

Development of Non-financial Reporting: The Case of Estonian Listed Companies

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Non-financial reporting as “the way to disclose how companies operate and manage social and environmental challenges” is gaining popularity during last decade and is constantly changing field of study. Being non-mandatory for most companies the Non-Financial information is disclosed in the form of Environmental reports, CSR reports, Social activity reports, SDG and ESG reporting. During recent five years a growing body of literature has been discussing how the EU member states are ratifying Non-Financial Reporting Directive 2014/95/EU (NFRD) (Camilleri, 2017), its impact on the quality of the Non-Financial Reporting (Ottenstein et al., 2021, Schroder, 2022, Lippai-Makra et al., 2022.) and the importance for investors (Amel-Zadeh & Serafeim, 2018). This directive requires large public interest entities with over 500 employees (listed companies, banks, and insurance companies) to disclose certain Non-Financial information. These changes seem to be challenging and require companies to review their compliance with the latest requirements. The aim of this study is to determine whether the Estonian listed companies have implemented the requirements of the NFRD and what are the major changes related to its enforcement as well as the preferred way of disclosing Non-Financial information. Authors have conducted a qualitative content analysis of Non-Financial information of companies in the period of 2015-2020. The sample of the survey includes thirteen companies listed on the main list of the Nasdaq Tallinn Stock Exchange as of 31.12.2021 as. Authors analysed Non-Financial information disclosed in the 78 reports of companies by selected areas on the basis of a unified valuation model. The main focus is on the content of the reports and on the changes that have taken place during the research period. The main findings revealed that in general companies have successfully complied with the requirements stipulated by the NFRD. The relevance, consistency and comparability of the information disclosed have improved over the years. In general, it can be concluded that mandatory requirements for the harmonization of Non-Financial information are important and contribute to the measurement and monitoring of the activities of companies and their impact on society and environment.

KEYWORDS: CSRD, NFRD, non-financial reporting disclosures, sustainability reporting.

Nowadays the European union legislation requires certain large companies to disclose information regarding the way they operate and manage social and environmental challenges. (European Commission, 2021) aiming to make corporate sustainability reporting a powerful communication tool contributing to transparency and accountability of businesses. (Gurviš-Suits, Sidorova, 2022). The main driver was the implementation of the Directive 2014/95/EU being according to Pizzi et.al, 2021 “one of the main innovations introduced by the European Commission” and the matter of debates and intense research. The last decade has faced several rapid changes and development in the field of the non-financial reporting. A brief history of the main legislative events is presented in [Table 1](#).

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Abstract

Introduction



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Table 1

Policy making timeline and events of the non-financial reporting in the EU

Year	Event description
16.04.2013	Legislative proposal for the Non-Financial Reporting Directive.
15.04.2014	Disclosure of non-financial and diversity information by large companies and groups.
22.10.2014	Adoption of the Non-Financial Reporting Directive.
28.01.2015	Public consultation on non-financial reporting guidelines.
26.06.2017	Guidelines to help companies disclose environmental and social information, not mandatory and companies may decide to use international, European or national guidelines according to their own characteristics or business environment.
20.02.2019	Targeted consultation on the guidelines on reporting climate-related information.
18.06.2019	Guidelines on reporting climate-related information (new supplement to the existing guidelines on non-financial reporting, which remain applicable).
20.02.2020	Public consultation on the review of the Non-Financial Reporting Directive.
08.03.2021	EFRAG reports on development of EU sustainability reporting standard.
21.04.2021	Proposal for a Corporate Sustainability Reporting Directive (CSRD) to amend the existing reporting requirements of the NFRD.
22.02.2022	Political agreement by The European Parliament and the Council on the Corporate Sustainability Reporting Directive (CSRD).
23.11.2022	First set of draft EU sustainability reporting standards adopted by EFRAG.
28.11.2022	Final green light of the Council to the Corporate Sustainability Reporting Directive (CSRD).

