i/c/a/c/ Instituto de Contabilidad y Auditoría de Cuentas

ASEPUC Asociación Española de Profesores Universitarios de Contabilidad

ESTUDIO ICAC-ASEPUC
(Convocatoria 2024)

Research project on the connectivity between financial and sustainability reporting

Analysis and monitoring of the project of the IASB and the work of EFRAG

GOBIERNO DE ESPAÑA | MINISTERIO DE ECONOMÍA, COMERCIO Y EMPRESA

This publication is available exclusively in electronic format on the website **www.icac.gob.es**.

RESEARCH PROJECT ON THE CONNECTIVITY BETWEEN FINANCIAL AND SUSTAINABILITY REPORTING. ANALYSIS AND MONITORING OF THE PROJECT OF THE IASB AND THE WORK OF EFRAG

NIPO: 223-25-015-3

Published by: Accounting and Auditing Institute (Instituto de Contabilidad y Auditoría de Cuentas – ICAC)
(Ministry of Economy, Trade and Enterprise)
Huertas, 26 - 28014 MADRID

María Cristina Abad Navarro (coordinator)
Francisco Bravo Urquiza

ICAC-ASEPUC Agreement (2023-2027)

(Resolution of 25 September 2023, of the Accounting and Auditing Institute)

This Study meets the specific relevance criteria for the disclosure of matters affecting the application of accounting and auditing standards and the exercise of the powers assigned to the ICAC, as well as the timeliness of its objectives, both in terms of their nature and scope.

The ICAC does not guarantee the accuracy of the data included in the Study.

To promote public dissemination, these papers are made available on the ICAC website: www.icac.gob.es/categorias-publicaciones

The opinions expressed in this Study reflect exclusively the views of the authors and should not be attributed to the Accounting and Auditing Institute.

List of sections

Contents

Executive Summary

This study, called "Research project on the connectivity between financial and sustainability reporting. Analysis and monitoring of the project of the IASB and the work of EFRAG", is part of the Public Call for the development of studies under the agreement between the Accounting and Auditing Institute (ICAC) and the Spanish Association of University Accounting Lecturers (Spanish acronym: ASEPUC) for the year 2024. As outlined in the submitted work plan, this study comprises three main blocks:

1. **Review of the literature**: It analyses existing research on the connectivity between financial and sustainability reporting in academia.
2. **Analysis of the projects of EFRAG and the IFRS Foundation**: It examines regulatory developments and ongoing projects related to the connectivity between financial and sustainability reporting.
3. **Empirical analysis**: It assesses the connectivity in the sustainability reports of major Spanish listed companies.

Connectivity between financial and sustainability reporting has become a regulatory challenge, as it is key to understanding the relationships between the content of financial statements and matters relating to environmental, social and governance (ESG) issues. This connectivity is essential for corporate reports to provide a comprehensive and coherent picture of a company's past performance and future outlook. Both types of reporting become more useful, relevant and consistent when they are interconnected, as they complement one another and help avoid duplication or fragmentation across different reports. As a result, users of corporate reporting are placing increasing value on this connectivity. However, achieving convergence between the two types of reporting remains complex. Various standards and frameworks govern sustainability reporting, and there is significant variation in definitions and metrics. Both IOSCO and ESMA have highlighted the need to improve this connectivity as a regulatory priority. EFRAG and the IFRS Foundation have responded by launching initiatives to clarify the approach to linking financial and sustainability reporting.

The most significant aspects of each section of the study are summarised below.

Review of the literature

Academic literature on connectivity between financial and sustainability reporting is still relatively limited and at an early stage of development. Nonetheless, there is broad consensus on the need to enhance this connectivity in order to improve transparency and build investor confidence. Insufficient integration between the two types of reporting can undermine the efficient operation of financial markets and business decision-making.

Recent studies have developed indices to assess the level of connectivity in integrated reports published by companies, confirming that current levels remain low. Low connectivity hampers the processing and analysis of reporting content, which can in turn increase financing costs and reduce the accuracy of equity valuations. Financial analysts also face greater difficulty interpreting corporate reporting and making projections, leading to challenges in decision-making and market efficiency. Other recent empirical studies, including Tóth *et al*. (2022) and David and Giordano-Spring (2022), have assessed connectivity using an approach more closely aligned with that proposed by EFRAG. They found that connections between financial and sustainability reporting remain very limited.

These studies emphasise the need to improve links between the two forms of reporting, especially with regard to connections to quantitative financial indicators.

In summary, the existing literature agrees on the importance of further developing and applying the connectivity principle. Sustainability reporting has financial implications, and it is essential to demonstrate the links between both types of reporting. Regulators play a vital role in this process, and the introduction of specific guidance on connectivity could support preparers in improving their reporting practices.

Analysis of the projects of EFRAG and the IFRS Foundation

The second block of the study focuses on the projects undertaken by EFRAG and the IFRS Foundation concerning connectivity between financial and sustainability reporting.

EFRAG's project, launched in June 2022, aims to address the concept of connectivity, assess its scope, and define how it should be implemented, considering both common features and differences between financial and sustainability reporting. EFRAG aims to lead the debate on the topic, influence the international standard-setting process, and support preparers in considering connectivity in their annual reports. The connectivity project is being developed under the direction of the EFRAG FR TEG and the EFRAG FRB, with input from the EFRAG SR TEG, the EFRAG SRB, and the EFRAG Advisory Panel on the Connectivity Between Financial Reporting and Sustainability Reporting (EFRAG CAP), which was established to support the development of the project. The work carried out over 24 months has resulted in an Interim Deliverable Paper, published in June 2024, which is an important step forward in conceptualising the notion of connectivity and clarifying the boundaries of each of the sections of the annual report and how these boundaries determine what can and cannot be connected. The next step is the publication of a Discussion Paper for public consultation, which will also include practical illustrations of connectivity.

The IFRS Foundation, for its part, has shown interest in connectivity since March 2023, with the publication of an article signed by the Chairs of the IASB and the ISSB. In this context, connectivity is understood in a broad sense, encompassing its inclusion in the standard-setting process (joint work between the IASB and the ISSB), in the product of that process (for example, through the use of compatible concepts and consistent language between the two standard-setting bodies), and in the reports that companies are required to prepare (general purpose financial reports that are holistic, comprehensive and coherent). Moreover, the emphasis on connectivity has recently been highlighted by the ISSB in its work plan and by the IASB in its project on "Climate-related and Other Uncertainties in the Financial Statements". The importance of connectivity was also acknowledged at the 2024 World Standard-setters Conference, where the closing plenary session was dedicated to this topic.

In conclusion, both EFRAG and the IFRS Foundation have responded to the need to improve the connectivity between financial and sustainability reporting by launching initiatives to clarify the approach to be followed and provide illustrative examples for companies.

Empirical analysis of sustainability reports

The third block of the study focuses on an empirical analysis of the sustainability reports of major Spanish listed companies for the 2023 financial year. The main objective of this analysis is to determine the degree of connectivity between sustainability reporting and financial reporting by these companies.

To carry out this analysis, a content analysis methodology has been used. The sustainability reports of IBEX-35 listed companies have been reviewed, assessing the connectivity between sustainability-related information and financial information. This analysis includes a study of connectivity across the entire sample, a sector-based study, and an additional analysis to investigate whether connectivity may be influenced by the companies' impact materiality assessment and their sustainability performance.

The main findings of the empirical analysis are as follows:

- The connectivity between financial and sustainability reporting is still limited and is presented in a heterogeneous manner across IBEX 35 companies.
- The connectivity is primarily qualitative, with few quantitative connections between the two types of information.
- The connectivity appears to be influenced by the industry, the impact materiality assessment, and companies' sustainability performance. In particular, companies that conduct a more thorough materiality assessment and demonstrate better sustainability performance tend to exhibit greater connectivity between financial and sustainability information, ruling out opportunistic behaviour.
- The results suggest that further improvements in connectivity between financial and sustainability reporting are needed to provide a more integrated and coherent view of companies' performance and future prospects.

Our study offers several practical and theoretical contributions. Firstly, it is relevant and timely for academics, professionals and users of information in general, as it provides insight into the current state of play and the progress made in the development of EFRAG and IFRS Foundation projects. Secondly, the evidence obtained may be useful to regulators in developing ongoing projects aimed at designing effective measures to enhance connectivity between sustainability reporting and financial reporting, as well as to companies for the purpose of improving their sustainability disclosure practices and adapting them to the new requirements. Thirdly, from an academic perspective, our work designs a measure of connectivity between the two types of reporting, based on existing frameworks, which could be used in other contexts to conduct comparative analyses, as well as other types of studies incorporating this aspect.

1 Introduction

This study, called "Research project on the connectivity between financial and sustainability reporting. Analysis and monitoring of the project of the IASB and the work of EFRAG", is part of the Public Call for the development of studies under the agreement between the Accounting and Auditing Institute (ICAC) and the Spanish Association of University Accounting Lecturers (Spanish acronym: ASEPUC) for the year 2024. As outlined in the submitted work plan, this study comprises three main blocks. The first of these consists of a review of the literature related to the connectivity between financial and sustainability reporting in order to know the current state-of-the-art at the academic level. The second block includes the analysis of the projects undertaken by the European Financial Reporting Advisory Group (EFRAG) and the IFRS Foundation on this matter. The third block contains an empirical analysis of the sustainability reports of major Spanish listed companies to determine the degree of connectivity between sustainability and financial reporting.

Connectivity between financial and sustainability reporting has become a regulatory challenge, as it is key to understanding the relationships between the content of financial statements and matters relating to environmental, social and governance (ESG) issues. This connectivity is essential for corporate reports to provide a comprehensive and coherent picture of a company's past performance and future outlook. Both types of reporting become more useful, relevant and consistent when they are interconnected, as they complement one another and help avoid duplication or fragmentation across different reports. Increasingly, users of reporting value this connectivity (ISSB, 2024a), which contributes to reinforcing the usefulness and relevance of the information. However, achieving convergence between the two types of reporting remains complex. Various standards and frameworks govern sustainability reporting, and there is significant variation in definitions and metrics. Furthermore, given the nature of sustainability reporting, in many cases it is unclear how to establish such connectivity with financial reporting. In this regard, the International Organization of Securities Commissions (IOSCO, 2021) highlighted that one of the weaknesses of current reporting is the frequent disconnect between companies' reported financial and non-financial performance. More recently, IOSCO (2023a) has emphasised that improving connectivity between sustainability reporting and the financial statements should be a regulatory priority. Similarly, at the end of 2023, the European Securities and Markets Authority (ESMA) identified consistency between financial and sustainability reporting as a key priority (ESMA, 2023b). EFRAG and the IFRS Foundation have responded by launching initiatives to clarify the approach to linking financial and sustainability reporting.

EFRAG's project, launched in June 2022 and currently under development, aims to address the concept of connectivity and assess the scope and means of implementing it, taking into account the common features and differences between financial and sustainability reporting. EFRAG also aims to lead the debate on this topic, influence the international standard-setting process, and support preparers in taking connectivity into account in their annual reports. The work carried out over 24 months has resulted in an Interim Deliverable Paper, published in June 2024 (EFRAG, 2024n), which is an important step forward in conceptualising the notion of connectivity and clarifying the boundaries of each of the sections of the annual report and how these boundaries determine what can and cannot be connected. The next step in the project is the publication, in the second half of 2024, of a Discussion Paper for public consultation, which is also expected to include illustrative examples of connectivity.

For its part, the IFRS Foundation has demonstrated its interest in connectivity between sustainability and financial reporting since March 2023, with the publication of an article signed by the Chairs of the International Accounting Standards Board (IASB) and the International Sustainability Standards Board (ISSB) (IFRS Foundation, 2023a). In this case, connectivity is understood in a broad manner, encompassing its consideration in the standard-setting process (joint work between the IASB and the ISSB), in the output of that process (for example, through the use of compatible concepts and consistent language between the two standard-setting bodies), and in the reports that companies are required to prepare (general purpose financial reports that are holistic, comprehensive and coherent). Accordingly, the emphasis placed on connectivity has recently been underscored by the ISSB, which assigned it a prominent role in its work plan (ISSB, 2024b), and by the IASB through its project on "Climate-related and Other Uncertainties in the Financial Statements" (IFRS Foundation, 2024a). The IFRS Foundation's engagement with the issue is also evident in the fact that the final plenary session of the 2024 World Standard-setters Conference, held in September this year, was dedicated to this subject (IFRS Foundation, 2024c), reflecting the recognised importance of connectivity between the IFRS Accounting Standards and the IFRS Sustainability Disclosure Standards in enabling the provision of high-quality financial reporting to capital markets.

From an academic perspective, the available literature in this field remains limited and is still at an early stage of development. Nevertheless, there is broad consensus across existing studies on the need to continue progressing towards improved connectivity between sustainability reporting and financial reporting in corporate reports. The absence of adequate connectivity represents a significant limitation in the quality and completeness of corporate reporting. According to prior literature, this shortcoming not only affects individual companies but may also have negative implications for the efficient functioning of financial markets more broadly. The lack of alignment between sustainability reporting and financial data can reduce transparency and investor confidence, and may result in less well-informed business decision-making.

In line with the three main blocks of this study, defined at the beginning of this section, the objectives of this research have been threefold. Firstly, to review the academic literature on the concept of connectivity, with the aim of identifying key limitations highlighted in previous studies and drawing conclusions from the international evidence to date. Secondly, to track the development of the EFRAG and IFRS Foundation initiatives by reviewing the documents published by both organisations on their ongoing projects in this area. Third, to carry out an empirical study based on content analysis of the 2023 sustainability reports of IBEX 35 companies, in order to assess the degree of connectivity between sustainability reporting and financial reporting among Spanish listed companies. To this end, several analyses have been conducted, including an evaluation of connectivity across the full sample, a sector-based analysis, and an additional assessment to explore whether connectivity may be influenced by the companies' impact materiality assessment and their sustainability performance.

