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Lino Cinquini
Francesco De Luca *Editors*

Non-financial Disclosure and Integrated Reporting

Theoretical Framework and Empirical
Evidence



 Springer

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ISSN 2662-9879 ISSN 2662-9887 (electronic)
SIDREA Series in Accounting and Business Administration
ISBN 978-3-030-90354-1 ISBN 978-3-030-90355-8 (eBook)
<https://doi.org/10.1007/978-3-030-90355-8>

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This Springer imprint is published by the registered company Springer Nature Switzerland AG.
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

As generally agreed, especially in the last decade, corporate reporting has extended its boundaries beyond the “traditional” economic and financial communication, including what is generally defined as non-financial information. If in a first phase, the informative contents of the non-financial area mainly refer to the disclosure on risks and related coping policies, in more recent times they extend to information concerning environmental and social sustainability, corporate governance, business model, intangibles, the development of territories and communities, etc. Moreover, at the same time, the regulatory action also intervened with policing purposes, in particular by the European legislator, which with Directive 2014/95/EU, has mandated a set of minimum information contents in non-financial disclosure topic and has recently (April 21, 2021) issued the new proposal of European Directive on Sustainability Reporting (CSRD). This proposal extends the scope to all large companies and all companies listed on regulated markets (except listed micro-enterprises) require the audit (assurance) of reported information. It introduces more detailed reporting requirements, including intangibles, according to mandatory EU sustainability reporting standards which will be issued by EFRAG and based on a multi-stakeholder, and not only investor, perspective.

In this dynamic context, different standards of non-financial reporting found application across the world in the last decade. However, with the aim of favoring the comparability of non-financial information, it appears clearly that there is a growing need for achieving the convergence of the non-financial reporting frameworks and the recently enacted Consultation Paper of IFRS Foundation on Sustainability Reporting suggests the need for a single standard-setting framework. Besides, there is a lively debate about how managing the different existing standards, particularly GRI in conjunction with other standards (International Integrated Reporting Council (IIRC), the Carbon Disclosure Project (CDP), or the SASB) to achieve a globally accepted and a more comprehensive framework on non-financial reporting system. This would also allow a more comparable sustainability reporting cross borders and will result in more efficient investments allocation mechanism. In this perspective, the process of convergence has recently found also a significant

result in the establishment of the Value Reporting Foundation by the merge of IIRC and SASB.

Considering the multiple facets of the issue, the objective of this book is deepening the topic in a multiple perspective of analysis that contemplates the different categories of stakeholders involved (e.g., preparers, users, and standard setters), different frameworks and standards for non-financial reporting (e.g., GRI, IR, ESG rating), and different contexts of application (e.g., large companies, SMEs, public companies, public bodies, non-profits). Thus, the detailed research objectives could be articulated according to the following main research questions that reflect the structure of the book Parts:

1. Which is the development level that corporate non-financial disclosure achieved so far, and which are its main features? (Part I).
2. How and to what extent environmental and sustainability disclosure characterize corporate non-financial reporting? (Part II).
3. How and to what extent intangibles and intellectual capital disclosure characterize corporate non-financial reporting? (Part III).
4. Which are the underpinning concepts and theories of the Integrated Reporting in its attempt to allow stakeholders' understanding of companies' ability to value creation in the long run? Which is the main empirical evidence about the practical experience of integrated reporting with specific reference to digital transformation? (Part IV).
5. How and to what extent non-financial information is accountable? Which is the role, and which are the standards for auditing and assurance of non-financial information? Which is the role of regulation bodies between mandatory requirements and companies' discretion in non-financial disclosure? (Part V).
6. Which is the role of companies' CEOs and CFOs in developing companies' non-financial and/or integrated reporting? (Part VI).

To the first research question is devoted the Part I of this book: "Corporate Non-financial disclosure" that features three chapters.

In the first chapter, the authors deal with corporate governance mechanisms to assess if they can affect the readability of non-financial reporting as required by Directive No. 2014/95/EU. In particular, findings show that board independence, the social committee, gender diversity, and the social rating (i.e., the ESG score) improve the non-financial information readability of Italian listed firms.

The second chapter aims to deepen the emerging issue of cyber-risk that represents a major threat for organizations, among non-financial risks, due to the growing sophistication and variety of data breaches and cyber-attacks. Findings call for an urgent increase of the top management knowledge and sensitivity toward operational risks arising from data violations. In fact, the authors provide evidence that companies with board-level technology committee are more committed to cybersecurity and more inclined to provide information on cybersecurity breach.