Source: prepared by authors basis the data from an official website of the EU

As seen from the [Table 1](#) the next step has been made and the CSRD has finally been approved by the EU and published in the Official Journal of the EU. The CSRD takes effect in May 2023 and will begin to impact disclosures from January 2024. (XBRL the Business Reporting Standard, 2022). The aim of the new directive is to increase transparency of the reporting and help make assessments of sustainability targets (What is CSRD, 2022) It will involve a wider set of companies than NFRD as listed SMEs, will also now be required to report on sustainability – approximately 50,000 companies in total (official EU website, 2022). The main differences between NFRD and CSRD are presented in [Table 2](#).

The CSRD aims to eliminate certain shortcomings of the previously adopted non-financial reporting directive and add value to the completeness and transparency of the reporting. According to the study of the European Commission on the Non-Financial Reporting Directive performed in 2020 noted “the increased awareness and changes in the procedures for reporting and in policies as well as the following positive impacts associated with the NFRD:

- » Positive feedback from external stakeholders;
- » Approval of the materiality matrix by investors and extra-financial rating agencies;
- » Improvement of brand image among customers;
- » Greater visibility among non-financial rating agencies;
- » Inclusion of company shares in ESG stock exchange indices;

- » Expansion of the investor base with better access to investors and asset funds;
- » Specialising in green assets and investments responding to ESG criteria;
- » Enhanced backward integration;
- » More information exchanges within the supply chain; and,
- » Increased non-financial data flows from subsidiaries abroad". (EU Commission Study, 2020).

However, the following "several negative impacts were also observed:

- » Additional overlaps with other reports (i.e. information reported, deadlines);
- » Reporting at the group level led to the mandatory inclusion of data of all subsidiaries, raising the costs to generate and align data within several companies (which were not subject to mandatory reporting);
- » Added bureaucratic effort with regard to (process) documentation in order to fulfil the auditor's requirements; and, complications for operational activities, administrative burdens and higher compliance costs". (EU Commission Study, 2020).

	NFRD	CSRD
For whom	Large public interest entities with more than 500 employees: listed companies, banks, and insurance companies. Approximately 11,600 companies	All large companies matching 2 out of 3 of the below characteristics: > 250 employees and/or, > €40-million turnover and/or, > €20-million total assets listed companies Approximately 49,500 companies
When	2018-2022	2023-....
Reporting requirements	Environmental protection, Social responsibility and treatment of employees, Respect for human rights, Anti-corruption and bribery, Diversity on company boards (in terms of age, gender, educational and professional background)	NFRD +additional requirements: Double Materiality Concept – reporting on both the impact the company has on society and the environment and the sustainability risks the company experiences (e.g., due to climate change and scarcity of resources), Formulating long-term Environmental, Social, and Governance (ESG) objectives and policies, Due diligence on its operation and supply chain, Disclosure of information relating to intangibles (social, human, and intellectual capital), Reporting in line with the Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy Regulation, Integrated reporting and mandatory external assurance
Reporting format	Not set – mainly online, PDF	European Single Electronic Format

Table 2

Main differences between the NFRD and the CSRD

Source: prepared by authors basis the data from website of the CPMView

The EU study also revealed that most companies “confirmed to have a limited or reasonable assurance engagement on the Non-Financial statement” (EU Study, 2020). Companies also seemed to have issues with determining the materiality of concept while defining what is worth reporting, which is also confirmed by review of literature and numerous scientific articles as “on the need to enhance a double-materiality perspective” (Fiandrino et al., 2022). The EU study also concluded that “the value of reporting Non-Financial matters is very clear to some companies but less so to others” and in several cases the reporting is not initiated by company but demanded by stakeholders. All these shortcomings are hoped to be addressed by the adoption of the CSRD.

The CSRD also fancies the adoption of EU sustainability reporting standards. The draft standards are currently developed by the European Financial Reporting Advisory Group (EFRAG). The standards based on the EU policies and also contributing to international standardisation initiatives. (official EU website, 2022). International Sustainability Standards Board (ISSB) also plans to develop the digital taxonomy which will accompany the standard, and it should be available in the first half of 2023. (XBRL the Business Reporting Standard, 2022).