As a result of the work carried out, this study presents several practical and theoretical contributions. Firstly, it is relevant and timely for academics, professionals and users of information in general, as it provides insight into the current state of play and the progress made in the development of EFRAG and IFRS Foundation projects. Secondly, the findings indicate that connectivity between the two reporting domains remains generally limited, varies across companies, and is primarily qualitative in nature. Moreover, connectivity appears to be influenced by the industry, the companies' approach to assessing impact materiality and their sustainability performance. This evidence may be of use to regulators in the context of ongoing projects in this area aimed at designing effective measures to enhance connectivity between sustainability reporting and financial reporting, as well as to companies for the purpose of improving their sustainability disclosure practices and adapting them to the new requirements. Thirdly, from an academic perspective, our work designs a measure of connectivity between the two types of reporting, based on existing frameworks, which could be used in other contexts to conduct comparative analyses, as well as other types of studies incorporating this aspect.

The remainder of this study is structured as follows. Section two reviews the academic literature on the connectivity between financial and sustainability reporting. Section three analyses the development of the EFRAG and IFRS Foundation projects. Section four presents the empirical analysis, including the methodology and the presentation and discussion of the results. The final section sets out the main conclusions of the study.

2 Review of literature related to the connectivity between financial reporting and sustainability reporting

For this section, we carried out a review of the academic literature in search of previous studies that have analysed corporate disclosure practices, with a focus on the connectivity between sustainability reporting and financial reporting. It should be recalled that a thorough theoretical review of the concept of connectivity has already been conducted by EFRAG in the context of the connectivity project, and the outcome of that analysis, along with the conclusions reached, are presented in the *Interim Deliverable Paper* published in June 2024 (EFRAG, 2024o). This issue is dealt with in the third section of this study.

In the academic field, alongside the development of various international standards on corporate sustainability reporting, a stream of research has emerged that emphasises the importance of corporate reporting providing a comprehensive view of companies by combining and connecting sustainability and financial reporting. In particular, there is extensive literature on integrated reporting (Velte and Stawinoga, 2017; Vitolla *et al*., 2019; Hamad *et al*., 2020; Jayasiri *et al*., 2023), which constitutes a well-established line of research. While it is true that the concept of connectivity set out by EFRAG is broader than that employed in the framework proposed by the International Integrated Reporting Council (IIRC), these studies help highlight the need to connect reporting on environmental, social and governance matters with the financial reporting published by companies.

Although there are not many studies that assess in depth the level of connectivity in integrated reports, the research conducted on this issue develops indices to evaluate the connectivity in corporate disclosures, including the connectivity between sustainability and financial reporting. Findings from recent empirical studies confirm that the level of connectivity in the reporting contained in integrated reports is currently low among the companies analysed (Tirado-Valencia et al., 2024; Wang *et al*., 2024), which highlights the existence of information asymmetries and the difficulties faced by investors in gaining a full and accurate understanding of companies.

This lack of connectivity represents a limitation in corporate reporting and, according to previous literature, may have adverse effects both for companies and for the efficient functioning of financial markets in general. In this regard, there are studies that analyse the consequences of connectivity in corporate reporting for various economic agents. These studies conclude that low connectivity hampers the processing and analysis of disclosures made by companies (Lee and Yeo, 2016), negatively affects their cost of financing (Vitolla *et al.*, 2020), and influences the valuation of their shares (Wang *et al*., 2024). These problems also extend to financial analysts, who face greater difficulty in interpreting corporate reporting and making projections. Along these lines, low connectivity in reporting is associated with lower-quality analyst forecasts, which tend to be less accurate and more dispersed (Wang *et al*., 2024), resulting in further challenges for decision-making and for the efficient operation of financial markets. Against this backdrop, it is essential to continue making progress in the development and application of the connectivity principle (Tirado-Valencia *et al.*, 2024; Wagenhofer, 2024). It is clear that sustainability-related reporting has financial effects, and it is necessary to make the link between both types of reporting explicit. For this reason, the role of regulators, as key actors shaping corporate sustainability reporting policies, is particularly highlighted in previous studies. It is also worth noting that the establishment of specific guidance on the connectivity between sustainability and financial reporting not only supports firms in the preparation of corporate disclosures, but also serves as a safeguard to minimise discretion in this process and to mitigate potential opportunistic behaviour (Lai *et al*., 2018).

However, the academic literature that has specifically and empirically analysed the connectivity between sustainability reporting and financial reporting is still very much in its early stages, with only a few published studies, among which we may cite David and Giordano-Spring (2022) and Tóth *et al*. (2022). One of the main challenges in these studies lies in measuring the connectivity between sustainability reporting and financial reporting. The design of a measuring instrument is a task that carries an implicit subjectivity and is not free from criticism, given that there is still no consolidated regulatory framework that clearly defines what this connectivity consists of.

On the one hand, Tóth *et al*. (2022) measure the connectivity between sustainability reporting and financial reporting using the IFRS Accounting Standards and the standards issued by the Global Reporting Initiative (GRI) as references. Specifically, they analyse the connection between certain corporate sustainability issues and financial data. Although the sample analysed is small and limited to the largest companies in the European automotive manufacturing sector, these authors conclude that the connections in corporate sustainability reports with financial aspects are very limited.

David and Giordano-Spring (2022) develop a connectivity index based on the concepts put forward in the proposals issued by EFRAG. In particular, these authors conduct a study in which they use this index to measure, for listed companies in France in 2021 included in the CAC 40, the connectivity between climate change-related disclosures and financial reporting. This connectivity index is composed of ten items relating to both direct and indirect connectivity. The empirical results highlight that the level of connectivity, in both forms, is limited, and that further improvement is needed in the linkage between sustainability reporting and financial reporting. In particular, these authors observe that corporate reporting on climate change is mainly connected to financial reporting in a qualitative manner, in terms of the description of strategies and plans. However, the level of connectivity is very low when it comes to linking climate change disclosures with quantitative financial indicators or to quantifying the financial impact of climate change-related information.

In conclusion, it may be noted that the existing literature on this subject is in an early stage of development and is consistent in identifying the need to continue improving connectivity between certain types of sustainability-related reporting and financial reporting. One of the academic implications of the projects developed by EFRAG and the IFRS Foundation is precisely the need to conduct in-depth empirical studies that enable a better understanding of companies' disclosure practices and how they establish effective connectivity between their sustainability reporting and financial reporting, in such a way that evidence can be generated to contribute to improving standard-setting proposals and the policies followed by companies in this area.

3 Analysis of the projects of EFRAG and the IFRS Foundation

3.1. The EFRAG project

The demand for sustainability-related information has increased significantly, a trend expected to continue in the coming years. The non-financial, environmental, social, and governance (ESG) performance of organisations is becoming increasingly important to various stakeholders, who are showing greater interest in sustainability issues due to both ethical motivations and their potential to impact companies' financial results. Consequently, decisions made within financial markets are increasingly incorporating sustainability-related information, while there is a growing need for its appropriate integration with financial reporting. Connectivity between financial reporting and sustainability reporting has become a strategic issue for companies to provide a comprehensive view of their business model and value creation process.

Against this backdrop, recent years have witnessed extensive regulatory developments in sustainability reporting. The European Union (hereinafter, EU), the IFRS Foundation, and countries such as the United States have launched ambitious regulatory projects to develop standards more aligned with the current situation. In 2022, the EU adopted Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022, amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC, and Directive 2013/34/EU, as regards corporate sustainability reporting (commonly known as the Corporate Sustainability Reporting Directive, hereinafter CSRD). The main objectives of the CSRD are to improve sustainability reporting by maximising its quality and comparability and reducing associated costs, as well as to promote the benefits of the European single market to contribute to the transition towards a fully sustainable and inclusive economic and financial system, in line with the European Green Deal and the United Nations Sustainable Development Goals (hereinafter, SDGs).

A large number of stakeholders consider the term "non-financial information" to be inaccurate, as it implies that the information in question lacks financial importance. The CSRD acknowledges these considerations and incorporates the term "sustainability information", with the ultimate goal of placing sustainability reporting on the same level as financial reporting, while also considering the connection between the two. This is facilitated by the requirement to include sustainability information in the management report.

For the preparation of sustainability information to be included in a specific, clearly identified section of the management report, the CSRD mandates EFRAG to develop standards: the European Sustainability Reporting Standards (ESRS). The first set of standards was adopted by Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 and includes two cross-cutting standards and ten topical standards. The first of the cross-cutting standards, ESRS 1 "General Requirements," sets out the fundamental concepts used, as well as the general requirements for preparing and presenting sustainability information. It also establishes guidelines to ensure connectivity between sustainability information and financial information, in section 9, titled: "Linkages with other parts of corporate reporting and connected information".

In this regard, the report issued in February 2021 (EFRAG PTF-NFRS, 2021a) by the EFRAG Project Task Force on European Sustainability Reporting Standards (EFRAG PTF-ESRS) already highlighted that the connectivity between financial reporting and sustainability reporting was one of the fundamental concepts that should guide the development of the European Sustainability Reporting Standards (ESRS). Furthermore, given the importance of this concept, another associated report was also produced to delve deeper into its development. This associated report (EFRAG PTF-NFRS, 2021b) analyses the interconnection between financial and non-financial information and identifies anchor points between both types of reporting, based on existing non-financial information frameworks.

These reports can be considered the origin of EFRAG's decision to initiate a project on the connectivity between financial reporting and sustainability reporting, which was approved for launch in June 2022 (EFRAG, 2022b). Furthermore, in the feedback received from the consultation conducted by EFRAG on its work programme in May 2021, this was the project that received the most support and was also identified as a high priority (EFRAG, 2022c).

The connectivity project is being developed under the direction of the EFRAG Financial Reporting Technical Expert Group (EFRAG FR TEG) and the EFRAG Financial Reporting Board (EFRAG FRB), with input from the EFRAG Sustainability Reporting Technical Expert Group (EFRAG SR TEG) and the EFRAG Sustainability Reporting Board (EFRAG SRB), who are regularly informed and expected to provide comments, including during joint meetings. In addition, to support the development of the project, the creation of the EFRAG advisory panel on the connectivity between financial reporting and sustainability reporting (EFRAG CAP) was approved in February 2023 to advise the EFRAG FR TEG (EFRAG, 2023c). The aim is for the members of this advisory panel, which began its activities in the third quarter of 2023 (EFRAG, 2024l), to share perspectives and practical experiences on connectivity issues and to help EFRAG identify, assess and prioritise connectivity topics, as well as identify good reporting practices. To this end, the panel brings together preparers of financial statements/sustainability reports, users of financial statements/sustainability reports (including valuation experts, NGOs, trade unions and consumer organisations), assurance service providers, academics and/or regulators.

The general objectives of the project are as follows (EFRAG, 2024m):

- "influence the ongoing international standard setting consistent with the objectives of the EFRAG proactive research workplan;
- serve as an educational resource and support practice through illustrative examples; and
- contribute to research/thought leadership on the topic of connectivity, which is a nascent and high-priority area for stakeholders".

The main motivation for the project is shaped by the benefits that EFRAG considers can be achieved through connectivity (EFRAG, 2024n):

a) "enhancing the coherence and complementarity of the information in the Annual Report;

b) lessening potential gaps (missing) information and overlaps (duplicative information) across the Annual Report;

c) enhancing the predictive value of sustainability reporting information through connections to future financial statements [...]; and

d) fostering the strategic-oriented communication of the Annual Report".

The scope of the project and the approach to be followed, structured in two phases, were approved during the joint meeting of the EFRAG FR TEG and the EFRAG FRB on 8 February 2023 (EFRAG, 2023d). It is first necessary to note that, within the framework of the project, connectivity is understood as the connection between the information in the financial statements, the sustainability information included in the management report, and the remaining content of the management report, as these are the documents that companies in the European Economic Area are required to prepare. Additionally, it is clarified that connectivity is considered from a *GAAP-agnostic* perspective, although the focus is on connections with financial statements prepared under IFRS Accounting Standards, as some companies may apply national accounting standards. Similarly, the EFRAG project considers two-way connectivity (EFRAG, 2024m), that is, the connection of sustainability information with the financial statements and the connection from within the financial statements outward (even though IFRS Accounting Standards currently do not explicitly include this connection). The connection elements are shown graphically in Figure 1.

//// FIGURE 1

↑ Source: EFRAG (2024m).

In the first phase of the project, which is currently underway, the objective is to develop the concept of connectivity within the current regulatory framework. Among other aspects, in this phase (EFRAG, 2024a), work has been undertaken to establish the conceptual scene, through an analysis of why connectivity is important; the establishment of definitions (what connectivity means within the framework of the EFRAG project); the analysis of the distinctive roles played by the financial statements, the management report, and sustainability information; the identification of the differences between financial information and sustainability information (what cannot be connected); the identification of the needs and expectations of users and other stakeholders; and the identification of disclosures that can be connected (what can be connected). In this phase, the aim is also to develop practical application examples, both real and simulated.

The output of the first phase is the publication of a *Discussion Paper* including both the conceptual analysis and illustrative examples to guide companies. Prior to the publication of the *Discussion Paper*, work was carried out on an *Interim Deliverable Paper* (EFRAG, 2024l), which in its final version was published on 28 June 2024 under the title "Connectivity considerations and boundaries of different Annual Report sections" (EFRAG, 2024n). This first document includes the conceptual analysis, which refers to the research conducted concerning the concept of connectivity and the boundaries of financial and sustainability reporting, but it does not yet include practical examples. The purpose of this initial paper (EFRAG, 2024o) is "to raise awareness of the articulation and conceptual foundations of the notion of connectivity as primarily reflected in the ESRS' and ISSB Standards' connectivity/connection requirements and of the boundaries of different Annual Report sections. Another objective is to highlight the pivotal role of connectivity in ensuring the coherence and complementarity of the information across the Annual Report". More specifically, the document (EFRAG, 2024n) sets out the conceptual basis, categories and benefits of connectivity. It also includes an analysis of the reporting boundaries with the aim, first, of shedding light on what information can or cannot be connected, and second, of reducing expectation gaps, particularly around what information can be reported in the financial statements.