The third chapter explores how the adoption of the Sustainable Development Goal (SDG)s and the introduction of the 2014/95/EU Directive are likely to promote organizational changes in the context of Sustainability Report preparers. To this end,

the authors provide a case study that shows how the introduction of the EU Directive has strengthened the culture of non-financial information within the organization, encouraging greater awareness and high-value global engagement, changing its growth model, and placing relevant SDGs at the core of the value chain process.

To the second research question is devoted the Part II of this book: “Social and Environmental Sustainability” that features three chapters.

The first chapter provides a systematic literature review of 205 research articles published from 1989 to 2019 about sustainability reporting in non-financial disclosure. It emerges that besides the main theories—namely legitimacy, stakeholder, and institutional—also the theories referred to agency, signaling, discourse, attribution, social movement, structuration, and multi-theory frameworks have found application to the field of sustainability reporting.

The second chapter presents a systematic literature review of empirical studies about sustainability and greenhouse gas (GHG) emissions disclosure during the period 1999–2018. The review shows the main gaps in the literature to be filled. These gaps are mainly referable to the quality/reliability of GHG emissions disclosure, the explanation of if and how a certain type of disclosure can answer the stakeholders’ expectations, the identification of the effects of the emissions reduction (and the connected disclosure) on the firms’ (financial) performance, the identification and analysis of GHG emissions-related risk management.

The third chapter investigates the practice of Sustainability reporting in higher education institutions. Thanks to the use of a case study of an Italian university, the research shows that there are some of the current challenges for the education sector which mainly involve a better engagement of external stakeholders and the embedding of social reporting in the institution’s accounting, planning, and control systems.

Part III of the book, “Intangibles and Intellectual Capital Disclosure,” addresses the third research question and presents five chapters. The first chapter of this Part aims at analyzing the theoretical aspects of intangibles and intellectual capital disclosure through the main frameworks of integrated reporting and non-financial information. The authors suggest that the GRI framework and the Integrated Reporting framework can be considered as systematic new ways to frame and disclose IC by considering the linkages between IC performance and the other non-financial indicators (e.g., social, environmental, etc.). The second chapter proposes an empirical investigation about the extent to which NFI about Intangibles, Intellectual Capital, and CSR affects market performance. Findings support the hypothesis that higher level of financial performance originates from several possible combinations/configurations of NFI, and this appears to be in line with the emergent scholar debate on intellectual capital and CSR reporting and disclosure. The authors of the third chapter draw on agency theory and analyze the role of the ownership structure characteristics (e.g., ownership concentration, managerial ownership, institutional ownership, and government ownership) in IC disclosure policies. Their results show a negative effect of ownership concentration, managerial ownership, and state ownership, while institutional ownership appears to have non-significant influence on the quality of IC information. The fourth chapter

investigates IC disclosure before and after the introduction of the EU Directive 2014/95 in Italy, to assess its effects on companies' disclosure practices. Results highlight some concerns about the effective materiality of disclosed IC information: in fact, although the overall amount of IC information has increased in 2017 compared to 2016, it appears that companies continue to privilege the communication of qualitative, non-sensitive information, while quantitative measures are communicated only for those issues for which standardized measures exist. The authors of the fifth chapter try to shed light on the role of intellectual capital (IC) in the nonprofit sector, as an under-investigated research area within the IC studies. Results show that two human capital sub-components (training, value added) and one structural capital sub-component (services) mainly affect the return on assets (ROA).

Part IV of the book, "Integrated Reporting," addresses the fourth research question through five chapters. The first chapter proposes a theoretical approach to review the scientific literature to identify the theories most frequently adopted in the field of IR research and the extent to which these theories have been applied. Findings show that researchers adopted more than one theory to provide a comprehensive and integrated interpretation of the IR phenomenon. Furthermore, many new theories are emerging even if Legitimacy Theory and Agency Theory are considered very frequently as the theoretical foundation of the IR research. Instead, the second chapter aims at developing a literature review of the studies that have investigated the informative and communicative role of IR. This analysis highlights the existence of a limited number of studies that have addressed the topic. Therefore, further research is expected about the effective application of integrated thinking and integrated communication (at the internal level), as drivers of readability and comprehension of the integrated report. Third chapter provides a review of the current state of knowledge on integrated reporting in public sector. Based on this review, the authors call for further research on different settings, both in terms of geographical area and organizational focus for a better understanding of the potentialities and criticalities of integrated reporting in public sector. Moreover, further empirical studies are strongly suggested in order to deepen the understanding of integrated reporting in practice. Fourth chapter investigates the role of technology for the development of integrated reporting practices and delineates its contribution toward the achievement of this advanced form of corporate accountability. It emerges that although the vast majority of stakeholders claims for a more central role of technology, concerns still persist on how this can be consistent with the "entity-specific" approach that this reporting practice derives from. In the same vein, the fifth chapter offers some considerations about the potential contribution to non-financial disclosure (NFD) and integrated reporting (IR) that could derive from the use of eXtensible Business Reporting Language (XBRL), with particular reference to its Inline XBRL (iXBRL) specification. The authors support that this electronic language can favor the preparation of NFD and IR along with their use, especially in terms of usability, processability, and comparability.

