material information, with the consequent increase of internal awareness of the value creation mechanisms associated with the management, measurement, and reporting of IC information.

With reference to the second research question, the three cases analyzed show both common and convergent elements. On one hand, all the companies give strong relevance to the materiality analysis to identify and prioritize the matters significant for stakeholders. Furthermore, different categories of stakeholders are involved in the process to ensure satisfying their interests.

On the other hand, some business context factors appear to have an impact on the stakeholder engagement process. Among them, two are emerging in particular: listing on financial markets, which appears to influence the categories of the engaged stakeholder; and size of the company, which seems to influence the extent of the stakeholder engagement process and the number of initiatives needed to capture the legitimate expectations of stakeholders.

Future research could analyze the impact of the prioritization of the providers of financial capital respect to other categories of stakeholders in IR practices, as proposed by the IR Framework. This research does not show a negative impact of this prioritization on stakeholder engagement practices, but this study is limited by using a small sample of companies. Therefore, an opportunity for future research could extend the analysis to a larger number of companies, corroborating the idea that stakeholder engagement in IR process is able to mobilize the measurement, management, and reporting of IC.

References

Abeysekera, I. (2013). A template for integrated reporting. *Journal of Intellectual Capital*, 14(2), 227-245.

Abhayawansa, S. & Guthrie, J. (2010). Intellectual capital and the capital market: a review and synthesis. *Journal of Human Resource Costing & Accounting*, 14(3), 196-226.

Adams, C.A., Potter, B., Singh, P.J. & York, J. (2016). Exploring the implications of integrated reporting for social investment (disclosures). *British Accounting Review*, 48(3), 283-296.

Bagnoli, C. & Redigolo, G. (2016). Business model in IPO prospectuses: insights from Italian Innovation Companies. *Journal of Management and Governance*, 20(2), 261-294.

Baxter, P. & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559.

Beattie, V. & Smith, S.J. (2013). Value creation and business models: Refocusing the intellectual capital debate. *British Accounting Review*, 45(4), 243-254.

Burgman, R. & Roos, G. (2007). The Importance of Intellectual Capital Reporting: Evidence and Implications. *Journal of Intellectual Capital*, 8, 7-51.

Busco, C., Frigo, M.L., Riccaboni, A. & Quattrone, P. (2013). *Integrated Reporting: Concepts and Cases That Redefine Corporate Accountability*. New York: Springer.

Catasús, B., Ersson, S., Gröjer, J. and Yang Wallentin, F. (2007). What gets measured gets … on indicating, mobilizing and acting. *Accounting, Auditing & Accountability Journal*, 20(4), 505-521.

Catasús, B. & Gröjer, J. (2006). Indicators: on visualizing, classifying and dramatizing. *Journal of Intellectual Capital*, 7(2), 187-203.

Chiucchi, M.S. (2013a). Measuring and reporting intellectual capital. *Journal of Intellectual Capital*, 14(3), 395-413.

Chiucchi, M.S. (2013b). Intellectual capital accounting in action: enhancing learning through interventionist research. *Journal of Intellectual Capital*, 14(1), 48-68.

Cordazzo, M. (2007). Intangibles and Italian IPO prospectuses: a disclosure analysis. *Journal of Intellectual Capital*, 8(2), 288-305.

Dal Maso, L., Liberatore, G. & Mazzi, F. (2017). Value Relevance of Stakeholder Engagement: The Influence of National Culture. *Corporate Social Responsibility and Environmental Management*, 24(1), 44-56.

