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Double materiality and the shift from non-financial to European sustainability reporting: review, outlook and implications

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Abstract

Purpose – This paper outlines the development of the principle of materiality in the European accounting framework, from the Modernization Directive (2003/51/EC) to the NFI Directive (2014/95/EU) and on to the proposals for a Corporate Sustainability Reporting (CSR) Directive (2021/0104 (COD)). The authors highlight how the requirements for corporate reporting in terms of sustainability matters have changed, underlining the main issues that require further attention by practitioners, researchers and legislators.

Design/methodology/approach - This paper is based upon a historic analysis of European Union (EU) regulations in the field of non-financial and sustainability reporting and how these have changed over time. A conceptual comparison of different reporting concepts is presented, and changes in their relevance to the EU accounting framework are discussed as part of the historic analysis. Implications from corporate practice are derived from previous empirical findings from the EU Commission's consultations.

Findings – The proposed change from non-financial to sustainability reporting within the EU affects more than simply the terminology used. It implies that a different understanding is needed of both the purposes of company reporting on sustainability matters and the aims of carrying out such reporting. This change was driven by the need and desire to appropriately interpret the principle of materiality set forth in the NFI Directive. However, the recent redefinition in the shift within the EU Commission's proposals presents considerable challenges-and costs-in practice.

Research limitations/implications - Future research on the conceptualization and operationalization of ecological and social materiality, as well as on the use of this information by different stakeholder groups, is necessary in order to (a) help companies that are applying the reporting requirements in practice, (b) support the increased harmonization of the reports published by these companies and (c) fully assess the costs and benefits associated with the increase in reporting requirements for these companies.

Practical implications - Companies have to establish relevant reporting processes, systems and formats to fulfil the increasing number of reporting requirements.

Originality/value – This paper outlines the historic development of the principle of materiality regarding mandatory non-financial or sustainability reporting within the EU. It outlines a shift in rationales and political priorities as well as in implications for European companies that need to fulfil the reporting requirements. In consequence, it describes appropriate interpretations of this principle of materiality under current and upcoming legislation, enabling users to apply this principle more effectively.

Keywords Non-financial reporting, Sustainability reporting, Materiality

Paper type Research paper



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reporting

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Introduction: in search of materiality for non-financial information

"Materiality, like beauty, is in the eye of the beholder" (Hicks, 1961, p. 159). The specific and elusive nature of one of the fundamental principles of accounting in its entirety has attracted the attention of practitioners, researchers and those setting standards for decades (e.g. Edgley, 2014; Bean and Thomas, 1990). Materiality is central to most considerations made to maintain or improve the decision usefulness of corporate reporting with respect to its target audience. In this key position, it serves as a principle to be upheld in the light of "disclosure overload" issues (AASB, 2014), but also presents a considerable threat to the completeness and comparability of reporting information provided, because the reporting company might practice overly extensive discretion (Brennan and Gray, 2005).

The more heavily reporting requirements rely upon the principle of materiality, the more relevant these possible benefits and threats become and, thus, merit attention. This is the case in the field of reporting concepts that influence the sustainability performance of companies, such as sustainability and integrated reporting (Unermann and Zappettini, 2014; Eccles *et al.*, 2012). Within the European Union (EU), non-financial reporting is a specific reporting concept that displays features of these two concepts (Baumüller and Schaffhauser-Linzatti, 2018) and has been more commonly applied over the past two decades. The latter does not involve any concrete reporting requirements, beyond the need to disclose any information "necessary for an understanding of the undertaking's development, performance, position and impact of its activity". Further guidance on the correct interpretation and operationalization of this requirement, however, is absent. For this reason, considerable differences in how this principle is understood and thus applied in practice have materialized (Venturelli *et al.*, 2020; EU Commission, 2018b). Many have recognized that this has become one of the most urgent issues that needs to be addressed under the current non-financial reporting regime within the EU (e.g. Germanwatch, 2021).

This ambiguity arises due to the very nature of the current non-financial reporting requirements. Historically, these mark the first step taken to increase transparency and to reveal the impact of the company's activities on sustainability matters. At the same time, the requirements are the result of compromises made due to their historical and conceptual roots and political implications. These compromises have left ample of room for interpretation in corporate practice where these requirements are applied (Monciardini *et al.*, 2020; Lehner and Harrer, 2019), and above that have also provided opportunities for the EU Commission to specify the reporting requirements according to its own (changing) political priorities. By proposing a reviewed regulation on mandatory sustainability reporting, the EU Commission has tried to address this problem and to promote the further development of more extensive reporting on sustainability matters (EU Commission, 2021).

In this paper, we outline the historic development of non-financial reporting within the EU from its origin to its proposed abolishment, described in a recent legislative proposal made by the EU Commission. The reporting content as it is specified by the principle of materiality rests at the heart of this development. This paper presents both normative legal and historical legal research findings to increase the understanding of the recent legal situation, to clarify interpretations which are needed to fulfil the reporting requirements and to further develop the legal system on sustainability reporting. The results of a literature review are presented at the beginning, followed by a comparison of the most relevant concepts of reporting concepts and the different approaches taken to understand materiality by applying these concepts. This information enabled us to identify the most important legislative measures and further announcements issued by the EU Commission, serving as a basis for a study the establishment and further development of non-financial reporting. Relevant topics related to the understanding of reporting content and especially materiality considerations for reporting purposes are outlined and compared with the different reporting concepts discussed in the previous sections of this paper. As a result, we demonstrate that changes in

the political agenda have determined the intended understanding of the respective nonfinancial reporting requirements. Whether those working in corporate practice will be able to live up to these new ambitions, however, remains to be seen.

