UNIVERSITY OF LJUBLJANA SCHOOL OF ECONOMICS AND BUSINESS

MASTER'S THESIS

THE IMPACT OF COMPLIANCE WITH THE GRI STANDARD FOR NON-FINANCIAL REPORTING ON THE FINANCIAL PERFORMANCE OF EU COMPANIES

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LIST OF ABBREVIATIONS

 $\label{eq:eff} \textbf{EFRAG} - \textbf{European Financial Reporting Advisory Group}$

- **EIB** European Investment Bank
- ESG Environmental, Social, and Governance
- ESRS European Sustainability Reporting Standards
- EU European Union
- **GRI** Global Reporting Initiative
- GSSB Global Sustainability Standards Board
- IFRS International Financial Reporting Standards
- **IIRC** The International Integrated Reporting Council
- NFI Non-Financial Information
- NFR Non-Financial Reporting
- SASB Sustainability Accounting Standards Board
- SDG Sustainable Development Goals
- TFCD Task Force on Climate-Related Financial Disclosure
- UN United Nations

1 INTRODUCTION

Responsible business is increasingly being scrutinized as companies encounter a wave of contemporary practices that focus on accounting for modern issues, such as the need to consider the environment, social issues, and firm behaviour. To this end, the concept of sustainability is becoming increasingly more relevant. The need to transition to a sustainable economy and the economic consequences of environmental challenges for various industries and businesses are key components of the nascent and quickly expanding interdisciplinary area of sustainability. It is becoming increasingly more evident that sustainable practices have sparked a transformation in the way companies do business (Pham et al., 2021). Nonfinancial reporting (often referred to as sustainability reporting) has become a common practice over the past ten years as more and more businesses have shifted toward tracking the effects of their operations on the social, business, and environmental surroundings (Yang et al., 2019). In order to create an effective medium for communicating their corporate social responsibility (CSR) to stakeholders, several businesses throughout the world have gradually embraced social and sustainability reporting (Hsu et al., 2013). In fact, non-financial reporting (NFR) has emerged as one of the most effective means of informing stakeholders about CSR initiatives (Morsing & Schultz, 2006), making CSR a key component of NFR.

More recently, NFR has become mandatory for large companies in the European Union (EU) with the implementation of the EU's Directive 95/2014 in 2017. Before this directive, such reports have only been encouraged to produce. This promising trend is driven by increased stakeholder scrutiny of businesses' social and environmental practices and rising governmental pressure to publish non-financial reports (Michelon et al., 2015). Over the past ten years, research on NFR practices has expanded significantly and has been intertwined with a number of other academic disciplines, including corporate ethics, financial accounting, and strategic management (Turzo et al., 2022). NFR is defined as "a broad term that applies to all information reported to shareholders and other stakeholders that is not defined by an accounting standard or a calculation of a measure based on an accounting standard" (Eccles & Krzus, 2015, p. 82). The recent regulatory developments, however, have complicated NFR practices. NFR principles and reporting criteria have not been consolidated and standardized by practitioners and businesses (Eccles & Krzus, 2015). There are various standards that offer rules for reporting outputs, processes, and impacts. Due to the presence and use of these many different standards, sustainability reports cannot be compared with one another. Osmanagić Bedenik and Barišić (2019) further elucidate two limitations to NFR. The first is in the gap between the increasing quantity of scientific studies on NFR and their comparability, as the researchers look at various companies, sectors, nations, etc., employing various methods to do so. The second drawback is the NFR's great degree of generality with the authors stating that it would be useful to study particular sectors and their NFR practices. NFR, therefore, needs to adhere to a certain set of rules and guidelines for better comprehension and comparativeness, since the initial ones have been too lax. One set of such guidelines are the Global Reporting Initiative (GRI) Standards.

Introduced in 2016, the GRI Standards are the first developed global standards for sustainability reporting. With the help of the GRI Standards, organizations and stakeholders may convey and interpret the economic, environmental, and social ramifications of organizations. The Standards are intended to increase the comparability and quality of data on these issues on a global scale, enabling businesses to be more transparent and accountable (Global Reporting, 2016).

Due to the uprise in NFR literature in the past ten years and the EU mandating such reports for large companies, authors such as Maas and Sampers (2020) posit that there is a clear need for further analyses studying the impact of NFR on company performance, while Raucci et al. (2020) stress the need for more empirical analyses and in-depth research efforts into each sector separately, providing additional modelling techniques with key explanatory variables for supporting and justifying GRI reporting. Current literature provides mixed conclusions as to whether NFR, or more specifically, sustainability reporting, has a positive effect on a company's financial performance. The GRI Standards are believed to provide a more robust framework for reporting on companies' ESG practices, making it more comprehensive, specific, and comparable when reporting on company activities. The question is, therefore, whether adhering to the GRI Standards when issuing sustainability reports leads to better financial performance. With the growing trend of financial reports becoming not only voluntary, but also mandatory practice for firms of all sizes, the problem of standardization of reports becomes increasingly more glaring. Several standards are being used in practice, which leads to problems with comparability and cohesiveness of information. Therefore, the purpose of this master's thesis is to help elucidate the benefits and drawbacks of following the GRI Standards for disclosing non-financial reports by comparing a set of companies which use these standards and a matching set that does not. To expand the growing field of research into this new kind of standardised, transparent business reporting, the following objectives are set:

- to provide a literature review of theories which provide the basis for the rise of nonfinancial reporting,
- to analyse the workings of the GRI Standards, how they are implemented, and why companies tend to adhere to their guidelines,
- to investigate the effectiveness of non-financial reporting standards and guidelines.

2 THEORETICAL FRAMEWORK

To better understand the current trend of increased non-financial reporting we must first illustrate what led to this new reporting practice and the reasons behind it. The following chapter poses a crucial question in this regard and recognizes three different theories that drive the procurement of non-financial reports.

2.1 Why do companies report?

This simple, but very important question is posed mainly in relation to companies' voluntary disclosure of NFR. While the topic of this master's thesis is focused on companies that must comply with regulatory advances made by the EU – ensuring such disclosure is mandatory - it is important to note that before this directive, companies were only encouraged to do so. So why did companies, even before this practice became compulsory, spend time and resources to ensure such information was reported, even though it was not required by any law or regulation? Friedman's article, famously titled "The social responsibility of business is to increase profits", states that the adoption of CSR actions imposes unfair and profoundly undemocratic taxes on shareholders, that its implementation costs exceed any potential concrete advantages, and that as a result, it leads to the misallocation and misuse of important firm resources (Friedman, 1970). Nevertheless, more and more companies decided to pursue this strategy and contradict Friedman's assumption. According to a KPMG survey from 2017, the majority (78 percent) of the largest firms in the world now include non-financial data in their yearly financial statements, indicating that they think investor interest in corporate responsibility data is high (KPMG, 2017). The current trend therefore suggests the existence of contradicting factors to Friedman's doctrine that shaped the actions of reporting firms.

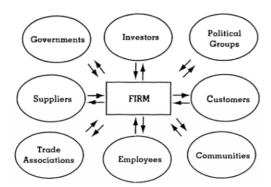
For this purpose, many theories were applied to help understand such firm behaviour. According to literature, seven theories can be used to explain why businesses disclose nonfinancial information (NFI). Maama (2020) states, that these theories include a combination of intergenerational equity theory, legitimacy theory, stakeholder theory, signalling theory, agency theory, institutional theory and positive accounting theory. The author further states that the reporting practices of sectors, whose operations are regarded to have a detrimental influence on society and the environment, are best explained by the legitimacy, institutional, signalling, and intergenerational equity theories. The stakeholder, signalling, institutional, and agency theories, on the other hand, often shape businesses and industries that are thought to have a minor detrimental impact on the environment and society. To better align the theoretical framework with the purpose of this master's thesis, the study from Mancini et al. (2022) of external and internal perspectives, specifically the former, is used. With the external perspective, the effects of reporting procedures are the main point of attention. This perspective therefore demonstrates how these practices affect stakeholders' views and actions. The impact of external determinants on the reporting procedures can also be evaluated from an outside perspective.

Since the focal point of this thesis is financial performance of companies and how that is affected by reporting standards, this approach best suits the thesis' objectives. Stemming from literature on quantitative effects of reporting on impacts made by a company, the following theories are most frequently used to support research hypotheses – agency theory, legitimacy theory, and stakeholder theory (Mancini et al., 2020).

2.2 Stakeholder theory

The work of Freeman (Freeman, 1984), who defined stakeholders as groups or people who could have an impact on or affect the scope of an organization's objectives, served as the foundation for the creation of the stakeholder theory. Stakeholder theory was created to address and to revaluate a number of specific issues, including the issues of value creation, management attitude, and the ethical problems of capitalism (Parmar et al., 2010). The theory suggests that instead of just concentrating on maximizing profit for the owners, the corporation should try to meet the interests and demands of its stakeholders. According to this theory, businesses have responsibilities to both internal and external parties, including owners, employees, clients, suppliers, creditors, and the general public (Freeman, 1994). This definition provided by Freeman is often criticized for being too ambiguous, leading to several different definitions of the term "stakeholders". Currently there are over 66 different applicable definitions, although the ones provided by Freeman in his initial work are most widely used in contemporary studies (Wagner Mainardes et al., 2011). Donaldson and Preston (1995) propose the following 8 main stakeholder groups that are most influenced, or in turn, have the most profound impact on a company:

Figure 1: 8 Main stakeholder groups



Source: Donaldson & Preston (1995).

This broad concept of creating value for stakeholders therefore unites many interests of specific stakeholder groups at once. Since the company is viewed as a component of the environment, this approach serves as the cornerstone of sustainable business. In this sense, a corporation shouldn't be seen as tool belonging solely to the owner, but rather as a cohesive organizational unit with effects on many groups that should work in harmony with one another. Hence, the economic performance, environmental quality, and social justice of the organization should be taken into account while evaluating business performance, since there is no question that businesses operate in an environment with a large number of complex interactions and interrelations (Osmanagić Bedenik & Barišić, 2019).

Literature therefore posits that according to the stakeholder approach, a company's ability to survive depends on its ability to effectively manage its interactions with stakeholders who

are concerned with both financial and non-financial performance of the company they are directly or indirectly involved with (Lokuwaduge & Heenetigala, 2016). Businesses must balance the needs of all of their stakeholders, while making decisions and establishing priorities in order to create value for everyone. Therefore, the ability to produce long-term value and the quality of stakeholder interactions are two sides of the same coin (Tsoulfas & Pappis, 2012). Carroll (1991), further states that there is a natural connection between the idea of social or environmental responsibility and the firm's stakeholders. Moreover, the stakeholders are able to play a vital part in the organization's sustainability efforts, may offer valuable resources and help if managed effectively, and have the power to influence the growth of the organization's sustainability activities (Clemens & Bakstran, 2010). In order to personalize social and environmental responsibilities, the notion of a stakeholder identifies the specific groups or individuals that businesses must take into account in their corporate NFI disclosure attitude (Carroll, 1991).

The creation of Freeman's theory of stakeholders has had an immense impact on the emergence of social and ethical accounting, auditing and reporting studies, and triple bottom-line accounting. With the recent evolution of accountability and reporting processes, we have seen a shift from financial to NFR, as well as from a mono-stakeholder (shareholders) approach to a multi-stakeholder style of strategic management, of which reporting is a crucial component (Parmar et al., 2010). This shift towards effective NFI disclosure has been influenced by very significant international standards, regulations, and guidelines, which emphasize the significance of thorough consideration and genuine stakeholder participation (Thijssens et al., 2015).

However, although this shift has gained traction among stakeholders, due to the number of such participants in a company's business environment, NFI disclosure must be centred around the requirements of all stakeholders on whom the reporting organization has an impact on, in order to be perceived as beneficial (Shauki, 2011). This illustrates the importance of stakeholders' requirements and preferences with regard to NFI disclosure, but also that, according to theory, different stakeholder groups have different views on how a company should be managed. To approach these heterogenous and often conflicting views, companies adopt the practice of managing NFI disclosure strategically. According to Deegan (2019), stakeholders should be managed in a way that serves the company's interests, and the more important a stakeholder is to the company, the more work will be put into managing the relationship. This may therefore lead to organizations altering their NFI disclosure practices in accordance with how powerful they perceive stakeholders to be. Deegan (2019) further notes that a company's environmental and social reporting obligations can be evaluated by looking at the decisions it has taken at the organizational or business level to satisfy key stakeholders. From this viewpoint, the author argues that there is no mandate about who must have access to information or what information should be shared. Corporate information disclosures or reporting, is often seen as a way for businesses to satisfy the demands of stakeholders who are important to the organization's survival and existence.

It is important to note that stakeholders' expectations for corporate behaviour are consistent with the surrounding culture. Various cultures have various values, social customs, and religious beliefs, which result in various NFR practices. Stakeholders must comprehend how decisions about whether to continue supporting companies or penalizing them for lacklustre performance are influenced by non-financial company activities (Turzo et al., 2022). As stakeholders rely on trustworthy and relevant NFI to assist them in making decisions, Ioana and Adriana (2014) argue that it is crucial for businesses and organizations to provide this information to aid in the decision-making process. After all, if the needs or desires of the readers are not taken into account, producing NFI is likely not to have the desired effects for the organization (Bradford et al., 2016). It is also worth noting that using a stakeholder approach to the disclosure of NFI is not an easy and straightforward decision to make, and it may prove to be a continuous challenge for managers and accountants, despite the fact that such reporting may be fair and ethical (Maama, 2020).

2.3 Legitimacy theory

The foundation of legitimacy theory is the idea that an organization has no intrinsic right to exist. Only when the organization's value system is deemed to be compatible with that of the community it serves, will society grant it this privilege (Dowling & Pfeffer, 1975). According to this theory, organizations try to make sure that their actions are seen as "legitimate" in the eyes of outsiders by acting in a way that conforms to the laws and standards of the societies in which they operate. Organizations must be reactive to the ethical (or moral) setting in which they function because these boundaries and norms are not seen as being static throughout time (C. Deegan & Unerman, 2011). Legitimacy is a relative concept that changes with time and place, depending on the social structure in which an organization functions. For an organization to be considered legitimate, it is not the organization's actual behaviour that matters, but rather, it is how society as a whole knows or perceives the organization's behaviour (Ismail & Haddaw, 2014). The theory therefore posits, that there is a "social contract" between a company and the community in which it operates. According to the theory, a community should function as a whole without taking individual members into account (Freeman, 1994; Donaldson & Preston, 1995).By putting in place suitable structures and procedures, this social contract encourages an organization to adhere to a society's unique values, norms, and boundaries (Dowling & Pfeffer, 1975). In other words, it is used to illustrate different implicit and explicit expectations society has regarding how an organization should run its business. Hence, an organization's ability to maintain long-term survival depends on its capacity to implement effective procedures that allow it to meet societal, or community expectations.

If these social expectations are not met, it may result in societal penalties, such as legal constraints on an organization's operations, limitations on the availability of resources, or decreased demand for its products (Ismail & Haddaw, 2014). Since a firm has benefitted from the usage of a resource, Lindawati and Puspita (2015) claim that current demands for

businesses include consideration for the community and the environment in addition to financial gain. This is because the company has used the resource to its advantage so it should reinvest its earnings back into the community and the environment. Moreover, by being transparent about their social responsibilities, businesses can indirectly increase the legitimacy they receive from the community and have an effect on the company's worth in the eyes of investors and the general public.

Legitimacy therefore implies that companies tend to strive to be seen as responsible and trustworthy. If a legitimacy gap – the gap between the community's ideals and the firm's adopted values – arises or is detected, an organization will adopt legitimating strategies (Susith & Lawrence, 2014). These strategies include:

- to inform the public about the organization's goals;
- to alter public opinion of the company's operations;
- to divert or control the public's attention and alter public expectations (Cormier & Gordon, 2001).

These legitimization techniques increase an organization's access to resources, bolster their brand and their connections with clients and investors, both of which strengthen its competitive position. If society believes there is a lack of transparency, then it loses credibility (Aguilera et al., 2007).

The above-mentioned strategies include regulatory, cultural, and normative components, which effectively serve as a corporate governance tool for management. Following the law is referred to as "pragmatic legitimacy," while adhering to current social norms has been linked to "cognitive legitimacy". Adhering to the norms of a particular business setting has been described as a means of producing "moral legitimacy" (Deegan, 2019). This is further depicted in Figure 2 below.

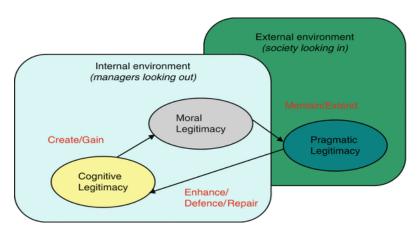


Figure 2: Life cycle of legitimacy

Source: Schiopoiu Burlea & Popa (2013).

The strategies therefore imply that when society demands it, businesses are more likely to reveal information about their operations, especially those addressing social, economic, and environmental factors. This stems from the realisation that a company's growth, reputation, and sustainability depend on the support it receives from society. Businesses and organizations willingly share specific NFI as a persuading tool to help the community regard their presence and actions as legitimate, authentic, and suitable in order to earn and sustain such supports (Maama & Appiah, 2019).

To achieve this, companies must disclose their objectives, actions, and performance in a concise and in-depth manner (Carnevale & Mazzuca, 2013). Legitimacy and reputation are crucial principles for businesses, and disclosure can help project a company's socially responsible image (Bebbington et al., 2008). An organization must disclose its environmental, social, and governance (ESG) actions and impacts, and the standalone sustainability report has predominated these reporting efforts up to this point. Disclosure is therefore a sort of dialogue between businesses and their stakeholders, where legitimacy relies heavily on communication (Saraite-Sariene et al., 2019). Through this channel, companies try to manage reputational risks.

On the other hand, according to the growing body of research on legitimacy theory, NFI disclosure is primarily a means of achieving organizational goals and not the preferred goals of society, which are mainly transparency and accountability (Maama, 2020). This can lead to a point where legitimacy is achieved by restructuring and shortening the actual information disclosed (De Villiers & Van Staden, 2006). Such evidence bolsters the claim that disclosure is typically constrained when it comes to legitimacy. According to Susith and Lawrence (2014), in order to increase legitimacy, businesses attempt to withhold or even restrict negative news regarding social responsibility, or conversely, only disclose positive information, if it is thought to help raise or sustain the degree of company credibility. Further evidence is presented by C. Deegan and Rankin (1996), claiming that prosecuted firms disclosed more favourable environmental data in the year of their prosecution than in any other year. Additionally, Plumlee et al. (2015) found in their more recent research that companies provided more information on ethical business practices in response to rising public criticism, while Mensah et al.'s (2017) research revealed that industrial companies with more significant adverse environmental effects published more favourable ESG data in their annual statements. Despite this, the bulk of the research points to a connection between the legitimacy theory and the desire to engage in CSR and environmentally beneficial activities as well as reporting (Maama, 2020), and therefore serves as an appropriate theoretical framework for justifying NFR.

According to legitimacy and stakeholder theories, more informative transparency fosters ongoing dialogue between a company and its stakeholders, allowing the latter to better understand and justify the former's behaviour (Michelon, 2011). This paradigm can illustrate the communication management of NFI to meet the requirements of being transparent and

ultimately obtaining the devotion of all stakeholder groups, according to Saraite-Sariene et al. (2019).

According to the stakeholder theory, non-financial reports are not necessarily written with all interests in mind, but rather specific interest groups that the company has identified. In this situation, the company's stakeholders are held accountable through the sustainability report, sometimes even under pressure from particular stakeholders, as per Siboni et al., (2013). The company's reporting on subjects important to key stakeholders only is a tool in the management branch of stakeholder theory. If stakeholders are a company's primary audience, they often describe their materiality study in detail (Siboni et al., 2013). On the other hand, if a business seeks to obtain legitimacy through sustainability reports, it is often the case that the issues covered are frequently impacted by the firm's decisions that pertain to the larger community. Thus, specific stakeholders are not addressed. As a result, from the legitimacy theory perspective, businesses typically offer a straightforward and restricted materiality report. The manner in which businesses handle their interactions with the community will determine whether they survive (Reverte, 2009).