A warning has also been issued (EFRAG, 2024l) to point out that the objective of the connectivity project is mainly to stimulate debate, to contribute to the improvement of corporate reporting, but under no circumstances should the *Discussion Paper* be considered part of EFRAG's standard-setting activity nor is it intended to constitute ESRS implementation guidance.

For the development of examples, work has been carried out in parallel with the conceptual study included in the *Interim Deliverable Paper*. The use of examples to illustrate connectivity can bring multiple benefits, including (EFRAG, 2024b):

- "they can support reporting practices by enabling companies to benchmark themselves and improve their reporting practices;
- they will help to convey, clarify, and enhance the articulation of the principles of connectivity;
- they may point to gaps or grey areas within existing requirements;
- they will educate stakeholders through practical illustration of applications and this could lessen the expectation gaps on what information can be connected".

As noted above, these examples will be both real and simulated. The need to prepare simulated examples arises from the fact that sustainability information prepared based on ESRS will not be available for the first time until 2025. In any case, the aim is to prioritise the use of real examples (EFRAG, 2024k; EFRAG, 2024p), as these will be available to the extent that current reports prepared by companies follow existing voluntary frameworks (such as GRI or TCFD (Task Force on Climate-related Financial Disclosures)) that have served as the basis for the development of the ESRS. Additionally, EFRAG (2024k) specifies that the examples to be included in the *Discussion Paper* should in no case be considered as examples of *best practice*, but rather examples that allow companies to have a reference on what can be considered good practice. Up to now, as a result of the meetings held, several documents relating to the development of illustrative examples have also been issued (EFRAG, 2024b; EFRAG, 2024c; EFRAG, 2024k; EFRAG, 2024p). These documents, among other aspects, set out the general issues to consider for the development of examples, the topics to be prioritised, the number of examples to be obtained for each topic, and the organisation of the work schedule. They also include some initial examples developed by the working group, which have served as a reference for our empirical work, as will be discussed later in Section 4 of this study.

Once the first phase is completed, the work to be carried out in the second phase of the project, which is currently regarded as a possibility and remains to be defined, would be determined taking into account the lessons learned from the first phase (EFRAG, 2024l). It would also be necessary to monitor other initiatives, such as those of the IASB, ISSB, and other national regulatory bodies, so that EFRAG's work can benefit from the synergies of the work they carry out.

Table 1 lists, in chronological order, the various working documents published by EFRAG during the development of the project, for discussion by the members of the EFRAG FRB, EFRAG FRB TEG, EFRAG SRB, EFRAG SRB TEG and EFRAG CAP in meetings held by one of these bodies or jointly, and which have been reviewed during the preparation of our study.

These documents reflect the progress made as a result of the work carried out and the discussions held in the meetings, in such a way that the first working document has been progressively developed until its publication as the *Interim Deliverable Paper* in June 2024. The *Discussion Paper* is expected to be published in the second half of 2024.

//// **TABLE 1** **Working Documents for the Connectivity Project**

- EFRAG (2022a). Cover note and issue Paper. Connectivity between financial and sustainability reporting. EFRAG FR TEG Meeting. Paper 07.01. 19 May 2022.
- EFRAG (2022b). Recommendation of new projects for the EFRAG proactive research agenda. Issues Paper. EFRAG FR Board meeting. Paper 06-02. EFRAG Secretariat: Agenda Consultation team. 01 June 2022.
- EFRAG (2022c). EFRAG Feedback Statement. IASB's Third Agenda Consultation Request for Information and EFRAG's Proactive Research Agenda. Agenda Consultation. July 2022.
- EFRAG (2023a). Connectivity between Financial and Sustainability Reporting Information. Scoping EFRAG Research project. EFRAG FR TEG- SR TEG Joint meeting. Paper 04-01. EFRAG Secretariat: Connectivity team. 17 January 2023.
- EFRAG (2023b). Connectivity between Financial and Sustainability Reporting Information. Suggested scope and approach of EFRAG Research project. EFRAG FRB- FR TEG Joint meeting. Paper 09-01. EFRAG Secretariat: Connectivity team. 8 February 2023.
- EFRAG (2023d). Boundaries of FR and SR, elements of 'connectivity', and update on IFRS Foundation connectivity-related discussions. Issues Paper. EFRAG FR TEG meeting. Paper 07-01. 13 April 2023.
- EFRAG (2023e). Connectivity between financial and sustainability reporting information. EFRAG FRB-SRB Joint meeting. Paper 05-02. 3 May 2023.
- EFRAG (2023f). EFRAG research project - connectivity between financial and sustainability reporting information. EFRAG SR TEG. 05-03- Background reading Paper. 23 May 2023.
- EFRAG (2023g). Identifying and developing examples related to different aspects of connectivity. Issues Paper. Paper 05-01. 18 October 2023.
- EFRAG (2024a). Cover note. Connectivity project. EFRAG FR TEG and SR TEG meeting. Paper 02-01. EFRAG Secretariat: Connectivity team. 15 February 2024.
- EFRAG (2024b). Examples Development Considerations - Updated Roadmap. EFRAG FR TEG and SR TEG meeting. Paper 02-02. EFRAG Secretariat: Connectivity team. 15 February 2024.
- EFRAG (2024c). Illustrating connectivity. EFRAG FR TEG and SR TEG meeting. Paper 02-03. EFRAG Secretariat: Connectivity team. 15 February 2024.
- EFRAG (2024d). Connectivity principles. Issues paper. EFRAG FR TEG and SR TEG meeting. Paper 02-04. EFRAG Secretariat: Connectivity team. 15 February 2024.
- EFRAG (2024e). Objectives and boundaries of different sections of the annual report. Issues paper. EFRAG FR TEG and SR TEG meeting. Paper 02-05. EFRAG Secretariat: Connectivity team. 15 February 2024.
- EFRAG (2024f). Draft Interim Deliverable Paper: Connectivity & Boundaries of Annual Report Sections. Presentation to EFRAG SR TEG. EFRAG SR TEG meeting. Agenda Paper 06-01. EFRAG Secretariat: Connectivity team. 8 May 2024.
- EFRAG (2024g). EFRAG Connectivity Project: Draft Interim Deliverable Paper - 08 May 2024. Connectivity considerations & Boundaries of different Annual Report sections. EFRAG SR TEG meeting. Agenda Paper 06-02. EFRAG Secretariat: Connectivity team. 8 May 2024.
- EFRAG (2024h). Report of the EFRAG CAP Chairman - EFRAG CAP meeting held on 30 April 2024. EFRAG FR TEG and FRB meeting. Agenda Paper 08-00. 15 May 2024.
- EFRAG (2024i). Draft Interim Deliverable Paper: Connectivity & Boundaries of Annual Report Sections. 15 May 2024. Presentation to EFRAG FR TEG and FRB. EFRAG FR TEG and FRB meeting. Agenda Paper 08-01. 15 May 2024.
- EFRAG (2024j). EFRAG Connectivity Project: Draft Interim Deliverable Paper - 15 May 2024. Connectivity considerations & Boundaries of different Annual Report sections. EFRAG FR TEG and FRB meeting. Agenda Paper 08-02. EFRAG Secretariat: Connectivity team. 15 May 2024.
- EFRAG (2024k). Connectivity Project. Possible outreach plans and examples development update. EFRAG FR TEG and FRB meeting. Agenda Paper 08-03. 15 May 2024.
- EFRAG (2024l). Draft Interim Deliverable Paper: Connectivity & boundaries of Annual Report sections. Presentation to EFRAG SRB. EFRAG SRB meeting. Agenda Paper 07-01. 04 June 2024.
- EFRAG (2024m). EFRAG Connectivity Project: Draft Interim Paper. Connectivity considerations & boundaries of different Annual Report sections. EFRAG SRB meeting. Agenda Paper 07-02. EFRAG Secretariat: Connectivity team. 04 June 2024.
- EFRAG (2024o). Initial Paper. EFRAG Connectivity Project. Connectivity considerations and boundaries of different Annual Report sections. June 2024.
- EFRAG (2024p). Connectivity project update - Examples development. EFRAG FRB and FRB meeting. Paper 03-01. 26 June 2024.

↑ Source: Prepared by authors.

Moreover, as a result of the meetings held between the ICAC and the members of the team responsible for this study since its commissioning, the team was asked to work jointly with the ICAC to prepare comments on the draft paper to be discussed at the meetings of the EFRAG Financial Reporting Board (FRB), where the connectivity project was included on the agenda. In particular, the team was asked to prepare a comment report on the draft *Interim Deliverable Paper* in the version to be discussed at the EFRAG FR TEG and EFRAG FRB meeting held on 15 May 2024. The report is reproduced below.

Comments on "Agenda Paper 08-02 of the EFRAG FR TEG and FRB meeting" of 15 May 2024 (EFRAG, 2024j)

This document entitled "*Draft Interim Deliverable Paper - Connectivity considerations & Boundaries of different Annual Report Sections*" (Agenda Paper 08-02) represents a further development of the *EFRAG Connectivity Project*. In general, various considerations on the connectivity between financial reporting and sustainability reporting made by the different EFRAG working groups have been taken into account in this document.

As stated in this Agenda Paper 08-02, the joint meeting of the EFRAG working groups on 15 February highlighted several considerations that have been taken into account.

Among them was concern about labelling the content of the "Interim Deliverable Papers" as principles. Thus, *Issuer Paper 02-04 "Connectivity Principles"* and *Issuer Paper 02-05 "Objectives and boundaries of different sections of the annual report"* have been integrated into Agenda Paper 08-02, eliminating the term "principles" from its title, in order to avoid confusion. In this respect, the resulting document uses terminology clearly and reduces potential ambiguities for stakeholders, explicitly warning that the content of the document does not constitute alternative guidance.

In the same meeting, the importance of two-way connectivity (from sustainability information to financial information and vice versa) was emphasised, as well as the need to incorporate specific points and examples of connectivity. Agenda Paper 08-02 clarifies the concept of connectivity by addressing specific and contentious aspects.

The meeting also underlined the importance of influencing preparers of corporate reporting. Throughout Agenda Paper 08-02, the importance of achieving connectivity between sustainability information and financial information is emphasised, along with a clear presentation of the benefits of such connectivity, highlighting it as a key element in raising awareness of the significance of the topic at a professional level. The paper also places particular emphasis on the role of connectivity in communicating a holistic and coherent view of the business and its value creation, placing sustainability reporting on an equal footing with financial reporting.

In particular, Agenda Paper 08-02 is structured in two main parts dealing with the concept of connectivity and boundaries respectively.

The first part, entitled "Connectivity considerations", begins (Section 1.1) by clarifying the concept of information connectivity, differentiating it from the concept of integrated reporting, and explaining the possible strands of connectivity (in reports, in products and in processes). A clear and unambiguous definition of the concept of connectivity is a necessary foundation on which to build the rest of the project. In this sense, the conceptual comparison with integrated reporting and the distinction between different types of connectivity help improve the understanding of the concept. Section 1.2 represents progress in understanding the concept of connectivity by comparing the EU and IFRS regulatory frameworks, which enables greater clarity on the specific scope of EFRAG's project. This comparison highlights differences in the approach and placement of connectivity in reporting, which may affect its comparability depending on the framework applied. It also makes clear that connectivity should be established among sustainability disclosures in the management report, the financial statements, and the other content of the management report, to the extent that these are subject to compliance and assurance/audit, and are based on sound conceptual foundations. Section 1.3 highlights the need for corporate reports to be self-sufficient, while recognising that, given their complementary nature, some repetition is necessary. However, it is important that the reports are concise and do not include unnecessary repetition. Defining the concept of necessary repetition is one of the areas requiring further development in order to clarify this issue, which is fundamental to achieving the objectives proposed in the document. This section also clarifies the understanding of the different categories or issues related to connectivity as established under the ESRS and the ISSB's IFRS Sustainability Standards: qualitative and quantitative, direct and indirect, consistency of assumptions, and time horizon. Furthermore, although the IASB is the body responsible for setting connection requirements within financial statements, the added value of this EFRAG paper lies in the related commentary it provides, as well as in the clarifying examples currently under development.

The second part, entitled "Boundaries of different annual report sections", contains explanations to clarify the boundaries between financial information and sustainability information, highlighting the boundaries of each of the sections of the annual report and how these boundaries determine the connections that can (or cannot) be established. In relation to the objectives of the different corporate reports, the following are identified among the main differences: i) the time horizon, generally lengthier in sustainability reporting; ii) the incorporation of forward-looking information; iii) the use of non-monetary metrics and their translation into monetary values; iv) the incorporation of the value chain in sustainability reporting. These issues make connectivity between financial information and sustainability information more difficult, which is why their inclusion in this EFRAG document is very appropriate to clarify the boundaries between both types of information. Another issue that contributes to understanding these boundaries is the explanation of the time dimension of connectivity. It is also relevant to explain certain "grey areas" where problems in achieving connectivity between financial and sustainability reporting are shown, as well as the reasons why in some cases certain sustainability issues may not be reflected in the financial statements. In summary, this part of the document constitutes progress insofar as it clarifies the boundaries between both types of information and, on the other hand, sets out the challenge of continuing to specify how to materialise connectivity between sustainability reporting and financial reporting.

3.2. The IFRS Foundation project

As already mentioned, alongside the significant standard-setting effort being undertaken by the EU, there are other initiatives in the field of sustainability reporting, among which that developed by the IFRS Foundation stands out. The IFRS Foundation entered the international sustainability standard-setting landscape with the creation of the ISSB in November 2021, an organisation formed through the consolidation of the Value Reporting Foundation - itself the result of the merger between the IIRC and the Sustainability Accounting Standards Board (SASB) in June 2021 – and the Climate Disclosure Standards Board (CDSB). It also builds on the work of the TCFD – which was dissolved in 2023, with the IFRS Foundation assuming responsibility for monitoring progress on climate-related disclosures (TCFD, 2023) – and the World Economic Forum's Stakeholder Capitalism Metrics (ISSB, 2024c).