Literature review

This literature review was conducted to classify and evaluate the legal reporting requirements and the effects of these requirements on companies and their stakeholders. Consequently, the results of the literature review—taking into account the subsequent legal analysis—enabled the derivation of recommendations for structuring the reporting obligations.

The survey of the existing research literature on the reporting of sustainability-related information revealed the relevance of credible reporting practices and their usefulness for the reporting companies. Nevertheless, materiality judgments play important roles, as they define the content of such reports. This, in turn, poses considerable challenges for these companies, auditors and stakeholders, indicating that they need further clarification and guidance to apply the principle of materiality effectively for non-financial reporting. These challenges are outlined by the following paragraphs.

Stakeholders demand access to mandated, externally verified sustainability-related information in order to gain knowledge about the level of a company's commitment to responsible business practices (O'Dwyer et al., 2005; regarding environmental information, see Deegan and Rankin, 1997). As the group of users, scope, degree of liability and frequency of auditing such information increases, the usefulness of this information for the stakeholders of the reporting company also increases. The increased sensitivity on the part of the addressees offers companies the opportunity to reposition themselves in terms of their disclosures and their adjustments to internal processes. These positive effects of disclosing sustainability-related information-formerly a voluntary process-can be found in the literature. For example, Cho et al. (2020) show a positive relationship between the disclosure of sustainability-related information on the assessment of companies by their stakeholders and on capital market reactions. Dhaliwal et al. (2011) examine a potential reduction in firms' cost of equity capital associated with the initiation of the voluntary disclosure of such information. Moreover, according to Dhaliwal et al. (2012), the issuance of sustainability reports is significantly and negatively associated with earning forecast errors produced by analysts. Aureli et al. (2020) find that positive changes in corporate practice are caused by the shift from voluntary to mandatory non-financial information, initiated by the EU Directive 95/2014. Specifically, their case study shows *inter alia* that companies use the new reporting obligations "to develop internal processes to improve its relations with external subjects that hold key resources" (Aureli et al., 2020, p. 2400).

Despite the positive effects of disclosing sustainability-related information, increasing such reporting obligations does not necessarily lead to more transparency for stakeholders. On the contrary, researchers have observed that increasing the number of disclosure obligations may lead to an attempt to limit disclosure as much as possible. For example, Caputo *et al.* (2021) describe the overall attitude of avoiding the disclosure of unfavourable or unavailable information (see also Pizzi *et al.*, 2020) which results in disclosure practices that have a potentially negative impact on the evaluation of stakeholders. The limited effect these practices have on the adaptation of internal processes is illustrated by the fact that the integration of the Sustainable Development Goals (SDGs) into the non-financial reports is not a matter of course, despite the increasing importance of the SDGs, and especially when using sustainable business models (for more detailed information about this connection, see Pizzi *et al.*, 2021).

In addition, studies indicate that not only the disclosure of sustainability-related information but also the interest in an audit of such reports and the type of audit depends on the respective company, among other factors. For example, Simnett *et al.* (2009) demonstrate

that the demand for assurance is higher amongst companies engaging in more highly visible industrial activity and companies with a larger "social footprint". Other studies confirm the relevance of company characteristics—as well as their employed reporting practices on the voluntary conduct of audit procedures in the context of sustainability reporting (Ruhnke and Gabriel, 2013; Branco et al., 2014; Mnif Sellami et al., 2019; Venter and van Eck, 2021). Positive auditing of sustainability-related information contributes to its credibility and has other positive impacts on companies (Uyar et al., 2021); however, the typical lack of standardized information presents those who are mandated to perform the audit with considerable challenges (Boiral et al., 2019; Krasodomska et al., 2021).

Since the definition of materiality affects the scope and binding nature of the disclosure, its interpretation consequently has a large influence on the effectiveness of the sustainability performance of companies (internally) and how it is reported (externally). The concept of materiality can be used to interpret and control the two directions of action related to the previously described disclosure obligations. Therefore, statements made by companies on how they apply this principle help researchers assess the effectiveness of the principle of materiality. As with other reporting practice, these statements remain vague, and the principle is often applied to most favourably present the non-financial reporting. Beske et al. (2020, p. 178) analysed sustainability and integrated reports and found that statements related to the materiality analysis "show commitment to stakeholder engagement, but fail to clarify the underlying processes because of missing explanations. If as assumed by legitimacy theory, companies might tend to select topics strategically [...]". The underlying need for interpretation and leeway in the application is naturally inherent in the principle. Those responsible in the company have to decide how the principle is applied (for application in a broader sense, see Eccles and Youmans, 2016). Because the principle of materiality can be interpreted in ways that both encourage the presentation of reliable information and undermine the interests of stakeholders, defining the specific nature of the principle is problematic and plays an important role in non-financial reporting.

Approaches taken towards reporting on sustainability matters

In recent decades, four important concepts for reporting on a company's sustainability performance have emerged (Baumüller *et al.*, 2020a): (1) non-financial reporting, (2) sustainability reporting, (3) integrated reporting and (4) climate reporting. These concepts have gained global importance in practice and are most often also jointly used in company reporting. But although they share a common core (i.e. the environmental, social and/or governmental matters which are to be presented) and refer to one each other, they are also considerably different in terms of their target audience and how (or even: if) they prioritize those sustainability matters over financial matters. As a result, these reporting processes also lead to different reporting contents (Mio *et al.*, 2020).