2.4 Agency theory

Agency theory is the theoretical model favoured by quantitative research that concentrates on reporting procedures. Unlike the legitimacy theory, this theory largely addresses the principal-agent connection that occurs when management and ownership are split (Fama & Jensen, 1983). The theory further posits, that agency issues occur when the principle and the agent both aim to pursue their own, conflicting interests. This conflict of interest arises as a result of management's preference to maximize their own financial gain, even at the expense of owners (Sayekti, 2015). This results in a deadweight loss, also referred to as the agency cost, which can reduce a company's value in the long-term (Jensen & Meckling, 1976).

Due to managers' self-interests and, more crucially, the intricate web of both implicit and explicit contracts between the company and its stakeholders, agency problems may also develop between the managers and a wider variety of stakeholders. Because of this, managers' choices to pursue the interests of one group of stakeholders may harm those of other stakeholders. As a result, ongoing alignments between managers' interests and those of diverse stakeholders are essential, because doing otherwise has a negative impact on the performance of the organization (Jensen, 2002; Wall & Greiling, 2011).

Investors' interests are effectively being infringed upon in the dual agency issue that has developed between insiders, investors, and the government of listed businesses. Enterprises still treat R&D spending improperly as a result of knowledge asymmetry, which is one of the main causes of agency issues. Moreover, businesses with poor information transparency may use a variety of strategies to hide damaging information (Wu & Yuan, 2020). Thus, it is crucial to find a solution to the agency issue.

Information on ESG issues is therefore highly sought-after by shareholders (or investors) for decision-making in the current knowledge-based economy. To combat this, voluntarily providing NFI disclosure may lessen asymmetry, opportunistic behaviour, and the cost of financing (Singh & Van Der Zahn, 2008; Li et al., 2008). When analysing corporate reporting, voluntary disclosure serves as a mechanism that managers (as agents) utilize to tell stakeholders (as principals) about the company's performance and therefore minimize agency issues. Some stakeholders can also keep an eye on management and stop them from hiding information, which forces and ultimately leads to quality disclosure (Mancini et al., 2022).

Investors require NFI in order to assist them with investment decisions, and these demands are not influenced by what society deems to be legitimate or not. According to agency theory, businesses with agency issues offer NFI that enables capital market participants to evaluate businesses' earnings potential and risk profiles with greater accuracy. In general, this has a favourable impact on the economy by preventing bad investment decisions, lowering the cost of financing, and raising stock prices (Mio et al., 2020). Omran and Ramdhony (2015) corroborate this in their study, stating that by disclosing NFI to position themselves as accountable, management will occasionally try to sidestep the perceived agency problem. This gradually boosts investor confidence, which in turn draws in more funding, and raises the price of the company's shares. Hodge et al. (2006) and Pflugrath et al. (2011) also argue that managers make an effort to win the approval and trust of stakeholders by providing additional NFI when an agency problem arises. Maama (2020) is also of the opinion that this information asymmetry results in significant agency costs, which shareholders must track and control. So, shareholders expect more information from management, especially NFI, to stop them from acting in their own interests at the expense of shareholders.

According to Ullmann (1985), board size, leverage, and ownership dispersion are some of the most often utilized variables in prior studies that served as proxies for the agency problem. Particularly, it has been suggested that the NFI disclosure policy is influenced by the extent to which stock ownership in a company is concentrated in the ownership of a few wealthy investors or distributed among many people. In firms with more distributed ownership, opportunistic management practices and conflicts of interest among agents and principals are more prone to emerge. Voluntary disclosure can therefore serve as a monitoring technique that lessens agency conflicts in businesses with dispersed ownership. In order to lessen information asymmetries between the company and its shareholders, some studies have discovered evidence that firms with numerous owners disclose more NFI than firms with concentrated ownership (García-Meca & Sánchez-Ballesta, 2010). Similar to this, businesses with large boards, a sign of dispersed ownership, frequently experience more agency issues and must therefore offer more NFI to lessen information asymmetry (García-Sánchez et al., 2013). The above authors therefore posit, that the cost of the agency problem and the disclosure of NFI are negatively correlated. Such disclosure can therefore improve corporate governance, address agency issues, and reduce risks.

3 NON-FINANCIAL INFORMATION

Financial statements no longer serve as an adequate means of corporate reporting because they do not fully capture a company's operations. They solely reflect the short-term financial characteristics of a company, while not offering any insight into the longer-term, much more significant environmental, social, and managerial components of a company. For many segments of the general public, using NFI in reports is a must in the modern economy since it illustrates a company's obligation to conduct business operations sustainably (Osmanagić Bedenik & Barišić, 2019).

In the past few decades, there has been a shift in the need for more responsibility and legitimacy, which has necessitated more information disclosure regarding the acts taken by organizations. Conventional financial information is no longer appropriate in this regard, as a result of the development of these new management approaches (Newberry, 2015). Aside from that, firms are now under external pressure to act more responsibly in their operating environments because of the last major economic crisis in 2008. In order to satisfy the needs of many stakeholders on matters relating to legitimacy and accountability, NFI has been viewed as an alternative to that provided in conventional financial reports. Making the most of shared value – that could consequently generate investment returns for a company's shareholders, while avoiding negative consequences on society and the environment – is therefore the main goal of firms' disclosure of such information (Navickas & Kontautiene, 2012). Information on corporate governance, organization, and social responsibility is among the most sought-after topics, particularly in light of the persisting corruption scandals. Moreover, achieving an equilibrium between financial and non-financial transparency may be beneficial in fostering a public interest information flow that enables stakeholders to interact with the organization and take part in decision-making (Saraite-Sariene et al., 2019).

This inclusion of NFI in annual reports is seen as crucial if organizations are to integrate their accountability to stakeholders in their main business activities. Due to the public being much more aware of businesses' growing concern for effective environmental management and efforts that prioritize employee wellbeing, implementing appropriate sustainability reporting policies, that stem from NFI, is a global effort for governments, businesses, and consumers who must take accountability for their external effects on society and the environment (Halkos & Nomikos, 2021). In light of such efforts on a national and EU scale, recent legislations have forced businesses to disclose non-financial statements in their annual reports. Dumay et al. (2015) point out that European companies are increasingly adhering to management styles that include publishing their non-financial performance. Several adjustments have also been made to the external reporting laws of NFI at the national and transnational level in the EU. Such examples include:

– Sweden

From 2001 onwards, state-owned companies must adhere to the Guidelines for external reporting. The purpose of these guidelines is to "determine a minimum level of external reporting in government-owned companies". Such companies are therefore expected to provide transparency by procuring NFI (Ministry of Industry, Employment and Communications, Sweden, 2000).

– Denmark

The Danish Financial Statements Act, which was passed in 2008 and came into legislation starting with the fiscal year 2009, stated that listed and state-owned companies must provide NFI in addition to traditional annual reports. The companies must publicly report on the following three aspects; their current social responsibility practices, how these policies are being implemented, and business achievements stemming from these practices (Hohnen, 2009).

– France

The Grenelle act II, which was passed in 2012, mandates that businesses include data on their environmental and social performance in their annual reports, covering all of the company's subsidiaries, essentially transforming the annual report into the basis for a comprehensive integrated report. This act covers all listed companies and companies with up to 500 employees and a net annual sales of \notin 100 million. The disclosed NFI is also verified by a third party (Global Reporting Initiative, 2010).

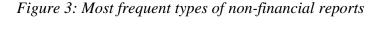
– The European Union

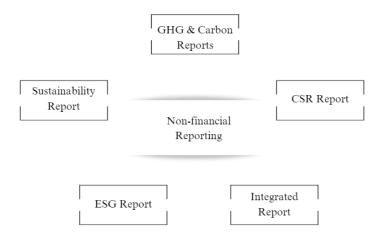
The European Commission (EC) and its institutions are dedicated to addressing issues relating to the environment and the climate, as well as shifting society and the economy towards a system that is more sustainable. The United Nations (UN) Sustainable Development Goals (SDG) have therefore been implemented and integrated into the EC's policymaking and operations. To this end, the EU has implemented the Non-Financial Reporting Directive 2014/95/EU in 2014. The directive, which became a part of Belgian law on September 3, 2017, states that public interest entities must provide NFI in their annual report if they have more than 500 employees. Starting with the year 2018, it mandates that the corporations regulated by this legislation publish the following data: A description of the company's business plan, an explanation of the company's policies regarding environmental matters, social and employee-related aspects, respect for human rights, anti-corruption and bribery issues, and diversity on boards of directors, the results and risks of these policies, and relevant company non-financial critical performance indicators (KPMG, 2022). This regulation is a significant advancement because it makes NFI disclosure mandatory rather than just optional and it paves the way for future EU legislation regarding NFI disclosure.

3.1 Defining non-financial information

From the early 1990s, interest in the corporate disclosure of NFI has steadily increased. Stakeholders, which include shareholders, investors, consumers, etc., view NFI as important for assessing the company's long-term viability and success (Arvidsson, 2011). As a result, this led to a new kind of reporting, and with it also came several different descriptions and definitions. Before analysing the variations in the descriptions of the concepts underpinning NFI, we must first note the variance in the nomenclature used to refer to this kind of reporting. The European Union (2014) acknowledges three different synonyms for such reporting: non-financial information, non-financial reporting, and non-financial statements. These terms will therefore be used interchangeably throughout the thesis. When defining this concept, several definitions are offered, none of which are explicitly provided by a regulatory body or organization.

In general, the term NFI refers to a variety of reports, which has incited confusion among academics and businesses alike, leading to misinterpretations of the definition. Authors Turzo et al. (2022) summarise the following types of non-financial reports that are most commonly found in practice today in Figure 3 below.





Source: Own work based on Turzo et al. (2022).

Eccles and Krzus (2015, p. 82) define NFR as "a wide-ranging term which can include both regulated and voluntary disclosure by companies. From a shareowner and investor perspective, it is information, other than financial statements, which is relevant and material to investment decision making". Chong et al. (2018) associated NFI with information related to either social responsibility or sustainability. Manes-Rossi et al. (2018) posit that NFI covers a variety of different themes and challenges, ranging from environmental issues and social policies to energy use, greenhouse gas emissions, climate change, and employee

satisfaction. They assess that NFI is crucial in satisfying increasing stakeholders' needs for the transparency and accountability of organisations. This ties in with the EC's statement that "NFI is generally seen as environmental, social and governance (ESG) information" (European Commission, 2013, p. 2), thus underlying some key factors that constitute the fundamentals of NFI.

Authors Tarquinio and Posadas (2020) offer a different and interesting approach to the definition of NFI, stating that as neither a shared concept nor a single, widely accepted definition of the word exist, NFI is still unclear and complex. Although most academics define and explain NFI differently - as CSR issues, intangible value information, and information that is not included in financial statements – this abbreviation has frequently been used to refer to information about society and the environment. These two concepts open the door to thinking of NFI as a genus and its various interpretations, such as CSR and ESG data, as species. Furthermore, the EU declared that the purpose of this new "accounting" practice is to bring attention to and report on issues of non-financial nature that are useful in "identifying sustainability risks and increasing investor and consumer trust" (European Union, 2014, p. 2). In the past decade, this has led to academics, practitioners, standard-setters, and other organizations, such as the Task Force on Climate-Related Financial Disclosure (TFCD), the International Integrated Reporting Council (IIRC), and the GRI, expressing a strong interest in requiring the disclosure of this information in corporate reports. Although they are used interchangeably, the various terminologies used to refer to these reports frequently reflect the key focuses of corporate reports (e.g. social policies, the environment, etc.) (Stolowy & Paugam, 2018).

To avoid confusion and to enable a thorough and solid growth of a shared understanding, a shared vocabulary is essential. Moreover, a precise and widely accepted definition of NFI can aid in creating a shared framework for comprehending and creating corporate disclosures (Tangen, 2005). Kirk (2006) further corroborates this by highlighting the possibility of an expectation gap – a discrepancy between stakeholders' expectations, regulatory requests, and NFI reporting in practice – that occurs when a word has various meanings for different parties. Due to the severe and costly implications for businesses failing to comply with recent regulations, this is especially pertinent in the case of compulsory disclosure of NFI.

Currently, there are several frameworks, standards and guidelines that are typically utilized for preparing NFI reports and setting its contents. They do not, however, provide any definition of NFI. As a result, several terms have arisen to define the reports that characterize NFI. These reports, or "species", according to Tarquinio and Posadas (2020), include sustainability reports, combined reports, integrated reports, CSR reports, and ESG reports. Although many articles and authors use these terms interchangeably, there are several differences between them, leading to further misuse and confusion. To avoid such misunderstandings throughout this thesis, the following chapter illustrates the key characteristics of these reports.

3.2 Defining non-financial reports

3.2.1 Sustainability report

A sustainability report is a yearly document that businesses produce to inform a variety of stakeholders on their social, managerial, and environmental responsibilities. The report compiles and disseminates any information a company chooses to make public regarding its commitments to and activities in the above-mentioned categories. By doing this, a company informs relevant parties – including customers, employees, and others interested in the organization's actions – of the brand's approach to sustainable development (Courtnell, 2022). Some examples of the metrics the report incorporates to assess sustainability include carbon footprint, energy use and waste, and water use and waste.

It is essential to emphasize that only the reports that incorporate all three dimensions of sustainability in one report can legitimately be referred to as 'sustainability reports', to differentiate themselves from one-dimensional reports that simply cover isolated areas of sustainability (e.g. GHG and Carbon reports). With this type of reporting, stakeholders are informed about an organization's inside-out impacts, including both positive and negative effects of the business on people and the environment. The report is therefore an important and thorough assessment of the situation and attributes of a company's business activities, aimed primarily at the company's stakeholders.

In recent years, since the UN's introduction of the 2030 Agenda for sustainable development in 2015, companies from around the world, especially multinationals, have included SDGs in their yearly sustainability reports. The SDGs are a total of 17 goals, ranging from clean water, air, and land to more socially oriented goals, such as abolishing poverty and striving towards a society of gender equality. All of UN's SDGs are presented in Figure 4 below.

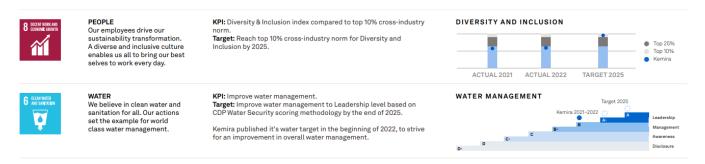


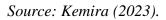
Figure 4: UN's Sustainable Development Goals

Source: United Nations (n.d.).

A company will include the particular SDG they are working towards, either through company policies, actions, or company culture, to further emphasise their contribution to the UN's goals. An example of including SDGs is shown below in Figure 5.

Figure 5: Example of including SDGs in a sustainability report





3.2.2 ESG report

Much like sustainability reports, ESG reporting is also the sharing of information about how a company does business in relation to its environmental, social, and governance aspects. The main differences that set this report apart from the former, is the stakeholders that it addresses and the perspective from which it reports. The main stakeholders here are investors, who utilize the idea of ESG as a framework for evaluating the performance and risk of a firm. Standards for this framework have been established by legislators, investors, and ESG reporting organisations. Conversely, sustainability reports account for workers, consumers, and shareholders, meaning they have a broader stakeholder emphasis. Unlike ESG reports, they also take scientific research into account (Courtnell, 2022).

ESG can be explicitly measured using well defined social, sustainability, and environmental metrics and it also has specific criteria that describe its scope, rules, and data disclosure. These criteria can be seen as a must-have for companies if they wish to attract ethical and responsible investors. On the other hand, sustainability is a broad, often vague, catch-all phrase for acting favourably toward a wide range of stakeholders (GEP, 2022). What investors therefore want to know with these types of reports is if a business is at risk from social, governance or environmental impacts on the business itself, essentially utilizing an outside-in perspective (Romanek, 2022).

3.2.3 CSR report

Although there is no commonly accepted definition of CSR, the EC (2017) defines CSR as "the responsibility of enterprises for their impact on society." The EC goes on to say that CSR is a crucial and critical tool for achieving sustainability, innovation, and competitiveness among EU businesses. Wood (1991), McWilliams and Siegel (2001) define

the concept of CSR as a company's obligation to society and the environment, which stems from the notion that business and society are inextricably intertwined and that corporations must pursue some public benefit in addition to what is mandated by the law. According to Bebbington et al. (2008) and Gray (2010), CSR reporting can be used as a synonym for sustainability reporting since it is defined by the procurement of company data on its impact on society and the environment. Like the sustainability report, it addresses a broader scope of stakeholders, and it also relies on data that is more vague and less quantifiable, making it different from the ESG report. It is more often seen as a precursor to ESG, which focuses on the idealistic, broad viewpoint of sustainability (O'Neill & The Corporate Governance Institute, 2023).

3.2.4 Combined report

This type of report is usually made up of several different company disclosures, ranging from an annual financial report, sustainability report, to governance filings. The combined report provides a one-stop shop for company information, but it can also have a number of shortcomings. Unlike the individual reports, which each have a clear purpose and are written with a particular stakeholder group and specific data needs in mind, the combined report is much longer and vastly extensive. In other words, according to Integrated Reporting, IFRS Foundation (2020), "the whole is not greater than the sum of its parts".

3.2.5 Integrated report

An integrated report is defined by the IIRC as a report that "brings together material information about an organization's strategy, governance, performance and prospects in a way that reflects the commercial, social and environmental context within which it operates" (Integrated Reporting, IFRS Foundation, 2023). According to De Villiers and Maroun (2017), the process of integrated reporting pertains to how a company interacts with its physical environment and society, reflecting on its relationship with financial and economic concerns, social responsibility, the environment, human and intellectual capital, governance practices, potential risks, energy, and product safety. Contrary to the combined report, the material of an integrated report is inspected more thoroughly, emphasising value generation throughout time. Based on this criterion, information "earns" a place in the integrated report, regardless of where it came from. Specifically, the integrated report makes explicit the connection of information in the context of creating value rather than only being a summary of information accessible elsewhere. This type of report is the most clear and concrete outcome of sustainability reporting as it combines all elements of sustainability reporting with the traditional financial report. Some data from a sustainability report will make its way into the integrated report, but only to the degree that it has a meaningful connection to value generation over time (Integrated Reporting, IFRS Foundation, 2020). Table 1 on the following page summarises the key differences between a typical annual financial report and other commonly used types of non-financial reports.

	Audience	Mandatory	Materiality	Standards and Frameworks	Comparability
Annual financial report	Specific stakeholders (Shareholders, Investors)	Yes	Information about a company's financial activities and performance	National and international laws, GAAP (IAS/IFRS)	High
Sustainability report / CSR report	Broad stakeholder emphasis (Consumers, employees, partners, shareholders)	No (Exceptions include PIC)	Communicating the company's social and environmental impacts, providing strategic goals	GRI, IIRC, SASB, TCFD, CDP	Low
ESG report	Specific stakeholders (Investors, providers of financial capital)	No	How economic, social, and environmental aspects impact a company' s performance, a risk assessment for investors	GRI, IIRC, SASB, TCFD, CDP	Low
Combined report	Broad stakeholder emphasis (Consumers, employees, partners, shareholders)	No	Broader scope than financial, sustainability, and ESG reports, relatively unstructured	GAAP (IAS/IFRS), GRI, IIRC, SASB, TCFD, CDP	Low
Integrated report	Specific stakeholders (Investors, providers of financial capital)	No	Broader scope than financial, sustainability, and ESG reports, shorter than combined report.	IIRC framework	Low

Table 1: Comparison of different non-financial reports

In order to summarise studies on how NFR affects a company in various ways, some of the notable theoretical and empirical studies from the last 15 years are presented in Table 2. To better portray the insights of these studies, the object of research, method of research, and main findings are highlighted.