The objectives of the ISSB are (ISSB, 2024c):

- "to develop standards for a global baseline of sustainability disclosures;
- meet the information needs of investors;
- enable companies to provide comprehensive sustainability information to global capital markets; and
- facilitate interoperability with disclosures that are jurisdiction-specific and/or directed at broader stakeholder groups".

To date, only two IFRS Sustainability Disclosure Standards have been published, approved in June 2023: IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures. As with the cross-cutting ESRS 1 on general requirements, IFRS S1 includes general guidance, stating that it "prescribes how an entity prepares and presents its sustainability-related financial disclosures" and sets out "general requirements for the content and presentation of those disclosures so that the information provided is useful to primary users in making decisions relating to providing resources to the entity" (IFRS S1, paragraph 4). Among the general requirements, it also contains guidance on the connections that should exist between sustainability-related financial disclosures and the other information the entity provides in its financial reports. This is set out in the conceptual foundations in paragraphs 21–24 under the heading "Connected information," and developed further in the application guidance (paragraphs B39–B44).

In this regard, an article published in March 2023 by the Chairs of the IASB and ISSB, Andreas Barckow and Emmanuel Faber (IFRS Foundation, 2023a), stated: "The benefits of connectivity were an important consideration when the IFRS Foundation created the International Sustainability Standards Board (ISSB) to operate alongside the International Accounting Standards Board (IASB). Stakeholders consistently highlighted the benefits to be gained from having two standard-setting boards within the Foundation, both focused on providing information to inform investment decisions".

The same article (IFRS Foundation, 2023a) clarifies what is meant by connectivity in the IFRS Foundation's work. Thus, connectivity is envisaged in three dimensions: connectivity in reports, connectivity in product, and connectivity in process. Connectedness in reports means that the ultimate outcome of recognising the important role connectivity must play is that companies produce holistic, comprehensive and coherent general purpose financial reports. To achieve this, connectivity must also be considered in the other two dimensions, products and processes. Connectivity in product refers to the use of compatible concepts across the two sets of standards, and to the absence of unintended gaps or overlaps between accounting information, sustainability-related financial disclosures and related digital taxonomies. Finally, connectivity in process implies that both boards (IASB and ISSB) collaborate at both board and staff levels and are guided by advisory bodies that report to both. This is why joint meetings between the two boards have been held with connectivity on the agenda (IFRS Foundation, 2023e; ISSB, 2024a).

At the April 2023 meeting of the IFRS Advisory Council, one of the ISSB's priorities was highlighted as the need to focus on connectivity with the financial statements (IFRS Foundation, 2023c). A presentation on connectivity was given (IFRS Foundation, 2023d), and it was confirmed that the ISSB would consult stakeholders (as part of the ISSB's agenda consultation) on what the priorities should be for working with the IASB (IFRS Foundation, 2023e). This public consultation was launched in May 2023, *"ISSB Consultation on Agenda Priorities"* (ISSB, 2023) and a large number of comments on connectivity were received. The feedback summary (ISSB, 2024a) notes that although the public consultation did not contain specific questions on connectivity, it did mention that one of the key activities in the ISSB's work plan should be to ensure connectivity between the ISSB's and the IASB's requirements in order to facilitate the delivery of a coherent and comprehensive system of general purpose financial reporting that includes sustainability-related financial information and financial statements. The responses received to the public consultation highlight that connectivity is important in order to provide useful information for decision-making, by communicating the connections between financial and sustainability performance. Furthermore, the ISSB and the IASB are encouraged to work in collaboration, with specific areas identified where such cooperation is particularly important, such as the project on the disclosure of climate-related risks in the financial statements. As a result of this consultation, in May 2024 the ISSB decided (ISSB, 2024b) that the connection with the IASB should become an integral part of all the ISSB's work, thereby giving it a prominent role in its work plan. Table 2 lists the documents that have been reviewed to analyse the involvement of the IFRS Foundation in relation to the connectivity between financial information and sustainability information.

//// TABLE 2 IFRS Foundation Working Documents in relation to Connectivity

- IFRS Foundation (2023a). Connectivity-what is it and what does it deliver? IFRS Foundation. 23 March 2023.
- IFRS Foundation (2023b). Connectivity in practice: the IASB's new project on Climate-related Risks in the Financial Statements. IFRS Foundation. 23 March 2023.
- IFRS Foundation (2023c). Update on the ISSB's Activities. Agenda paper 5. IFRS Advisory Council Meeting. April 2023.
- IFRS Foundation (2023d). Connectivity in financial reporting. Agenda paper 8. IFRS Advisory Council Meeting. April 2023.
- IFRS Foundation (2023e). Meeting Summary. IFRS Advisory Council. 4-5 April 2023.
- ISSB (2023). Request for Information. IFRS® Sustainability Disclosure Standards. Consultation on Agenda Priorities. May 2023.
- ISSB (2024a). ISSB Consultation on Agenda Priorities. Feedback summary – Connectivity. IASB-ISSB Joint meeting. January 2024.
- ISSB (2024b). ISSB Consultation on Agenda Priorities. Summary of decisions and final work plan. ISSB meeting. Staff paper. Agenda reference: 2. May 2024.

↑ Source: Prepared by authors.

In parallel, the IASB's emphasis on connectivity is evident in the project on "Climate-related and Other Uncertainties in the Financial Statements," which has been under development since March 2023 (IFRS Foundation, 2024a). This project is a clear example of how connectivity is articulated at the process level, such that this IASB project and the work of the ISSB complement each other to facilitate connectivity in annual reports (IFRS Foundation, 2023b). In this regard, the decisions made in the development of the two IFRS Sustainability Disclosure Standards have served as a basis to inform the project (IFRS Foundation, 2023b), and the IASB has collaborated with members and technical staff of the ISSB during its development with the aim of facilitating connections between the information the company provides in its financial statements and the information it discloses in other parts of its annual report (ISSB, 2024). Furthermore, the IASB is considering leveraging the work of the ISSB, contemplating, for example, whether the connectivity mechanisms existing in IFRS S1 and IFRS S2 could be similarly reflected in the IFRS Accounting Standards (IFRS Foundation, 2023b).

Regarding the progress of the project, in July 2024, a draft for public discussion was published (IASB, 2024), containing eight illustrative examples intended to help understand how a company applies the requirements of the IFRS Accounting Standards to report the effects of climate-related and other uncertainties in its financial statements. The objective of these examples is to increase the transparency of information in the financial statements, but also to strengthen the connection between these and other parts of the annual report, including sustainability information, responding to stakeholders' concerns that information about the effects of climate-related risks in the financial statements sometimes appears to be inconsistent with the information companies provide outside their financial statements, particularly the information disclosed in other general-purpose financial reports (IFRS Foundation, 2024b; IASB, 2024). Thus, examples have been selected that highlight inconsistencies that may exist in this regard (BC19, Exposure Draft), aiming to illustrate the provision of connected information in general-purpose financial reports and reinforce compatibility with the IFRS Sustainability Disclosure Standards (BC21, Exposure Draft).

In response to the request for comments on the draft, EFRAG has worked on a comment letter, the draft of which was published on 18 September 2024 (EFRAG, 2024q). As a general comment, EFRAG considers that despite the inherent limitations of illustrative examples, they "can help to bridge the expectations gap that may arise from the inconsistent reporting of climate-related information within and outside the financial statements; and, to some extent, they may help to strengthen the connectivity of reported information in the financial statements and sustainability reports/other general purpose financial reports". However, EFRAG believes that it is necessary to go further, as the goal of improving connectivity is only partially achieved, since the illustrations of connectivity in the examples are insufficient. In this regard, in the examples given, "there is only generic reference made to the information in other general purpose financial reports and the analysis of whether to disclose is circumscribed to the application of IFRS Accounting requirements" (paragraph 50). EFRAG suggests that "more specificity about the information that could be disclosed in sustainability reports and/or other sections of the management report/management commentary (e.g., on climate-related transition risk) would help make the guidance within these examples less generic and more realistic and helpful for stakeholders" (paragraph 51).

Finally, EFRAG recommends that both the IASB and the ISSB focus more on the connectivity of disclosed information, even developing examples that illustrate connectivity in the presentation of their respective reports, as well as between the financial statements based on IFRS Accounting Standards and other sustainability reporting requirements, including the ESRS.

4 Empirical analysis of sustainability reports

4.1. Methodology

The objective of this empirical study is to evaluate the current degree of connectivity between sustainability information (environmental, social, and governance, ESG) and financial information included in the sustainability reports published by Spanish listed companies that are part of the IBEX 35 index. To this end, for financial year 2023, and following methodologies commonly applied in this type of study (David & Giordano-Spring, 2022; Ruiz-Lozano *et al.*, 2022), a content analysis of these documents was conducted. This involved designing a disclosure index to measure the connectivity between the two types of information, based on the prior work carried out by EFRAG on this concept. The process of coding the information involved, firstly, downloading all the sustainability reports directly from the companies' corporate websites, and secondly, conducting a detailed analysis of each report to identify the presence of various proposed items for measuring the connectivity between sustainability and financial information.

Based on the anchor points identified in the EFRAG report, we propose a disclosure index comprising 10 items (see Table 3). The design of this index draws on the EFRAG connectivity reports (EFRAG PTF-NFRS, 2021b) and the analysis of the various working documents that EFRAG has published for discussion during the meetings held throughout the development of the connectivity project. Additionally, according to the nature of the information analysed, two supplementary indices were derived from these items: a qualitative connectivity index and a quantitative connectivity index. The former considers qualitative connections between the sustainability information disclosed by the companies and their financial information, and consists of 4 items (items 1 to 4). The latter, the quantitative index, composed of 6 items (items 5 to 10), considers quantitative connections between both types of information. The majority of the items fall within the definition of indirect connectivity according to EFRAG PTF-NFRS (2021b)[1], with the exception of items 7 and 10. In order to avoid introducing subjectivity into the process of collecting the information, we assigned the same weighting to all items (Ruiz-Lozano *et al.*, 2022). Thus, one point was assigned if the company provides information on the item analysed and zero points otherwise. All the indices were calculated by dividing the number of items for which a company discloses information by the total number of items in the index in question.

In addition, during the process of analysing the content of the corporate reports, we also took into account the documents issued by EFRAG in 2024 (EFRAG, 2024b; EFRAG, 2024c; EFRAG, 2024k; EFRAG, 2024p) concerning the development of illustrative examples on how to connect sustainability information with financial information, which are currently being developed for inclusion in the forthcoming *Discussion Paper*.

1 According to the EFRAG PTF-NFRS report (2021b), indirect connection arises from the need to relate certain disclosed sustainability information, which may, for example, refer to future investments or costs, or to scenario analysis, to information used for financial reporting but which is not included in the financial statements or the general ledger, but is instead part of financial planning, budgeting or the investment plan. This may occur when a potential future impact cannot be directly measured in financial terms in the current year and is not reflected in accounting estimates or disclosed in the current financial statements. Therefore, the purpose of the indirect connection is to establish the links between financial information and sustainability information in cases where sustainability matters may affect future financial performance, or for current activities that cannot be directly measured in financial terms in the current year and are therefore not reflected in current financial information.

With the aim of ensuring the reliability of the content analysis carried out, we established a rigorous coding process. This began with a discussion among the researchers involved in this study of the various sections included in the connectivity index, in order to strengthen the criteria used and reduce possible ambiguities (Linsley and Shrives, 2006). In addition, several companies outside the sample were initially assessed by both researchers to verify the consistency in the application of the coding criteria. Furthermore, in accordance with the recommendations in the literature (Krippendorff, 2004), we conducted tests of stability and reproducibility to ensure the reliability of the coding process. On the one hand, the stability test involved the same document being analysed by the same researcher at two different points in time, resulting in consistent findings. On the other hand, the reproducibility test required that, at the end of the process, two documents from companies in the sample were evaluated independently by both researchers. Scott's Pi, one of the most commonly used indicators for measuring reliability in coding between different researchers, yielded a value of 0.83[2] in our case.

//// **TABLE 3 Connectivity index**

Item	Reference framework	Description	Nature
1		Explanation of the principle of information connectivity.	Qualitative
2	IIRC, EU Taxonomy, TCFD, non-binding guidelines, NFRD	Narrative explanation of how ESG aspects affect value creation, as well as risks and opportunities from a financial perspective.	Qualitative
3	IIRC, TCFD	Qualitative explanation of the impact of ESG issues on specific financial variables.	Qualitative
4	IIRC, TCFD, NFRD	Qualitative explanation of measures to manage the financial impact of ESG issues.	Qualitative
5	TCFD, WEF-IBC, PTF on climate risk	Quantification of the financial impact of climate change-related scenarios (scenario analysis).	Quantitative
6	Value Balancing Alliance, IMP, WEF-IBC, capitals coalition, multi capitals accounting	Quantification of the social monetary value of the ESG impacts of business activities.	Quantitative
7	EU taxonomy, SASB indicators, TCFD, non-binding guidelines	Disclosure of financial indicators with ESG attributes (e.g. share of revenue or turnover, CAPEX, OPEX, etc. from activities aligned with the EU taxonomy).	Quantitative
8	Non-binding guidelines	Quantification of the impact of ESG matters on financial variables.	Quantitative
9	SAP	Quantification of the financial impact of changes in ESG indicators.	Quantitative
10	GRI	Disclosure of financial indicators in the Non-Financial Statement.	Quantitative

↑ This table shows the items that make up the connectivity index. GRI: Global Reporting Initiative; IIRC: Integrated Reporting Council; NFRD: Non-Financial Reporting Directive; SASB: Sustainability Accounting Standards Board; TCFD: Task Force on Climate-Related Financial Disclosures; EU: European Union; WEF-IBC: World Economic Forum's International Business Council. Source: Prepared by the authors based on EFRAG PTF-NFRS (2021b).