The fifth research question is addressed in Part V "Accountability and Auditing of Non-financial information and Integrated Reporting" of this book that is composed of eight chapters. The first chapter examines to what extent the voluntary choice

among different reporting frameworks is used to comply with the EU Directive 2014/95 and how this could affect the comparability of non-financial reporting throughout the EU. Results of the comparative analysis show that the high flexibility of action granted to companies in providing NFI seems to go against the main aim of comparability. Moreover, among the different frameworks and guidelines settings, the GRI standards appears to be the most compliant with the EU directive requirements. The second chapter analyzes the role of disclosure on intangible assets in reducing information asymmetry, increasing the level of transparency and accountability toward stakeholders, and positively influencing corporate performance. The authors combine a literature review with an overview of how the IIRC and the GRI address this issue. Findings show that companies tend to manage the available “knowledge” flow for differentiating, achieving sustainable competitive advantages, and implement corporate strategy favoring greater integration between financial and non-financial information. The third chapter discusses of which kind of assurance best serves the interests of the users of NFI and what can be expected as emerging trends in for the coming years. It emerges that reasonable assurance is still rarely performed due to the absence of a common sustainability accounting standard along with the qualitative and narrative feature of non-financial information. In the near future, we may expect that the double materiality concept will maintain its relevance and that companies will enlarge the scope of the reasonable assurance to sensible items, such as GHG emissions, energy and water consumption. In the fourth chapter, the author reviews the academic research on the assurance of non-financial information. The review documents three main research lines that focus on (i) the meaning and features of assurance, (ii) the factors driving the demand for assurance, and (iii) the assurance process and content of assurance statements issued by different assurance providers. Further research is then called on five macro issues: integration between financial and non-financial verification processes; integration of internal and external control systems; development and use of a theoretical framework to guide analyses of the assurance topic; the impact of assurance on reporters and stakeholders; and the use of new technologies. The fifth chapter analyzes national differences among “non-financial disclosure” reports in a cross-country comparison after the introduction of Directive 2014/95/EU and provides some support for the fact that the lack of detail in the Directive, and in national transposition laws, could have increased the quantity of reported information, but did not promote an effective organizational change, while the reliability of the information disclosed, and its traceability is still a concern. The sixth chapter examines the international literature on the behavior, aspirations, and contributions of stakeholders about non-financial disclosure, after the issuance of the Directive 2014/95/EU. The analysis provides some evidence that the non-financial information currently disclosed by companies does not effectively meet the needs of stakeholders. In the seventh chapter, the authors adopt an empirical approach to understand how audit is developed for non-financial information assurance. To this end, semi-structured interviews are conducted to auditors of an Italian auditing firm. Interviews suggest that reporting process is relevant for the quality non-financial information, while the use of ISEA 3000 revised standard enables the audit process and legitimizes the

audit. In the same vein, the eight chapter provides a comprehensive discussion of materiality and assurance in an Integrated Report (IR) context. The authors provide evidence that assurance enhances the credibility of financial and NFI disclosed in IR, but this effect is much stronger when the quality of assurance improves, i.e., when the assurance level is reasonable rather than limited, even if there are still few cases of IR subjected to reasonable assurance as there are no recognized standards for IR assurance.

Lastly, Part VI “The role of CFOs and controllers in the Non-financial Reporting” is structured through two chapters. The first addresses the research question about which is the role played by the CFO (or controller) in the non-financial information process. The authors provide some preliminary evidence on the existing relationships between management accounting and non-financial disclosure, although they call for further research in this sense. Some evidence is provided of the fact that the skills of the CFO (or controller), the characteristics of the sector, the degree of involvement of the CEO, the pressure of external stakeholders, the presence of a pre-existing corporate culture to the organization itself are all factors that affect non-financial information quality. The second chapter complements this analysis through a case analysis of two Italian listed companies, and tries to investigate who participates, and which is the role of the CFO/controller in the materiality determination process. Findings show that the key organizational actors involved in the materiality determination process and their roles (including the CFO and the Chief Audit Executive) are different between the two selected case studies and the related materiality assessment is mainly driven by the information needs of capital providers. Moreover, the complexity of the stakeholder audience, the CFO’s skills, and the extension of managerial proxies to the CFO are implications relevant for the materiality process.