Schreck & Raithel (2018)	Chen et al. (2018)	Hummel & Schlick, (2016)	Plumlee et al. (2015)	Iatridis (2013)	Najah & Jarboui (2012)	Vafaei et al. (2011)	Soana M.G. (2011)	Schadewitz & Niskala (2010)	Weber et al. (2008)	Author
Relationship between CSP and size on company's provision of SR	Impact of China's mandatory CSR reporting mandate on company performance	The relationship between sustainability performance and sustainability disclosure	The relationship between expected future cash flows and cost of equity, and disclosure quality	The quality of environmental disclosures and how it relates to company performance	Impact of CSR and social reporting on consumer behaviour/how it can increase value for the company	If disclosure of intellectual capital is value-relevant in share markets	Relationship between social performance and CFP	How GRI based responsibility reports affect firm value	Relationship between GRI indicators and CFP	Object of research
Regression model of 280 public companies in 12 sectors from 2009	DiD research design, regression analysis of Chinese firms subject to the 2008 CSR mandate	Regression of 195 listed companies in 2013 based on their performance and disclosure quality	3 regression models are used on a sample of US firms, comparing firm value, expected future cash flow and cost of equity to quality of disclosure	OLS regression of a sample of 529 listed Malaysian countries in environmentally sensitive sectors	Panel data analysis using regression of large French companies	Regression model based on data from 4 countries, incorporating intellectual capital disclosure and content analysis of annual reports	Quantitative analysis of 47 Italian and 21 International banks from 2005	Valuation model of Finnish firms that adopted GRI Standards between 2002- 2005	Multiple regression on 100 worldwide firms based on if they use GRI indicators in practice	Method of research
Although there is a strong link between CSP and SR, the strength of it depends on firm size and visibility <i>Table continues</i>	Mandate leads to decline in profits. It changes practices and benefits the public at the expense of shareholders	Better sustainable performance leads to higher quality reporting and vice-versa	Both cash flow and cost of equity influence the relationship between business value and disclosure quality	Environmental disclosures of high quality add value and enhance investor perceptions	Non-significant relationship between reporting and revenue/profit margins. However, NFR had a very beneficial effect on the return on sales	Positive impact of disclosure in non- traditional, and non-significant impact in traditional sectors	No significant correlation between social performance and CFP	NFR lessens the agency gap. For more accurate market assessment of a corporation, GRI responsibility reporting is necessary	Positive correlation between sustainability activities and CFP	Main findings

Liu and Tian (2021) The effectiveness of investors' investments in China following the mandated disclosure of companies' social responsibility	if appropriate	marketing creates longer value relationships with consumers	marketing creates longer value relationships with consumers Relationship between sustaina and CFP	21) (2022)
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Maas and Sampers (2020) The effect of NFR on financial performance Literature study results in better performance. More study is needed to determine how NFR affects performance.	The effect of NFR on financial performance Literature study The effectiveness of investors' investments in China following the mandated disclosure of companies' social responsibility DiD method, regression analysis of Chinese firms subject to the 2008 CSR mandate	The effect of NFR on financial performanceLiterature studyNot enough evidence to suggest that reporting al results in better performance. More study is needed determine how NFR affects performance.The effectiveness of investors' investments in China following the mandated disclosure of companies' social responsibilityDiD method, regression analysis of Chinese firms subject to the 2008 CSR mandate subject to the 2008 CSR mandate efficiency, particularly regarding overinvest efficiency, particularly regarding overinvest efficiency, particularly regarding overinvest marketing creates longer value-based relationships with consumersDiD method, regression analysis of Chinese firms aubject to the 2008 CSR mandate efficiency, particularly regarding overinvest efficiency, particularly regarding overinvest marketing creates longer value-based marketing communicationsDot method, regression analysis of Lithuanian food retail firms' marketing consumer values are only mildly reflected, communicated sustainability values are not integr	The effect of NFR on financial performanceLiterature studyNot enough evidence to suggest that reporting alvesting in better performance. More study is needed determine how NFR affects performance.The effectiveness of investors' investments in China following the mandated disclosure of companies' social responsibilityDiD method, regression analysis of Chinese firms subject to the 2008 CSR mandatePost mandate, firms have decreased investment subject to the 2008 CSR mandateExamines if appropriate sustainability marketing creates longer value-based relationships with consumersContent analysis of Lithuanian food retail firms' marketing communicationsConsumer values are only mildly reflected, communicated sustainability values are not integrible between sustainability practiceRelationship between sustainability and CFPUsing sustainability indexes and regression on a sample of 116 Swedish listed firmsPositive relationship between sustainability and CF	200) The effect of NFR on financial performance Literature study Not enough evidence to suggest that reporting an results in better performance. More study is need determine how NFR affects performance. More study is need of companies social responsibility DiD method, regression analysis of Chinese firms in Chinas following the mandated disclosure subject to the 2008 CSR mandate Post mandate, firms have decreased invests efficiency, particularly regarding overinvests analysis of Lithuanian food retail firms' relationships with consumers Content analysis of Lithuanian food retail firms' communicated sustainability reflected, marketing creates longer value-based relationship between sustainability practice Using sustainability indexes and regression on a sample of 116 Swedish listed firms Construction of a regression model based on data for the sundate sustainability and CF Effect of NFI quality on company success Construction of a regression model based on data form 381 Portuguese companies Quality NFI does not directly influence non-fina performance but contributes indirectly through decimality making
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3.4 Benefits and drawbacks of non-financial information

3.4.1 Benefits of non-financial information

Since the turn of the century, NFI has been researched and linked with several benefits for businesses. Studies by Dhaliwal et al. (2012) and Muslu et al. (2019) utilizing a cross-country sample, discovered that NFI was positively correlated with greater forecast accuracy by analysts, particularly in stakeholder-oriented nations like Belgium, France, and Italy. Monteiro et al. (2022) confirm this by stating that quality NFI leads to better decision making by managers, and vice versa, that managers who make successful decisions generally belong to firms that provide better NFI. Furthermore, according to Plumlee et al. (2015), quality NFI can also lead to lower cost of equity and higher future cash flows. The link between NFI and benefits to businesses grew even more apparent in the years that followed the adoption of non-financial reports, demonstrating that adherence to NFR procedures over the long term was crucial for businesses to establish credibility.

Lenox and Nash (2003) corroborate this by stating that providing NFI can encourage businesses to lessen their detrimental environmental and social externalities while influencing stakeholder involvement and enhancing the organisation's reputation. Sarti et al. (2018) go on to say that with more information at their disposal, external stakeholders are better able to evaluate businesses' overall performance and influence their purchasing and investment decisions in order to favour businesses that practice sustainability. This also ties in with Bernyte's (2021) study which came to the conclusion that customers are more likely to be involved with businesses that share their beliefs and values, which are evolving quickly and steadily in favour of sustainable development. Due to this quick change in attitudes, marketing communications, such as reports containing NFI, must now be based on acceptable sustainable marketing concepts. Hence, the procurement of transparent and relevant sustainability information builds stronger and more lasting value-based relationships with customers. The disclosure of such information therefore makes it possible for stakeholders to offer feedback on the process, which helps firms consider the connection between their sustainable performance and company strategy, business models, initiatives, and objectives (Maas & Sampers, 2020).

Economic benefits of NFI can manifest as tangible effects when it influences the company's choices and strategies as well as capital market benefits when the information is pertinent to participants in the capital market (Churet & Eccles, 2014). These benefits of being able to secure long-term capital at a lower rate can be achieved through clear and transparent communication of the company's strategy. Companies may discover that investors are more ready to assist them in long-term endeavours if they are able to successfully convey their long-term strategies (Department of Business, Energy & Industrial Strategy, 2019). Organizations can also benefit from using NFI for internal objectives since investors value

sustainability management strategies more than objective sustainability performance, according to rating agencies (Maas & Sampers, 2020).

The main proposed benefits of NFI are therefore:

- a clear description of the organisation's mission and strategy,
- improved decision making,
- lower costs of financing,
- impact on present and future employees,
- impact on the company brand and reputation.

3.4.2 Drawbacks of non-financial information

It must be emphasized that access to NFI does not guarantee a company's success on its own. Managers must take this into account when making decisions (Monteiro et al., 2022). Current empirical evidence on NFR demonstrates the following persistent issues: Information overload, selective disclosure, impression management, greenwashing, a need for quality assurance, cost of disclosure, low comparability of disclosures, and the use of disclosure as a means unto itself rather than a method that results in organizational change (Hess, 2019; Stolowy & Paugam, 2018; Department of Business, Energy & Industrial Strategy, 2019).

Concerns have been raised by a number of stakeholders regarding the huge increase of disclosed financial and NFI by businesses in recent years. "Information overload" is a word used to describe the uncertainty experienced by consumers of financial and NFI when they discover that they are obtaining more information than they require for their decisions (Stolowy & Paugam, 2018). The Department of Business, Energy and Industrial Strategy (2019) conducted interviews with several stakeholder organizations and corroborated this "information overload". Some stakeholders that were interviewed expressed concern about the overwhelming amount of NFI, claiming that there is sometimes too much information, preventing investors from understanding the reports and making it difficult for them to quickly identify information that is relevant, interesting, or pertaining to their decision-making.

Regarding selective disclosure, Chauvey et al. (2015) conducted a study in which they found that over the years reporting on negative company events dropped, even though the scope of NFR grew. The authors propose that this may be due to NFR undergoing a "normativity process" and passing a "legitimacy test". Normativity in this case refers to the level that rules and processes have become standardized. When normativity takes place, such practices and processes are embraced by businesses, becoming prerequisites for legitimacy. According to The Department of Business, Energy and Industrial Strategy (2019), several stakeholders have also expressed concern about the use of "generic marketing and PR" type information that lacked substance and failed to address important strategic issues. There was a belief that,

in some cases, the desire to satisfy specific stakeholders and organizations may have influenced the length and content of report. With recent regulations coming into effect in the EU, it often seems as if compliance with these laws is more important than value.

Impression management is also one of the concerns regarding NFI. Hummel and Schlick (2016) performed a study of 195 European corporations' sustainability reports and found that more accurate reporting is produced by businesses with superior sustainable development accomplishments, whereas less successful businesses tend to fill out their reports with subpar data in an effort to mask their real performance and maintain credibility. As a result, both NFR and the standards used to assemble it could end up in the hands of the management of the company as a new instrument for influencing the market and the general public. Greenwashing also ties in with this problem as NFR may become a management tool for manipulating stakeholder's view of the non-financial performance of businesses, disclosing only environmentally pleasing data, while withholding potentially damaging information regarding their environmental impacts (Michelon et al. 2015).

Assurance, validity, or other types of verification of the information provided in reports, are one of the key underlying issues of NFR. Regarding how stakeholders judge the validity of the NFI a firm gives, two features of the EU Directive 2014/95 stand out. The reliability of the reports – that is, their ability to withstand scrutiny and be balanced – is a prerequisite for credibility. Firstly, it merely requires an auditor to confirm that the necessary non-financial report has been submitted. Second, member states have the option to require that a third party independently certifies the information contained in the report (Quick & Inwinkl, 2020). Third party assurance is therefore not mandatory; however, in the absence of any independent assurance, neither the analyst nor the user will be able to determine if the information is materially complete. It is up to the user to determine whether the material is generally accurate, but they will not be able to tell if the information they require has been added. This seriously reduces the value of such reports. Moreover, external validation of this data has the ability to boost its credibility, improve the legitimacy of organizations, and foster stakeholder confidence (Boiral, 2013). This appears to be particularly relevant in a situation where NFR is required, as firms are more inclined to demand external confirmation of their reports (Ackers & Eccles, 2015).

One other important aspect of NFR is that this type of information does not come for free. Such disclosures require more financial, human, and capital resources. (Christensen et al., 2019). According to the Department of Business, Energy and Industrial Strategy's (2019) interviews, although some stakeholder respondents suggested that such costs must be significant, they generally had no concept of the expenses that businesses must incur to comply with the regulations. On the other hand, others argued that since businesses should already be gathering the necessary data as part of their routine internal operations, there should be no actual cost associated with compliance. Additionally, NFR exposes businesses to legal risk, so it makes sense that businesses would oppose this, unless there were foreseeable, tangible benefits. Therefore, including NFI exposes a firm's operations to greater scrutiny, making some corporations hesitant to report them.

Another current issue is the low comparability of reports. There is an increasing gap between the rising quantity of scientific studies on NFR and their comparability, as the researchers look at various companies, sectors, nations, etc., employing various methods to do so (Osmanagić Bedenik & Barišić 2019). Much of this stems from the fact that NFI is still not clearly defined, leading to confusion among reporting companies. Comparability of reports is essential for users to determine which companies are performing better than others in certain areas. Without consolidation and standardisation of NFR principles, this trend is likely to continue. Unfortunately, despite reporting organisations' best efforts, it is impossible to guarantee sufficient comparability of NFR given the increased demand for such information (Venturelli et al., 2020).

3.4.3 Goals of non-financial reporting

"There is a paradigm shift to see change needed in pulling back the covers and recognising the true drivers of value creation...why do organisations that appear to have acceptable audit reports subsequently fail? Well, they fail because things that aren't being audited are the things that are failing." (Department of Business, Energy & Industrial Strategy, 2019). This quote by a member of one of the stakeholder organisations interviewed sums up the need for further effort regarding the disclosure of NFR to fully enjoy its benefits.

Only when the information supplied is helpful to internal and external stakeholders will NFR be effective. NFR must adhere to qualitative standards that are comparable to those of annual financial reports in order to be valuable. It must accurately, completely, impartially, and faithfully portray what it claims to portray (Maas & Sampers, 2020). The main purpose of this transparency is to provide trustworthy data about the company so that various stakeholders, including potential investors or financing companies, can make informed choices when forming relationships with the reporting company (Tontiset & Kaiwinit, 2018).

For NFR to be of quality, three main aspects must be considered (Helfaya et al., 2018; Helfaya & Whittington, 2019):

- the information included in reports (information formats, metrics, and themes),
- credibility indicators (assurance procedures and reporting requirements),
- communication strategies (e.g. use of visual aids).

By connecting the provided information with business strategy, NFR primarily aims to benefit the organization and its stakeholders. Through the direct participation of all stakeholders of an organisation, organisations could manage to achieve a balance between their business activities and the environment, both natural and social, in which they operate in (Torelli et al., 2020). The primary goal of NFR – promoting ethical and sustainable business operations – has therefore not been accomplished yet. To help prevent confusion regarding disclosures, improve comparability of reports, and provide a basis for assurance, adopting internationally recognized standards for NFR is essential if this primary goal is to be achieved.

4 STANDARDS AND FRAMEWORKS

4.1 Overview of current standards and frameworks

Consumers are interested in knowing that the goods they purchase were made ethically, with respect for workers' rights, and without causing environmental damage. To encourage businesses to include sustainability in their practices and reporting, policymakers are implementing regulations, legislations, and other obligations regarding NFR (Global Reporting Initiative, 2022b). To this end, there are already several global projects, frameworks, standards, taxonomies, and metrics in place. Several organisations already exist that have considerable expertise in both the outside-in perspective (e.g., TCFD, SASB) and inside-out perspective of sustainability management and reporting (e.g. GRI). In the past few years, these have already resulted in reporting norms, principles, or standards that have seen increased use. Although some of these projects and frameworks are similar, the ultimate goal of each framework or standard setter is to provide specific data for its chosen stakeholder group.

Currently, different organisations are directing their attention to different goals. Some pursue frameworks for climate change related problems, some pursue creating standards for reporting NFI, while others only wish to create a framework for deciding on relevant NFI. None of the current standards for reporting are comprehensive, and because each one calls for a different level of detail, it is required to employ many standards at once, which increases the expenses for businesses. Global fragmentation may worsen due to different approaches and goals (The European Round Table of Industry, 2021). In recent years, consistent with the uprise in the number of reporting organisations, we have seen many inconsistencies in the definitions regarding standards and frameworks, with many sources using them interchangeably. There are, however, several differences, mainly in their approach and purpose, that separate the two terminologies (Global Reporting Initiative, 2022c):

– Standards

Standards are the agreed-upon minimum requirements for quality that individuals believe reporting bodies should be able to meet. One way to think of standards is as clear and precise measurements or criteria for "what" should be reported on each issue. Corporate reporting requirements typically share the following characteristics: an emphasis on the public interest, independence, due process, and independent oversight. This results in a firmer foundation

for the information being requested. Standards are crucial for sustainability reporting because they supply the industry with data and regularity, establishing a shared model for making frameworks usable.

– Frameworks

On the other hand, frameworks offer the 'frame' for contextualizing information. They are typically used when there are no clear standards. By using a framework, the method itself cannot be changed, only the direction is subject to flexibility. A framework can be considered as a set of guidelines that offer direction and mould people's perspectives on a certain subject but fail to meet a specific reporting need. When comparing the two, standards are much more rigid and thorough. Figure 6 presents the most popular standards and frameworks currently in use.

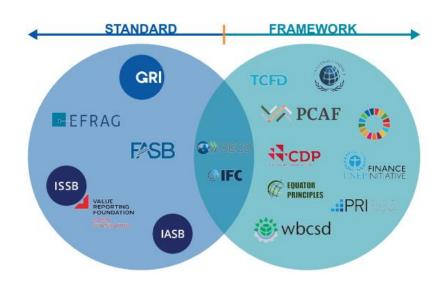


Figure 6: Overview of standards and frameworks

Source: Global Reporting Initiative (2022c).

The various frameworks and standards have existed concurrently and have been in competition with one another up to this point. This has led to emerging concerns regarding the impact of escalating domestic and regional regulatory requirements on global competitiveness. The fragmented system in place now makes sustainability disclosures inefficient and ineffective. Various standard-setters demand various reporting formats with various levels of data. As a result, the preparer incurs significant additional reporting expenses. On the other hand, the user is presented with overwhelming information, as well as a potentially enormous number of KPIs. In the end, it gets harder and harder for the user to evaluate and contrast sustainability performances of different preparers of reports (The European Round Table of Industry, 2021). Table 3 below presents the differences between some of the more widely used standards and frameworks, to better understand their purpose and necessity.

	Brief summary of organisation	Audience	Materiality	Type of tool
SASB (Sustainability Accounting Standards Board)	77 distinct industries are covered in recommendations for topics and measurements that address all three facets of ESG	Financial capital providers	Financial materiality	Standard
GRI (Global Reporting Initiative)	Outlines sustainability guidelines for issues affecting a company's stakeholders on the economic, environmental, and social aspects	All stakeholders	People and environment/ impact materiality	Standard
IIRC (International Integrated Reporting Council)	Gives businesses a framework based on principles to explain how they generate both financial and non- financial value using six different types of capital	Financial capital providers	Financial materiality	Framework
TCFD (The Task force on Climate- related Financial Disclosure)	Eleven recommendations are given that fall under the four categories of governance, strategy, risk management, and measurements & targets	Financial capital providers	Financial materiality	Framework
CDP (Carbon Disclosure Project)	CDP helps a variety of stakeholders assess their possibilities and risks related to water security, deforestation, and climate change	Investors and wider stakeholder audience	People and environment	Framework/Tool

Table 3: Comparison of most widely used Frameworks and Standards

Source: Own work based on Ernst & Young (2021); Department of BEI (2020); EU reporting Lab (2021).

4.2 Changes in the reporting landscape

In order to move forward, a single set of universal standards must be created by combining these many solutions, and these standards must then be further developed. To this end, the five major framework and standard-setting organizations with the most global influence in the NFR space – CDP, CDSB, GRI, IIRC, and SASB – announced in September 2021 that they share a common objective of an all-encompassing reporting system and are willing to work together to make it a reality (The European Round Table of Industry, 2021). Although there are several frameworks that address the subject of sustainability, only two reporting standards are currently being applied globally: GRI and SASB, each having a distinct audience and scope. Nonetheless, the movement of NFR is gaining more traction than ever. Two significant reporting-related changes are currently occurring:

1. The creation of The European Sustainability Reporting Standards (ESRS).

In light of the political aspirations and tight deadline of the European Green Deal and the sustainable finance agenda, the EC had invited the European Financial Reporting Advisory Group (EFRAG) to carry out preparatory work for the potential development of EU's NFR standards. EFRAG established a task group to evaluate the NFR landscape, as well as the existing reporting frameworks and standards, and to provide recommendations for the best course of action. The task group then came to the conclusion that the fragmented NFR environment does not currently provide a solution that could be used as an EU reporting framework in and of itself. Thus, a common EU wide standard was proposed, which would come into effect starting with the year 2025. The standards will be based on double materiality, meaning that they would account for a broader audience, from minor stakeholders to potential investors (Global Reporting Initiative, 2022a).

2. The creation of standards for the disclosure of sustainability related financial information.

These standards are being developed by the International Financial Reporting Standards (IFRS) Foundation, with the difference being that they will be based upon financial materiality, focusing only on investors. The two initiatives proposed by the EU and the IFRS are meant to be complimentary forces rather than competitors. For certain audiences, different standards serve different functions. Impact standards, which educate a wider range of stakeholders, are not based on the same principles as standards whose only goal is to inform investors. EFRAG and the IFRS are therefore committed to constructing this extensive set of international sustainability reporting standards. Only with a core set of shared disclosures and each pillar standing on an equal footing, can a two-pillar system for financial and sustainability requirements be established (Global Reporting Initiative, 2022a).