The main analysis in our study is based on the examination of the sustainability reports of all companies in the sample. In addition, we carried out three further analyses in order to obtain greater evidence of the connectivity between the sustainability information and the financial information disclosed by Spanish listed companies. Firstly, we conducted an industry analysis based on the classification provided by the Madrid Stock Exchange General Index[3], since sustainability disclosure practices may be influenced by the industry to which companies belong (Ruiz-Blanco *et al*., 2022). Secondly, we examined whether the connectivity between the two types of information is influenced by the impact materiality assessment carried out by companies in their reports. In this case, the starting hypothesis posits that the analysis of material issues may promote the connection between sustainability information and financial information in corporate reports (Gerwanski *et al.,* 2019). To

2 The literature agrees that values above 0.75 indicate satisfactory reliability in the coding process between researchers (Beattie *et al*., 2004).

3 Sector 1: Oil and Energy; Sector 2: Basic Materials, Industry and Construction; Sector 3: Consumer Goods; Sector 4: Consumer Services; Sector 5: Financial Services; Sector 6: Technology and Telecommunications; Sector 7: Real Estate Services.

this end, we used as a reference the Informe Reporta "Relevance" index, which evaluates how corporate reporting covers all aspects of economic, social and environmental impacts. Thus, two groups were formed with the companies in our sample depending on whether they were above or below the median value of this index. This measure is published annually by the agency DEVA and is developed based on the main international reference frameworks (Dow Jones Sustainability Index, FTSE4Good, GRI, IIRC, among others), and has been used in previous research (Bravo and Reguera-Alvarado, 2019). Thirdly, we analysed whether the connectivity between sustainability information and financial information is conditioned by the companies' sustainability performance, since recent research indicates that companies with lower sustainability performance may manage their sustainability disclosures in ways that involve greenwashing practices (Lee and Raschke, 2023). In this regard, we used the "MERCO ESG Responsibility" ranking as a reference, forming two groups for the companies in our sample based on their inclusion in this ranking (companies with higher and lower sustainability performance). This ranking reflects the sustainability performance of companies operating in Spain and is published annually using a multi-stakeholder approach and audited by a Big Four firm. It has been used in recent research (Palacios-Manzano *et al*., 2021).

4.2. Main analysis

All the companies studied exhibited, to some extent, connectivity between sustainability information and financial information in 2023. Table 4 shows that, on average, IBEX-35 companies connected both types of information in 47.3% of the items considered in the connectivity index. Specifically, qualitative connectivity (59.1%) is significantly higher than quantitative connectivity (39.4%). Although the degree of connectivity is still limited, as might be expected considering that regulators' emphasis on this area is recent and the issue itself is complex, our findings show progress compared to the level of connectivity identified for listed French companies in 2021 (David and Giordano-Spring, 2022) or for European companies regarding climate change in 2019 (Tóth *et al*., 2022). Our results highlight the efforts made by companies to improve the connectivity between sustainability information and financial information, as well as the need to continue progressing in this area in order to increase the usefulness of corporate reporting. It is worth noting the heterogeneity observed in the presentation of the information, which remains a weakness traditionally associated with sustainability information (Stolowy and Paugam, 2023). This heterogeneity often hinders the identification of connections between both types of information, as well as their comparability.

//// TABLE 4 Connectivity indices. Descriptive statistics

Indices	Mean	Median	Std. Dev.
Connectivity Index	0.473	0.000	0.500
Qualitative connectivity	0.591	1.000	0.494
Quantitative connectivity	0.394	0.000	0.490

↑ This table shows the descriptive statistics of the connectivity indices. Std. Dev.: Standard deviation. Source: Prepared by authors.

The following section presents detailed results for each of the items included in the qualitative and quantitative connectivity measures, in order to identify the strengths and weaknesses of IBEX 35 companies with regard to the connectivity between sustainability information and financial information.

Firstly, in relation to qualitative connectivity (Figure 1), only 6.1% of the companies analysed explain the use of the principle of information connectivity in their corporate reports (Item 1), which likely contributes to the dispersion and heterogeneity in the way these companies present the connection between the two types of information.

However, 93.9% of the companies analysed explain the measures taken to manage the financial impact of ESG matters (Item 4), and 87.9% explain how ESG factors affect value creation, as well as risks and opportunities from a financial perspective (Item 2). These figures represent an increase compared with those found in previous studies, such as that of David and Giordano-Spring (2022), who found that for a similar measure, around two-thirds of listed French companies in 2021 explained value creation linked to ESG factors. It is important to note that these disclosures mostly refer to climate change and are generally not highly detailed.

Regarding Item 2, the documents published by EFRAG on the development of illustrative examples of connectivity (EFRAG, 2024c; EFRAG, 2024k; EFRAG, 2024p) emphasise the importance of explaining how sustainability matters interact with strategic issues and the impact they have or will have on the business, highlighting both present and future effects. Thus, in most of the cases analysed in this study, we found a general description of how ESG matters, particularly those related to climate change, may influence the business model, as well as the risks and opportunities associated with it and how this may affect the company's value, without going into specifics. For example, the company ACS explains that, in view of the "increasing demand for transparency and climate action from regulators, society, shareholders, among others", there is a reputational risk that may "negatively affect the valuation of intangibles by stakeholders" in the short and medium term. In the same vein, the company indicates that in the long term, there are risks related to ESG matters, particularly natural disasters, which may affect the company's strategy by causing damage to its infrastructures.

In relation to Item 4, companies usually provide a description of the measures aimed at mitigating risks and enhancing opportunities, particularly those related to climate change, although they tend to refer only superficially to the financial impact of these. Some companies specify the types of risks related to various ESG matters that they face and link them to a series of planned measures to mitigate them. For instance, Acerinox indicates that the most relevant risks related to ESG matters "are those related to CO2 emissions reduction, energy, and occupational health and safety". Regarding the mitigation of these risks, "Acerinox has targets for 2030 linked to these three areas and specific action plans that can be consulted in the corresponding sections of this report", in particular, "specific CO2 reduction and efficiency improvement plans; energy efficiency plans at each facility; preventive maintenance programmes, awareness campaigns on safety, training plans; decarbonisation plan, implementation of energy efficiency measures, increased use of renewable energy and greater use of sustainable fuels".

However, the number of companies analysed in our study that provide a qualitative explanation of the impact of ESG matters on specific financial variables (item 3) is much lower and accounts for only 48.5% of the sample. As previously mentioned, companies generally refer to the financial effect of ESG matters in a superficial manner. Those that explain the effect on specific financial variables focus mainly on the impact that ESG matters may have on costs and, to a lesser extent, on the impact they may have on their assets or expected sales. In this regard, various corporate reports provide generic information and, in fewer cases, more detailed information on these issues. For example, Bankinter states that ESG matters may entail "potential losses, abrupt price changes, or increased market volatility caused either by severe physical events or by transition risks affecting market expectations or asset values". It also indicates the effects that ESG matters may have on the company's results as a consequence of reductions in asset value or the emergence of new liabilities, explaining that ESG issues may result in losses due to "damage to assets and/or disruption of operations caused by physical risks" and "litigation due to, for example, the financing of controversial environmental activities".

Finally, it should be noted that all items in the qualitative connectivity index involve indirect connectivity, through the identification of links to financial information that are not direct reconciliations with the financial statements, or through a description of the likely future financial impact of sustainability matters.

//// **FIGURE 1** **Qualitative connectivity. Mean values**

↑ This figure shows the mean values of the items that make up the qualitative connectivity index. Source: Prepared by authors.

Secondly, with regard to quantitative connectivity (Figure 2), it should be noted that all the companies analysed (100%) disclosed in their sustainability reports financial indicators with ESG attributes (Item 7). Specifically, they provided information on turnover, CAPEX (capital expenditure), and OPEX (operational expenditure) associated with activities considered environmentally sustainable under the EU Taxonomy, in line with the provisions of Commission Delegated Regulation (EU) 2021/2178. This type of information is also considered in the documents on the development of illustrative examples published by EFRAG (EFRAG, 2024c; EFRAG, 2024k; EFRAG, 2024p), although those documents refer to even more detailed disclosures, including, among others, the proportion of sales exposed to significant physical and transition risks. In any case, the results found in our study are significantly higher than those reported by David and Giordano-Spring (2022) in France in 2021, who found that less than 40% of companies disclosed these indicators, which highlights companies' capacity to adapt to new regulatory frameworks. Generally, this information is clearly identified through tables that quantify the portion of these variables corresponding to ESG activities. In most cases, companies explain the meaning of green indicators and quantify them for both the current and previous year. This can be seen, for example, in the case of Indra, which explains that for these indicators, the company considers "the proportion of activities aligned, according to the taxonomy, with Article 8.2 of Regulation (EU) 2020/852". In the case of turnover, this refers to "the proportion of their turnover derived from products or services — including intangible ones — associated with economic activities that meet the alignment criteria of the Taxonomy. That is, they substantially contribute to an environmental objective, do not significantly harm the other objectives, and comply with the minimum social safeguards." For CAPEX, it refers to "the proportion of investments in fixed assets that meet the alignment criteria of the Taxonomy. That is, they substantially contribute to an environmental objective, do not significantly harm the other objectives, and comply with the minimum social safeguards." For OPEX, it refers to "the proportion of operating expenses that meet the alignment criteria of the Taxonomy. That is, they substantially contribute to an environmental objective, do not significantly harm the other objectives, and comply with the minimum social safeguards."

Also noteworthy is the fact that 84.8% of the companies analysed disclosed financial indicators in their sustainability reports or Non-Financial Statements (NFS) (Item 10). It is common for these reports to include financial data such as performance, sales or profitability figures. However, it is important to clarify the extent of connectivity between sustainability information and financial information, since in many cases, financial indicators were presented alongside ESG-related data, but no direct connection between them was established. Therefore, although the sustainability reports provided an overall picture of ESG matters and the financial situation, there remains a need for greater integration between the two.

The results for the remaining items related to quantitative connectivity reveal a low level of integration. Only 21.2% of the companies quantified the impact of ESG matters on financial variables (Item 8). This topic is particularly emphasised in the documents issued by EFRAG relating to the development of illustrative examples (EFRAG, 2024c; EFRAG, 2024k; EFRAG, 2024p), which stress the importance of sustainability disclosures being clearly linked to the financial statements and quantifying both current and future effects of ESG-related risks and opportunities on the company's financial position. Some of these documents explicitly highlight the importance of linking ESG risks to related provisions. Among the companies that provide information in this regard, several excerpts from ACS's sustainability report can be cited. On the one hand, the report highlights of environmental risks such as "the loss of ecosystem services, reduced economic growth, regulatory non-compliance, litigation and environmental penalties." Regarding financial liabilities associated with these risks, the report states: "In 2023, no significant breaches of environmental legislation or regulations were recorded, with 'significant' understood as breaches involving fines of over EUR 10,000. According to Note 37 on Environmental Information in the ACS Group's Annual Financial Statements, environmental costs in 2023 amounted to EUR 5,938 thousand (EUR 14,840 thousand in 2022) and, according to Note 20, non-current provisions contain provisions for environmental action, which include provisions to cover probable environmental risks that may arise, with no such provision recognised in 2023." On the other hand, the report notes that sustainable and resilient infrastructure represents opportunities for the company and quantifies the impact on sales, stating that it leads to the "development of Green Building projects" with "sales in 2023 of EUR 14,087 million."

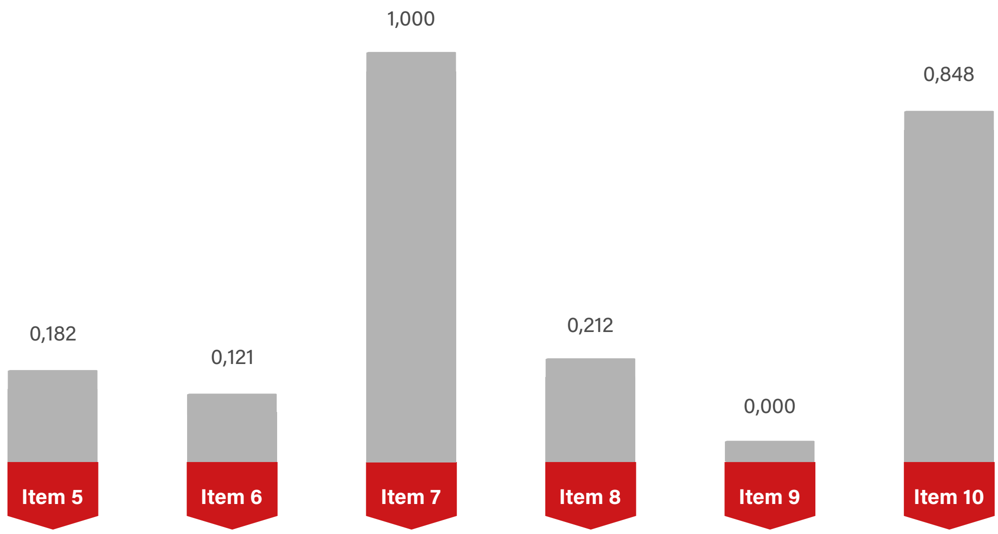
Regarding Item 5, only 18.2% of the companies analysed disclosed the financial impact of climate change-related scenarios in quantitative terms. The documents on the development of illustrative examples published by EFRAG (EFRAG, 2024c; EFRAG, 2024k) emphasise the importance of identifying the effects of material risks, both physical and transition-related, stemming from climate change on financial variables. However, despite the fact that it is common for companies to describe these risks and link them qualitatively to measures to be adopted and potential economic-financial consequences, quantification of the financial impact is rarely found. One example of this is the information provided by Acciona Energía, which highlights the existence of different climate change-related scenarios. For instance, under the category of chronic physical risks, the company mentions a "decline in revenue due to reduced efficiency of photovoltaic panels as global temperatures rise." The report also rates the likelihood of this occurring as "possible" and quantifies the financial impact as "insignificant (a decrease in sales of under 0.25%)."

An even smaller proportion of companies (12.1%) provided information on the social monetary value of the ESG impacts of business activities (Item 6). In these cases, sustainability reports such as the one published by AENA can be found, where it is stated, for example, in reference to the community and the sustainable value chain, that "by 2026 we will triple the amount allocated to social action initiatives compared with 2019. And by 2030, this will represent 1% of net profit."