In research and practice, the term "non-financial" is frequently assigned different meanings (Stolowy and Paugam, 2018; Haller *et al.*, 2017); a broad meaning is also sometimes assigned that encompasses all of the aforementioned concepts [1]. However, in the European regulatory context, non-financial reporting can be defined as a specific European concept applied when reporting on sustainability matters. This context serves as the fundament of the current EU legislation introduced by the so-called "NFI Directive" (2014/95/EU) in 2014. Since this time, extensive reporting on a company's ecological and social impacts has been required as described in the European accounting framework. The origin of this practice can be traced back to the beginning of the millennium, when the reporting obligations were much more limited in scope. (This aspect will be described in more detail in the next sections of this paper.) In this context, the term "non-financial information" is usually understood as—and increasingly criticized for meaning—distinguished information, i.e. information that is

complementary or even opposed to financial information (European Lab, 2021). The main point of reference, however, of the historical understanding of "non-financial information" dates back to the so-called Jenkins Report from 1994, a study commissioned by the American Institute of Certified Public Accountants (AICPA) to address core questions about the relevance and usefulness of business reporting. The original usage of the term differs greatly from its frequent usage today; at the time, non-financial information was defined as "high-level operating data and performance measurements that management uses to manage the business" (AICPA, 1994, p. 22), such as the quantities and qualities of a company's products and services. Obviously, a means—end relationship is assumed and, as in financial accounting, investors and similar stakeholder groups are considered as the main target audience for reporting. This understanding was adopted when the term was introduced into the European accounting framework.

Sustainability reporting, on the other hand, adopts a wider perspective of reporting matters that dates back to the Brundtland Commission's definition of sustainable development: "Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, rec. 27). Sustainability reporting standards like the standards defined by the Global Reporting Initiative (GRI) additionally include the notion of a "triple bottom line" (Elkington, 1997), implying that economic, ecological and social performance levels are equally relevant for reporting purposes (GRI, 2016). The perspective taken to define the content of sustainability reporting has another characteristic: The impacts of the business activities on the company's environment are addressed ("inside-out") (Baumüller and Schaffhauser-Linzatti, 2018). If information is material under any one of the three performance dimensions, it has to be included in the reporting process. Consequently, a wide target audience is addressed, linking sustainability reporting to stakeholder theory (Hörisch *et al.*, 2014; Schaltegger *et al.*, 2017). Stakeholder engagement is one of the key features of the sustainability reporting process (Stocker *et al.*, 2020).

Compared to the previous concepts, integrated reporting goes one step further by aligning the economic, ecological and social performance of a company for reporting purposes. As sustainability reporting became more common, companies began to seek closer ties among these three performance dimensions and to outline the way these dimensions affect each other. Because this concept was first developed in corporate practice and then became the subject of research (Eccles et al., 2015), it received widespread recognition and was assigned relevance when the International Integrated Reporting Council (IIRC) formed in 2011 and the first International Integrated Reporting Framework was published. The most recent revision of this framework was published in January 2021. Integrated reporting based on this framework serves the ultimate aim of providing investors as the main target audience with information about how a company creates, preserves or erodes value over the short, medium or long term. A primarily financial perspective is taken; however, this perspective extends beyond the short-term focus of financial statements. Only information that contributes to this aim is considered material and is included in an integrated report. One of the guiding principles that distinguishes such a report from other reporting formats is the principle of connectivity: "An integrated report should show a holistic picture of the combination, interrelatedness and dependencies between the factors that affect the organization's ability to create value over time" (IIRC, 2021, p. 55). Taking this perspective should support "integrated thinking" at the management level, helping managers to make better-informed decisions.

The standards set by the Sustainability Accounting Standards Board (SASB) as well as the recent proposals made by the IFRS Foundation on the field of sustainability reporting are situated between the sustainability reporting standards of the GRI, which are considered as the "de facto standard" on a global level (KPMG, 2013), and the IIRC's framework. The SASB's standards still cover the whole range of sustainability matters, but establish the

sustainability

investors' perspective and, thus, financial materiality as a key criterion for meeting reporting obligations. Still, the formal requirements that they need to fulfil do not go as far as the concept of integrated reporting, especially in terms of how the principle of connectivity is applied. Nevertheless, because of specific focus placed on financial materiality, these standards are considered with scepticism by proponents of GRI-oriented sustainability reporting (Adams, 2021).

Climate reporting is the youngest reporting concept. Pioneered by non-government organizations (NGOs) such as the Carbon Disclosure Project (CDP) and the Climate Disclosure Standards Board (CDSB), this concept was recognized as globally relevant when the industryled Task-Force on Climate-related Financial Disclosures (TCFD) was established at the Paris United Nations Framework Convention on Climate Change in December 2015. First published in 2017, the guidelines of this concept have been developed to provide recommendations for accounting when assessing the impact of climate-related matters (and especially climate change) on a company's performance and when positioning this material either in its annual report or in a separate report accompanying the annual report. The concept suggests that materiality and thus reporting content should be assessed in the same way as it is assessed for financial reporting. The information provided is meant to provide investors with information about the value-relevance of climate-related matters, encouraging them to include this information in their investment decisions (TCFD, 2017). So in addition to its main subject (i.e. climate-related matters), this reporting concept shares more similarities with financial reporting and integrated reporting than with either (GRI-based) sustainability or non-financial reporting (Eccles and Krzus, 2019). This concept is rooted in the UN's political priorities and thereby in their legislative relevance on a member state-level. For this reason, many governments have started to adopt the TCFD guidelines and establish them as a mandatory element of corporate (sustainability) reporting regulations. Most recently, an initiative headed by the CDP, CDSB, GRI, IIRC and SASB defined these guidelines as a basis to be used for the development of a new prototype standard for climate-related financial disclosures (CDP et al., 2020b). As such, these will obviously play an important role in the IFRS Foundation's project to develop a new set of sustainability reporting standards (IFRS Foundation, 2021).