It is also worth noting that according to the KPMG Survey of Corporate Responsibility Reporting conducted in 2022 while the Global Reporting Initiative (GRI) still remains a dominant standard for sustainability reporting sstock exchange guidelines are a matter of growing popularity across Asia Pacific, Middle East & Africa. Therefore, it is extremely important that the standards alignment is in progress, driven by initiatives of the ISSB and CSRD focusing on the fact that “as the world attempts to collectively address issues such as climate change and inequality, it is increasingly important that we all speak the same way about sustainability” (KPMG, 2022). ESG assurance rate is also rapidly increasing, being high in China and lower in Europe and Asia-Pacific region. In general, it can be concluded that the rate of Non-Financial reporting is becoming higher and “sustainability continues to become a priority for company leadership but there is room for improvement”. (KPMG, 2022).

The present research fills a gap in determining how the NFRD influenced the quality of non-financial reporting of listed companies in Estonia. The aim of this study is to determine whether Estonian listed companies have implemented the requirements of the NFRD and what are the major changes related to its enforcement as well as the preferred way of disclosing Non-Financial information. The main findings revealed that in general companies have successfully complied with the requirements stipulated by the NFRD. The relevance, consistency and comparability of the information disclosed have improved over the years. Authors believe that the introduction of the CSRD and the adoption of EU sustainability reporting standards. The will have further positive impact on the quality of Non-Financial reporting.

The remainder of this paper is organised as follows. After the linkage of the Non-Financial reporting topic to current literature, we provide a practical insight into the quality of Non-Financial reporting. Furthermore, we perform an analysis of the quality of Non-Financial reporting by the businesses operating in the Baltic States market. The listed companies on Nasdaq stock Exchange Tallinn main list of shares are evaluated in order to find out the main ways, changes and features of Non-Financial reporting.

Literature review

During recent five years a growing body of literature has been discussing how the EU member states are ratifying Non-Financial reporting Directive 2014/95/EU (NFRD) (Camilleri, 2017), its impact on the quality of the Non-Financial reporting (Ottenstein et al., 2021, Schroder, 2022, Lip-pai-Makra et al., 2022). and the importance for investors (Amel-Zadeh & Serafeim, 2018).

The Directive is considered to be one of the most important innovations contributing to the sustainable business development on the European Union (Pizzi et al., 2021) and a huge step to-

wards transparency of companies (Aluchna et al. 2022) making sustainability reporting compulsory for certain companies and thus influencing company behaviour and social externalities (Chen et al., 2018). The important role is placed on countries in sharing their experience in order to narrow the gap in the quality of reporting (Singhania & Saini, 2023), “provide adequate information and improve accountability for stakeholders” (Fiandrino & Tonelli, 2021) also adding value the compatibility of reports.

It seems obvious that the NFRD implementation has led to the increase in CSR transparency and performance (Cuomo et al., 2022) and has more clear focus on investors and the information they require (Breijer et al., 2022) contributing to the towards sustainability, guaranteeing transparency and higher level of stakeholders’ engagement (Aureli et al., 2020). Numerous researchers reveal positive impact on the improvement of Non-Financial reports (Meeh-Bunse et al., 2019) and the increasing quality of disclosures. Matuszak & Róžańska (2021) identified the highest impact on the companies with previously low level of reporting among the ones listed on the Warsaw Stock exchange and identified homogeneity of NFRD across different industries (Cicchello et al., 2022) noted improving disclosure commitment and effectiveness while Tarquinio et al., 2020 outlined that it has led to the improvement of disclosure ranking of companies in last three years.

It is also worth noting that there are continuous debates about whether and how Non-Financial disclosure should be regulated (Cuomo et al., 2022) as while “the EU Taxonomy is the first standardised and comprehensive classification system for sustainable economic activities” (Schütze & Stede, 2021) there is a need for unified set of standards combining all the taxonomy requirements.

The sample of the present research consists of companies quoted at the main list of shares at Nasdaq stock Exchange Tallinn, which are subject to the enhanced requirements of the Non-Financial reporting Directive 2014/95/EU (NFRD). In case of Estonia the research sample includes only those companies who have been emitting stocks as of 2015, two other companies are also added to the sample which have been listed at secondary list first and later transferred to the main list: AS LHV Group and AS Pro Kapital Grupp. [Table 3](#) represents the data of the selected companies.