Lastly, no companies quantified the financial impact of changes in ESG indicators (Item 9). These results are consistent with those found by David and Giordano-Spring (2022) in France in 2021, who also included two similar measures to Items 6 and 9 in our study and did not find any company disclosing quantitative information in this regard.

Finally, it is worth highlighting that items 7 and 10, which reflect direct connectivity, show the highest values. This is evidence that suggests it is considerably easier for companies to establish a quantitative connection when this involves a direct reconciliation with information already included in the financial statements, than when it requires an indirect connection with internal financial information. This may be due, for example, to the proprietary costs that such disclosure could entail.

//// **FIGURE 2** **Quantitative connectivity. Mean values**



↑ This figure shows the mean values of the items that make up the qualitative connectivity index. Source: Prepared by authors.

4.3. Additional analyses

To examine more closely companies' behaviour regarding the connectivity presented in the sustainability report between sustainability information and financial information, Table 5 provides an industry analysis. The data show that there are no major differences across the various sectors examined, with relatively similar values for the different connectivity indices, with the exception of the Oil and Energy sector. Companies in this sector exhibit lower connectivity on average (with the connectivity index more than 12 percentage points below the full sample average), mainly due to significantly lower quantitative connectivity (almost 17 percentage points below the full sample average).

The findings for the Oil and Energy sector are particularly striking considering that this sector has traditionally been viewed as highly sensitive to environmental issues (Birkey *et al.*, 2016). This very exposure to ESG issues could lead to greater complexity and difficulty when it comes to making estimates, especially quantitative ones, of financial impacts. It is also possible that reputational costs arising from such imprecisions are higher, which may affect the disclosure of specific quantitative information on financial impacts in the sustainability report.

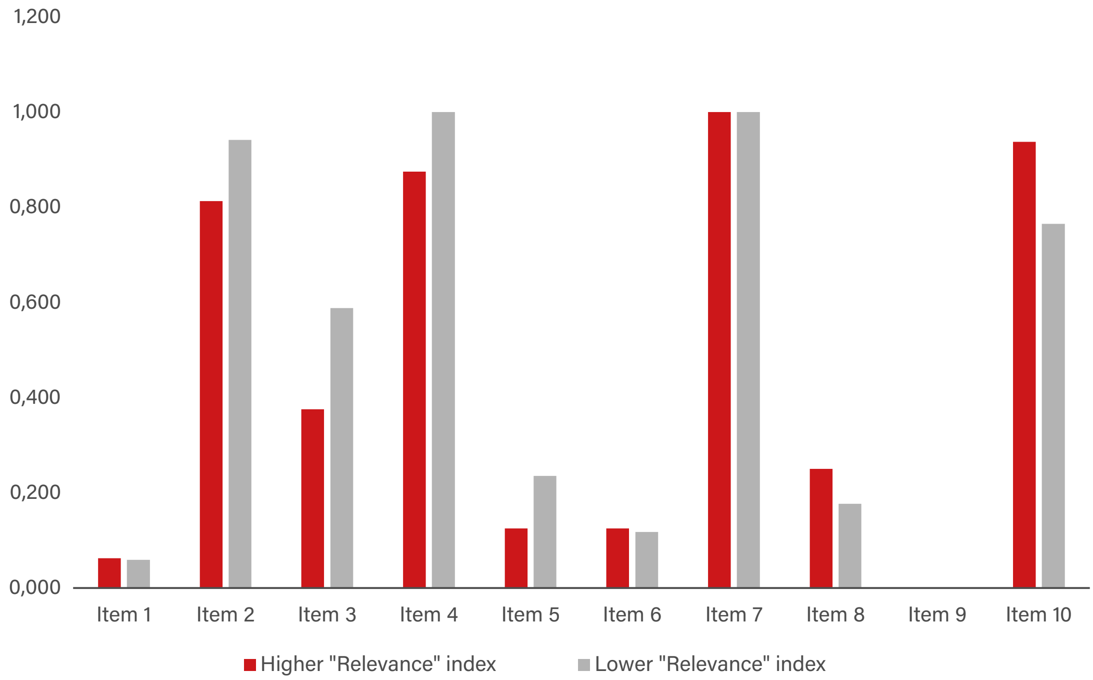
//// **TABLE 5** **Connectivity indices by sector. Mean values**

Sector	Connectivity Index	Qualitative connectivity	Quantitative connectivity
1. Oil and Energy	0.350	0.531	0.229
2. Basic Materials, Industry and Construction	0.543	0.679	0.452
3. Consumer Goods	0.467	0.583	0.389
4. Consumer Services	0.450	0.500	0.417
5. Financial Services	0.471	0.643	0.357
6. Technology and Telecommunications	0.450	0.563	0.375

↑ This table shows the mean values of the connectivity indices per sector. Source: Prepared by authors.

We now examine whether the connectivity between sustainability information and financial information is influenced by the materiality assessment presented by companies. Figure 3 shows, for each item in the connectivity index, the average values for the two groups of companies created based on the Informe Reporta "Relevance" index, i.e. according to how they address economic, social, and environmental impacts in their reports. The results reveal differences in qualitative and quantitative connectivity between the two groups. While companies with higher "Relevance" index scores do not show greater qualitative connectivity, they do demonstrate higher quantitative connectivity, particularly in relation to the monetary valuation of the social impacts of ESG-related business activities (Item 6), the quantification of the impact of ESG matters on financial variables (Item 8), and the disclosure of financial indicators in the NFS (Item 10). This evidence suggests that more comprehensive impact materiality analyses may help improve quantitative connections between sustainability information and financial information.

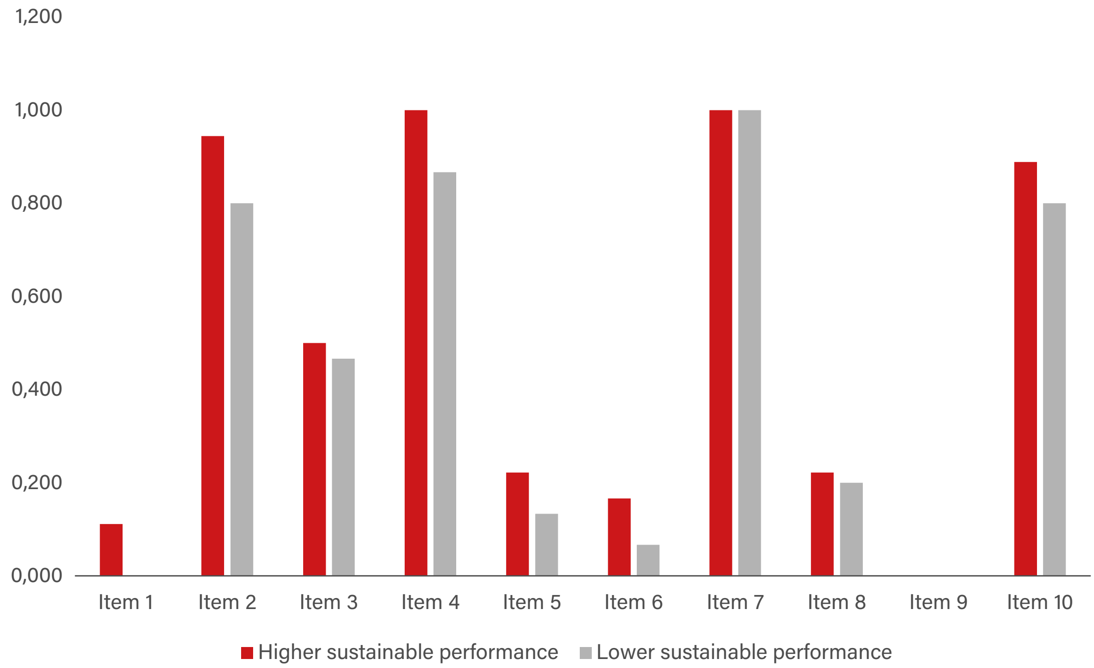
//// **FIGURE 3** **Connectivity according to the "Relevance" index**



↑ This figure shows the average values of each item of the connectivity index for the companies with the highest and lowest values of the Informe Reporta "Relevance" index. Source: Prepared by authors.

Finally, the analysis of connectivity based on the sustainability performance of companies is presented in Figure 4, which shows, for each item in the connectivity index, the average values for the two groups of companies created according to their presence in the "MERCO ESG Responsibility" ranking. The results clearly show that companies with higher sustainability performance consistently demonstrate greater connectivity, both qualitative and quantitative, between sustainability information and financial information across all items. Although greenwashing practices have traditionally been among the most criticised aspects of corporate sustainability information (Mahoney *et al*., 2013), our findings are in line with recent research (Ruiz-Lozano *et al*., 2022) and do not indicate opportunistic behaviour in corporate reports when presenting the connection between sustainability information and financial information.

//// **FIGURE 4** **Connectivity according to the "MERCO ESG Responsibility" ranking**



↑ This figure shows the average values of each item of the connectivity index for the companies with the highest and lowest sustainable performance according to the "MERCO ESG responsibility" ranking. Source: Prepared by authors.

4.4. Discussion of results and challenges for the future

The analysis performed contributes to understanding the information disclosure practices in the sustainability reports of major listed Spanish companies, particularly focusing on the connectivity between sustainability information and financial information. This issue has gained significant regulatory relevance, as seen in the initiatives of EFRAG and the IFRS Foundation. Although such connectivity is essential to provide a more comprehensive understanding of corporate sustainability information and to increase its usefulness, the recent emergence and complexity of this issue, as well as the historical absence of relevant regulatory frameworks, have led to low levels of connection between sustainability and financial information in practice, as indicated by the few existing studies on this topic to date (David and Giordano-Spring, 2022; Tóth *et al*., 2022). Our findings support these studies and suggest that connectivity between both types of information remains limited, especially in terms of quantitative connectivity. What follows are the key considerations from our analysis and several challenges that must be addressed in order to move toward more effective connectivity between sustainability information and financial information.

Firstly, the companies analysed do present in their sustainability reports connections between certain sustainability matters and financial information. However, there is no clear identification of this connectivity, which tends to appear dispersed and inconsistently across companies' corporate reports. One of the regulatory challenges is undoubtedly to ensure that the connectivity between sustainability and financial information becomes easily identifiable and comparable across companies. To this end, it would be important for the projects under development, beyond specifying the issues to be connected, to clarify the format in which such connectivity should be presented. The use of illustrative examples may help, but another possible solution could be the inclusion of a separate section summarising the main connections between both types of information.

Secondly, qualitative connectivity is significantly higher than quantitative connectivity. On the one hand, although most companies generally present high qualitative connectivity, it is often limited to a general description, superficially indicating how ESG matters may influence the business model or certain financial variables, as well as the measures to be adopted to manage such financial impact. While this is an important step in connecting ESG matters and financial information, this exercise in transparency is not without cost to companies, and its potential benefits may be called into question if the connection between sustainability and financial information is ambiguous or superficial. On the other hand, quantitative connectivity is limited across many of the items analysed. In particular, certain areas reveal significant shortcomings, mainly due to the fact that companies generally do not quantify the financial impacts associated with ESG matters. One of the major regulatory challenges lies precisely in clearly specifying the connections that should be shown between sustainability and financial information. Although the illustrative examples to be included in the forthcoming Discussion Paper to be published by EFRAG, and those already published by the IASB as part of the project on "Climate-related and Other Uncertainties in the Financial Statements," may provide a highly useful reference in this regard, it is necessary to take into account the particularities of the companies and sectors subject to the regulation, the diverse needs of information users, and the costs incurred by companies in obtaining and disclosing such information.

Thirdly, it is important to recognise the ability of companies to adapt to regulatory changes. In recent years, many of the recommendations or regulations relating to corporate sustainability reporting have focused on climate change. During this period, companies have acknowledged the importance of this issue and have substantially improved their climate-related reporting. The analysis of the NFS and sustainability reports of the companies in our sample shows that a large part of the connection between sustainability and financial information takes place precisely in the area of climate change. Likewise, companies have become familiar with the EU Green Taxonomy and with Commission Delegated Regulation (EU) 2021/2178, and the findings confirm that the disclosure of green financial indicators (CAPEX, revenue, OPEX) is fully established among the companies analysed. Another current challenge is to ensure that companies embrace the need to quantify financial impacts related to social and governance matters, which are the areas that currently show the lowest degree of connection with the financial information.

Fourthly, attention must be paid to the industry differences that may exist. Our evidence shows that companies in the Oil and Energy sector, which are particularly sensitive to environmental issues, present lower connectivity between sustainability and financial information. As mentioned earlier, the reasons may lie precisely in this greater sensitivity or exposure to ESG matters, which may hinder the estimation of financial impacts and increase the costs of preparing the information, as well as the reputational costs associated with its disclosure. Taking into account the different sensitivities of the various sectors when regulating the connectivity between sustainability and financial information constitutes an additional challenge for the regulatory projects currently under development.

Fifthly, our evidence indicates that companies that address the materiality of different ESG impacts more effectively in their reports generally present higher quantitative connectivity. Thus, carrying out more comprehensive materiality analyses may favour quantitative connectivity. Upcoming regulations will require stronger connections of this kind, and companies must be aware of this and adapt their corporate reports to the new requirements. Therefore, audit and sustainability committees, as well as other mechanisms responsible for the internal control of corporate information, must understand the importance of conducting and presenting complete and detailed materiality analyses, thereby improving both the presentation and the understanding of the connectivity between sustainability and financial information.

Finally, it is worth noting that our results rule out opportunistic behaviour by companies in their reports in relation to the connectivity between sustainability and financial information. Greenwashing practices in corporate sustainability reporting have become a concern for regulators and professionals (ESMA, 2023a; IOSCO, 2023b; PwC, 2022). However, our evidence indicates that companies with higher sustainability performance present greater qualitative and quantitative connectivity. Nonetheless, the forthcoming recommendations in this area will increase the pressure on companies to present stronger connectivity between both types of information, which may lead to a higher risk of opportunistic disclosures concerning this connectivity. This therefore poses a challenge for auditors and/or assurance providers in monitoring this matter, as the connectivity between sustainability and financial information must be complete, faithful, and clear for corporate reports to fulfil the purpose envisaged in the regulation.