The fact that the reporting concepts applied to address sustainability matters are not only heterogeneous but also required those applying the concepts to take different views and assign different priorities has evoked considerable criticism in the past. As a consequence, the CDP, CDSB, GRI, IIRC and SASB initiative published a paper that described how to align their reporting frameworks. Clearly describing how they fit together and represent elements of a comprehensive corporate reporting framework, they built their ideas around a perspective of "dynamic materiality": Different target groups are associated with different information needs and, the more comprehensive they become, the wider the scope of the applicable principle of materiality (CDP et al., 2020a). Again, these efforts underline the important role that the concept of materiality plays in this field of reporting; it will allow for a diversity of interpretations in the future whilst also serving as the basis for alignment. The results of our literature review show, however, that a more detailed concept must be applied to interpret the principle of materiality, if one wishes to counteract the tendency to undermine the principle. Otherwise, a "strategic interpretation" of the principle will presumably remain observable.

Analysis on the development of the principle of materiality in European nonfinancial reporting

Sustainability matters and the implementation of single materiality in the European accounting directives

The term "non-financial information" has been introduced to the EU accounting framework with the Modernization Directive (2003/51/EC). The main aim was to introduce new

possibilities for member states to align their national accounting requirements with those of the IFRS (recently established as part of the EU's accounting framework by Regulation (EC) No 1606/2002), but also, for example, to extend the reporting requirements for the management commentary and auditor's report. The obligation to report on non-financial information was thus included in the management commentary. Article 46 par. 1 of the Accounting Directive (78/660/EEC) was amended as follows:

- (b) To the extent necessary for an understanding of the company's development, performance or position, the analysis shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters;
- (c) In providing its analysis, the annual report shall, where appropriate, include references to and additional explanations of amounts reported in the annual accounts.

With regard to this reporting requirement on non-financial information, a link is made to the Commission Recommendation 2001/453/EC of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies (Directive 2003/51/EC, rec. 9). This recommendation is rooted in the EU Commission's action plan "Towards sustainability" created in 1992. It was made to incorporate environmental disclosures in financial reports and, thus, to better align them with separate environmental reports. This enabled the impacts of environmental matters on the company's performance and position to be more clearly shown: "Disclosures are appropriate where they affect the user's understanding of the financial statements" (Commission Recommendation 2001/453/EC, rec. 12).

This reasoning also forms the background for the reporting requirements described in the Modernization Directive. The text itself of the Directive suggests that a very broad definition of the scope of information covered by the new requirements should be taken. This definition is similar to the one initially provided in the Jenkins Report. However, the considerations contained in the Modernization Directive's recitals narrows the focus of analysis substantially: "It is expected that, where appropriate, this should lead to an analysis of environmental and social aspects necessary for an understanding of the company's development, performance or position" (rec. 9). This shows that the reporting requirements introduced by the Modernization Directive have to be understood in the context of sustainability accounting practices, whereby the focus is typically directed toward environmental and social matters. It also links the idea of business reporting, however, by defining the financial statements of the reporting entity as the main point of reference. This connection should be seen as first step taken—and possibly also the first compromise made—by the EU Commission in order to establish more comprehensive requirements for sustainability reporting within the EU.

Failed ambitions to establish more extensive sustainability reporting requirements

Sustainability reporting, as a distinct type of reporting which has to be fulfilled by EU companies, was another focus of proposals initiated by the EU Commission's action plan "Towards sustainability" begun in 1992. A decade later, in 2001, the Commission's Communication "A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development" further expanded this focus. As one means to achieve its goals, the Commission considered ways to "improve communication and mobilise citizens and business". As a result, it invited "[a]ll publicly-quoted companies with at least 500 staff [...] to publish a 'triple bottom line' in their annual reports to shareholders that measures their performance against economic, environmental and social criteria" (EU Commission, 2001a, p. 8).

In its Green Paper issued in 2001, entitled "Promoting a European framework for Corporate Social Responsibility", the EU Commission developed this aim (EU Commission, 2001b). Whilst the perceived lack of a consensus on the form and content of sustainability reports for companies was considered to be the biggest obstacle to more concrete actions, this document makes a clear reference to existing frameworks, and the GRI's sustainability reporting guidelines are referred to as "best practice".

Subsequently, the EU Commission invited the newly formed EU Multi-Stakeholder Forum on CSR "to develop commonly agreed guidelines and criteria for measurement, reporting and assurance by mid-2004" (EU Commission, 2002). However, the final report issued by this Forum suggests that no consensus amongst participants could be achieved—whilst some parties argued for strict requirements, others favoured taking a merely voluntary approach with no detailed reporting obligations (CSR EMS, 2004). On the basis of this report, the EU Commission did not include more detailed information about any proposed reporting requirements with respect to sustainability information in its 2006 Renewed Sustainable Development Strategy. On the contrary, it was stressed that companies would have to undertake voluntary actions and that corporate social responsibility should not be established on the basis of binding regulations (Council of the European Union, 2006).

Moving from non-financial performance indicators to non-financial reporting

The so-called financial crisis of 2008 marked a turning point in the EU Commission's approach towards corporate social responsibility as a whole and specifically toward the related reporting practices (Monciardini, 2016). With its post-crisis considerations as part of the Single Market Act 2011 ("Twelve levers to boost growth and strengthen confidence: Working together to create new growth"), it defined a goal to create new and sustainable growth within the Union. One factor that promoted that growth was the extension of reporting obligations regarding sustainability matters. The EU Commission subsequently conducted a consultation to identify ways to extend the relevant reporting obligations defined in the Modernization Directive from 2003 (EU Commission, 2010). Further steps were taken in the EU Commission's renewed strategy 2011–14 for CSR. Sustainability reporting requirements are extensively discussed under the headline "Enhancing market reward for CSR", and the idea is presented that incentives for companies to behave more sustainably should be created by offering (capital) market rewards. This strategy stressed the disclosure of sustainability risks for a broad range of stakeholders as a necessary prerequisite (EU Commission, 2011).