It is therefore necessary to create a global organization that will set standards for sustainability reporting based on a common worldwide framework. In a time when society is demanding actions to tackle climate change, businesses would be able to increase public

trust by being more transparent about their sustainability projects, thanks to an internationally recognized sustainability reporting standard. They would just have to adhere to one reliable set of standards, which would minimize their cost of capital and reduce local and international reporting costs.

But creating a European standard for such reporting would run the risk of creating an unfavourable playing field because European businesses would be required to meet greater cost and transparency standards than their non-European rivals. This includes also having to perform double duty in nations with different standards. ESRS were generally feared to further polarize international standard-setting, because if they moved further on their own, it would result in the emergence of another set of standards that would ultimately need to converge with international standards. Therefore, it's possible that establishing European standards will take longer than gaining worldwide consistency through already-existing, convergent projects (The European Round Table of Industry, 2021; Deloitte, 2021)

4.3 Overview of the GRI Standards

Following the Exxon Valdez oil spill, two non-profit organizations, Ceres and the Tellus Institute, with the help of the United Nations Environment Programme (UNEP), established the Global Reporting Initiative. As an entity that develops standards, the GRI's mission is to make it possible for businesses or other parties to evaluate environmental impact in a manner that is generally recognized by other players in a business setting. The GRI Standards were the first universally recognized standards for reporting on sustainability issues. They are prepared and issued by the Global Sustainability Standards Board (GSSB), an independent entity comprised of 15 members. The organisation began its path of sustainability reporting in 2000 with the release of the first full draft of its sustainability reporting guidelines. After gaining significant traction in the reporting field, the organisation released its full official GRI Standards in 2016. Their Sector Program, Tax, Waste, and Universal Standards became public in 2021 (Apiday, 2023). Their standards are currently the most widely used reporting standard, as confirmed by a KPMG (2020) survey, which stated that 73 % of the G250 (the top 250 companies listed in the Fortune Global 500 ranking) and 67 % of the N100 (the 100 largest companies in 41 countries) adhere to the GRI Standards when comprising their sustainability reports.

The Standards are created in accordance with a formalized due process protocol that outlines the conditions for creating a standard and is monitored by an oversight group. The protocol makes sure that a multi-stakeholder, inclusive process is used to produce the Standards. Through a consensus-seeking strategy, experts from industry, investment institutions, academia, and accounting from all over the world are involved. Regular public comment periods are held by the GSSB to solicit stakeholder input on draft Standards. Due to the multi-stakeholder approach, there is a broad consensus among stakeholders on what should constitute acceptable reporting on sustainability subjects, which is the main appeal of the GRI's due process (Global Reporting Initiative, 2022a).

The relatively successful implementation of the GRI can be attributed to a variety of factors, including the fact that it is the most comprehensive standard that enables organizations to report on all three pillars of sustainable development. Among these factors are (Chathame House & Hohnen, 2012):

- First-mover advantage: GRI's global sustainability reporting framework was the first to be created and tested.
- Development of stakeholders: GRI was created through a multi-stakeholder negotiation process including thousands of representatives from international business, accounting, academic, labour, and advocacy organizations.
- Sensitivity to industry: in addition to its general Sustainability Reporting Guidelines, GRI has created a variety of "Sector Supplements" that provide industry-specific indicators of sustainability and guidance.
- Continuous development: GRI employs a "learn by doing" philosophy. Users begin by reporting on the most pertinent issues, and they gradually expand their reporting as capacity and demand need. To reflect user experience, the GRI Guidelines are continually reviewed and modified.
- Materiality-driven approach: materiality is a term defined by the SASB as "the sustainability issues that are likely to affect the financial condition or operating performance of companies within an industry" (SASB, 2023). The GRI framework invites stakeholders to identify the issues that are most important to the reporting and its stakeholders. Additionally, it provides metrics that can be utilized to monitor the difficulties with sustainability concerns.
- Compatibility: it is compatible with most global corporate responsibility guidelines, frameworks, and standards.

Organizations can therefore boost their transparency and convey both their positive and negative impacts on sustainable development by using the GRI Sustainability Reporting Standards. Companies can improve strategic decision-making, lower risks, spot commercial opportunities, and fortify stakeholder relationships by better comprehending, managing, and reporting on their impacts (Global Reporting Initiative, 2022b).

4.3.1 Inner workings of the Standards

The GRI Standards are an integrated modular collection of standards. They enable organizations to communicate to stakeholders and others the impacts of their operations systematically and transparently (Global Reporting Initiative, 2021).

The reporting process is pillared by three series of Standards:

1. The GRI Universal Standards

These apply to all organisations and are comprised of the following:

- GRI 1: The Foundation 2021 document describes the goals of the GRI Standards, illustrates key ideas, and provides guidance on how to apply the Standards. It outlines the conditions that a company must meet in order to provide reports that adhere to the GRI Standards. Additionally, it outlines the standards for high-quality reporting, including verifiability, accuracy, and balance.
- GRI 2: General Disclosures 2021 includes disclosures on a company's governance, strategy, policies, practices, activities, and stakeholder involvement, as well as its structure and reporting procedures. These provide information on the scope and profile of the organization and aid in setting the scene for comprehending its affects.
- GRI 3: Material Topics lays out the steps an organization can take to identify the themes that are most important to its impacts, or its material topics. It also outlines how the Sector Standards are employed in this process. Additionally, it includes disclosures of the organization's list of material topics, how those topics were selected, and how each is managed (Global Reporting Initiative, 2021).
 - 2. The GRI Sector Standards

The GRI Sector Standards are designed to improve the accuracy, consistency, and comprehensiveness of organizational reporting. In the coming years, 40 industries will have standards set, starting with the ones that will have the most adverse effects, like oil and gas and agriculture. The Standards include a list of issues that are likely to be important to the majority of organisations in a particular industry, together with the appropriate disclosures that should be made. An organisation is required to utilize an applicable Sector Standard when reporting in accordance with the GRI Standards.

A brief overview of the sector's features, namely its operations and commercial ties that highlight its impacts, is provided in the first section of each Sector Standard. The relevant material subjects for the sector are then listed in the Standard's main section, together with the most significant effects pertaining to the industry. When the disclosures from the Topic Standards described below do not adequately describe the organisation's impacts on the issue, a Sector Standard may also specify additional disclosures. The issues and related disclosures are chosen based on sector-specific data, global laws, and recommendations from industry professionals. As a result, they represent the hopes of many different stakeholders on the control of impacts on the industry (Global Reporting Initiative, 2021).

3. The GRI Topic Standards

The GRI Topic Standards include disclosures for offering information on various topics. Some examples include tax, well-being while on the job, and waste standards. Each Standard includes a summary of the subject, disclosures that are specific to the subject, and information on how a company manages the impacts that are related to it. An organisation chooses the Topic Standards that are appropriate for the chosen material themes and applies them to reporting (Global Reporting Initiative, 2021). Figure 7 presents a simplified overview of the GRI Standards.

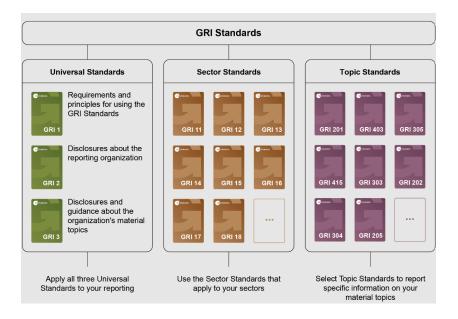


Figure 7: Overview of the GRI Standards

Source: Global Reporting Initiative (2021).

The best practices from various other existing tools and frameworks are rapidly being included into the GRI Standards. The Universal Standards, which were updated in 2021, reflect the requirements for expected ethical behaviour in intergovernmental entities like the International Labour Standards, the International Corporate Governance Framework, the Organisation for Economic Cooperation and Development (OECD), Guidelines for Multinational Enterprises, and the UN's Guiding Principles on Business and Human rights (Global Reporting Initiative, 2021).

4.4 Criticism of the GRI Standards

4.4.1 Misuse and misinterpretation of the standard

One major constraint of the GRI Standards is that it is a topic-level reporting standard, which means that even though the Standards are modular, its guidance is still less detailed in

comparison to other reporting frameworks like the SASB. The GRI Standards have a wider scope, but are narrower in reach than the SASB, which offers guidance on subjects including disclosure themes and accounting/activity measures at a more detailed level. Individuals' perspectives on whether the GRI succeeds in establishing a single standard for sustainability reporting are divided, but the vast majority accept it as a recognized global standard. This is one of the main points of contention regarding the GRI (Apiday, 2023).

Jones et al. (2016) states that it is important to keep in mind that not all of the issues relating to the creation of NFI have been immediately addressed by the GRI Standards. Even though their contents are frequently reviewed, concerns have been raised about their effectiveness in promoting sustainable consumption patterns and thwarting the idea of continued economic growth, which would stop the exhaustion of the planet's resources and guarantee a shift toward a future that is truly sustainable. The author furthermore suggests that enterprises currently benefit from a flexible interpretation of the methodologies and the ability to apply the GRI Standards to varied degrees of their business areas. As a result, they frequently switch the emphasis of their reports from environmental concerns to business continuity. Kumar et al., (2017) used another research team that examined the GRI reporting of 10 top Indian banks and came to similar conclusions. They claim that despite a huge quantity of data being made public, reporting techniques for sustainable development seriously underreport important social and environmental issues. Additionally, the reporting content's poor persuasiveness can be linked to insufficient user interaction. To add to this, Boiral and Henri (2017) emphasize the difficulty of assessing and contrasting the data pertaining to 92 GRI indicators disclosed by firms within the same sector due to its vague and incomplete wording, while Talbot and Boiral (2018) found that the majority of the analysed GRI reports were lacking in certain areas and left out crucial information on climate performance.

Other academics are also sceptical. They contend that GRI is overly generic and possesses numerous reporting tools that businesses do not use, and that it is solely used to shape reporting procedures rather than being used as a management tool. Due to the difficulty of gathering data for so many different indicators, implementing GRI recommendations is difficult, time-consuming, and expensive (Lozano & Huisingh, 2011). It is therefore not yet evident how GRI reporting benefits reporting processes.

4.4.2 Assurance problems

For many decades now it has been standard practice for companies that issue financial reports to also have those reports audited by professional auditors. This is to prevent companies from falsifying their financial performance. If a company were to release its financial statements without them being checked by an officially recognized auditing authority, such statements would invoke suspicion among its users, deeming it unreliable at best, and illegal at worst. Therein lies the biggest criticism of current NFR – it lacks proper

assurance. Although it currently seems that the GRI is set to be the most likely organisation to develop into offering generally accepted reporting standards for corporate sustainability reporting, it has not yet received regulatory body recognition in this capacity. Combined with the heterogeneity of sustainability reports, this creates a serious obstacle for auditors. Adding further to this dilemma, current GRI reports often contain information that was obtained using a variety of measurement methods. In most cases this means that data is frequently compiled from a variety of sources, many of which are located outside the reporting organisation due to the expertise needed for effective measurement. The reporting organisation must therefore decide how best to analyse and pass on the data gathered by other specialized organisations, and auditors must figure out how to perform the attest role for such reports in the most effective manner (Ballou & Heitger, 2005).

All of the above factors point to the need for mandatory audits of sustainability reports, while also increasing the complexity of providing such audits. Not only do these factors increase the importance of sustainability report audits, but they also increase the complexity of providing such audits. To this end, this issue offers an auditing opportunity that is relatively yet unexploited, since the majority of reports are not audited. Due to the critical necessity to provide authentication for this substantial and increasingly widespread amount of disclosed information, stakeholders are bound to start expecting official audits for such reports in the future. Although the present version of GRI principles poses difficulties for auditors, the speed at which businesses around the world are adopting them creates a market opportunity for assurance that is bound to be sought by businesses ready to offer such assurance. According to Accountancy Europe (2017), the number of providers of such CSR assurance is already expanding. The number of businesses that have their CSR practices reported on by third parties has increased as more businesses throughout the world do so. Facing pressures from regulatory bodies, stock exchanges, and investors, a rising number of businesses choose to certify their CSR reports (García-Sánchez et al., 2021).

Two opposing viewpoints are presented in the literature regarding the role of assurance in enhancing the validity of CSR disclosure:

1. The symbolic view

Businesses employ third-party verification for impression management. According to this viewpoint, the desire for more credibility drives the employment of CSR assurance services (Boiral et al., 2019).

2. The substantive view

This view, on the other hand, contends that external assurance influences reporting in a way that improves transparency and accurately portrays a firm's CSR efforts. For advocates of this viewpoint, (Brown-Liburd et al., 2018), getting assurance serves as a monitoring tool and also has a "disciplinary effect", which encourages greater dedication to transparency. Among others, Ballou et al. (2018) provide evidence of the beneficial impact of CSR

assurance on CSR statements, and Moroney et al. (2011) found a correlation between CSR assurance and higher quality revealed information. Another study by Sauerwald and Su (2019) examined the impact of CSR assurance on CSR decoupling (the gap between the disclosed information of company activities and actual company activities) and found a negative effect, suggesting that CSR assurance inhibits CSR decoupling.

With assurance for such reports becoming a rising trend, it must also be mentioned, that widespread worries about legal liability are a crucial issue that needs to be resolved before business sustainability reporting can be assured. The ability of consumers to sue companies and auditors based on the broad range of data contained in the reports may necessitate significant tort reform in order to decrease auditor risk (Ballou & Heitger, 2005).

5 ANALYTICAL APPROACH

5.1 Formulation of hypotheses

In addition to being the leading standard in NFR (Mysaka et al., 2021), authors Weber et al., (2008), and Lee and Maxfield (2015) describe the GRI Standards as having a wider-ranging effect than simple CSR, with a combination of policies, outcomes, and impact assessment of the organisation. It plays an essential role in identifying which topics to report, and how detailed the report should be (Torelli et al., 2019). Drawing from multiple theories (stakeholder theory, agency theory, signalling theory), some authors like Kang and Liu (2013), and Pham et al. (2021), have found positive connections between sustainability reporting and company performance. Others (Nikolaeva & Bicho, 2010) believe that the impact of the GRI Standards is still inconclusive and requires more empirical research. To further analyse the link between NFR and company performance, the following hypothesis is introduced.

H1: Adhering (or better adhering) to GRI Standards has a positive effect on financial performance.

The literature offers several explanations as to why firm size is often positively correlated with higher quality of NFI. Brooks and Oikonomou, (2018) posit that a firm is more likely to adopt quality reporting practices if it is already in a financially strong position and, therefore, has the luxury of spending extra resources on CSR activities. Michelon et al. (2015) state that large businesses, especially those present on the stock market, release sustainability reports for signalling purposes. This is due to them being exposed to more public scrutiny than smaller firms. On the other hand, Laine (2009) states that large firms in environmentally sensitive sectors tend to produce sustainability reports to legitimize their actions. From these findings, the second hypothesis is formed.

H2: Larger firms are more likely to (better) adhere to GRI Standards.

ESG score is a non-financial score that measures a company's environmental, social, and governance reporting practices, utilizing quantitative and policy-related data from the company's annual reports and CSR materials (Shaikh, 2022). Since the GRI Standards are created in accordance with a clearly established due process protocol, this guarantees that a transparent and inclusive approach was used to create them (Global Reporting Initiative, 2022). According to Marquis et al. (2016), the GRI Standards could also help resolve the problem of "selective reporting," which some businesses utilize to engage in greenwashing, where they reveal a chosen group of private data in order to deceive the public. Authors Hummel and Schlick (2016) corroborated this by analysing 195 European companies, with the results showing that companies with more informative reporting received higher achievements in sustainable development, while companies that tried to hide their lacking performance with flawed reports achieved lower performance scores. This leads us to the third and final hypothesis.

H3: Adhering (or better adhering) to GRI Standards leads to better environmental, social, and governance (ESG) performance (lower ESG scores).

5.2 Methodology and research process

To analyse the impact of adhering to GRI Standards on financial performance of companies, I resorted to quantitative research. The quantitative data was obtained from financial reports of companies and from the Sustainalytics website - an ESG ranking agency that publishes yearly ESG scores for companies. Besides checking the difference between companies that use the Standards and those that do not, I also performed a quality analysis of the GRI reports to check if higher quality reports lead to better financial performance. The data was then analysed using the statistical program RStudio. To select the 20 companies used for the study, I employed the convenient sampling method, meaning that I collected the necessary data from readily available samples. To check the difference between reporting and nonreporting companies, 13 of these companies adhere to GRI Standards, while the other 7 do not. The analysis starts by presenting the sample and the simple characteristics of each examined company. Next, I present the independent and dependent variables used in the analysis. In the final part, I perform a statistical analysis of the collected data, consisting of multiple regressions, assumptions for these regressions, and correlation tables. Using this statistical method, I analysed how (better) adhering to GRI Standards affects financial performance, how size affects (better) adhering to GRI Standards, and how (better) adhering to GRI Standards affects ESG scores.

5.3 Sample

Due to several obstacles regarding obtaining proper financial data from SME's and large enterprises, the research was conducted only on listed companies (those whose securities are traded on a regulated market), as they are required to present their financial information

under EU law (European Commission, 2021). Furthermore, the research was designed to be performed only on companies from the same sector to better control for the difference between sectors. To ensure higher quality of reports and a higher ratio of companies using the GRI Standards, the environmentally sensitive sector of Chemical Manufacturing (NACE Code – C20) was chosen. The sample includes different European countries so that more countries were represented. The companies selected for the sample were chosen on the following criteria: More than 500 employees, listed company, chemical manufacturing sector, available sustainability report for years 2020-2022, European country. The reason for the final sample size of companies to be analysed is therefore a sum between available data, time to analyse the data, and resources needed to obtain the data. The reason for the imbalanced number of companies in the two observed groups is that very few companies tend to choose not to report using the GRI Standards. The data was collected from publicly available annual and sustainability reports of companies. To check if a company was adhering (or not) to any form of GRI Standards, the website corporateregister.com was used, which tracks all the companies that have formally submitted their report to the Global Reporting Initiative. Table 4 presents the companies included in the analysis.

Company	Country	GRI Standards
Air Liquide	France	Does not adhere
Akzo Nobel	Netherlands	Adheres
AlzChem	Germany	Does not adhere
Arkema	France	Does not adhere
Borregard	Norway	Adheres
Chr. Hansen	Denmark	Does not adhere
Ciech	Poland	Adheres
Clariant	Switzerland	Adheres
Corbion	Netherlands	Adheres
Covestro	Germany	Adheres
CropEnergies	Germany	Does not adhere
Dottikon Synthesis	Switzerland	Does not adhere
Elkem	Norway	Adheres
Evonik Industries	Germany	Adheres
Kemira	Finland	Adheres
Novozymes	Denmark	Does not adhere
Sika	Switzerland	Adheres
SOL SpA	Italy	Adheres
Umicore	Belgium	Adheres
Wacker Chemie	Germany	Adheres

Table 4: Basic company information

5.4 Financial performance measurement – dependent variables

I determined the financial performance of each company by using annual reports and financial statements found on official company websites. To minimize the chance of performing analyses on outlier years of companies, three business years were used in preparing the data. To analyse financial performance of companies, three major parameters were observed: net profit for the year, shareholders' equity, and total assets. The 3-year averages for these three parameters were used to calculate two key ratios for understanding the financial position of a company – Average Return on Equity and Average Return on Assets. These two ratios served as my dependent variables that were used in the analysis of the impact of GRI on financial performance.

ROE is one of the most frequently used measures of financial performance of companies, especially popular among investors, since it provides a link between the income statement and the balance sheet. It shows how well a business makes use of the capital invested by its shareholders to produce profits. It is also useful in evaluating a company's performance relative to industry and rivals' averages (Ahsan, 2012).

$$ROE = \frac{(Operating \ profit+Financial \ income)}{Shareholders' Equity}$$
(1)

Often used in conjunction with (1) to provide an even more comprehensive view of a company's performance is ROA. It assesses the efficiency with which the entity's assets – defined as corporate assets acquired through the issuance of shares in the capital market and/or through obligations to banks or other parties, including the issuance of bonds – are used to generate profits (Kusuma, 2021).

$$ROA = \frac{(Operating \ profit+Financial \ income)}{Total \ assets}$$
(2)

5.5 Sustainability performance measurement – independent variables

The first measurement of sustainability performance used in this analysis is an ESG score, which is a parameter provided by Sustainalytics, a leading company in ESG and corporate governance research. The company's expertise is providing ratings and risk analyses that aid investors from all over the world in the creation and execution of ethical investment strategies. The ESG risk ratings quantify the extent to which an organisation's economic value is threatened by ESG issues. It measures the size of an organisation's mismanaged ESG risks. The score is made up of two separate parameters: a quantitative score and a risk category. Lower scores indicate less unmanaged risk, with the quantitative value indicating "units" of unmanaged ESG risk. Unmanaged risk is rated on an open-ended scale with a minimum value of zero (no risk) and a maximum score below 50 in 95 % of the time (Sustainalytics, n.d.). Table 5 presents the risk category scale into which companies are placed based on their ESG score.