5 Final considerations.

The study conducted highlights the growing importance of the connectivity between financial and sustainability information for regulators, preparers, and users of corporate reporting. Although such connectivity should be implicit in the preparation of the various sections of the annual report, in practice it remains a relatively new concept, introduced through the recently adopted sustainability standards (the ESRS and the IFRS Sustainability Disclosure Standards), and is not yet reflected in the Conceptual Framework for Financial Reporting. This makes it one of the main challenges currently facing international standard-setters, as it is essential for ensuring the quality of information available to all stakeholders.

As outlined in the submitted working plan, the study is structured in three main parts. The first presents a review of the academic literature on the connectivity between financial and sustainability information, in order to understand the current state of the debate. The second analyses the initiatives being developed by EFRAG and the IASB in this area. Lastly, the third offers an empirical analysis of the sustainability reports published by major Spanish listed companies, assessing the extent of connectivity between financial and sustainability information.

Firstly, with regard to the academic literature review, it should be noted a growing body of research has appeared in recent years emphasising the need to connect financial and sustainability information, in line with the development of international corporate disclosure standards. While there is extensive literature on integrated reporting, this is not the approach currently adopted by the initiatives of EFRAG and the IFRS Foundation. The available evidence shows that the level of connectivity between sustainability and financial information remains low, hindering the ability of investors and analysts to obtain a comprehensive understanding of companies. This negatively affects financing costs and company valuations, and also results in less accurate financial forecasts.

Other current studies have assessed connectivity using an approach closer to that proposed by EFRAG, but they remain limited in scope and depth. The most recent studies highlight the need to continue progressing towards the effective integration of both types of information, as the connection between financial indicators and sustainability data, such as climate change, remains mainly qualitative. They stress the importance of strengthening this link to ensure more accurate and useful corporate reporting, both for investors and for the efficient functioning of financial markets.

Secondly, an analysis has been carried out of the projects that EFRAG and the IFRS Foundation are developing in this area. Both initiatives agree that connectivity is key to providing a holistic and coherent view of the company and to achieving higher-quality reporting, although they approach the issue in different ways. EFRAG's project is more ambitious, aiming to lead the international debate on the topic, while the IFRS Foundation is more focused on the necessary collaboration between its two standard-setting bodies, the IASB and the ISSB. Accordingly, EFRAG's project is at a more advanced stage and is being carried out with greater specificity, culminating in the publication of an Interim Deliverable Paper in June 2024, as a step towards the publication of a Discussion Paper expected in the second half of 2024. This document represents significant progress in establishing the conceptual foundations, categories and benefits of connectivity, and in clarifying the boundaries of reporting to improve the understanding of what can and cannot be connected. In addition, collaboration between the IASB and the ISSB has recently materialised in the IASB's project on "Climate-related and Other Uncertainties in the Financial Statements", through the involvement of members and technical staff from both bodies, and by taking the ISSB's work as a starting point for the project.

Thirdly, the empirical analysis shows that Spanish listed companies currently present connections between both types of information in their sustainability reports. On the one hand, this demonstrates companies' motivation to adapt to regulatory requirements; on the other hand, it can also be interpreted as a way to differentiate themselves and enhance their corporate image by improving the quality of their sustainability reporting. Nonetheless, significant shortcomings are evident, especially in terms of quantitative connectivity. There are certain relevant items for which no connection is presented, or where the connection is very limited. Moreover, the connections described are often superficial and would require greater specificity. It is also worth noting the difficulty in identifying and comparing the connections between sustainability and financial information as presented in the companies' reports. In this regard, the illustrative examples currently being developed by EFRAG, and those already published by the IASB in the public consultation draft of the project on "Climate-related and Other Uncertainties in the Financial Statements", are expected to help improve preparers' practices in this area.

At the industry level, no major differences are observed, except in the Oil and Energy sector, which is particularly sensitive to ESG matters. Similarly, companies that more comprehensively address impact materiality in their reports also tend to show greater quantitative connectivity between sustainability and financial information. Finally, there is no evidence to suggest that connectivity is being used opportunistically in corporate reporting, as greater connectivity is generally found in companies with better sustainability performance. All the evidence gathered suggests that the differences observed between the companies analysed may be explained by the costs associated with preparing and disclosing information in terms of connectivity. Such costs, in the current context where strong regulation is not yet in place, may exceed the benefits received by companies.

Our study has several implications in different areas. Firstly, the results allow companies to assess their position and identify weaknesses in the connectivity between the sustainability and financial information they publish, helping them relate their disclosure practices to those of other listed companies, particularly in their industry. Secondly, our findings are valuable for regulators, as they provide more detailed insight into the specific aspects that need to be addressed to ensure effective connectivity in corporate reporting, particularly with regard to quantitative information. Thirdly, in the academic field, our study offers relevant directions for future research. On the one hand, it proposes a connectivity index that can be used in further studies to obtain more empirical evidence on this issue. On the other hand, it opens the door to future studies on the benefits of greater connectivity of information, not only from the point of view of information users, but also from the perspective of companies, which would be very useful for conducting cost-benefit analyses of such disclosures. Finally, another important issue lies in gaining a better understanding of the internal factors that may explain the disclosure of sustainability information that is more effectively connected with financial information. In view of the forthcoming regulatory landscape, where connectivity requirements will be high, it is essential to make progress in empirical studies that analyse the internal corporate mechanisms that promote the disclosure of more connected information.

6 References

Beattie, V., McInnes, B. and Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205-236. https://doi.org/10.1016/j.accfor.2004.07.001

Birkey, R,N., Michelon, G., Patten, D.M. and Sankara, J. (2016). Does assurance on CSR reporting enhance environmental reputation? An examination in the U.S. context. *Accounting Forum*, 40(3), 143-152. https://doi.org/10.1016/j.accfor.2016.07.001

Bravo, F. and Reguera-Alvarado, N. (2019). Sustainable development disclosure: Environmental, social, and governance reporting and gender diversity in the audit committee. *Business Strategy and the Environment*, 28(2), 418-429. https://doi.org/10.1002/bse.2258

David, B., and Giordano-Spring, S. (2022). Connectivity between financial and non-financial reporting: An exploration through climate accounting. *Accounting Auditing Control*, 28(4), 21-50.

Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU as regards corporate sustainability reporting.

EFRAG (2022a). Cover note and issue Paper. Connectivity between financial and sustainability reporting. EFRAG FR TEG Meeting. Paper 07.01. 19 May 2022. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2107271002133994/07-01-%20Connectivity%20between%20financial%20and%20sustainability%20reporting%20-%20EFRAG%20TEG%2019-05-2022.pdf

EFRAG (2022b). Recommendation of new projects for the EFRAG proactive research agenda. Issues Paper. EFRAG FR Board meeting. Paper 06-02. EFRAG Secretariat: Agenda Consultation team. 01 June 2022. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2107261337216499/06-02%20-%20Agenda%20consultation%20-% 20Recommendations %20of%20new%20projects%20for%20EFRAG%20proactive%20research%20agenda%20-%20EFRAG%20FRB%2022-06-01.pdf

EFRAG (2022c). EFRAG Feedback Statement. IASB's Third Agenda Consultation Request for Information and EFRAG's Proactive Research Agenda. Agenda Consultation. July 2022. Retrieved from https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/Feedback%20statement%20on%20Agenda%20Consultation.pdf

EFRAG (2023a). Connectivity between Financial and Sustainability Reporting Information. Scoping EFRAG Research project. EFRAG FR TEG- SR TEG Joint meeting. Paper 04-01. EFRAG Secretariat: Connectivity team. 17 January 2023.

EFRAG (2023b). Connectivity between Financial and Sustainability Reporting Information. Suggested scope and approach of EFRAG Research project. EFRAG FRB- FR TEG Joint meeting. Paper 09-01. EFRAG Secretariat: Connectivity team. 8 February 2023.

EFRAG (2023c). EFRAG Advisory Panel on the Connectivity between Financial Reporting and Sustainability Reporting (EFRAG CAP). Terms of Reference (approved by the EFRAG Administrative Board on 27 February 2023). https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/Terms%20of%20reference%20EFRAG%20Advisory%20Panel%20on%20Connectivity%20between%20Financial%20and%20Sustainability%20Reporting%20Information.pdf

EFRAG (2023d). Boundaries of FR and SR, elements of 'connectivity', and update on IFRS Foundation connectivity-related discussions. Issues Paper. EFRAG FR TEG meeting. Paper 07-01. 13 April 2023. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2212071336469377/07-01%20Issues%20paper%20on%20scope%20of%20connectivity%20and%20boundaries%20between%20FR%20and%20SR.pdf

EFRAG (2023e). Connectivity between financial and sustainability reporting information. Suggested scope and approach of EFRAG Research project. EFRAG FRB-SRB Joint meeting. Paper 05-02. 3 May 2023. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2302240953558531/05-02%20-%20Background%20paper%20only-%20EFRAG%20FRB%20and%20SRB-%20Scope%20and%20approach-%20EFRAG%27s%20Research%20on%20Connectivity%20between%20Financial%20and%20Sustainability%20Reporting.pdf

EFRAG (2023f). EFRAG research project - connectivity between financial and sustainability reporting information. EFRAG SR TEG. 05-03- Background reading Paper. 23 May 2023. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2303311058556237/05-03-EFRAG%20SR%20TEG-%20Background%20paper-Connectivity%20between%20FR%20and%20SR%20update-23%20May%202023.pdf

EFRAG (2023g). Identifying and developing examples related to different aspects of connectivity. Issues Paper. Paper 05-01. 18 October 2023. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2301301019414433/05-01-%20Issues%20Paper-%20Identifying%20and%20developing%20examples%20on%20different%20aspects%20of%20connectivity-EFRAG%20FR%20TEG%20and%20SR%20TEG-18%20October%202023.pdf

EFRAG (2024a). Cover note. Connectivity project. EFRAG FR TEG and SR TEG meeting. Paper 02-01. EFRAG Secretariat: Connectivity team. 15 February 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312111421206227/02-01-%20Cover%20Note-%20EFRAG%20FR%20TEG%20and%20SR%20TEG%20Meeting-%2015%20February%202024.pdf

EFRAG (2024b). Examples Development Considerations - Updated Roadmap. EFRAG FR TEG and SR TEG meeting. Paper 02-02. EFRAG Secretariat: Connectivity team. 15 February 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312111421206227/02-02%20-%20Examples%20Development%20Related%20Considerations-%20Updated%20Roadmap%20-%20EFRAG%20FR%20TEG%20and%20SR%20TEG%20-%202024-02-15.pdf

EFRAG (2024c). Illustrating connectivity. EFRAG FR TEG and SR TEG meeting. Paper 02-03. EFRAG Secretariat: Connectivity team. 15 February 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312111421206227/02-03%20Illustrating%20Connectivity%20-%20Examples%20-%20EFRAG%20FR%20TEG%20and%20SR%20TEG%20-%202024-02-15.pdf

EFRAG (2024d). Connectivity principles. Issues paper. EFRAG FR TEG and SR TEG meeting. Paper 02-04. EFRAG Secretariat: Connectivity team. 15 February 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312111421206227/02-04%20-%20Issues%20paper%20-%20Connectivity%20Principles-%20EFRAG%20FR%20TEG%20and%20SR%20TEG%20-%202024-02-15.pdf

EFRAG (2024e). Objectives and boundaries of different sections of the annual report. Issues paper. EFRAG FR TEG and SR TEG meeting. Paper 02-05. EFRAG Secretariat: Connectivity team. 15 February 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312111421206227/02-05%20-%20Issues%20paper%20-%20Objectives%20boundaries%20of%20different%20annual%20report%20sections-%20EFRAG%20FR%20TEG%20and%20SR%20TEG%20-%202024-02-15.pdf

EFRAG (2024f). Draft Interim Deliverable Paper: Connectivity & Boundaries of Annual Report Sections. Presentation to EFRAG SR TEG. EFRAG SR TEG meeting. Agenda Paper 06-01. EFRAG Secretariat: Connectivity team. 8 May 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2404191339179145/05-01-%20Update%20on%20interim%20deliverable%20for%20EFRAG%20Connectivity%20Project-%20EFRAG%20SR%20TEG%20meeting-%2008-05-2024.pdf

EFRAG (2024g). EFRAG Connectivity Project: Draft Interim Deliverable Paper - 08 May 2024. Connectivity considerations & Boundaries of different Annual Report sections. EFRAG SR TEG meeting. Agenda Paper 06-02. EFRAG Secretariat: Connectivity team. 8 May 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2404191339179145/05-02-EFRAG%20connectivity%20project%20-%20Draft%20Interim%20Deliverable%20-%20Connectivity%20concepts%20and%20AR%20boundaries-%20EFRAG%20SR%20TEG%20-%2008-05-%202024.pdf

EFRAG (2024h). Report of the EFRAG CAP Chairman - EFRAG CAP meeting held on 30 April 2024. EFRAG FR TEG and FRB meeting. Agenda Paper 08-00. 15 May 2024.