In sum, the push toward a strengthened role of companies’ non-financial Disclosure and Integrated Reporting keeps lively the debate among academics, practitioners, and regulators about the possible approaches, framework, contents, principles, and standards that should oversee these forms of reporting. Through several contributions, conducted both with qualitative and quantitative methodologies, this book provides an up-to-date portrait of the above debate by exploring corporate non-financial disclosure either in its mandated contents or voluntary information. Thus, the chapters of this book encompass the different lines of non-financial disclosure, namely non-financial risk reporting, sustainability reporting, and intellectual capital reporting, as well as the integration of financial and non-financial information through the IR, the assurance of the NFD and IR through auditing activities, and the role of management in NFD and IR.

Of course, all findings provided throughout the chapters of this book have practical implications with specific regard to policymakers to address the current discussion on the new aforementioned CSRD proposal. Specifically:

1. The new EU Directive should broaden the scope and require more detailed and standardized reporting is necessary, and relevant for investors.

2. The quality of disclosure might be falling off due to the firm's limitation in structural capital. As a matter of fact, there is evidence that constraints in company size might lead to a poorer disclosure practice. Thus, policymakers should pay more attention to determining a reasonable balance between the scope of the Directive and the level of detail on the information that should be included in sustainability reports.
3. The standardization of non-financial information should ease the process toward a reasonable assurance (and comparability) of non-financial information in favor of internal and external stakeholders.
4. Organizational change within companies is necessary to provide non-financial information that is material for stakeholders.

Finally, the Editors would like to express their gratitude to the Editorial Board of the SIDREA Series in Accounting and Business Administration for having considered this book within this prestigious series. The Editors would also sincerely thank all the authors that contributed to this Book and all the reviewers for their invaluable work in helping authors to improve the quality of their scientific contribution.

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Part I
Corporate Non-financial Disclosure

Do Corporate Governance Mechanisms Affect the Non-financial Reporting Readability? Evidence from Italy



Adele Caldarelli, Alessandra Allini, Claudia Salvatore,
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1 Introduction

It is a long time that academics, practitioners, and regulators discussed the importance of non-financial information (hereafter NFI) for stakeholders (e.g., Haller et al., 2017). For several reasons, disclosure of NFI greatly evolved from the first attempts in the 1970s (e.g., Hahn & Kühnen, 2013), and in many countries it became widespread, although in its voluntary form.

Thus, the recent introduction of Directive 2014/95/EU on NFI, entered in force in 2017, marked an important step on this issue. It is the result of a very long process conceived around two main aspects: the perceived inability of the corporate annual report to provide a complete understanding of firm performance and risk profile, and the need to meet information demands of stakeholders, as a whole (Deegan, 2017; Hess, 2019; Jackson et al., 2020). In particular, there was the belief that the excessive focus on financial information could be perceived as a form of neglecting firms' social and environmental responsibilities addressed by stakeholders (e.g., climate change, human rights, and corruption) (De Luca, 2020). Instead, this regulation should have the effect to encourage greater transparency and generate stakeholders' confidence about firms' corporate sustainability activities, which, in turn, should reward them.

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Each Member State has completed the process of transferring the Directive into its own local law.

The EU Directive establishes some minimum requirements for the types of NFI that larger companies and public-interest entities must publicly reveal to their users, with the aim to “enhance the consistency and comparability of NFI reported” (European Union, 2014). Thus, it represents an important regulatory move toward harmonizing the non-financial reporting practices around Europe. Empirically, recent studies confirm the higher comparability level of NFI after the new rule was issued (e.g., Aureli et al., 2019).

The EU Directive also marks a shift from a voluntary to a mandatory NFI disclosure base (Lai et al., 2018). Regarding the mandatory reporting, the idea that regulation could promote the quality of NFI has been already confirmed in the literature (i.e., Deegan, 2002). Therefore, scholars advocate that regulation may also help in avoiding an incomplete and lack of accuracy, neutrality, and objectivity information, leading to a more transparent disclosure.

Transparency has especially been referred to as corporate financial reporting, but nowadays it has been widely transported to NFI, as a way to improve accountability (Lai et al., 2018). Firms, however, retain discretion about the NFI content, since the EU Directive does not prescribe any specific standard regarding policy adoption, outcomes, and type of information.