Research sample

Company	Listed since	Market capitalization thousands € ¹	Number of employees ²	Revenue mln €/2020	Net profit mln €/2020
PRFoods	2010	13 732	280	78	-5
Baltika	1997	14 061	198	19	0
Arco Vara	2007	24 724	12	14	1
Nordecon	2006	38 203	690	296	2
Ekspress Grupp	2007	50 199	1600	63	3
Silvano Fashion Group	1997	67 320	1633	38	1
Pro Kapital Grupp	2012	78 796	69	19	-56
Harju Elekter	1997	125 770	847	147	6
Merko Ehitus	2008	267 270	673	316	23
Tallinna Vesi	2005	281 600	336	52	17
Tallink Grupp	2005	434 244	4513	443	-108
Tallinna Kaubamaja Grupp	1996	456 982	4864	742	32
LHV Group	2016	1 258 775	597	104	58

Table 3

Data on the selected Estonian companies

Source: Nasdaq stock Exchange Tallinn main list (Emitendid ... 2022).

Notes: 1. Market capitalization rate as of 21.01.2022.

2. Number of employees as of 26.03.2022 according to data presented at Nasdaq fact sheet.

The selected companies represent 72% of companies quoted at the main list of shares at Nasdaq stock Exchange Tallinn and therefore authors consider the sample as representative.

Research methodology

The aim of this study is to determine whether the Estonian listed companies have implemented the requirements of the NFRD and what are the major changes related to its enforcement as well as the preferred way of disclosing Non-Financial information.

The research was conducted using the content qualitative analysis method basis the requirements of the EU Directive on Non-Financial reporting “in order to enhance the consistency and comparability of Non-Financial information disclosed throughout the Union, certain large undertakings should prepare a Non-Financial statement containing information relating to at least environmental matters, social and employee-related matters, respect for human rights, anti-corruption and bribery matters. Such statement should include a description of the policies, outcomes and risks related to those matters and should be included in the management report of the undertaking concerned. The Non-Financial statement should also include information on the due diligence processes implemented by the undertaking, also regarding, where relevant and proportionate, its supply and subcontracting chains, in order to identify, prevent and mitigate existing and potential adverse impacts”. (2014/95/ EL).

A year of 2015 was selected as a starting point for the research when the Non-Financial requirements were not enforced yet. The authors used data retrieved from the annual financial reports of companies, management reports and/or other reports containing ESG related information. Authors have focused on the on the impact of business activities and management assessment in the following categories:

- » Environmental matters,
- » Social matters and treatment of employees,
- » Respect for human rights,
- » Anti-corruption and bribery
- » Diversity on company boards.

In order to compare the disclosed information authors have created the assessment model, tested while retrieving the required data. The maximum amount of points received by company for the quality of its Non-Financial reporting may be 100. The assessment model and the calculation of maximum score is presented in [Table 4](#).

Table 4

Assessment criteria of the quality of non-financial reporting

No	Criteria	Percentage
1	Points awarded for the presence of the sub- categories in the report of the company	20
2	Points awarded for the details disclosed in every sub-category	60
3	Points awarded for the reporting guidelines and frameworks followed by company (GRI, OECD, UN Global Compact etc.)	5
4	Points awarded for Submitting the <i>Environmental, Social and Governance</i> reports (ESG)	5
5	Points awarded for the assurance of the auditor	5
6	Points awarded for ISO/EMAS certifications	5

Source: Authors

The maximum number received for the presence of the sub-categories in the report of the company is 20 (20 categories and one point for each). The detailed overview of the selected Non-Financial subcategories is presented in [Table 5](#).

Reporting category	Reporting subcategory
Environmental matters	1 Details of the current and foreseeable impacts of the undertaking's operations on the environment.
	2 The use of renewable and/or non-renewable energy.
	3 Greenhouse emission.
	4 Water use.
	5 Air pollution.
	6 Recycle of materials, waste management.
Social matters and treatment of employees	1 Gender equality.
	2 Implementation of fundamental conventions of the ILO.
	3 Working conditions.
	4 Social dialogue (charity).
	5 Respect for the right of workers to be informed and consulted.
	6 Respect for trade union rights.
	7 Health and safety at work.
	8 Dialogue with local communities.
Respect for human rights	1 The prevention of human rights abuses.
Anti-corruption and bribery	1 Instruments in place to fight corruption and bribery.
	2 Ethical norms and code of conduct at work.
	3 Whistle-blower code of conduct.
Diversity on company boards	1 Description of main principles, aims and their implementation.
	2 Management and supervisory bodies diversity with regard to age, gender or educational and professional backgrounds.