Table 5: Risk category scale

Risk Category	Negligible	Low	Medium	High	Severe
ESG Score	0 - 10	10 - 20	20 - 30	30 - 40	40 +

Source: Own work based on Sustainalytics (n.d.).

The above categories are absolute, therefore an assessment of any severity of risk corresponds to an equivalent level of unmanaged ESG risk across all covered subindustries. This implies that any company from any sector can be easily compared to another from a different sector. The ESG Risk Ratings therefore serve as a sort of "unified currency" for ESG risk. It should also be stated here that the world is moving towards a more sustainable economy, and as a result, better management of ESG risks should, all else held constant, be linked with greater long-term corporate value (Sustainalytics, n.d.).

The second measurement of sustainability is the quality of GRI reports. Previous research has established the link between better quality reports and financial performance, but determining the quality of a sustainability report is not always simple. Martínez-Ferrero et al. (2013) and Isaksson and Steimle (2009) posit that the quality of GRI reports is determined by how many GRI indicators a company covers in their sustainability report. To this end, the GRI reports from each observed year for all reporting companies in the sample were checked manually, using the material topic list provided by the GRI. Since GRI has not yet released its sector standards for the chemical manufacturing industry, companies could choose whether a certain material topic was pertinent to their business and therefore necessary to report on. Since all companies included in the sample are from the same C20 sector, it is assumed that they should all have similar impacts on society and the environment, and therefore should report on mostly the same material topics. For this reason, the following topics were removed from consideration, since the majority of companies did not report on them: Indirect economic impacts, Procurement practices, Security practices, Rights of indigenous people, and Customer privacy. The approach from Utami (Utami, 2015) was then used, by using a simplified grading method, assigning 0 for every material topic not reported, and 1 for every material topic that was. The total number of reported topics was then divided by the number of possible topics to report on to gain a percentage of material topics reported in each year. This was done for each year and then averaged to produce an average percentage. Based on this percentage, the companies received a numerical score ranging between 0 (0 % of material topics were covered – meaning that the company does not adhere to the GRI Standards) and 8 (90 % or more of material topics were covered). Appendix 2 provides visual insight into the grading system for GRI material topics for each company.

The third measurement of sustainability is whether companies provided external assurance when issuing their sustainability reports. Since previous studies established a link between assurance and CSR decoupling (Sauerwald & Su, 2019), and assurance and quality of reports (Moroney et al., 2011), it is assumed that data from companies that provide such external

validation is more reliable and of higher quality, meaning that it should have a greater effect on financial performance. To this end, the sustainability reports for each company were checked using the website corporateregister.com, which stated whether the published reports were externally or only internally validated. Companies with external assurance were given a score of 1, otherwise they scored a 0.

5.6 Control variables

Other variables that can offer information and influence a company's outcome must be taken into account when analysing the relationship between corporate sustainability performance and financial performance. To reduce the possibility of omitted variable bias, control variables are introduced. Among several possible control variables for this type of analysis, three common variables are chosen: firm size, firm age, and leverage.

When compared to small businesses, large firms can take advantage of economies of scale and scope, making them more effective. Additionally, small businesses might not have as much influence as their larger counterparts, making it challenging for them to succeed, especially in marketplaces with fierce competition. On the other hand, as businesses become bigger, they may experience inefficiencies that worsen their financial performance (Liargovas & Skandalis, 2012). Smaller firms are therefore less likely to succeed in adequately implementing environmentally and socially conscious solutions with long-term strategic benefits that will boost financial performance, because they lack the resources that larger businesses have (Andries & Stephan, 2019). For this analysis, the natural logarithm of total assets – representing Firm size – was chosen as a control variable.

Since older firms are more established, have accumulated more experience, and reaped the benefits of learning, they are less susceptible to the liabilities of newness and are therefore in a better position to enjoy greater financial performance. Established reputation can also lead to higher margins on sales. Conversely, older businesses may become passive and may find themselves trapped in established routines that are out of step with shifting market conditions (Liargovas & Skandalis, 2012). To this end, the control variable Firm age is introduced, measured by the natural logarithm of age.

The control variable Leverage is represented by the debt-to-equity ratio, comparing what the company has borrowed to what it has raised from private investors or shareholders. When riskless debt is assumed, the value of the tax shield rises as financial leverage grows. This means that increasing debt increases the business' worth, leading to an optimal all-debt capital structure. However, no business enjoys risk-free debt, leading to an inverted U-shape relationship between leverage and firm performance (Wrightsman, 1978). This occurs when the threat of bankruptcy due to rising financial costs arises. Businesses therefore need to maintain an optimal capital structure, suited to their nature of business, to bolster their financial performance. The descriptive statistics for all variables are presented in Table 6 on the following page.

	ROE	ROA	GRI	Size	Age	Leverage	Assurance	ESG
Mean	16.15	7.36	2.40	22.10	4.03	1.41	0.40	23.12
Median	14.71	6.29	2.5	22.02	4.60	1.21	0.00	22.65
Max.	30.58	14.17	7.00	24.55	5.00	3.09	1.00	33.90
Min.	8.45	2.68	0.00	19.74	2.08	0.19	0.00	12.80
Std. Dev.	5.96	3.26	2.28	1.31	0.92	0.71	0.5	5.95
Ν	20	20	20	20	20	20	20	20

Table 6: Descriptive statistics for all variables

Source: Own work.

5.7 Analysis method

To analyse the connection between dependent and independent variables, two multiple regressions are applied, followed by a multicollinearity table showcasing the relationships between examined variables. The first two regression models examine the relationship between ROA/ROE and the independent variables, while the correlation table examines how Firm size affects GRI adherence and how GRI impacts ESG scores. The regression models follow the traditional multiple regression formula:

$$y = \beta_0 + \beta_1 x_{1t} + \beta_2 x_{2t} + \ldots + \beta_k x_{kt} + \varepsilon$$
(3)

The two regression models are therefore designed as:

 $ROE = GRI + External assurance + Firm size + Firm age + Leverage + \varepsilon$ (4)

 $ROA = GRI + External assurance + Firm size + Firm age + Leverage + \varepsilon$ (5)

5.8 Regression assumptions

In order to achieve accurate results, certain assumptions of a regression need to be met. Violations of these assumptions can lead to biased results and interpretations, so to prevent such inaccuracies, the following regression assumptions are tested:

- heteroscedasticity,
- autocorrelation,
- normal distribution of residuals,
- multicollinearity.

5.8.1 Heteroscedasticity

Because regressions using ordinary least squares (OLS) presume that the residuals are taken from a population with constant variance, heteroskedasticity is viewed as an issue in statistics. Analysis results may be inaccurate if there is an unequal dispersion of residuals, as this indicates that the population utilised in the regression has an unequal. To test this, scatterplots depicting standardized residuals against standardized fitted values were plotted for both regression models as can be seen in Appendix 3. After examining model (4)'s scatterplot, it was determined that it seems to have a fairly randomized distribution of points, no discernible patterns, and no present outliers. For model (5), it was determined that it also seems to have fairly randomized points, a discernible pattern is hard to detect, and while it is slightly skewed to the left with one possible outlier, the outlier still fits within 2 standard deviations. Afterwards, Appendix 3 further shows that the Breusch-Pagan test was applied for both models. The test shows p-values of over the statistically significant value of 0.05, therefore the null hypothesis of homoscedasticity cannot be rejected, indicating that heteroscedasticity is not present in both models.

5.8.2 Autocorrelation

To test for autocorrelation, which points to residuals being correlated with each other over time and therefore making the regression unreliable, a Durbin-Watson test was applied (see Appendix 4). The test statistic always ranges from 0 to 4, with 2 being the most desirable outcome. Both regression models received a test score of close to 2 with p-values being greater than the statistically significant value of 0.05, meaning that we cannot reject the null hypothesis of no autocorrelation.

5.8.3 Normal distribution of residuals

To perform an accurate regression, residuals ought to be normally distributed. Violation of this assumption points to an inadequate model, since it means that the errors are not consistent across different values. This is tested by examining histograms of normal distributions for both models and performing additional Shapiro-Wilk tests (see Appendix 5). While the Shapiro-Wilk normality tests show desired p-values of over 0.05 for most variables except GRI and Firm age (Assurance is a binary variable so it cannot be normally distributed), the histograms of residuals for both regression models still show a discernible normal distribution pattern, meaning that the model is fairly normally distributed.

5.8.4 Multicollinearity

To check if multicollinearity occurs, meaning that there is high correlation between independent variables, VIF values were calculated for all independent variables. A multicollinearity table is also provided in Appendix 6 to further test for this assumption.

Since no VIF values of the independent variables exceed 4, and all correlations between independent variables are between -0.8 and +0.8 (except for (1) and (2), but the two are never present in the same model), it can be assumed that multicollinearity does not occur.

5.9 **Results of the analysis**

5.9.1 Regression results for Return on Equity

To test for H1, a table of regression results is produced, highlighting the link between ROE and (better) adherence to GRI. Table 7 shows the results of the analysis, while the summary and link to the hypothesis are provided further below.

Variable	Coefficient	p-value
GRI	0.479	0.609
Firm size	-0.464	0.720
Assurance	-0.605	0.137
Leverage	0.302	0.884
Firm age	1.226	0.468
		'
$R^2 = 0.259, N = 20$		
Adjusted $R^2 = 0.005$		
<i>p-value of model</i> = 0.461		
*= Significance at 0.05 level		

Table 7: Regression for the dependent variable ROE

Source: Own work.

From the summary of the regression model (4), we can see that no independent variables have a statistically significant impact on the dependent variable ROE. While GRI has a positive effect on ROE with a coefficient of 0.479, the p-value is statistically insignificant at a 95 % confidence interval. We therefore cannot accept H1, which stated that GRI has a positive effect on financial performance. Overall, the model only partially accounts for the variance in the dependent variable ROE, according to the adjusted R-squared of 0.005, meaning that not even 1 % of the variance in ROE is explained by the model. The whole model is not statistically significant at the 0.05 significance level, according to the corresponding p-value of 0.463. This indicates that the dependent variable ROE in this model is not statistically correlated with the set of chosen independent variables.

5.9.2 Regression results for Return on Assets

To test for H1, a table of regression results is produced, highlighting the link between ROA and (better) adherence to GRI. Table 8 shows the results of the analysis, while the summary and link to the hypothesis are provided further below.

Variable	Coefficient	p-value
GRI	0.211	0.615
Firm size	-0.645	0.276
Assurance	-3.507	0.060
Leverage	-2.258	0.027*
Firm Age	0.186	0.807
		I
$R^2 = 0.504, N = 20$		
Adjusted $R^2 = 0.327$		
p-value for model = 0.055		
*= Significance at 0.05 level		

Table 8: Regression for the dependent variable ROA

Source: Own work.

From the summary of the regression model (5), we can see that only Leverage has a statistically significant effect on ROA at a 95 % confidence level. The results state that for every 1 unit increase in Leverage, ROA decreases by -2.258 %, holding other variables constant. This means that the more debt a firm accumulates, increasing their debt-to-equity ratio, the more their ROA decreases. Assurance is close to being significant with a p-value of 0.06, which would mean that, on average, when Assurance is present, there is a decrease in expected value of ROA, compared to when Assurance is not present. This suggests that while there may be a negative relationship between these two variables, the result is not statistically significant. Although GRI quality seems to lead to an increase in ROA, the result is statistically insignificant, meaning that we cannot accept H1, which stated that GRI has a positive effect on financial performance. Overall, the model's adjusted R-squared of 0.327 indicates that it accounts for approximately 32.75 % of the variance in the dependent variable ROA, while the model's p-value of 0.055 indicates that it is marginally statistically significant, suggesting that the combination of the independent variables may be associated with ROA.

5.9.3 Correlation table results for GRI, ESG, and Firm size

To test for H2 and H3, a correlation table is produced, highlighting the link between GRI, ESG, and Firm size. Table 9 shows a correlation table containing all the variables, while the summary and link to hypotheses are provided further below:

	ROE	ROA	GRI	Size	ESG	Assurance	Leverage	Age
ROE	1							
ROA	0,8**	1						
GRI	-0,2	-0,42	1					
Size	-0,13	-0,26	0,36	1				
ESG	-0,18	-0,07	-0,11	-0,58	1			
Assurance	-0,44	-0,47	0,63	0,034	-0,005	1		
Leverage	0,09	-0,47*	0,25*	0,034	0,12	0,01	1	
Age	0,3	0,19	-0,18	-0,39**	0,01	-0,21	0,09	1
*= <i>0.05</i> ,								
**= 0.01								

Table 9: Correlation table of variables

Source: Own work.

From the correlation table we can see that neither GRI and Firm size, nor GRI and ESG are significantly correlated. While it seems that (better) adhering to GRI Standards leads to lower (therefore better) ESG scores, and that larger firms tend to adhere to GRI more, both results are not significant at a 95 % confidence level. We therefore cannot accept neither H2 nor H3, which stated that larger firms tend to (better) adhere to GRI Standards and that (better) adhering to GRI Standards leads to better (lower) ESG scores respectively. The results of all the hypotheses are presented in Table 10 below.

Table 10: Summary of hypotheses results

Hypothesis	Result
H1: Adhering (or better adhering) to GRI Standards has a positive effect on financial performance.	Cannot accept, inconclusive
H2: Larger firm are more likely to (better) adhere to GRI Standards.	Cannot accept, inconclusive
H3: Adhering (or better adhering) to GRI Standards leads to better environmental, social, and governance (ESG) performance (lower ESG scores).	Cannot accept, inconclusive

6 **DISCUSSION**

6.1 Theoretical implications

The research provides relevant contributions for reporting firms as well as standard setters. While none of the hypotheses were proven to be accurate, the results can still provide insight into the growing field of NFR. While (better) adhering to GRI did not show statistically significant benefits to financial performance, this may not mean that this practice is redundant when considering financial implications. This may only confirm Chauvey et al.'s (2015) work, in which they stated that NFR has undergone a "normativity process". This means that the practice of producing non-financial reports has already passed the legitimacy test, meaning that companies have already embraced NFR as a prerequisite for legitimacy. Previous studies that suggested a positive impact of GRI on company financial performance relied on older data, specifically from years 2002-2004 (Webber et al., 2008), 2008-2016 (Yang et al., 2019), and 2008–2018 (Bodorin et al., 2019). Since NFR and the use of GRI has seen a rapid increase following the years of the imposed EU Directive 2014/95, this has likely affected the results of this study. This difference became apparent when analysing sustainability reports from companies included in the C20 sector, as it was near impossible to find a company that did not already adhere to the GRI Standards. Of those that did not, many companies made their own versions of sustainability reports, taking the GRI Standards as inspiration, leading to very similar, but not GRI acknowledged reports. Consequently, if most of the companies accept the GRI Standards as the norm when it comes to NFR, it can lead to misleading results when comparing companies that adhere to the Standards with those that do not, since external assurance is still not mandatory, meaning that low quality reports are very common. Many companies therefore report using the minimal requirements to still be acknowledged by the GRI, and by doing so they are "checking the box" when it comes to sustainability reporting, which fails to meet the end goals of this kind of practice. This trend is consistent with The Department of Business, Energy and Industrial Strategy's (2019) report, which states that in the wake of a plethora of regulations coming into effect in the EU (such as the ESRS), it is becoming increasingly apparent that compliance with these regulations is of greater importance than their contents.

Stemming from Bradford et al.'s (2016) research, inconclusive results of the analysis can also point to the fact that the provided NFI from companies does not meet the desires and needs of the readers (stakeholders), causing it to not have the desired effects for the organisation. Legitimacy theory is therefore not as accurate as the stakeholder theory in explaining the results of how (better) adhering to GRI Standards affects financial performance.

The literature states that by increasing transparency and providing an honest picture of the company's efforts regarding social, governance, and environmental factors, the company develops a deeper relationship with its stakeholders, achieving a better position to reap future

financial benefits (Lokuwaduge & Heenetigala, 2016; Tsoulfas & Pappis, 2012; Deegan, 2019). The results of the analysis regarding external assurance and financial performance, although marginally statistically significant (p = 0.06), suggest the opposite, meaning that it could be possible that more transparency comes at a cost of financial performance. When the effort to achieve greater transparency is not backed by mandatory external validation, this can lead to companies, who provide such validation and therefore report more truthfully regarding positive and negative topics, achieving worse results than the ones providing potentially misleading and incomplete data. It seems as if overselling your success and omitting underwhelming results pays off better than providing an objective picture of a company's efforts.

The results of the analysis suggest that legitimacy theory – the act of companies offering external validation to legitimize their behaviour in the eyes of society – does not provide the desired results in this case. The decision to portray only the positives could also stem from the fact that companies strategically consider what to report to appease mainly their key stakeholder groups, while disregarding the needs of those less important (Deegan, 2019). Neither stakeholder, nor legitimacy theory therefore clearly explain the results of this analysis.

While literature credits several factors as to why firm size is positively correlated with better NFI and that they are more likely to adopt quality reporting practices if they have an abundance of expendable assets to spend on CSR activities (Brooks & Oikonomou, 2018), the results in this study proved to be inconclusive in this aspect. Again, this may stem from the fact that the nature of sustainability reporting is so widespread and has become a business practice that is taken for granted. Larger firms also did not seem to provide better quality reports, which can mean that more disposable assets do not lead to better disclosure, or worse, that the focus of reporting is more leaning towards legitimizing current firm behaviour to appease key stakeholders, than it is improving future sustainable undertakings. Agency theory posits that large firms, where ownership is separated from management - as is especially common in listed companies observed in this study – offer more and better quality NFI to minimize the costs stemming from opportunistic management practices (Ullmann, 1985; García-Meca & Sánchez-Ballesta, 2010; García-Sánchez et al., 2013). Although the correlation between firm size and GRI use was positive, it was statistically insignificant, meaning that there are other factors other than agency theory that affect this relationship. Similar theoretical implications can be made for the relationship between GRI reporting and ESG scores, as the results proved that the legitimizing actions of companies providing GRI reports did not automatically lead to better ESG scores. While the correlation between the two variables was negative, it was statistically insignificant, meaning that other factors also play a role when defining this relationship.

6.2 Managerial implications

Regarding the inconclusive relationship between (better) GRI reporting and firm performance, one implication could be that businesses should spend more time engaging with stakeholders to better understand their needs, since ultimately, it is the stakeholders and subsequent customer relationships that increase firm value. Since merely providing a GRI report in recent years is not enough to appease stakeholders, further alignment of company goals and strategies with stakeholders' expectations must occur to fully take advantage of this type of reporting.

Regarding the negative relationship between external assurance and firm performance, standard setters need to address this glaring issue if the true goals of NFR are to be achieved. The EU should also consider the need for external validation with its upcoming European Standards to lessen the gap between financial and NFR and solidify each type as separate, but equal pillars of quality company disclosure. NFR legislation must mirror that of financial reporting in this aspect and since it is becoming apparent that certain companies gain an advantage by circumventing the need for external assurance in their sustainability reports, pressure to implement this type of practice needs to come from the legislative side. On the other hand, the negative relationship between external assurance and financial performance could indicate a problem regarding the Standard's applicability and thoroughness. Due to the GRI not (yet) having a dedicated Standard for this type of industry sector, this can lead to companies underreporting on key issues. GRI should therefore expedite the process of formulating sector specific standards or assist the upcoming ESRS in this aspect, so that the issue can be resolved in the upcoming years.