Based on this argument, the present chapter elicits to understand how firms are responding to this new regulation, by focusing on NFI readability, as a qualitative characteristic of corporate disclosure, with the aim to contribute to the literature on the quality of NFI. The readability represents how much a text is understandable for users; hence, if stakeholders deal with a less readable disclosure they may feel uncomfortable in evaluating overall firm responsibilities, performance, and risk profiles (Asay et al., 2018).

In particular, this study evaluates whether some corporate governance mechanisms (i.e., board independence, gender diversity, and the presence of a social committee), commonly observed in sustainability disclosure studies (e.g., Jaggi et al., 2020; Jain & Jamali, 2016; Liao et al., 2015; Pucheta-Martínez & Gallego-Álvarez, 2019; Sundarasan et al., 2016), may contribute to enhancing NFI readability. While these governance features have been mostly investigated by scholars in terms of their effects on sustainability disclosure, research in the specific area of NFI readability is very limited, which deserves further investigation. The interpretive lens of the legitimacy theory is adopted, since disclosure policies could be regarded as a way to adopt different strategies to influence the organization’s relationships with its constituents (Deegan, 2002; Mio et al., 2020). Thus, the question arises as to whether corporate governance addresses the readability of NFI in its attempt to gain legitimacy.

We address this purpose by focusing on the transposition of the Directive in Italy, through the Italian Legislative Decree No. 254, of December 30, 2016.

One of the main reasons making Italy a good case for investigation is that this country is among the five European States with the highest percentage of assured NFI reports (Cordazzo et al., 2020; KPMG, 2011). We select a sample of 82 firms

listed in the Italian Stock Exchange mandated by the EU Directive, and cover the periods 2017 and 2018. Thus, we perform a regression analysis to test the association between readability indexes and some corporate governance variables and other control variables.

The final results emphasize the important role played by the board independence, the social committee, gender diversity, and the social rating in establishing good practices in terms of transparency of NFI. Indeed, some studies have demonstrated that readability is a proxy of transparency (e.g., Ben-Amar & Belgacem, 2018) that improves the stakeholders' dialogue and firms' accountability.

We believe that this study contributes to the academic debate and may be helpful to policymakers, managers, and regulators by providing fresh insights on the role played by some corporate governance mechanisms on NFI readability. Overall, the chapter is structured as follows: Section 2 regards to background and literature review; Section 3 is the theoretical background and hypotheses development; Sections 4 and 5 are respectively the research design and the results; Section 6 deals with the discussion; and lastly, the concluding remarks.

2 Background and Literature Review

2.1 The Directive No 2014/95/EU

The European Union (EU) Directive 2014/95/EU (henceforth the Directive), and the subsequent EU Guidelines 2017, on non-financial and diversity information that entered into force in the fiscal year 2017 in member states require, for the first time, large companies, i.e., those exceeding 500 employees and groups of companies, all of which are considered entities of public interest, to report non-financial and diversity information. This information concerns environmental and social issues, human resources and employee-related information, human rights, anti-corruption, and governance-related issues (Carini et al., 2018), whereas diversity information concerns the diversity policies applied in relation to the composition of the administrative, management, and supervisory bodies of companies and how these policies have been implemented by board members. Companies should provide information on board members with regard to age, gender, educational, and professional backgrounds.

According to the Directive, the objective of NFI is to improve sustainability disclosure and to describe, within a “management commentary-report” or in a separate report, the business model of companies, their attention to social and environmental issues, their corporate policies on sustainability risks, together with their key performance indicators relevant to the business and, consequently, to increase the trust of investors and stakeholders. In fact, thus far financial data and reports were not sufficient, in terms of transparency and accountability, or in terms of satisfying stakeholders' and investors' needs, particularly regarding sustainability.

Indeed, stakeholders do not trust companies given their poor disclosure concerning sustainability issues (De Luca, 2020).

Thus, the recent Directive represented a starting point for legitimizing mandatory corporate reporting on NFI by large private companies. Previously, NFI was disclosed voluntarily only by a few undertakings (Doni et al., 2019). In fact, before the Directive was introduced, there were management incentives to encourage voluntary disclosure of NFI, which played an important role in assessing its quality (Rezaee & Tuo, 2017).