EFRAG (2024i). Draft Interim Deliverable Paper: Connectivity & Boundaries of Annual Report Sections. 15 May 2024. Presentation to EFRAG FR TEG and FRB. EFRAG FR TEG and FRB meeting. Agenda Paper 08-01. 15 May 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312131345449245/08-01-%20Update%20on%20interim%20deliverable%20for%20EFRAG%20Connectivity%20Project-%20EFRAG%20FR%20TEG%20and%20FRB%20meeting-%2015-05-2024.pdf

EFRAG (2024j). EFRAG Connectivity Project: Draft Interim Deliverable Paper - 15 May 2024. Connectivity considerations & Boundaries of different Annual Report sections. EFRAG FR TEG and FRB meeting. Agenda Paper 08-02. EFRAG Secretariat: Connectivity team. 15 May 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312131345449245/08-02-EFRAG%20connectivity%20project%20-%20Draft%20Interim%20Deliverable%20-%20Connectivity%20concepts%20and%20AR%20boundaries-%20EFRAG%20FR%20TEG%20and%20FRB%20meeting-%2015-05-%202024.pdf

EFRAG (2024k). Connectivity Project. Possible outreach plans and examples development update. EFRAG FR TEG and FRB meeting. Agenda Paper 08-03. 15 May 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2312131345449245/08-03%20-%20EFRAG%20connectivity%20project%20-examples%20development%20update%20and%20possible%20outreach%20plans%20-%20EFRAG%20FR%20TEG%20and%20FRB%20meeting%20-%2015-05-2024.pdf

EFRAG (2024l). Draft Interim Deliverable Paper: Connectivity & boundaries of Annual Report sections. Presentation to EFRAG SRB. EFRAG SRB meeting. Agenda Paper 07-01. 04 June 2024. Recuperado de https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2405070938330278/07-01-%20Presentation%20on%20draft%20interim%20deliverable%20for%20EFRAG%20Connectivity%20Project-%20EFRAG%20SRB%20meeting-%2004-06-2024.pdf

EFRAG (2024m). EFRAG Connectivity Project: Draft Interim Paper. Connectivity considerations & boundaries of different Annual Report sections. EFRAG SRB meeting. Agenda Paper 07-02. EFRAG Secretariat: Connectivity team. 04 June 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2405070938330278/07-02-EFRAG%20connectivity%20research%20project%20-%20Draft%20Interim%20Deliverable%20-%20Connectivity%20concepts%20and%20AR%20boundaries-%20EFRAG%20SRB-%2004-06-2024.pdf

EFRAG (2024n). *EFRAG publishes paper addressing interplay of connectivity and Annual Report boundaries*. Retrieved on 28 June 2024, from https://efrag.org/news/project-709/EFRAG-publishes-paper-addressing-interplay-of-connectivity-and-Annual-Report-boundaries?AspxAutoDetectCookieSupport=1

EFRAG (2024o). Initial Paper. EFRAG Connectivity Project. Connectivity considerations and boundaries of different Annual Report sections. June 2024. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Project%20Documents/2301031429599109/Connectivity%20considerations%20and%20boundaries%20of%20different%20Annual%20Report%20sections.pdf

EFRAG (2024p). Connectivity project update - Examples development. EFRAG FRB and FRB meeting. Paper 03-01. 26 June 2024.

EFRAG (2024q). Draft Comment Letter. EFRAG FRB and EFRAG SRB meeting. 18 September 2024. Paper 02-02. Retrieved from https://www.efrag.org/system/files/sites/webpublishing/Meeting%20Documents/2408141108181476/02-02%20Draft%20Comment%20Letter%20-%20clean%20-%20EFRAG%20FRB%20and%20EFRAG%20SRB%20-%202024-09-18.pdf

EFRAG PTF-NFRS (2021a). Final report. Proposals for a relevant and dynamic EU sustainability reporting standard-setting. February 2021. Retrieved from https://www.efrag.org/sites/default/files/2024-07/EFRAG_PTF-NFRS_MAIN_REPORT%5B1%5D.pdf

EFRAG PTF-NFRS (2021b). Appendix 4.4: Stream A4 Assessment Report, Interconnection between financial and non-financial information. Retrieved from https://www.efrag.org/sites/default/files/sites/webpublishing/SiteAssets/EFRAG%20PTF-NFRS_A4_FINAL.pdf

ESMA (2023a). Progress Report on Greenwashing. Response to the European Commission's request for input on "greenwashing risks and the supervision of sustainable finance policies". 31 May 2023. Retrieved from https://www.esma.europa.eu/sites/default/files/2023-06/ESMA30-1668416927-2498_Progress_Report_ESMA_response_to_COM_RfI_on_greenwashing_risks.pdf

ESMA (2023b). Public Statement. European common enforcement priorities for 2023 annual financial reports. 25 October 2023. Retrieved from https://www.esma.europa.eu/sites/default/files/2023-10/ESMA32-193237008-1793_2023_ECEP_Statement.pdf

Gerwanski, J., Kordsachia, O. and Velte, P. (2019). Determinants of materiality disclosure quality in integrated reporting: Empirical evidence from an international setting. *Business Strategy and the Environment*, 28(5), 750-770. https://doi.org/10.1002/bse.2278

Hamad, S., Draz, M. U., and Lai, F. W. (2020). The impact of corporate governance and sustainability reporting on integrated reporting: A conceptual framework. *Sage Open*, 10(2), 2158244020927431. https://doi.org/10.1177/2158244020927431

IASB (2024). Climate-related and Other Uncertainties in the Financial Statements. Proposed illustrative examples. Exposure Draft. IFRS® Accounting Standard. July 2024. Retrieved from https://www.ifrs.org/content/dam/ifrs/project/climate-related-other-uncertainties-fs/iasb-ed-2024-6-climate-uncertainties-fs.pdf

IFRS Foundation (2023a). Connectivity-what is it and what does it deliver? IFRS Foundation. 23 March 2023. Retrieved from https://www.ifrs.org/news-and-events/news/2023/03/connectivity-what-is-it-and-what-does-it-deliver/

IFRS Foundation (2023b). Connectivity in practice: the IASB's new project on Climate-related Risks in the Financial Statements. IFRS Foundation. 23 March 2023. Retrieved from https://www.ifrs.org/news-and-events/news/2023/03/connectivity-in-practice-the-iasbs-new-project-on-climate-related-risks-in-the-financial-statements/

IFRS Foundation (2023c). Update on the ISSB's Activities. Agenda paper 5. IFRS Advisory Council Meeting. April 2023. Retrieved from https://www.ifrs.org/content/dam/ifrs/meetings/2023/april/ac/ap04-update-on-the-issbs-activities-apr-2023.pdf

IFRS Foundation (2023d). Connectivity in financial reporting. Agenda paper 8. IFRS Advisory Council Meeting. April 2023. Retrieved from https://www.ifrs.org/content/dam/ifrs/meetings/2023/april/ac/ap08-management-commentary-and-integrated-reporting.pdf

IFRS Foundation (2023e). Meeting Summary. IFRS Advisory Council. 4-5 April 2023. Retrieved from https://www.ifrs.org/content/dam/ifrs/meetings/2023/april/ac/meeting-summary.pdf

IFRS Foundation (2024a). *Climate-related and Other Uncertainties in the Financial Statements. Project history*. Retrieved on 1 October 2024, from https://www.ifrs.org/projects/work-plan/climate-related-risks-in-the-financial-statements/#project-history

IFRS Foundation (2024b). *Exposure Draft and comment letters: Climate-related and Other Uncertainties in the Financial Statements. Consultation.* Retrieved on 1 October 2024, from https://www.ifrs.org/projects/work-plan/climate-related-risks-in-the-financial-statements/ed-cl-climate-related-uncertainties-fs/

IFRS Foundation (2024c). *World Standards-setters Conference 2024*. Retrieved on 15 October 2024, from https://www.ifrs.org/news-and-events/calendar/2024/september/world-standard-setters-conference-2024/

IOSCO (2021). Report on Sustainability-related Issuer Disclosures. Final Report. June 2021. Retrieved from https://www.iosco.org/library/pubdocs/pdf/IOSCOPD678.pdf

IOSCO (2023a). Report on International Work to Develop a Global Assurance Framework for Sustainability-related Corporate Reporting. March 2023. Retrieved from https://www.iosco.org/library/pubdocs/pdf/IOSCOPD729.pdf

IOSCO (2023b). Supervisory Practices to Address Greenwashing. Final Report. December 2023. Retrieved from https://www.iosco.org/library/pubdocs/pdf/IOSCOPD750.pdf

ISSB (2023). Request for Information. IFRS® Sustainability Disclosure Standards. Consultation on Agenda Priorities. May 2023. Retrieved from https://www.ifrs.org/content/dam/ifrs/project/issb-consultation-on-agenda-priorities/issb-rfi-2023-1.pdf

ISSB (2024a). ISSB Consultation on Agenda Priorities. Feedback summary - Connectivity. IASB-ISSB Joint meeting. January 2024. Retrieved from https://www.ifrs.org/content/dam/ifrs/meetings/2024/january/iasb-issb-joint/ap2b-feedback-summary-connectivity.pdf

ISSB (2024b). ISSB Consultation on Agenda Priorities. Summary of decisions and final work plan. ISSB meeting. Staff paper. Agenda reference: 2. May 2024. Retrieved from https://www.ifrs.org/content/dam/ifrs/meetings/2024/may/issb/ap2-agenda-consultation-summary-decisions-work-plan.pdf

ISSB (2024c). About the International Sustainability Standards Board. Retrieved on 15 September 2024, from https://www.ifrs.org/groups/international-sustainability-standards-board/

Jayasiri, N. K., Kumarasinghe, S., and Pandey, R. (2023). 12 years of integrated reporting: A review of research. *Accounting & Finance*, 63(2), 2187-2243. https://doi.org/10.1111/acfi.12958

Krippendorff, K. (2004). Reliability in content analysis: Some common misconceptions and recommendations. *Human Communication Research*, 30(3), 411-433. https://doi.org/10.1111/j.1468-2958.2004.tb00738.x

Lai, A., Melloni, G., and Stacchezzini, R. (2018). Integrated reporting and narrative accountability: The role of preparers. *Accounting, Auditing and Accountability Journal*, 31(5), 1381-1405. https://doi.org/10.1108/AAAJ-08-2016-2674

Lee, M. T. and Raschke, R. L. (2023). Stakeholder legitimacy in firm greening and financial performance: What about greenwashing temptations? *Journal of Business Research*, 155, 113393. https://doi.org/10.1016/j.jbusres.2022.113393.

Lee, K. W., and Yeo, G. HH. (2016). The association between integrated reporting and firm valuation. *Review of Quantitative Finance and Accounting*, 47(4), 1221-1250. https://doi.org/10.1007/s11156-015-0536-y

Linsley, P.M. and Shrives, P.J. (2006). Risk reporting: a study of risk disclosures in the annual reports of UK companies, *The British Accounting Review*, 38(4), 387-404. https://doi.org/10.1016/j.bar.2006.05.002

Mahoney, L. S., Thorne, L., Cecil, L. and LaGore, W. (2013). A research note on standalone corporate social responsibility reports: Signaling or greenwashing? *Critical Perspectives on Accounting*, 24(4-5), 350-359. https://doi.org/10.1016/j.cpa.2012.09.008

ESRS 1 "General Requirements".

IFRS S1 "General Requirements for Disclosure of Sustainability-related Financial Information".

IFRS S2 "Climate-related Disclosures".

Palacios-Manzano, M., Gras-Gil, E. and Santos-Jaen, J. M. (2021). Corporate social responsibility and its effect on earnings management: an empirical research on Spanish firms. *Total Quality Management & Business Excellence*, 32(7-8), 921-937. https://doi.org/10.1080/14783363.2019.1652586

PwC (2022). PwC's Global Investor Survey 2022. Retrieved from https://www.pwc.com/gx/en/global-investor-survey/PwC-Global-Investor-Survey-2022.pdf

Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Articles 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities, and specifying the methodology to comply with that disclosure obligation.

Commission Delegated Regulation (EU) 2023/2772 of 31 July 2023 supplementing Directive 2013/34/EU of the European Parliament and of the Council as regards sustainability reporting standards.

Ruiz-Blanco, S., Romero, S., and Fernandez-Feijoo, B. (2022) Green, blue or black, but washing-What company characteristics determine greenwashing? *Environment, Development and Sustainability*, 24(3), 4024-4045. https://doi.org/10.1007/s10668-021-01602-x

Ruiz-Lozano, M., De Vicente-Lama, M., Tirado-Valencia, P. and Cordobes-Madueno, M. (2022). The disclosure of the materiality process in sustainability reporting by Spanish state-owned enterprises. *Accounting, Auditing & Accountability Journal*, 35(2), 385-412. https://doi.org/10.1108/AAAJ-08-2018-3629

Stolowy, H. and Paugam, L. (2023). Sustainability reporting: Is convergence possible? *Accounting in Europe*, 20(2), 139-165. https://doi.org/10.1080/17449480.2023.2189016

TCFD (2023). *Task Force on Climate-related Financial Disclosures. Important message - Please read.* Retrieved on 15 September 2024, from https://www.fsb-tcfd.org/

Tirado-Valencia, P., de Vicente-Lama, M., Cordobés-Madueño, M., and Ruiz-Lozano, M. (2024). Determinants of interconnected corporate information. Evidence of the connectivity principle in integrated reporting. *European Research on Management and Business Economics*, 30(3), 100255. https://doi.org/10.1016/j.iedeen.2024.100255.

Tóth, Á., Suta, A., and Szauter, F. (2022). Interrelation between the climate-related sustainability and the financial reporting disclosures of the European automotive industry. *Clean Technologies and Environmental Policy*, 24(1), 437-445. https://doi.org/10.1007/s10098-021-02108-w

Velte, P., and Stawinoga, M. (2017). Integrated reporting: The current state of empirical research, limitations and future research implications. *Journal of Management Control*, 28, 275-320. https://doi.org/10.1007/s00187-016-0235-4

Vitolla, F., Raimo, N., and Rubino, M. (2019). Appreciations, criticisms, determinants, and effects of integrated reporting: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, 26(2), 518-528. https://doi.org/10.1002/csr.1734

Vitolla, F., Salvi, A., Raimo, N., Petruzzella, F., and Rubino, M. (2020). The impact on the cost of equity capital in the effects of integrated reporting quality. *Business Strategy and the Environment*, 29(2), 519-529. https://doi.org/10.1002/bse.2384

Wagenhofer, A. (2024). Sustainability reporting: a financial reporting perspective. *Accounting in Europe*, 21(1), 1-13. https://doi.org/10.1080/17449480.2023.2218398

Wang, R., Chua, W. F., Simnett, R., and Zhou, S. (2024). Is greater connectivity of financial and non-financial information in annual reports valued by market participants? *The British Accounting Review*, 101407. https://doi.org/10.1016/j.bar.2024.101407

i/c/a/c/ Instituto de Contabilidad y Auditoría de Cuentas