As with firm size and GRI, the relationship between GRI reporting and ESG scores was likewise not statistically significant, showing no significant evidence that GRI reporting leads to a better ESG score. Since sustainability reporting has become a must in the eyes of sustainability conscious investors, merely providing a report is apparently not good enough anymore. Companies must further differentiate themselves from other companies in how they manage their ESG risks to appease companies that provide ESG scores. Other factors such as investments into R&D, sustainable practices, and the degree of risk management within a company should be considered by companies when applying for an ESG score assessment.

6.3 Limitations and future research directions

This study also suffers from some limitations that could be better addressed, particularly when formulating the sample. Since regular company reports typically need to be paid for, listed companies were chosen as they were the best trade-off between resource and time availability. Due to the fact that listed companies tend to be larger, it made it difficult to find non-GRI reporting firms, especially when also having to exclude a number of firms due to problems with outliers and insufficient data. This led to a fairly small sample size of 20

companies, of which 13 were GRI users. When analysing financial performance as a dependent variable, attributing the change in performance to the selection of independent variables can be misleading, as many other factors can lead to this change. Other worldwide events, such as the recent pandemic, can also skew some of these results, therefore they need to be interpreted with caution.

Noteworthy control variables to include in future studies would be other sustainability performance indicators, such as inclusion in the Dow Jones sustainability and FTSE4Good developed indexes (Pham et al., 2021), or including other financial performance indicators, such as share price (Nguyen, 2020) and Tobin's Q (Bodorin et al., 2019). Another factor when studying the effects of NFR is also the country where a company primarily operates, since various cultures have their own values, customs, and beliefs that result in different NFR practices (Turzo et al., 2022). Future studies could therefore also focus on if the difference in countries affects the relationship between NFR and company performance. The methodology of this thesis is mostly based on current literature, meaning that this study can be easily replicated, although future studies may want to focus more on the adoption of the ESRS, since it is likely to be the prevalent standard in the EU moving forward.

7 CONCLUSION

The trend of NFR is becoming increasingly popular, even mandatory, across the world and especially in the EU. New standards, regulations, and other reporting practices are being developed each year. One major development in this area was EU's introduction of the Non-financial Reporting Directive 2014/95 in 2014, which solidified the role of NFR in the era of sustainable business, by mandating certain non-financial disclosure from large firms and public interest entities. The benefits of such reporting include improved decision making, lower costs of financing, and impact on the company brand and reputation. Other scholars agree that certain drawbacks are also inevitable with such reporting, such as information overload, selective disclosure, greenwashing, lack of assurance, and low comparability of disclosures.

One of the purposes of this master's thesis was to elucidate the connection between GRI sustainability reporting and financial performance of companies. To achieve this, stakeholder, agency, and legitimacy theories were used as a theoretical foundation as to why companies report in the first place. Since the prevalent stance among companies leading up to the 21st century was that additional reporting incurs additional costs with questionable benefits, such initiatives were seldom practiced. Notable theoretical reasons for the uprise in this trend were better communication with stakeholders (other than shareholders) and their demands, legitimizing firm behaviour in the eyes of the public, and minimizing the costs stemming from opportunistic managerial behaviour. In addition, stakeholders have become increasingly aware that financial statements no longer serve as an adequate means of reporting, since they do not fully capture a company's operations. Companies are also under

more external pressure to act responsibly following persistent global corruption scandals, and more notably, the financial crisis of 2008. In response to this, several standards and frameworks for reporting of additional information emerged, out of which the GRI Standards have become the most prevalent.

To better understand why companies use the GRI Standards, the thesis provided insight into the inner workings of the Standards themselves. Businesses increasingly (even predominantly) refer to the GRI Standards when issuing non-financial reports due to their thoroughness, stakeholder participation, due process, quality materiality assessment, and renown. The Standards provide guidance throughout all the necessary steps of formulating a report with developed sector standards for industries like mining, oil and gas, while promising further specific standards for other industries as well. Their popularity has placed them considerably in front of other standards competing for global recognition. The following years will be crucial in the relationship between governments and imposed standards, and the continuation of the GRI Standards, especially with the EU launching their own standards (ESRS) to combat the fragmentation of standards and guidelines worldwide.

Furthermore, the thesis tried to provide insight into how effective these Standards are relative to their absence of use and how effective they are in achieving the goals of NFR. To achieve this, a qualitative approach was used to determine the quality of GRI reports, while quantitative approaches in the form of multiple regressions and a correlation table were used to explain the relationships between chosen variables. The results of the regressions showed no correlation between (better) adhering to GRI Standards and increased financial performance, measured by ROE and ROA averages over the years 2020–2022. One interpretation could be the successful diffusion of GRI Standards in the reporting sphere to the degree that it has now become standard practice. This means that the use of GRI Standards no longer provides the stamp of quality reporting and no longer signals that a reporting company is better prepared for the upcoming ESG risks as it used to in the years leading up to the 2020's. It also suggests that legitimization was not successful, because the data provided was not in accordance with stakeholders' demands or expectations. This would mean that companies should pay more attention to stakeholders' needs and establish a clearer dialog to strengthen such relationships which in turn could provide greater financial benefits.

The results also showed no correlation between firm size and GRI use, and GRI use and ESG scores. Theory predicted that firms with more resources would be more prone to adhering to exhaustive standards like the GRI, since they could allocate a greater portion of their earnings than smaller companies. The results were inconclusive in this, suggesting that since the use of GRI is so widespread now, companies large and small opt to adhere to GRI, since it has become almost the norm. Meanwhile, the inconclusive relationship between GRI and ESG scores suggests that companies need to do more than just "checking the box" by adhering to GRI, by providing additional risk assessments and concrete steps as to how to improve their sustainability endeavours to achieve better ESG scores. Stakeholder, agency, and legitimacy theory were therefore not wholly successful in explaining the relationship

between the observed variables, suggesting that other variables need to be considered, ranging from different financial indicators (Tobin's Q, share price) to sustainability indicators (Dow Jones sustainability and FTSE4Good developed indexes).

The link between sustainability reporting and company performance is therefore still unclear and needs further examination to better solidify the connection. Future studies should also take into account comparing different countries and their NFR, since culture can also play a role in how a country reports. More emphasis should also be placed on future legislation coming to the EU and how this type of reporting affects also SME's not just large and listed companies.

This master's thesis therefore contributes to the nascent field of NFR, elucidating the relationship between company financial performance and GRI sustainability reporting. It also adds to existing literature by examining the workings of standardised and transparent business reporting and drawing a comparison to prevalent theoretical concepts and other similar studies regarding NFR.

REFERENCE LIST

- 1. Accountancy Europe. (2017, November 30). *Annual report 2017*. https://www.accountancyeurope.eu/publications/annual-report-2017/
- Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3), 836–863. https://doi.org/10.5465/amr.2007.25275678
- 3. Ahsan, A. F. M. (2012). Can ROE be used to predict portfolio performance? *Economics, Management, and Financial Markets*, 7(2), 132-148.
- 4. Aluchna, M., & Roszkowska-Menkes, M. (2018). Non-financial Reporting. Conceptual Framework, Regulation and Practice. *CSR, Sustainability, Ethics & Amp; Governance*, 213–236. https://doi.org/10.1007/978-3-030-00440-8_14
- 5. Andries, P., & Stephan, U. (2019). Environmental innovation and firm performance: How firm size and motives matter. *Sustainability*, *11*(13), 3585. https://doi.org/10.3390/su11133585
- Apiday. (2023, March 8). GRI What is the global reporting initiative? https://www.apiday.com/glossaries-posts/gri-what-is-the-global-reportinginitiative#:~:text=The%20GRI%20is%20an%20international,26000%2C%20SASB%2 C%20and%20CDP
- Arvidsson, S. (2011). Disclosure of non-financial information in the annual report. *Journal of Intellectual Capital*, 12(2), 277–300. https://doi.org/10.1108/14691931111123421
- 8. Ballou, B., Chen, P., Grenier, J. H., & Heitger, D. L. (2018). Corporate social responsibility assurance and reporting quality: Evidence from restatements. *Journal of*

Accounting and Public Policy, *37*(2), 167–188. https://doi.org/10.1016/j.jaccpubpol.2018.02.001

- 9. Ballou, B., Heitger, D. & Farmer, R. (2005, July). The Rise of Corporate Sustainability Reporting: A Rapidly Growing Assurance Opportunity. http://www.sba.muohio.edu/balloubj/images/Ballou%20Heitger%20CSR%2024Jul05.p df
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). Corporate social reporting and reputation risk management. *Accounting, Auditing &Amp; Accountability Journal*, 21(3), 337–361. https://doi.org/10.1108/09513570810863932
- Bernyte, S. (2021). Sustainability Marketing Communications Based on Consumer Values and Principles. *Regional Formation and Development Studies*, 26–35. https://doi.org/10.15181/rfds.v26i3.1807
- 12. Bodorin, A., Shash, N., Panaedova, G., Frumina, S., Kairbekuly, A., & Mityushina, I. (2019). The impact of the publication of non-financial statements on the financial performance of companies with the identification of intersectoral features. *Entrepreneurship and Sustainability Issues*, 7(2). https://doi.org/10.9770/jesi.2019.7.2
- Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. Accounting, Auditing & Accountability, 26(7), 1036–1071. https://doi.org/10.1108/aaaj-04-2012-00998
- Boiral, O., & Henri, J. (2017). Is Sustainability Performance Comparable? A Study of GRI Reports of Mining Organizations. *Business & Society*, 56(2), 283–317. https://doi.org/10.1177/0007650315576134
- Boiral, O., Heras-Saizarbitoria, I., & Brotherton, M. (2019). Assessing and Improving the Quality of Sustainability Reports: The Auditors' Perspective. *Journal of Business Ethics*, 155(3), 703–721. https://doi.org/10.1007/s10551-017-3516-4
- 16. Boonen, M. B. (2022). Global Reporting Initiative (GRI) & Corporate Sustainability Reporting Directive (CSRD) gap analysis. KPMG. https://kpmg.com/be/en/home/services/sustainability-services/global-reportinginitiative--gri----non-financial-reporting--nfr.html
- Borodin, A., Shash, N., Panaedova, G., Frumina, S., Kairbekuly, A., & Mityushina, I. (2019). The impact of the publication of non-financial statements on the financial performance of companies with the identification of intersectoral features. *Entrepreneurship and Sustainability Issues*, 7(2), 1666–1685. https://doi.org/10.9770/jesi.2019.7.2(61
- Bradford, M., Earp, J. B., Showalter, D. S., & Williams, P. F. (2016). Corporate Sustainability Reporting and Stakeholder Concerns: Is There a Disconnect? *Accounting Horizons*, 31(1), 83–102. https://doi.org/10.2308/acch-51639
- Brooks, C., & Oikonomou, I. (2018). The effects of environmental, social and governance disclosures and performance on firm value: A review of the literature in accounting and finance. *The British Accounting Review*, 50(1), 1–15. https://doi.org/10.1016/j.bar.2017.11.005

- Brown-Liburd, H. L., Cohen, J. A., & Zamora, V. L. (2018). CSR Disclosure Items Used as Fairness Heuristics in the Investment Decision. *Journal of Business Ethics*, 152(1), 275–289. https://doi.org/10.1007/s10551-016-3307-3
- Caglio, A., Melloni, G., & Perego, P. (2020). Informational Content and Assurance of Textual Disclosures: Evidence on Integrated Reporting. *European Accounting Review*, 29(1), 55–83. https://doi.org/10.1080/09638180.2019.1677486
- Carnevale, C., & Mazzuca, M. (2013). Sustainability report and bank valuation: evidence from European stock markets. *Business Ethics: A European Review*, 23(1), 69–90. https://doi.org/10.1111/beer.12038
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48. https://doi.org/10.1016/0007-6813(91)90005-g
- 24. Chathame House, & Hohnen, P. H. (2012, January). *The Future of Sustainability Reporting*. https://odpowiedzialnybiznes.pl/wp-content/uploads/attachments/news/Future_of_Sustainability_Reporting_Chatham_Hous e_2012.pdf
- 25. Chauvey, J., Giordano-Spring, S., Cho, C. H., & Patten, D. M. (2015). The Normativity and Legitimacy of CSR Disclosure: Evidence from France. *Journal of Business Ethics*, *130*(4), 789–803. https://doi.org/10.1007/s10551-014-2114-y
- Chen, L., Feldmann, A., & Tang, O. (2015). The relationship between disclosures of corporate social performance and financial performance: Evidence from GRI reports in manufacturing industry. *International Journal of Production Economics*, 170, 445–456. https://doi.org/10.1016/j.ijpe.2015.04.004
- Chong, L. Y., Ong, H., & Tan, S. (2018). Corporate risk-taking and performance in Malaysia: the effect of board composition, political connections and sustainability practices. *Corporate Governance*, 18(4), 635–654. https://doi.org/10.1108/cg-05-2017-0095
- Christensen, H. E. M., Hail, L., & Leuz, C. (2019). Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review. *RePEc: Research Papers in Economics*. https://doi.org/10.3386/w26169
- 29. Churet, C., & Eccles, R. G. (2014). Integrated Reporting, Quality of Management, and Financial Performance. *Journal of Applied Corporate Finance*, 26(1), 56–64. https://doi.org/10.1111/jacf.12054
- Clemens, B., & Bakstran, L. (2010). A framework of theoretical lenses and strategic purposes to describe relationships among firm environmental strategy, financial performance, and environmental performance. *Management Research Review*, 33(4), 393–405. https://doi.org/10.1108/01409171011030480
- Cormier, D., & Gordon, I. M. (2001). An examination of social and environmental reporting strategies. *Accounting, Auditing &Amp; Accountability Journal*, 14(5), 587– 617. https://doi.org/10.1108/eum000000006264

- 32. Courtnell, J. (2022, November 28). ESG Reporting: How Does It Differ From Sustainability Reporting? Green Business Bureau. https://greenbusinessbureau.com/esg/esg-reporting-and-sustainability-reporting/
- Danielsson, P. D., & Ek, S. E. (2020). Non-financial reporting. What about the internal interest? A quantitative study on commission in the private sector. http://www.divaportal.org/smash/record.jsf?pid=diva2%3A1443760&dswid=4003
- Darnall, N., Ji, H., Iwata, K., & Arimura, T. H. (2022). Do ESG reporting guidelines and verifications enhance firms' information disclosure? *Corporate Social Responsibility* and Environmental Management, 29(5), 1214–1230. https://doi.org/10.1002/csr.2265
- 35. De Villiers, C., & Maroun, W. (2017). Sustainability Accounting and Integrated *Reporting*. (1st edition). Routledge.
- De Villiers, C., & Van Staden, C. J. (2006). Can less environmental disclosure have a legitimising effect? Evidence from Africa. *Accounting, Organizations and Society*, 31(8), 763–781. https://doi.org/10.1016/j.aos.2006.03.001
- 37. Deegan, C. M. (2019). Legitimacy theory. *Accounting, Auditing & Amp; Accountability Journal, ahead–of*(ahead-of-print). https://doi.org/10.1108/aaaj-08-2018-3638
- Deegan, C., & Rankin, M. (1996). Do Australian companies report environmental news objectively? *Accounting, Auditing &Amp; Accountability Journal*, 9(2), 50–67. https://doi.org/10.1108/09513579610116358
- 39. Deegan, C., & Unerman, J. (2011). *Financial Accounting Theory*. McGraw-Hill Education.
- 40. Deloitte. (2021, March 8). *Standard setters discuss non-financial reporting*. https://www.iasplus.com/en/news/2021/03/ifass-non-financial-reporting
- 41. Department for Business, Energy, and Industrial Strategy. (2020, April). Frameworks for standards for non-financial reporting. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen t_data/file/935097/frameworks-for-standards-for-non-financial-reporting.pdf
- 42. Department of Business, Energy & Industrial Strategy. (2019, October). Stakeholder perceptions of nonfinancial reporting. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachmen t_data/file/841047/stakeholder-perceptions-of-non-financial-reporting.pdf.
- Dhaliwal, D. S., Radhakrishnan, S., Tsang, A., & Yang, Y. (2012). Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure. *The Accounting Review*, 87(3), 723–759. https://doi.org/10.2308/accr-10218
- Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20(1), 65. https://doi.org/10.2307/258887
- Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *The Pacific Sociological Review*, 18(1), 122–136. https://doi.org/10.2307/1388226

- 46. Dumay, J., Frost, G., & Beck, C. (2015). Material legitimacy. *Journal of Accounting & Organizational Change*, *11*(1), 2–23. https://doi.org/10.1108/jaoc-06-2013-0057
- Eccles, R. G. E., & Krzus, M. P. K. (2015). The State of Nonfinancial Reporting Today. One Report, 82. https://doi.org/10.1002/9781119199960.ch4
- 48. Ernst & Young. (2021, August). *The Evolving Non-Financial Reporting Landscape*. https://www.ey.com/en_us/climate-change-sustainability-services
- 49. European Commission. (2013, April 16). Proposal for a directive of the European parliament and of the council amending Council Directives 78/660/EEC and 83/349/EEC as regards disclosure of non-financial and diversity information by certain large companies and groups. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52013PC0207
- 50. European Commission. (2017). *Corporate social responsibility & Responsible business conduct*. Internal Market, Industry, Entrepreneurship and SMEs. https://single-market-economy.ec.europa.eu/industry/sustainability/corporate-social-responsibility-responsibile-business-conduct_en
- 51. European Commission. (2021, December 13). *Financial reporting*. Finance. https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/financial-reporting_en#:~:text=Under% 20EU% 20rules% 2C% 20listed% 20companies,(internatio nal% 20financial% 20reporting% 20standards)
- 52. European Reporting Lab. (2021, February). Conceptual framework for nonfinancial information standard setting. https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FSit eAssets%2FEFRAG%2520PTF-NFRS A3 FINAL.pdf&AspxAutoDetectCookieSupport=1
- 53. European Union. (2014, October 14). *Directive 2014/95/EU of the European parliament and of the council.* https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=uriserv%3AOJ.L_.2014.330.01.0001.01.ENG&toc=OJ%3AL% 3A2014%3A330%3ATOC
- 54. Fama, E. F., & Jensen, M. C. (1983). Separation of Ownership and Control. *The Journal* of Law and Economics, 26(2), 301–325. https://doi.org/10.1086/467037
- 55. Feng, Y., Chen, H., & Tang, J. (2018). The Impacts of Social Responsibility and Ownership Structure on Sustainable Financial Development of China's Energy Industry. *Sustainability*, *10*(2), 301. https://doi.org/10.3390/su10020301
- 56. Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. *Strategic Management*.
- 57. Freeman, R. E. (1994). The Politics of Stakeholder Theory: Some Future Directions. *Business Ethics Quarterly*, 4(4), 409–421. https://doi.org/10.2307/3857340
- 58. Friedman, M. F. (1970, September 13). The Social Responsibility Of Business Is to Increase Its Profits. *The New York Times*. https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-socialresponsibility-of-business-is-to.html

- García-Meca, E., & Sánchez-Ballesta, J. P. (2010). The Association of Board Independence and Ownership Concentration with Voluntary Disclosure: A Metaanalysis. *European Accounting Review*, 19(3), 603–627. https://doi.org/10.1080/09638180.2010.496979
- García-Sánchez, I., Hussain, N., Aibar-Guzmán, C., & Guzmán, B. A. (2021). Assurance of corporate social responsibility reports: Does it reduce decoupling practices? *Contemporary Accounting Research*, 31(1), 118–138. https://doi.org/10.1111/beer.12394
- 61. García-Sánchez, I., Rodríguez-Ariza, L., & Frías-Aceituno, J. (2013). The cultural system and integrated reporting. *International Business Review*, 22(5), 828–838. https://doi.org/10.1016/j.ibusrev.2013.01.007
- 62. Gep & GEP. (2022, July 7). *The Difference Between ESG and Sustainability and Why It Matters*. GEP. https://www.gep.com/blog/strategy/esg-vs-sustainability-differences#:~:text=Sustainability%3A%20Three%20Differences,guidelines%20and%20disclosure%20of%20data
- 63. Global Reporting Initiative. (2010). Art 225 Grenelle Act II Carrots & Sticks. Carrots & Sticks. https://www.carrotsandsticks.net/reporting-instruments/art-225-grenelle-act-ii/
- 64. Global Reporting Initiative. (2021). *A short introduction to the GRI Standards*. globalreporting.org. https://www.globalreporting.org/media/wtaf14tw/a-short-introduction-to-the-gri-standards.pdf
- 65. Global Reporting Initiative. (2022a). *GRI The reporting landscape*. GRI.com. https://www.globalreporting.org/public-policy-partnerships/the-reporting-landscape/
- 66. Global Reporting Initiative. (2022b). *GRI Standards Brochure*. https://www.globalreporting.org/standards/media/2458/gri_standards_brochure.pdf
- 67. Global Reporting Initiative. (2022c). *ESG standards, frameworks and everything in between*. https://www.globalreporting.org/media/jxkgrggd/gri-perspective-esg-standards-frameworks.pdf
- 68. Global Reporting. (2016). *Consolidated Set Of GRI Sustainability Reporting Standards* 2016. Global Sustainability Standards Board (GSSB). https://www.globalreporting.org/standards/
- Gray, R. (2010). A re-evaluation of social, environmental and sustainability accounting. Sustainability Accounting, Management and Policy Journal, 1(1), 11–32. https://doi.org/10.1108/20408021011059205
- 70. Guenther, E., Guenther, T., Schiemann, F., & Weber, G. (2015). Stakeholder Relevance for Reporting. *Business & Amp; Society*, 55(3), 361–397. https://doi.org/10.1177/0007650315575119
- Halkos, G., & Nomikos, S. (2021). Corporate social responsibility: Trends in global reporting initiative standards. *Economic Analysis and Policy*, 69, 106–117. https://doi.org/10.1016/j.eap.2020.11.008