The Directive was issued with the general aim of increasing transparency in corporate communication, in order to satisfy the information needs of investors and of a growing range of stakeholders. In addition, it could reduce information asymmetries between management and stakeholders (Doni et al., 2019), as well as it could enhance the process of harmonization of sustainability reporting and non-financial information throughout Europe (La Torre et al., 2018; Testarmata et al., 2020). Thus, the shift from voluntary to mandatory reporting required by the Directive, could also positively affect the economic performance of companies, their decision-making processes and information systems. It can also improve accountability by supporting the decision-making process of users and adding value to their internal and external stakeholders, which require sustainability information from larger companies. However, others argued that the regulation alone does not necessarily mean better reporting, and the legislation alone may not change reporting practice (La Torre et al., 2018).

The Directive, however, is flexible and it is not clearly specified where to position NFI within corporate reporting, also in order to avoid overlapping of this information. Therefore, NFI can be reported in a non-financial statement in the annual reports, or in the stand-alone reports, namely the sustainability reports (based on the guidelines of the Global Reporting Initiative) or the integrated reports (based on the framework of the International Integrated Reporting Council), which embeds both financial and NFI (i.e., environmental, social, and governance issues). The Directive was transposed into national regulations in each Member States.

Furthermore, in this scenario, the Directive does not establish specific disclosure frameworks or detailed rules for reporting NFI. In fact, it only gives examples and general guidance on interpretation, which leads to heterogeneity of the composition and communication of NFI.

There are some difficulties in understanding what “non-financial information” means for companies, and this sometimes makes the communication process unclear (Doni et al., 2019). For example, the only information provided for prepares and readers of non-financial reports concern environmental and social matters, while no information is provided about how to report human resources, human rights, and anti-corruption disclosures. Therefore, these matters are under investigation (Di Vaio et al., 2020).

To sum up, the Directive does not provide common standards about format and content for reporting and disclosing NFI (Manes-Rossi et al., 2018), unlike international organizations such as the International Integrated Reporting Council and the Global Reporting Initiative, which gave specific guidelines for companies to address

users' needs. In this perspective, some scholars argue that the Directive may appear to be a "policy action," a "regulatory move" rather than a real process of change in disclosing NFI to meet a sustainability challenge (La Torre et al., 2018, p. 614). The Directive could improve the quality of NFI only if this regulation is a stimulus for companies to improve the efficiency of corporate communication on sustainability (Venturelli et al., 2017), in order to satisfy accountability demands (Nicolò et al., 2020).

At the same time, NFI is able to meet stakeholders' information needs if it is also readable (du Toit, 2017). It is noteworthy that, actually, the content of NFI is left to the management's decisions and attitude, due to the absence of specific guidelines or standards. To be readable, the NFI report and the narratives should respect, among others, the guiding principle of materiality, should be trustworthy, relevant, and comprehensible for all stakeholders. Thus, the current research addresses an important gap in the existing literature by understanding the drivers of NFI readability.

2.2 Readability of Non-financial Information

Researchers have developed rationale for ensuring comprehensive information to users. The findings of several studies document that firms have started disclosing information on their social responsibilities to keep stakeholders, especially investors, informed about their activities (e.g., Michelon & Parbonetti, 2012; Plumlee et al., 2015). Under pressure from regulatory agencies, firms also started reporting information on their environment activities (e.g., Freedman & Jaggi, 2009; González-Benito & González-Benito, 2006). Overall, this literature shows that firms have accepted that social and environmental responsibilities play an important role in maximizing their value.

More recently, after the passage of the EU Directive, disclosure of NFI has received greater attention from policymakers, firms, and researchers, along with the desire to improve transparency (Christensen & Miguel, 2018). The NFI disclosure literature has widely investigated factors, motivations, and economic consequences of firms' behaviors to disclose NFI (e.g., Chan et al., 2014; Cordazzo et al., 2020; Hummel & Schlick, 2016; Jaggi et al., 2020; Mio et al., 2020; Qiu et al., 2016). In particular, a stream of research has specially examined how corporate governance mechanisms would impact NFI policies. Overall, studies reported that corporate board independence played an important role in encouraging managers to report more NFI so that users are able to make optimal investment decisions (e.g., Chan et al., 2014; Jain & Jamali, 2016; Sundarasan et al., 2016). Yet, corporate governance literature has been extended to evaluate the role of gender diversity and findings document that female directors encourage higher reporting of NFI (e.g., Adams et al., 2015; Liao et al., 2015; Pucheta-Martínez & Gallego-Álvarez, 2019; Terjesen & Sealy, 2016). Based on firms from different countries, Jaggi et al. (2020) reveal that there is a positive association between reporting of corruption information, as a specific type of NFI, and firms' governance structure.

However, most of these studies are mainly focused on the quantity of NFI, while very few illuminate how it is communicated. In this direction, the debate relating to the readability of NFI disclosure is becoming extremely intense (Wang et al., 2018).