At the time, the question of how these reporting requirements should be designed had already received some attention. Social and environmental information was deemed a good starting point. This choice seemed to be in line with the existing reporting requirements described in the Modernization Directive, which were found to be insufficiently translated to the practice arena (CSES, 2011), but the reasons for this choice still remain vague. In any case, with respect to the link between financial and non-financial information, the EU Commission's relevant considerations go one step further (EU Commission, 2011, p. 12):

There are a number of international frameworks for the disclosure of social and environmental information, including the Global Reporting Initiative. Integrated financial and non-financial reporting represents an important goal for the medium and long term, and the Commission follows with interest the work of the International Integrated Reporting Committee.

Most notable in this passage is the use of the term "non-financial reporting". This term is obviously used as a synonym for social and environmental or sustainability reporting. This is a change as compared to the more distinct use of the term in the past. Furthermore, the term "integrated" is introduced into the discussion for the first time.

The EU Commission went on to draft legislative proposals concerning a new reporting directive to harmonize such reporting requirements. With regard to this undertaking, the EU Commission still supported the view of taking a broader approach based on the concept of sustainability reporting in its first resolution on 6 February 2013 on "Corporate Social Responsibility: accountable, transparent and responsible business behaviour and sustainable growth" (2012/2098(INI). However, in a second resolution made on 6 February 2013 on "Corporate Social Responsibility: promoting society's interests and a route to sustainable and inclusive recovery" (2012/2097(INI)), the EU Parliament took a notably different standpoint concerning the content of reporting requirements and stressed the necessary ties to financial information.

From these starting points, the NFI Directive (2014/95/EU) was developed. In the form proposed in 2013, the text was vague and did not include concrete guidelines for identifying the reporting content; in the accompanying impact assessment, however, the EU Commission clearly stated that it was supporting an approach that was similar to the definition of sustainability reporting used by the GRI (EU Commission, 2013, p. 87).

However, the proposal for the NFI Directive was heavily criticized, and several aspects had to be changed in order to find a political consensus (Kinderman, 2020). These changes not only refer to aspects such as the reduced scope of application or the introduced safeguard clause, but also to the more concrete—and narrower—formulation of the materiality principle in sustainability reporting. The text of the NFI Directive included the following passage:

Large undertakings [...] shall include in the management report a non-financial statement containing information to the extent necessary for an understanding of the undertaking's development, performance, position and impact of its activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters [...].

This passage obviously reflects the wording of the reporting requirements concerning the non-financial performance indicators described in the Modernization Directive, which were superseded by these new reporting requirements. It also supports the notion that the focus of the Modernization Directive's requirements concerning the relevant reporting content were upheld, representing a compromise made to appease European businesses and their representatives who opposed the overly extensive sustainability reporting obligation (Kinderman, 2020; La Torre *et al.*, 2018). Consequently, sustainability matters must also be treated as material from a financial perspective in order to be subject to the reporting obligation described in the NFI Directive (Baumüller and Schaffhauser-Linzatti, 2018). The German translation of the NFI Directive into national law even clearly stated this precondition (Deutscher Bundestag, 2017, pp. 48–49).

Thereby, it also maintained the conceptual distinction between non-financial and sustainability reporting in the European context. The underlying reasons given in the NFI Directive imply that a very broad understanding of the relevant reporting requirements was initially taken, whereby the phrases "impact of businesses on society" stand out. But this is complemented by a second, obviously at least equivalent, aim that is put forward, i.e. to provide insights into a company's performance (typically this term refers to its financial situation in an accounting context). In an accompanying Memo to the publication of its NFI Directive, the EU Commission discusses this last consideration still further. The link to integrated reporting is also addressed explicitly, highlighting the difference between this reporting concept and the one put forth in the NFI Directive (EU Commission, 2014, rec. 8):

The Directive focuses on environmental and social disclosures. Integrated reporting is a step ahead, and is about the integration by companies of financial, environmental, social and other information in a comprehensive and coherent manner. To be clear, this Directive does not require companies to comply with integrated reporting.

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European

sustainability reporting

Figure 1 summarizes the cornerstones and drivers of the regulatory development acting within the EU that led to the development of the NFI Directive.

Pushing towards double materiality

A major shift within the EU Commission's policy approach materialized in 2015. This was highlighted by two cornerstones for the future political priorities in the European Union: First, the adoption of the 17 SDGs in September. Second, the signing of the Paris Agreement at the United Nations Framework Convention on Climate Change in December. Whereas the prior efforts to support the establishment of a more sustainable economy were motivated by the aftermath of the financial crisis from 2008, the EU Commission's ambitions were based on the need to meet a set of broader environmental and social targets.

In terms of the interpretation of the NFI Directive, this was not reflected immediately. In 2017, the EU Commission published its "guidelines on non-financial reporting (methodology for reporting non-financial information)" (2017/C 215/01). Despite their unclear legal status, these guidelines contain two highly relevant statements concerning the EU Commission's understanding of the newly introduced reporting regime. First, it added the IIRC Framework on integrated reporting to a list of reporting frameworks that the EU Commission deemed useful for developing non-financial reporting practices in accordance with NFI Directive. Then, it embedded the idea of integrated reporting even more deeply (EU Commission, 2017, p. 5):

The guidelines recognise the importance of linkages and interrelations of information (connectivity), whether it is between different aspects of non-financial information or between financial and non-financial information.