- Helfaya, A., & Whittington, M. (2019). Does designing environmental sustainability disclosure quality measures make a difference? *Business Strategy and the Environment*, 28(4), 525–541. https://doi.org/10.1002/bse.2262
- Helfaya, A., Whittington, M., & Alawattage, C. (2018). Exploring the quality of corporate environmental reporting. *Accounting, Auditing & Accountability*, 32(1), 163–193. https://doi.org/10.1108/aaaj-04-2015-2023
- Hess, D. C. (2019). The Transparency Trap: Non-Financial Disclosure and the Responsibility of Business to Respect Human Rights. *American Business Law Journal*, 56(1), 5–53. https://doi.org/10.1111/ablj.12134
- 75. Hodge, F. D., Hopkins, P. E., & Pratt, J. H. (2006). Management reporting incentives and classification credibility: The effects of reporting discretion and reputation. *Accounting Organizations and Society*, 31(7), 623–634. https://doi.org/10.1016/j.aos.2005.12.003
- Hohnen, P. H. (2009, January 13). Non-financial reporting: Denmark ups the ante. Reuters. https://www.reutersevents.com/sustainability/content/non-financial-reportingdenmark-ups-ante
- Hsu, C. W., Lee, W. H., & Chao, W. C. (2013). Materiality analysis model in sustainability reporting: a case study at Lite-On Technology Corporation. *Journal of Cleaner Production*, 57, 142–151. https://doi.org/10.1016/j.jclepro.2013.05.040
- Hummel, K., & Schlick, C. (2016). The relationship between sustainability performance and sustainability disclosure – Reconciling voluntary disclosure theory and legitimacy theory. *Journal of Accounting and Public Policy*, 35(5), 455–476. https://doi.org/10.1016/j.jaccpubpol.2016.06.001
- Iatridis, G. E. (2013). Environmental disclosure quality: Evidence on environmental performance, corporate governance, and value relevance. *Emerging Markets Review*, 14, 55–75. https://doi.org/10.1016/j.ememar.2012.11.003
- 80. Integrated Reporting, IFRS Foundation. (2020). *Frequently Asked Questions / Integrated Reporting*. https://www.integratedreporting.org/faqs/
- 81. Integrated Reporting, IFRS Foundation. (2023). *Integrated Reporting*. https://www.integratedreporting.org/the-iirc-2/
- Ioana, D., & Adriana, T. T. (2014). Research Agenda on Integrated Reporting: New Emergent Theory and Practice. *Procedia Economics and Finance*, 15, 221–227. https://doi.org/10.1016/s2212-5671(14)00488-2
- 83. Isaksson, R., & Steimle, U. (2009). What does GRI-reporting tell us about corporate sustainability? *The Tqm Journal*, 21(2), 168–181. https://doi.org/10.1108/17542730910938155
- Ismail, I., & Haddaw, A. A. (2014). The impact of the theory of legitimacy on the disclosure of organizations in Jordan using a linear regression model. *European Journal of Business and Management*, 6(16), 190–196.
- Jensen, M. C. (2002). Value Maximization, Stakeholder Theory, and the Corporate Objective Function. *Business Ethics Quarterly*, 12(2), 235–256. https://doi.org/10.2307/3857812

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. https://doi.org/10.1016/0304-405x(76)90026-x
- Jones, P. B., Comfort, D., & Hillier, D. (2016). Managing materiality: a preliminary examination of the adoption of the new GRI G4 guidelines on materiality within the business community. *Journal of Public Affairs*, 16(3), 222–230. https://doi.org/10.1002/pa.1586
- Kang, H. H., & Liu, S. B. (2013). Corporate social responsibility and corporate performance: a quantile regression approach. *Quality &Amp; Quantity*, 48(6), 3311–3325. https://doi.org/10.1007/s11135-013-9958-6
- 89. Kemira. (2023). *Kemira Sustainability report* 2022. https://www.kemira.com/app/uploads/2023/02/kemira-sustainability-report-2022.pdf
- 90. Kirk, N. (2006). Perceptions of the true and fair view concept: an empirical investigation. *Abacus*, 42(2), 205–235. https://doi.org/10.1111/j.1467-6281.2006.00198.x
- 91. KPMG. (2017). *The KPMG Survey of Corporate Responsibility Reporting 2017*. https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/10/executive-summary-the-kpmg-survey-of-corporate-responsibility-reporting-2017.pdf
- 92. KPMG. (2020, December). *The KPMG Survey of Sustainability Reporting 2020*. https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2020/11/the-time-has-come.pdf
- 93. KPMG. (2022). *Global Reporting Initiative (GRI) & Corporate Sustainability Reporting Directive (CSRD) gap analysis*. https://kpmg.com/be/en/home/services/sustainability-services/global-reporting-initiative--gri---non-financial-reporting--nfr.html
- Kumar, R., Pande, N., & Afreen, S. (2017). Developing a GRI-G4-based persuasive communication framework for sustainability reporting (SR). *International Journal of Emerging Markets*, 13(1), 136–161. https://doi.org/10.1108/ijoem-01-2017-0015
- 95. Kusuma, M. (2021). Measurement of Return on Asset (ROA) based on Comprehensive Income and its Ability to Predict Investment Returns: an Empirical Evidence on Go Public Companies in Indonesia before and during the Covid-19 Pandemic. *Ekuilibrium: Jurnal Ilmiah Bidang Ilmu Ekonomi, 16*(1), 94. https://doi.org/10.24269/ekuilibrium.v16i1.3238
- 96. Laine, M. (2009). Ensuring legitimacy through rhetorical changes? Accounting, Auditing & Amp; Accountability Journal, 22(7), 1029–1054. https://doi.org/10.1108/09513570910987367
- Lee, J., & Maxfield, S. (2015). Doing Well by Reporting Good: Reporting Corporate Responsibility and Corporate Performance. *Business and Society Review*, 120(4), 577– 606. https://doi.org/10.1111/basr.12075
- Lenox, M., & Nash, J. (2003). Industry self-regulation and adverse selection: a comparison across four trade association programs. *Business Strategy and the Environment*, 12(6), 343–356. https://doi.org/10.1002/bse.380
- 99. Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. *Accounting and Business Research*, 38(2), 137–159. https://doi.org/10.1080/00014788.2008.9663326

- 100. Liargovas, P., & Skandalis, K. S. (2012). The impact of leverage and other key variables on business performance: evidence from Greece. *International Journal of Economics* and Business Research, 4(4), 472. https://doi.org/10.1504/ijebr.2012.047423
- 101. Lindawati, A. S. L., & Puspita, M. E. (2015). Corporate Social Responsibility: Implikasi Stakeholder dan Legitimacy Gap dalam Peningkatan Kinerja Perusahaan. Jurnal Akuntansi Multiparadigma. https://doi.org/10.18202/jamal.2015.04.6013
- 102. Lokuwaduge, C. S. D. S., & Heenetigala, K. (2016). Integrating Environmental, Social and Governance (ESG) Disclosure for a Sustainable Development: An Australian Study. *Business Strategy and the Environment*, 26(4), 438–450. https://doi.org/10.1002/bse.1927
- 103. Lozano, R., & Huisingh, D. (2011). Inter-linking issues and dimensions in sustainability reporting. *Journal of Cleaner Production*, 19(2–3), 99–107. https://doi.org/10.1016/j.jclepro.2010.01.004
- 104. Maama, H. M. M. (2020, April 20). Integration of Non-Financial Information into Corporate Reporting: A Theoretical Perspective. https://www.abacademies.org/articles/integration-of-nonfinancial-information-intocorporate-reporting-a-theoretical-perspective-9152.html
- 105. Maama, H., & Appiah, K. O. (2019). Green accounting practices: lesson from an emerging economy. *Qualitative Research in Financial Markets*, 11(4), 456–478. https://doi.org/10.1108/qrfm-02-2017-0013
- 106. Maas, K., & Sampers, P. (2020). The expected impacts of regulating non-financial reporting. *Maandblad Voor Accountancy En Bedrijfseconomie*, 94(7/8), 265–274. https://doi.org/10.5117/mab.94.55973
- 107. Mancini, D., Piedepalumbo, P., Stacchezzini, R., & Cortese, D. (2022). Theories in Integrated Reporting and Non-financial Information Research. SIDREA Series in Accounting and Business Administration, 233–252. https://doi.org/10.1007/978-3-030-90355-8_12
- 108. Manes-Rossi, F., Tiron-Tudor, A., Nicolò, G., & Zanellato, G. (2018). Ensuring More Sustainable Reporting in Europe Using Non-Financial Disclosure—De Facto and De Jure Evidence. *Sustainability*, 10(4), 1162. https://doi.org/10.3390/su10041162
- 109. Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing. *Organization Science*, 27(2), 483–504. https://doi.org/10.1287/orsc.2015.1039
- Martínez-Ferrero, J., García-Sánchez, I., & Cuadrado-Ballesteros, B. (2013). Effect of financial reporting quality on sustainability information disclosure. *Corporate Social Responsibility and Environmental Management*, 22(1), 45–64. https://doi.org/10.1002/csr.1330
- 111. McWilliams, A., & Siegel, D. S. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. Academy of Management Review, 26(1), 117. https://doi.org/10.2307/259398

- 112. Melloni, G., Caglio, A., & Perego, P. (2017). Saying more with less? Disclosure conciseness, completeness and balance in Integrated Reports. *Journal of Accounting and Public Policy*, 36(3), 220–238. https://doi.org/10.1016/j.jaccpubpol.2017.03.001
- 113. Mensah, E., Frimpong, K., & Maama, H. (2017). Environmental Reporting Practices by Listed Manufacturing Firms: The Perspective of an Emerging Economy. Asian Journal of Economics, Business and Accounting, 2(3), 1–12. https://doi.org/10.9734/ajeba/2017/32817
- 114. Michelon, G. (2011). Sustainability Disclosure and Reputation: A Comparative Study. *Corporate Reputation Review*, *14*(2), 79–96. https://doi.org/10.1057/crr.2011.10
- 115. Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33, 59–78. https://doi.org/10.1016/j.cpa.2014.10.003
- 116. Ministry of Industry, Employment and Communications, Sweden. (2000, May). Guidelines for external reporting by government-owned companies. OECD. https://www.oecd.org/sweden/1929709.pdf
- 117. Mio, C., Fasan, M., Marcon, C., & Panfilo, S. (2020). The predictive ability of legitimacy and agency theory after the implementation of the EU directive on non-financial information. *Corporate Social Responsibility and Environmental Management*, 27(6), 2465–2476. https://doi.org/10.1002/csr.1968
- 118. Monteiro, A. P., Vale, J., Leite, E. J. S., Lis, M., & Kurowska-Pysz, J. (2022). The impact of information systems and non-financial information on company success. *International Journal of Accounting Information Systems*, 45, 100557. https://doi.org/10.1016/j.accinf.2022.100557
- 119. Moroney, R., Windsor, C., & Aw, Y. T. (2011). Evidence of assurance enhancing the quality of voluntary environmental disclosures: an empirical analysis. *Accounting and Finance*, 52(3), 903–939. https://doi.org/10.1111/j.1467-629x.2011.00413.x
- 120. Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Business Ethics: A European Review*, 15(4), 323–338. https://doi.org/10.1111/j.1467-8608.2006.00460.x
- 121. Muslu, V., Mutlu, S., Radhakrishnan, S., & Tsang, A. (2019). Corporate Social Responsibility Report Narratives and Analyst Forecast Accuracy. *Journal of Business Ethics*, 154(4), 1119–1142. https://doi.org/10.1007/s10551-016-3429-7
- 122. Mysaka, H., Derun, I., & Skliaruk, I. (2021). The Role of Non-Financial Reporting in Modern Ecological Problems Updating and Solving. *Journal of Environmental Management and Tourism*, 12(1), 18. https://doi.org/10.14505/jemt.v12.1(49).02
- 123. Najah, A. N., & Jarboui, A. J. (2012). Non-Financial Disclosure and Value Creation through Consumer Satisfaction in France. *Journal of Academic Finance (J.A.F.)*, Vol. 1.(SSN 1923-2993
- 124. Navickas, V., & Kontautiene, R. (2012). The influence of stakeholder-company relationship on competitiveness of company. *Ekonomika Ir Vadyba*, 17(3). https://doi.org/10.5755/j01.em.17.3.2111

- 125. Newberry, S. (2015). Public sector accounting: shifting concepts of accountability. *Public Money & Management*. https://doi.org/10.1080/09540962.2015.1061180
- 126. Nguyen, T. T. D. (2020). An Empirical study on the Impact of Sustainability Reporting on firm Value. *Journal of Competitiveness*, 12(3), 119–135. https://doi.org/10.7441/joc.2020.03.07
- 127. Nikolaeva, R., & Bicho, M. (2010). The role of institutional and reputational factors in the voluntary adoption of corporate social responsibility reporting standards. *Journal of the Academy of Marketing Science*, 39(1), 136–157. https://doi.org/10.1007/s11747-010-0214-5
- 128. O'Neill, S. O. & The Corporate Governance Institute. (2023, March 10). *What is the difference between CSR and ESG?* https://www.thecorporategovernanceinstitute.com/insights/lexicon/what-is-thedifference-between-csr-and-esg/
- 129. Omran, M. M., & Ramdhony, D. (2015). Theoretical Perspectives on Corporate Social Responsibility Disclosure: A Critical Review. *International Journal of Accounting and Financial Reporting*, 5(2), 38. https://doi.org/10.5296/ijafr.v5i2.8035
- 130. Osmanagić Bedenik, N., & Barišić, P. (2019). Nonfinancial Reporting: Theoretical and Empirical Evidence. Sustainable Management Practices. https://doi.org/10.5772/intechopen.87159
- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & De Colle, S. (2010). Stakeholder Theory: *The State of the Art. The Academy of Management Annals*, 4(1), 403–445. https://doi.org/10.1080/19416520.2010.495581
- 132. Pfajfar, G., Shoham, A., Małecka, A., & Zalaznik, M. (2022). Value of corporate social responsibility for multiple stakeholders and social impact Relationship marketing perspective. *Journal of Business Research*, 143, 46–61. https://doi.org/10.1016/j.jbusres.2022.01.051
- 133. Pflugrath, G., Roebuck, P., & Simnett, R. (2011). Impact of Assurance and Assurer's Professional Affiliation on Financial Analysts' Assessment of Credibility of Corporate Social Responsibility Information. *Auditing-a Journal of Practice & Theory*, 30(3), 239– 254. https://doi.org/10.2308/ajpt-10047
- 134. Pham, D. C., Do, T. N. A., Doan, T. N., Nguyen, T. X. H., & Pham, T. K. Y. (2021). The impact of sustainability practices on financial performance: empirical evidence from Sweden. *Cogent Business & Amp; Management*, 8(1). https://doi.org/10.1080/23311975.2021.1912526
- 135. Plumlee, M., Brown, D., Hayes, R. M., & Marshall, R. S. (2015). Voluntary environmental disclosure quality and firm value: Further evidence. *Journal of Accounting and Public Policy*, 34(4), 336–361. https://doi.org/10.1016/j.jaccpubpol.2015.04.004
- 136. Quick, R., & Inwinkl, P. (2020). Assurance on CSR reports: impact on the credibility perceptions of non-financial information by bank directors. *Meditari Accountancy Research*, 28(5), 833–862. https://doi.org/10.1108/medar-10-2019-0597

- 137. Raucci, D., Tarquinio, L., Rupo, D., & Loprevite, S. (2020). Non-financial Performance Indicators: The Power of Measures to Operationalize the Law. *Sustainability and Law*, 275–291. https://doi.org/10.1007/978-3-030-42630-9_15
- 138. Reverte, C. (2009). Determinants of Corporate Social Responsibility Disclosure Ratings by Spanish Listed Firms. *Journal of Business Ethics*, 88(2), 351–366. https://doi.org/10.1007/s10551-008-9968-9
- 139. Romanek, B. (2022, June 29). *The difference between "Sustainability" vs "ESG" reporting*. ESG Professionals Network. https://www.esgprofessionalsnetwork.com/the-difference-between-sustainability-vs-esg-reporting/
- 140. Saraite-Sariene, L., Alonso-Cañadas, J., Galán-Valdivieso, F., & Caba-Pérez, C. (2019). Non-Financial Information versus Financial as a Key to the Stakeholder Engagement: A Higher Education Perspective. *Sustainability*, *12*(1), 331. https://doi.org/10.3390/su12010331
- 141. Sarti, S., Darnall, N., & Testa, F. (2018). Market segmentation of consumers based on their actual sustainability and health-related purchases. *Journal of Cleaner Production*, 192, 270–280. https://doi.org/10.1016/j.jclepro.2018.04.188
- 142. SASB. (2023, January 24). Understanding SASB Standards SASB. https://www.sasb.org/implementation-primer/understanding-sasbstandards/#:~:text=A%20Note%20on%20SASB%20Terminology&text=Financial%20 materiality%3A%20SASB's%20approach%20to,investors%20in%20making%2 0investment%20decisions.
- 143. Sauerwald, S., & Su, W. (2019). CEO overconfidence and CSR decoupling. Corporate Governance: An International Review, 27(4), 283–300. https://doi.org/10.1111/corg.12279
- 144. Sayekti, Y. (2015). Strategic Corporate Social Responsibility (CSR), Company Financial Performance, and Earning Response Coefficient: Empirical Evidence On Indonesian Listed Companies. *Procedia - Social and Behavioral Sciences*, 211, 411–420. https://doi.org/10.1016/j.sbspro.2015.11.054
- 145. Schadewitz, H. J., & Niskala, M. (2010). Communication via responsibility reporting and its effect on firm value in Finland. *Corporate Social Responsibility and Environmental Management*, n/a. https://doi.org/10.1002/csr.234
- 146. Schiopoiu Burlea, A., & Popa, I. (2013). Legitimacy Theory. *Encyclopedia of Corporate Social Responsibility*, 1579–1584. https://doi.org/10.1007/978-3-642-28036-8_471
- 147. Schreck, P., & Raithel, S. (2018). Corporate Social Performance, Firm Size, and Organizational Visibility: Distinct and Joint Effects on Voluntary Sustainability Reporting. *Business & Society*, 57(4), 742–778. https://doi.org/10.1177/0007650315613120
- 148. Shaikh, I. (2022). Environmental, Social, and Governance (ESG) practice and firm performance: An international evidence. *Journal of Business Economics and Management*, 23(1), 218–237. https://doi.org/10.3846/jbem.2022.16202