de Villiers, C., Rinaldi, L. & Unerman, J. (2014). Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*, 27(7), 1042-1067.
de Villiers, C. & Sharma, U. (2017). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Critical Perspectives on Accounting*, available at <https://doi.org/10.1016/j.cpa.2017.05.003> (last access 19.01.2019).
Dumay, J. (2009). Reflective discourse about intellectual capital: research and practice. *Journal of Intellectual Capital*, 10(4), 489-503.
Dumay, J. (2016). A critical reflection on the future of intellectual capital: from reporting to disclosure. *Journal of Intellectual Capital*, 17(1), 168-184.
Dumay, J., Bernardi, C., Guthrie, J. & Demartini, P. (2016). Integrated reporting: A structured literature review. *Accounting Forum*, 40(3), 166-185.
Dumay, J. & Rooney, J. (2011). 'Measuring for managing?' An IC practice case study. *Journal of Intellectual Capital*, 12(3), 344-355.
Eccles, R.G., Krzus, M.P. & Ribot, S. (2014). *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality*. Hoboken: Wiley.
Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, 30(3), 366-373.
Edvinsson, L. & Malone, M.S. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*. New York: HarperBusiness.
Eisenhardt, K.M. (1989). Building Theories from Case Study. *Academy of Management Review*, 14(4), 532-550.
Flower, J. (2015). The International Integrated Reporting Council: A story of failure. *Critical Perspectives on Accounting*, 27(March), 1-17.
Giuliani, M. (2016). Sensemaking, sensegiving and sensebreaking. *Journal of Intellectual Capital*, 17(2), 218-237.
Guthrie, J. & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, 1(3), 241-251.
Guthrie, J., Ricceri, F. & Dumay, J. (2012). Reflections and projections: A decade of Intellectual Capital Accounting Research. *British Accounting Review*, 44(2), 68-82.
International Integrated Reporting Council (IIRC) (2013). *The International IR Framework*. London.
Krzus, M.P. (2011). Integrated reporting: if not now, when? *IRZ: Zeitschrift Für Internationale Rechnungslegung*, 6(6), 271-276.

Lev, B. & Zambon, S. (2003). Intangibles and intellectual capital: an introduction to a special issue. *European Accounting Review*, 12(4), 597-603.
Marr, B., Gray, D. & Neely, A. (2003). Why do firms measure their intellectual capital? *Journal of Intellectual Capital*, 4(4), 441-464.
Melloni, G. (2015). Intellectual capital disclosure in integrated reporting: an impression management analysis. *Journal of Intellectual Capital*, 16(3), 661-680.
Mouritsen, J. (2006). Problematising intellectual capital research: ostensive versus performative IC. *Accounting, Auditing & Accountability Journal*, 19(6), 820-841.
Mouritsen, J., Johansen, M.R., Larsen, H.T. & Bukh, P.N. (2001).Reading an intellectual capital statement. *Journal of Intellectual Capital*, 2(4), 359-383.
Mouritsen, J., Larsen, H.T. & Bukh, P.N.D. (2001). Intellectual capital and the 'capable firm': narrating, visualising and numbering for managing knowledge. *Accounting, Organizations and Society*, 26(7-8), 735-762.
Pew Tan, H., Plowman, D. & Hancock, P. (2008). The evolving research on intellectual capital. *Journal of Intellectual Capital*, 9(4), 585-608.
Qu, S.Q. & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8(3), 238-264.
Roos, G. & Roos, J. (1997). Measuring your company's intellectual performance. *Long Range Planning*, 30(3), 413-426.
Stewart, T.A. (1997). *Intellectual Capital: The New Wealth of Organizations*. New York: Doubleday.
Teece, D.J., Pisano, G. & Shuen, A. (2007). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533.
Venturelli, A., Cosma, S. & Leopizzi, R. (2018). Stakeholder Engagement: An Evaluation of European Banks. *Corporate Social Responsibility and Environmental Management*, 25(4), 690-703.
Yin, R.K. (2015). *Case Study Research: Design and Methods* (5th. ed.). London: Sage Publication.
Zambon, S. & Guenther, T.W. (2011). Special issue: Measuring and managing intangibles for accounting use. *Journal of Management Control*, 22(3), 237-239.
Zambon, S. & Marzo, G. (eds.) (2007). *Visualising Intangibles: Measuring and Reporting in the Knowledge Economy*. Aldershot: Ashgate.
Zhou, S., Simnett, R. & Green, W. (2017). Does Integrated Reporting Matter to the Capital Market? *Abacus*, 53(1), 94-132.