In this statement, the EU Commission provides further support for reasons that it had already given in the final stages of the development of the NFI Directive. However, no statements are made on the interpretation of the principle of materiality or further specifications of the reporting content of non-financial reporting in accordance with the NFI Directive. But in practice, these became one of the most problematic aspects of applying these reporting requirements (Frank Bold, 2017).

In the meantime, the EU Commission commissioned a High-Level Expert Group on Sustainable Finance (HLEG) to make suggestions that would promote sustainability in the European regulatory framework. This initiative was created in an immediate reaction to the Paris Agreement and the adoption of the SDGs. In conclusion, the final report published in



Figure 1.
The genesis of nonfinancial reporting
within the EU

January 2018 paid considerable attention to the contributions of corporate reporting to a more sustainable European economy. Specifically, both the adoption of the TCFD guidelines as well as the alignment of the NFI Directive with these guidelines was recommended (HLEG, 2018). The EU Commission's immediate reaction was to publish its own "Action Plan on Financing Sustainable Growth" in March 2018, which included several relevant actions, such as founding the European Corporate Reporting Lab @ EFRAG (European Lab), launching a fitness check of EU legislation on public corporate reporting, including the NFI Directive, and issuing a supplement to its non-binding guidelines on non-financial reporting from 2017 (EU Commission, 2018a). Over the next few years, each of these three initiatives subsequently played an essential part in the development of the understanding of non-financial reporting and its materiality principle within the EU.

The EU Commission's "Fitness Check on the EU Framework for Public Reporting by Companies" raised again the issue of the scope of financial and non-financial information and the extent to which these types of information should be aligned. The results of this consultation showed that the regulatory framework for non-financial accounting within the EU was considered to be the part of the overall regulatory framework that required modification most urgently. The requirements for defining the reporting content, i.e. the application of the materiality principle, were especially considered by many respondents to be vague and unsatisfactory. The existence of a link between financial and non-financial performance was also questioned by many (EU Commission, 2018b).

The first response issued by the EU Commission was the publication of its new "guidelines on non-financial reporting: Supplement on reporting climate-related information" (2019/C 209/01) in June 2019. It incorporated the TCFD guidelines, introducing them in relation to the concept of non-financial reporting used in the NFI Directive. Even more importantly, much attention was paid to the fact that it also included a "clarification" of the proper interpretation of the principle of materiality for non-financial reporting, using the term "double materiality" to illustrate its understanding of the reporting requirements (EU Commission, 2019, p. 4):

"In effect, the Non-Financial Reporting Directive has a double materiality perspective:

- (1) The reference to the company's "development, performance [and] position" indicates financial materiality, in the broad sense of affecting the value of the company. Climate-related information should be reported if it is necessary for an understanding of the development, performance and position of the company. This perspective is typically of most interest to investors.
- (2) The reference to "impact of [the company's] activities" indicates environmental and social materiality. Climate-related information should be reported if it is necessary for an understanding of the external impacts of the company. This perspective is typically of most interest to citizens, consumers, employees, business partners, communities and civil society organizations. However, an increasing number of investors also need to know about the climate impacts of investee companies in order to better understand and measure the climate impacts of their investment portfolios."

This is opposed to the understanding of a so-called "single materiality" which would require information to be material from both perspectives—and not from either the one or the other—in order to fall under the reporting obligation defined in the NFI Directive. However, the obvious problems with the NFI Directive's wording, as well as historically documented different interpretations, i.e. single materiality, were not addressed in these new guidelines. This meant that this (nonbinding) supplemental definition was subject to heavy criticism, e.g. for lacking normative authority and not being a necessary consequence of the NFI Directive's (binding) legal text (Korca and Costa, 2020; Sopp and Baumüller, 2019). However, the definition was accepted by the European Securities and Markets Authority (ESMA), who included it in its Common Enforcement Priorities starting from the year 2020 (ESMA, 2019). Furthermore, the EU Commission built on this clarified definition in its consultation on the review of the NFI

Directive, which began in early 2020. In the wake of its Green New Deal, the EU Commission tried to increase the extent to which companies reported on climate and other environmental matters (EU Commission, 2020a).

In the proposals issued in the consultation that followed in February 2020, several suggestions were made regarding how this could be achieved. Most notably, the Commission also included the definition of the double materiality perspective as articulated in its 2019 guidelines (EU Commission, 2020b). However, this definition was not subject to the consultation but was instead presented as the basis for questions addressing the specific reporting content. The results of the consultation also led the EU Commission to stress that broad support for the concept of double materiality existed but (1) further clarification is needed in the NFI Directive itself and (2) more guidelines for applying this principle in practice would be useful. Furthermore, the consultation findings published by the EU Commission highlighted the need to ensure the connectivity between financial and non-financial information in order to make reporting more consistent and useful. However, the consultation's findings also show that especially companies that fell within the scope of the current non-financial reporting requirements signalled that they would prefer to maintain the status quo and to avoid having to fulfil more extensive obligations (EU Commission, 2020c).

The European sustainability reporting directive and European Sustainability Reporting Standards

Whilst the EU Commission started to revise the NFI Directive immediately after the end of the consultation, it mandated the EFRAG's European Lab to begin preparatory work to expand the EU Non-Financial Reporting Standards. In its technical mandate, the EU Commission established two necessary prerequisites for these standards: First, they needed to be based upon the principle of double materiality but consider more homogeneity in its application. Second, the connectivity between the financial and non-financial information needed to be promoted (EU Commission, 2020d). To conduct this work, a Project Task Force on Non-Financial Reporting Standards was established. At first, the European Lab's PTF-NFRS did suggest changing the name of the relevant reporting requirements from "non-financial reporting" to "sustainability reporting" to create more positive terminology and to underline the fact that financial and sustainability information are closely linked and thus more complementary than (as a negative terminology might imply) the opposing elements of corporate reporting. This aspect is also stressed in the new definition of the materiality principle that serves as the foundation for future European Sustainability Reporting Standards (European Lab, 2021, p. 17):

"The purpose of publicly available sustainability reporting is to provide relevant, faithful, comparable and reliable information:

- on (1) material sustainability impacts of the reporting entity on affected stakeholders (including the
 environment) and (2) material sustainability risks and opportunities for its own value creation;
- (2) enabling users of information (1) to understand the reporting entity's sustainability objectives, position and performance and (2) to inform their decisions relating to their engagement with the entity."