- Shauki, E. (2011). Perceptions on corporate social responsibility: A study in capturing public confidence. *Corporate Social Responsibility and Environmental Management*, 18(3), 200–208. https://doi.org/10.1002/csr.267
- 150. Siboni, B., Del Sordo, C., & Pazzi, S. (2013). Sustainability Reporting in State Universities. International Journal of Social Ecology and Sustainable Development, 4(2), 1–15. https://doi.org/10.4018/jsesd.2013040101
- 151. Singh, I., & Van Der Zahn, J. W. M. (2008). Determinants of intellectual capital disclosure in prospectuses of initial public offerings. *Accounting and Business Research*, 38(5), 409–431. https://doi.org/10.1080/00014788.2008.9665774
- 152. Soana, M. G. (2011). The Relationship Between Corporate Social Performance and Corporate Financial Performance in the Banking Sector. *Journal of Business Ethics*, 104(1), 133–148. https://doi.org/10.1007/s10551-011-0894-x
- 153. Stolowy, H., & Paugam, L. (2018). The expansion of non-financial reporting: an exploratory study. Accounting and Business Research, 48(5), 525–548. https://doi.org/10.1080/00014788.2018.1470141
- 154. Susith, S. F., & Lawrence, S. L. (2014). A theoretical framework for CSR practices: Integrating legitimacy theory, stakeholder theory and institutional theory. *The Journal of Theoretical Accounting 10.1*, 149–178.
- 155. Sustainalytics. (n.d.). *Material ESG Issues Resource Center*. https://www.sustainalytics.com/material-esg-issues-resource-center
- 156. Talbot, D., & Boiral, O. (2018). GHG Reporting and Impression Management: An Assessment of Sustainability Reports from the Energy Sector. *Journal of Business Ethics*, 147(2), 367–383. https://doi.org/10.1007/s10551-015-2979-4
- 157. Tangen, S. (2005). Demystifying productivity and performance. International Journal of Productivity and Performance Management, 54(1), 34–46. https://doi.org/10.1108/17410400510571437
- 158. Tanrikulu, C. (2021). Theory of consumption values in consumer behaviour research: A review and future research agenda. *International Journal of Consumer Studies*, 45(6), 1176–1197. https://doi.org/10.1111/ijcs.12687
- 159. Tarquinio, L., & Posadas, S. C. (2020). Exploring the term "non-financial information": an academics' view. *Meditari Accountancy Research*, 28(5), 727–749. https://doi.org/10.1108/medar-11-2019-0602
- 160. The European Round Table of Industry. (2021). Expert Paper: Non-Financial reporting standards. ERT. https://ert.eu/wp-content/uploads/2021/05/ERT_Exp-paper_NFRS-FINAL.pdf
- 161. Thijssens, T., Bollen, L., & Hassink, H. (2015). Secondary Stakeholder Influence on CSR Disclosure: An Application of Stakeholder Salience Theory. *Journal of Business Ethics*, 132(4), 873–891. https://doi.org/10.1007/s10551-015-2623-3
- 162. Thuy, C. T. M., Khuong, N. V., Canh, N. T., & Liem, N. T. (2021). Corporate Social Responsibility Disclosure and Financial Performance: The Mediating Role of Financial Statement Comparability. *Sustainability*, *13*(18), 10077. https://doi.org/10.3390/su131810077

- 163. Tontiset, N., & Kaiwinit, S. (2018). The Factors Affecting Financial Reporting Reliability: An Empirical Research of Public Listed Companies in Thailand. *Journal of Modern Accounting and Auditing*. https://doi.org/10.17265/1548-6583/2018.06.001
- 164. Torelli, R., Balluchi, F., & Furlotti, K. (2019). The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. *Corporate Social Responsibility and Environmental Management*, 27(2), 470–484. https://doi.org/10.1002/csr.1813
- 165. Torelli, R., Balluchi, F., & Furlotti, K. (2020). The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. *Corporate Social Responsibility and Environmental Management*, 27(2), 470–484. https://doi.org/10.1002/csr.1813
- 166. Tsoulfas, G. T., & Pappis, C. P. (2012). Corporate social responsibility and reporting. *Handbook of Sustainability Management*, 39–64. https://doi.org/10.1142/9789814354820_0003
- 167. Turzo, T., Marzi, G., Favino, C., & Terzani, S. (2022). Non-financial reporting research and practice: Lessons from the last decade. *Journal of Cleaner Production*, 345, 131154. https://doi.org/10.1016/j.jclepro.2022.131154
- 168. Ullmann, A. A. (1985). Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U. S. Firms. Academy of Management Review, 10(3), 540. https://doi.org/10.2307/258135
- 169. United Nations. (n.d.) The 17 Goals. https://sdgs.un.org/goals
- 170. Utami, W. (2015). Financial Performance and the Quality of Sustainability Disclosure Based on Global Reporting Initiative: Value Relevances Study in Indonesia Stock Exchange. *Mediterranean Journal of Social Sciences*. https://doi.org/10.5901/mjss.2015.v6n5s5p243
- 171. Vafaei, A., Taylor, D. K., & Ahmed, K. (2011). The value relevance of intellectual capital disclosures. *Journal of Intellectual Capital*, 12(3), 407–429. https://doi.org/10.1108/14691931111154715
- Velte, P., & Stawinoga, M. (2016). Integrated reporting: The current state of empirical research, limitations and future research implications. *Journal of Management Control*, 28(3), 275–320. https://doi.org/10.1007/s00187-016-0235-4
- 173. Venturelli, A., Pizzi, S., Caputo, F., & Principale, S. (2020). The revision of nonfinancial reporting directive: A critical lens on the comparability principle. *Business Strategy and the Environment*, 29(8), 3584–3597. https://doi.org/10.1002/bse.2598
- 174. Wagner Mainardes, E., Alves, H., & Raposo, M. (2011). Stakeholder theory: issues to resolve. *Management Decision*, 49(2), 226–252. https://doi.org/10.1108/00251741111109133
- 175. Wall, F., & Greiling, D. (2011). "Shareholder- versus Stakeholder-Orientation in Managerial Decision-Making—Editorial by Guest Editors." *Review of Managerial Science*, 5(2–3), 87–90. https://doi.org/10.1007/s11846-011-0064-7

- 176. Weber, O., Koellner, T., Habegger, D., Steffensen, H., & Ohnemus, P. (2008). The relation between the GRI indicators and the financial performance of firms. *Progress in Industrial Ecology, an International Journal*, 5(3), 236. https://doi.org/10.1504/pie.2008.019127
- Wood, D. J. (1991). Corporate Social Performance Revisited. Academy of Management Review, 16(4), 691. https://doi.org/10.2307/258977
- 178. Wrightsman, D. (1978). Tax shield valuation and the capital structure decision. *Journal* of *Finance*, *33*(2), 650. https://doi.org/10.2307/2326578
- 179. Wu, J., & Yuan, F. (2020). Corporate Performance, Agency Costs and Non-financial Information Disclosure. *Journal of Physics*, 1634, 012081. https://doi.org/10.1088/1742-6596/1634/1/012081
- 180. Yang, Y., Orzes, G., Jia, F., & Chen, L. (2019). Does GRI Sustainability Reporting Pay Off? An Empirical Investigation of Publicly Listed Firms in China. *Business & Amp; Society*, 60(7), 1738–1772. https://doi.org/10.1177/0007650319831632

APPENDICES

Appendix 1: Povzetek (Summary in Slovene language)

Odgovorno poslovanje je vse bolj pod drobnogledom, saj se podjetja srečujejo z valom sodobnih praks, ki se osredotočajo na upoštevanje trenutnih vprašanj, kot so potreba po upoštevanju okolja, socialni izzivi in obnašanja podjetij. V ta namen postaja koncept trajnosti vse pomembnejši. Potreba po prehodu na trajnostno gospodarstvo in gospodarske posledice okoljskih izzivov za različne panoge ter podjetja sta ključni sestavini nastajajočega in hitro razvijajočega se interdisciplinarnega področja trajnosti. Vedno bolj očitno je, da so trajnostne prakse povzročile preoblikovanje načina poslovanja podjetij. Nefinančno poročanje (pogosto imenovano trajnostno poročanje) je v zadnjih desetih letih postalo že skoraj uveljavljena praksa, saj se vse več podjetij usmerja v spremljanje učinkov svojega poslovanja na družbeno in poslovno okolje ter na naravo. Pred kratkim je postalo nefinančno poročanje obvezno za velika podjetja v Evropski uniji z uveljavitvijo Direktive 95/2014 leta 2017. Pred to direktivo se je priprava takšnih poročil le spodbujala. Ta obetavni trend je posledica večjega nadzora deležnikov nad družbenimi in okoljskimi praksami podjetij ter vse večjega pritiska vlad k objavi nefinančnih poročil. Nedavni regulativni razvoj pa je nefinančno poročanje tudi dodtano otežil. Načela in merila nefinančnega poročanje niso konsolidirana in standardizirana, kar pomeni, da je trajnostna poročila težko primerjati. V odgovor temu je organizacija Global Reporting Initiative (GRI) leta 2016 predstavila prvi globalni standard za nefinančno poročanje. Namen standardov je povečati primerljivost in kakovost podatkov o perečih družbenih in okoljskih vprašanjih na svetovni ravni ter podjetjem omogočiti večjo preglednost in odgovornost. Literatura je glede vpliva tovrstnega poročanja na finančno uspešnost podjetij še nejasna in poudarja, da obstaja jasna potreba po nadalinjih analizah, ki bi preučevale to povezavo. Potrebnih je več poglobljenih raziskav na ravni posameznih sektorjev, ki bi zagotovile dodatne tehnike modeliranja s ključnimi pojasnjevalnimi spremenljivkami za podporo in utemeljitev GRI poročanja. Namen tega magistrskega dela je torej celovito pojasniti teoretično ozadje, značilnosti in vplive nefinančnega ter GRI poročanja. Rezultati opravljene analize kažejo na nejasnost povezave med (kvalitetenejšo) rabo GRI Standardov in finančnega uspeha in prav tako na nejasnost povezave med rabo GRI Standardov in velikostjo podjetja ter med rabo GRI Standardov in boljšimi ESG ocenami. Iz rezultatov torej ni razvidno, da bi uporaba GRI standardov pozitivno vplivala na uspešnost podjetij, kar lahko pomeni, da obstaja vrzel med poročanjem podjetij in pričakovanji zainteresiranih. Rezultati prav tako kažejo na tako močno prevlado rabe GRI standardov, da so Standardi postali že standardna praksa podjetij vseh velikosti, ne samo večjih. Upoštevanje GRI Standardov torej ne zagotavlja več pečata kakovosti poročanja in ne sporoča več, da je poročajoče podjetje bolje pripravljeno na prihajajoča ESG tveganja, kot je to v številnih razsikavah veljalo do leta 2020.

Appendix 2: Example of the grading of GRI reports

GRI Material topics	Company Score
Economic performance 2016	Total = 3
Disclosure 201-1 Direct economic value generated and distributed	1
Disclosure 201-2 Financial implications and other risks and opportunities due to climate	
change	0
Disclosure 201-3 Defined benefit plan obligations and other retirement plans	1
Disclosure 201-4 Financial assistance received from government	1
GRI 202: Market Presence 2016	Total = 1
Disclosure 202-1 Ratios of standard entry level wage by gender compared to local	0
minimum wage	0
Disclosure 202-2 Proportion of senior management hired from the local community	1
Disclosure 204-1 Proportion of spending on local suppliers	0
GRI 205: Anti-corruption 2016	Total = 2
Disclosure 205-1 Operations assessed for risks related to corruption Disclosure 205-2 Communication and training about anti-corruption policies and	1
procedures	1
Disclosure 205-3 Confirmed incidents of corruption and actions taken	0
GRI 206: Anti-competitive Behavior 2016	Total = 1
Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly	10001-1
practices	1
GRI 207: Tax 2019	Total = 0
Disclosure 207-1 Approach to tax	0
Disclosure 207-2 Tax governance, control, and risk management	0
Disclosure 207-3 Stakeholder engagement and management of concerns related to tax	0
Disclosure 207-4 Country-by-country reporting	0
GRI 301: Materials 2016	Total = 1
Disclosure 301-1 Materials used by weight or volume	0
Disclosure 301-2 Recycled input materials used	1
Disclosure 301-3 Reclaimed products and their packaging materials	0
GRI 302: Energy 2016	Total = 3
Disclosure 302-1 Energy consumption within the organization	1
Disclosure 302-2 Energy consumption outside of the organization	0
Disclosure 302-3 Energy intensity	1
Disclosure 302-4 Reduction of energy consumption	1
Disclosure 302-5 Reductions in energy requirements of products and services	0
GRI 303: Water and Effluents 2018	Total = 0
Disclosure 303-1 Interactions with water as a shared resource	0
Disclosure 303-2 Management of water dischargerelated impacts	0
Disclosure 303-3 Water withdrawal	0
Disclosure 303-4 Water discharge	0
Disclosure 303-5 Water consumption	0
GRI 304: Biodiversity 2016	Total = 0
Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected	~
areas and areas of high biodiversity value outside protected areas	0
Disclosure 304-2 Significant impacts of activities, products and services on biodiversity	0
Disclosure 304-3 Habitats protected or restored	0

Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations

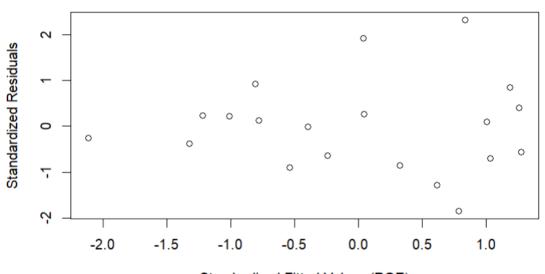
in areas affected by operations	0
GRI 305: Emissions 2016	Total = 3
Disclosure 305-1 Direct (Scope 1) GHG emissions	1
Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	1
Disclosure 305-3 Other indirect (Scope 3) GHG emissions	0
Disclosure 305-4 GHG emissions intensity	0
Disclosure 305-5 Reduction of GHG emissions	0
Disclosure 305-6 Emissions of ozone-depleting substances (ODS)	0
Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air	
emissions	1
GRI 306: Effluents and Waste 2016	Total = 0
Disclosure 306-3 Significant spills	0
GRI 306: Waste 2020	Total = 0
Disclosure 306-1 Waste generation and significant waste-related impacts	0
Disclosure 306-2 Management of significant wasterelated impacts	0
Disclosure 306-3 Waste generated	0
Disclosure 306-4 Waste diverted from disposal	0
Disclosure 306-5 Waste directed to disposal	0
GRI 308: Supplier Environmental Assessment 2016	Total = 1
Disclosure 308-1 New suppliers that were screened using environmental criteria	0
Disclosure 308-2 Negative environmental impacts in the supply chain and actions taken	1
GRI 401: Employment 2016	Total = 1
Disclosure 401-1 New employee hires and employee turnover	1
Disclosure 401-2 Benefits provided to full-time employees that are not provided to	
temporary or parttime employees	0
Disclosure 401-3 Parental leave	0
GRI 402: Labor/Management Relations 2016	Total = 0
Disclosure 402-1 Minimum notice periods regarding operational changes	0
	Total =
GRI 403: Occupational Health and Safety 2018	10
Disclosure 403-1 Occupational health and safety management system	1
Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	1
Disclosure 403-3 Occupational health services	1
Disclosure 403-4 Worker participation, consultation, and communication on occupational	
health and safety	1
Disclosure 403-5 Worker training on occupational health and safety	1
Disclosure 403-6 Promotion of worker health	1
Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts	1
directly linked by business relationships Disclosure 403-8 Workers covered by an occupational health and safety management	1
system	1
Disclosure 403-9 Work-related injuries	1
Disclosure 403-10 Work-related ill health	1
GRI 404: Training and Education 2016	Total = 3
Disclosure 404-1 Average hours of training per year per employee	10tal = 3
Disclosure 404-1 Average nours of training per year per employee Disclosure 404-2 Programs for upgrading employee skills and transition assistance	1
programs	1
Disclosure 404-3 Percentage of employees receiving regular performance and career	1
development reviews	1

GRI 405: Diversity and Equal Opportunity 2016	Total = 1
Disclosure 405-1 Diversity of governance bodies and employees	1
Disclosure 405-2 Ratio of basic salary and remuneration of women to men	0
GRI 406: Non-discrimination 2016	Total = 0
Disclosure 406-1 Incidents of discrimination and corrective actions taken	0
GRI 407: Freedom of Association and Collective Bargaining 2016	Total = 0
Disclosure 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	0
GRI 408: Child Labor 2016	Total = 1
Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labor	1
GRI 409: Forced or Compulsory Labor 2016	Total = 1
Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or	
compulsory labor	1
Disclosure 411-1 Incidents of violations involving rights of indigenous peoples	0
GRI 413: Local Communities 2016	Total = 0
Disclosure 413-1 Operations with local community engagement, impact assessments, and	0
development programs Disclosure 413-2 Operations with significant actual and potential negative impacts on local	0
communities	0
GRI 414: Supplier Social Assessment 2016	Total = 1
Disclosure 414-1 New suppliers that were screened using social criteria	0
Disclosure 414-2 Negative social impacts in the supply chain and actions taken	1
GRI 415: Public Policy 2016	Total = 0
Disclosure 415-1 Political contributions	0
GRI 416: Customer Health and Safety 2016	Total = 1
Disclosure 416-1 Assessment of the health and safety impacts of product and service	
categories	1
Disclosure 416-2 Incidents of non-compliance concerning the health and safety impacts of	
products and services	0
GRI 417: Marketing and Labeling 2016	Total = 1
Disclosure 417-1 Requirements for product and service information and labeling	1
Disclosure 417-2 Incidents of non-compliance concerning product and service information and labeling	0
Disclosure 417-3 Incidents of non-compliance concerning marketing communications	0
Disclosure +17-5 incluents of non-compliance concerning marketing communications	0

Total points for year X = 36

Percentage of total possible points for year X = 43 %

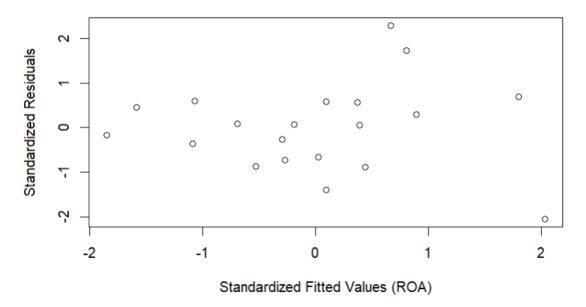
Breusch-Pagan test	ROE	ROA
Test statistic	4.6293	6.0377
p-value	0.4626	0.3026



Residual Plot for ROE

Standardized Fitted Values (ROE)

Residual Plot for ROA



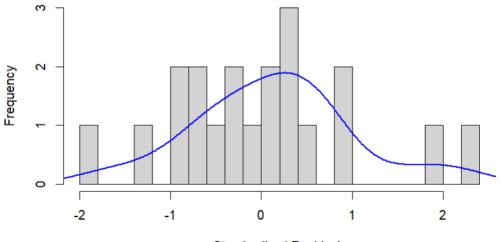
Appendix 4: Durbin-Watson test

Durbin-Watson test	ROE	ROA
Test statistic	1.5425	1.6543
p-value	0.1304	0.1992

Appendix 5: Tests for normal distribution – Shapiro-Wilk tests and histograms

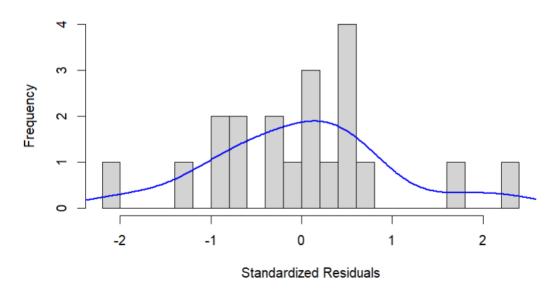
_	ROE	ROA	GRI	SIZE	AGE	LEVERAGE	ASSURANCE
Test statistic	0.933	0.915	0.872	0.966	0.838	0.960	0.626
p-value	0.185	0.081	0.012	0.673	0.003	0.554	0.000

Histogram of Standardized Residuals (ROE)



Standardized Residuals





	GRI	SIZE	Α	GE	LEVE	RAGE	ASSURANCE
VIF value	2.325	1.477	1.260		1.131		1.977
	ROE	ROA	GRI	SIZE	ASSU.	LEV.	AGE
ROE	1						
ROA	0,8**	1					
GRI	-0,2	-0,42	1				
SIZE	-0,13	-0,26	0,36	1			
ASSURANCE	-0,44	-0,47*	0,63	0,034	1		
LEVERAGE	0,09	-0,47*	0,25*	0,034	0,01	1	
AGE	0,3	0,19	-0,18	-0,39**	-0,21	0,09	1

Appendix 6: Tests for multicollinearity – VIF values and correlation table

*= Significance at 0.05 level, ** = significance at 0.01 level