Readability refers to the ease of understanding a written text (Harris & Hodges, 1995). It provides feedback about the comprehension level of the reports by users and ensures that preparers can pass important information to support users' decision-making (Bonsall IV et al., 2017; Kim & Starks, 2016). Users who deal with a less readable disclosure may feel uncomfortable in evaluating firm performance and risk profiles (Asay et al., 2018).

Ziek (2009) posits that assessing how firms communicate their sustainability activities represents an important aspect, and argues that this information should be conveyed using words that elicit the description of moral behaviors. Thus, consistent with Sen et al. (2009), NFI should be accurate.

Despite such importance, there is scarcity of investigation in the context of readability of NFI, and the existing studies mainly investigated the relation between NFI readability and firm performance. For instance, some research analyzes the environmental and social disclosure provided by companies and finds that they tend to prefer higher levels of readability just to compensate for poor financial performance (e.g., Clarkson et al., 2008). Clarkson et al. (2008) built an index based on the GRI list information and find that the related disclosure has a score based on its degree of compliance with GRI guidelines. A contribution by Abu Bakar and Ameer (2011) reveal that CSR readability prepared by Malaysian companies are very difficult to read. Other studies also suggest that companies tend to select more positive news in their NFI reports with the aim to improve their reputation (e.g., Habbitts & Gilbert, 2007), despite the risk to reduce firm credibility. Recently, Melloni et al. (2017) and similarly, Nazari et al. (2017), show that firms with worse social performance tend to provide a less complete NFI disclosure in their Integrated Reporting. In the same vein, Wang et al. (2018) provide evidence that companies with good social performance are more likely to use simple language to disclose their social activities as a way of emphasizing good information.

Nevertheless, and notwithstanding the effort of regulators to put forth a homogeneous landscape, NFI disclosure is still perceived as unclear by users (e.g., Abu Bakar & Ameer, 2011). Under the pressure of the new European regulation, given the increasing importance related to readability, the present chapter is among the first to investigate factors that may improve NFI readability.

3 Theoretical Background and HP Development

3.1 Theoretical Background

Legitimacy theory can offer a theoretical explanation for the NFI readability (Dumay et al., 2015; La Torre et al., 2018; Mazzotta et al., 2020).

The legitimacy is defined by Suchman (1995, pg. 574) as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.” It is conferred to the organization by its stakeholders and is founded on the idea that society permits firms to operate under the constraints of a social contract, which includes legal and non-legislated expectations from society (Lindblom, 1994; Patten, 1991). If firms do not follow the norms, values, beliefs, and definitions, which are considered socially acceptable by a society, the social contract can be broken. This can lead to a negative impact on firms’ legitimacy and compromise their long-term survival. Thus, such negative effects may generate from poor image, hiring issues, customer dissatisfaction, litigation, among other causes (Ameer & Othman, 2012; Wood, 1991).

From the perspective of the legitimacy theory, disclosure policies are regarded as a means to adopt different strategies to influence the organization’s relationships with other parties (Deegan, 2002), e.g., to provide material to inform users about unknown aspects of the business cycle, or to draw attention to the organization’s strengths (Dowling & Pfeffer, 1975; Lindblom, 1994).

To comply with this purpose, among other things, disclosure should be readable. Consistent with Hyland (2001), writing is perceived as a “social act,” and therefore, effective written communications must reveal the writers’ ability to meet their stakeholders’ information needs. Therefore, a disclosure that is not understandable is unable to meet the users’ information needs (Li, 2008). From this perspective, the NFI readability can be regarded as a characteristic of socially acceptable behavior, since a better understanding of NFI can decrease the distance between the firm’s value system and the society’s value system. Thus, the reaching of legitimacy may represent a theoretical explanation for NFI readability.

3.2 Hypotheses Development

3.2.1 Corporate Board Independence and NFI Readability

The existing literature strongly supports that independent directors play an important role in firms’ disclosure policies, including NFI strategies (e.g., Lopatta et al., 2017). It is noteworthy that the more independent boards of directors are, the more concerned they are about the long-term objectives of firms, since they are critical to improving the company’s reputation in the market (Johnson & Greening, 1999). It is widely accepted that independent directors provide objective feedback regarding a firm’s operations and performance (Liao et al., 2015), as they are not directly involved in the day-to-day operations (de Villiers et al., 2011). They also ensure more effective internal controls, which include transparent disclosure policies (Jaggi et al., 2020; Prado-Lorenzo & Garcia-Sanchez, 2010; Pucheta-Martínez & Gallego-Álvarez, 2019). Theorists of legitimacy theory also argue that independent directors tend to comply with societal pressures to ensure firm survival, and may improve a

firm's reputation through the communication of easy-to-read corporate disclosure (Hrasky & Smith, 2008).