The notion of value creation as a main point of reference is a new element introduced into European accounting law—and this has obviously been taken from integrated reporting. The conclusion of the European Lab's definition of sustainability reporting especially shows more ties to the idea of integrated thinking. Furthermore, the European Lab's PTF-NFRS defined the connectivity of financial and sustainability information as one of the six underlying concepts of the future European Sustainability Reporting Standards (European Lab, 2021, rec. 212). In that context, integrated reporting is mentioned as a necessary prerequisite to ensuring

consistent corporate reporting (European Lab, 2021, rec. 304). Furthermore, the whole structure of the proposed new system of reporting standards is based on the TCFD guidelineseven in terms of content—integrating many elements of this concept. Finally, the introduced distinction between sector-specific, sector-agnostic and company-specific disclosures—an idea that has obviously been taken over from established frameworks such as the GRI's sustainability reporting standards (GRI, 2019)—has been made to restrict the current autonomy companies have with regard to determining the content of their sustainability reports. This restricts the importance of the principle of materiality in that context.

On April 21, 2021, the EU Commission finally published its proposal for a new the Corporate Sustainability Reporting Directive (CSR Directive) (2021/0104 (COD)) which shall supersede the NFI Directive. Not only did it remove the term "non-financial reporting" from its content, consistently replacing it with the term "sustainability reporting", but it also followed the European Lab's recommendations to reformulate the principle of materiality (EU Commission, 2021, Art. 1 para. 3):

Large undertakings [...] shall include in the management report information necessary to understand the undertaking's impacts on sustainability matters, and information necessary to understand how sustainability matters affect the undertaking's development, performance and position.

The EU Commission's proposal again introduces the idea of "double materiality" for the purposes of fulfilling its reporting requirements; in that respect, the new wording of the materiality principle is (still) considered as just a clarification (EU Commission, 2021, p. 13). As a new requirement, the process of materiality analysis also has to be reported. What is more, the proposal again stresses the need for connectivity in corporate reporting (EU Commission, 2021, rec. 54) and the need to take an integrated view of a company's performance and position (EU Commission, 2021, rec. 45). Ultimately, the responsibility for further developing the concept of double materiality and providing guidelines for its practical application is transferred to the EFRAG, as an organization that will set standards in the field of European Sustainability Reporting Standards in the future. The new reporting requirements are supplemented by many more requirements that address the governance mechanisms with regard to sustainability, e.g. the responsibilities of the supervisory board.

Table 1 summarizes these and other important changes introduced by the proposed CSR Directive and contrasts them with items in the NFI Directive below.

Figure 2 summarizes the cornerstones and drivers of the regulatory shift from single to (explicit) double materiality within the EU.

Double materiality and the practice of European sustainability reporting: discussion

The recent legislative proposal made by the EU Commission not only contributes to a fundamental change that is taking place in non-financial reporting towards sustainability reporting within the EU, but it also implies that a shift is taking place in expectations towards corporate responsibility and reporting. This presents European companies with several challenges and forces them to face a new and considerably more demanding reporting environment.

First, the consequences that European companies face can be assessed based on the results of the 2020 consultation on the review of the NFI Directive (EU Commission, 2020; Baumüller *et al.*, 2020b). We assume that the concept of double materiality leads to a larger quantity of information needing to be reported upon. In terms of the effect of reporting, this increase in volume implies, on the one hand, that reporting may become more complete. On the other hand, the risk of an increased "information overload" (Calabrese *et al.*, 2017) also has to be considered, especially if certain information is too specific and only of relevance to a limited number of stakeholders. This makes it necessary to intensify the dialogue with these

	NFI directive	CSR directive	European sustainability
Objective	Information to the extent necessary for an understanding of the undertaking's development, performance, position and impact of its activity	Information necessary to understand the undertaking's impacts on sustainability matters, and information necessary to understand how sustainability matters affect the	reporting
Minimum content	Five sustainability matters covered ("environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters")	undertaking's development, performance and position Three sustainability matters covered ("environmental, social and governance factors") Sector-specific, sector-agnostic information defined by EFRAG	21
Perspective taken Relevant time horizons for materiality considerations	(Ultimately) outside-in Not specified	Outside-in and inside-out Short-, medium- and long-term	
(Main) Target group of information	Providers of financial resources	Stakeholders (in a broad sense)	
Options to omit	Safeguard clauseComply or explain principle	Safeguard clause	
Links to financial reporting	 Comply or explain principle Optional reporting as part of the management commentary Mandatory references to, and additional explanations of, other information included in the annual report 	Mandatory reporting as part of the management commentary Mandatory references to, and additional explanations of, other information included in the management commentary and the annual report	Table 1.
External assurance	Non-mandatory	Mandatory (highlighting the process of materiality analysis)	From the NFI directive to the proposed CSR directive





Figure 2.
From non-financial reporting to European Sustainability Reporting Standards

stakeholders and to consider the need to prioritize them (Almeida Machado et al., 2020; Torelli et al., 2020).

By applying the more standardized approach towards future sustainability reporting in the EU via the introduction of sector-agnostic and sector-specific disclosures, and especially metrics, some of the problems can be remedied. At the same time, this application can also contribute to more extensive reporting. In contrast, it might encourage companies and investors to pay less attention to sustainability information that is material from a company-specific perspective. This could lead to the adverse effect that information which might be of special relevance to stakeholders ultimately may not receive adequate attention under the upcoming reporting regime (Adams and Abhayawansa, 2021).

Even more risks are associated with the incompatibility of certain parts of the new reporting requirements with the overall accounting framework in the EU, especially with regard to the necessary intersections with financial reporting in the management commentary. Double materiality also implies that information has to be given in sustainability reporting that is only material from a financial perspective. However, this aspect of sustainability-related information is also typically a mandatory aspect of risk reporting in the management commentary. Ensuring consistency whilst avoiding redundancies as far as possible is a challenge that will become more relevant in the future.

One further issue that was specifically stressed is the difficulty of determining materiality levels for ecological and social information *per se*, i.e. not taking financial impacts into consideration. Whilst the methodology developed for financial accounting does not seem applicable, practitioners take a multitude of different measurement approaches, must fulfil different requirements and gain different results; researchers have shown that at least 200 of these approaches have already been developed (Tharani, 2019). This means that companies need help to identify valid approaches for their situation and translate them into practice—at the same time, they face considerable risks of being criticized for underreporting on certain sustainability matters (Vouros *et al.*, 2020). Business-led initiatives such as the Value Balancing Alliance are one response that has already materialized to support the development of new and standardized approaches to measuring ecological and social materiality (Value Balancing Alliance, 2020).

At the same time, some practitioners still question the distinction between financial materiality and sustainability materiality. Proponents of the concept of double materiality argue that, in the long run, most sustainability matters will also have financial implications, e.g. due to reputational risks. However, the debate of single materiality vs double materiality could then be boiled down to the much-easier-to-regulate (and handle) question of which relevant time horizon should be considered for making (financial) materiality assessments (Haaker and Freiberg, 2021). Clear reasoning in this respect is still lacking; new but not much elaborated concepts such as the "monetary line" introduced by the European Lab (2021), which are in favour of double materiality, contribute to this problem.

In any case, extended reporting on sustainability matters implies higher costs for the reporting companies: Costs are incurred whilst gathering information, entering it into the reporting and management systems, and finally conveying it to the target audiences of their sustainability reporting. The benefits of these costs and efforts are very uncertain, at least from a company's perspective. In turn, this uncertainty that still exists about how this (additional) sustainability information is processed on capital markets and how it is subsequently used by different stakeholder groups (Abhayawansa and Tyagi, 2021) raises the following question: To what extent do costs and benefits match each other? If we consider that the still-prevalent idea of Sustainable Finance implies the existence of a strong tie to financial incentives (e.g. Migliorelli, 2021), a less extensive reporting requirement that encourages the communication of the financial relevance of sustainability information would seem to be a more consistent and—from a cost—benefit perspective—safer choice.

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Conclusion

Reporting requirements on sustainability matters within the EU have experienced a considerable shift over the past two decades; from supplements to enhance the decision usefulness of financial reports-previously little more than a footnote-to a means to preventing financial crises and short-termism on capital markets. The EU Commission has suggested that fulfilling these requirements should ultimately be regarded as a political priority, a tribute to its efforts at "saving the world" (Barker, 2013). Not only does this development show that more attention is being paid to this increasingly important aspect of corporate reporting, but it also indicates that the way companies and their social responsibilities are viewed is changing. The transformation of the European and global capital markets depends especially strongly on the provision of data on the impacts of business activities and how these data are consequently incorporated in investment decisions (EU Commission, 2018a). However, the experience gained over the last 20 years, which is illustrated by the process of the materialization of the concept of non-financial reporting and its final demise, ultimately led to a more extensive approach towards sustainability reporting which has been taken now. This illustration clearly depicts the different perceptions and open questions that have accompanied this transformation, all of which still do not seem to be fully resolved.

The findings reported in this paper show that documented changes in how these reporting requirements are understood could be directly linked with how the principle of materiality is applied in its accounting framework for non-financial or sustainability reporting. A trend from single to double materiality was observed, the scope of information that has to be reported widened whilst the application of this information was limited through the introduction of sector-specific reporting requirements for the sake of comparability. And whilst redefining the principle of materiality removed the perspective of financial materiality as a final filter to assess the reporting obligation for sustainability matters, this redefinition also led to an increasingly explicit preference for integrated reporting, as this could ensure the connectivity of a company's economic, ecological and social performance. These results show, after all, that business reporting—even on sustainability matters—is embedded in a capitalistic agenda (Eccles and Spiesshofer, 2015).

For companies that will fall under the proposed regulation, this change implies that they will need to operate in an increasingly challenging environment. In addition to dealing with the political pressure arising from ambitions to enable a shift to a more sustainable European economy, companies must respond to the increased demand for sustainability information from their stakeholders. This will force them to develop new processes and reporting systems—as well as to change the way they manage their businesses. Therefore, whilst regulators and stakeholders have thus far stressed the alleged benefits of moving towards a more extensive scope of reporting, it will become necessary to pay more attention to the costs involved and the extent to which they can actually be outweighed by the benefits of the upcoming transformations.

Note

1. The vagueness of the terms and concepts employed presents a major obstacle, both for researchers and practitioners, preventing a clear understanding of the different reporting requirements, their similarities and differences. Not only are the terms "nonfinancial" and "sustainability" reporting often used interchangeably, but also terms like "CSR reporting" or "ESG reporting", often ignoring the different origins and implications of "CSR" or "ESG" (e.g. Eccles et al., 2020).

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