Considering that independent directors tend to ensure clearer accountability to stakeholders, they are expected to encourage firms to spread and convey NFI that is also understandable, with the aim to keep the firm's legitimacy (Prado-Lorenzo & Garcia-Sanchez, 2010). Based on these arguments, we predict that independent boards of directors would offer convincing motivation to managers to positively comply with the EU Directive by providing a greater NFI readability. Hence, we develop the following hypothesis to test our expectation:

H1:

There is a positive association between firms' NFI readability and the proportion of independent directors on the corporate boards.

3.2.2 Gender Diversity and NFI Readability

The influence of gender diversity on corporate boards of directors has recently been getting an amplified attention by researchers (Ahmed et al., 2017; Kim & Starks, 2016). Gender composition on the board is a critical dimension of corporate governance, since women and men are traditionally, culturally, and socially different (Liao et al., 2015). Extant researchers have confirmed that women differ from men in terms of communication style, personality, educational background, expertise, and career experience (e.g., Feingold, 1994). Previous empirical studies also provide evidence that the presence of female directors on corporate boards rises the board effectiveness (e.g., Ben-Amar & Belgacem, 2018; Liao et al., 2015; Nadeem et al., 2017; Terjesen & Sealy, 2016). Therefore, female directors are likely to be more diligent than male directors, and are believed to be socially responsible, due to higher ethical values, and high carefulness in making corporate decisions (e.g., Cumming et al., 2015; Rao & Tilt, 2016).

Yet, literature confirms that board diversity plays also an important role in enhancing voluntary disclosure including NFI (e.g., Jaggi et al., 2020; Ntim & Soobaroyen, 2013). Biber et al. (1998) argue that female writing is more "involved" and tends to have greater social commitment than male writing (Ishikawa, 2015). Empirically, in a linguistics-based survey with over 3000 respondents, it has been confirmed that women spend more time developing characters and providing descriptions, making their writing easier to read (e.g., Harjoto et al., 2020; Pennebaker, 2011). Even though these studies documented gender differences in writing, to the best of our knowledge, there has been no research to date examining whether board gender diversity may affect NFI readability. We expect that the higher presence of female directors will result in higher NFI readability, because female directors are more effective in the board's activities, showing their leadership and offering valuable contributions to corporate actions. Hence, we test our expectation on the following hypothesis:

H2:

There is a positive association between firms' NFI readability and the proportion of female directors on the corporate boards.

3.2.3 The Sustainability Committee and NFI Readability

Consistent with Biswas et al. (2018) the sustainability committee (SC) “assists the board with overseeing strategies designed to manage social and environmental risks, overseeing management processes and standards and achieving compliance with social and environmental responsibilities and commitments.” This committee helps firms to systematically plan, implement, and review sustainability policies, which also include related disclosure policies (Eberhardt-Toth et al., 2019; Liao et al., 2015). Its voluntary creation can be regarded as evidence of the importance about firms' responsibilities to stakeholders. It is also perceived as a governance mechanism to actively monitor the legitimacy of the firm's environmental and social operations and reputation, and to promote a higher quality of corporate disclosure transparency (e.g., Amran et al., 2014; Arena et al., 2015; del Valle et al., 2019; Helfaya & Moussa, 2017; Liao et al., 2015). Some previous studies empirically confirm that a SC positively heightens social disclosure (Michelon & Parbonetti, 2012). A way to ensure the quality of the SC is to pursue accountability for its outcomes, through a transparent disclosure (Fuente et al., 2017). The SC can be seen as a proxy for board orientation toward greater NFI transparency (Neu et al., 1998). Therefore, it is expected to encourage NFI readability in order to meet greater social acceptance of firms (Deegan, 2002). Its presence should strengthen a real willingness to implement sustainability policies, translating them into tangible actions, including understandable NFI, with the aim to increase legitimacy in the eyes of stakeholders. These arguments lead to expect that the presence of a SC will result in higher NFI readability. Therefore, the hypothesis is stated as follows:

H3:

There is a positive association between firms' NFI readability and the presence of a SC.

4 Research Design

We adopt an Ordinary Least Square (OLS) regression model to test the impact of corporate governance mechanism on NFI readability. White's test and Breusch Pagan's test are both favorable to compliance with the assumptions underlying the OLS. Collinearity is not a problem, as confirmed by the Pearson index and Variance Inflation Factors (VIF).