Table 5

Non-financial reporting categories and subcategories

Source: prepared by authors basis Directive 2014/95/EU

The details disclosed in every sub-category were evaluated by authors according to the scale from 1 to 3:

- » One point is given in case the sub-category is mentioned in the report.
- » Two points are given in case the sub-category description is complete and comprehensive.
- » Three points are given in case the sub-category description is complete and comprehensive and the Non-Financial performance indicators are present.

In general, it was possible to get 60 points maximum for the detailed information as there are 20 sub-categories and 3 points may be given as a maximum to each of them.

Five points were given in case company followed Non-Financial reporting guidelines and frameworks (GRI, OECD, UN Global Compact etc.), submitted standalone ESG report and received auditor's assurance. Also, the following certification added one point in assessing the quality of Non-Financial reporting:

- 1 ISO 9001:2015 - Quality Management System Implementation & Audit Standard.
- 2 ISO 14001:2015 - Environmental Management Systems Standard.

- 3 ISO 37001-Anti-Bribery Management Systems Standard.
- 4 ISO 45001-Occupational Health & Safety Management System Standard (ex OHSAS 18001/ EVS18001).
- 5 The EU Eco-Management and Audit Scheme (EMAS).

The results of the evaluation are presented in the next section.

Results

First of all, authors were aiming to find the way companies prefer to disclose Non-Financial information. The results of the study revealed that in 2015 only three Estonian companies submitted standalone CSR/ Sustainability/ Environmental report while in 2020 the number of such reports nearly doubled. These results are in line with the findings of Matuszak & Rozanska (2017), whose findings suggested that before the implementation of the NFRD companies preferred to disclose CSR related information in annual reports.

In regard to the quality and completeness of the Non-Financial report it became obvious that before the EU Directive came into force the number of categories disclosed were small containing less details and, in most cases, lacking the Non-Financial performance indicators. The detailed data on the reporting quality in 2015-2020 is presented in [Table 6](#).

Table 6

Quality of non-financial reporting for the selected companies for 2015-2020 (percentage of companies providing disclosures in each sub-category)

Sub-category	2015	2016	2017	2018	2019	2020
Details of the current and foreseeable impacts of the undertaking's operations on the environment.	54	85	93	100	100	100
The use of renewable and/or non-renewable energy.	38	69	69	77	85	85
Greenhouse emission.	23	38	46	46	54	62
Water use.	31	54	69	54	54	62
Air pollution.	15	31	54	54	54	54
Recycle of materials, waste management.	54	69	77	92	92	92
Gender equality.	23	62	77	77	77	77
Implementation of fundamental conventions of the ILO.	62	85	85	85	85	85
Working conditions.	62	85	85	92	92	92
Social dialogue (charity).	77	92	92	100	100	100
Respect for the right of workers to be informed and consulted.	54	77	77	85	85	85
Respect for trade union rights.	15	23	23	23	23	23
Health and safety at work.	62	85	85	92	92	92
Dialogue with local communities.	54	77	85	92	92	92
The prevention of human rights abuses.	38	54	69	77	77	85
Instruments in place to fight corruption and bribery.	15	54	62	77	77	85
Ethical norms and code of conduct at work.	15	54	69	77	77	85
Whistle-blower code of conduct.	8	15	23	31	31	31
Description of main principles, aims and their implementation.	100	100	100	100	100	100
Management and supervisory bodies diversity with regard to age, gender or educational and professional backgrounds.	92	92	92	92	92	92

Source: Authors basis data retrieved from the reports of companies

The data presented in [Table 6](#) confirms that the highest rate of reporting was noted in the area of details of the current and foreseeable impacts of the undertaking's operations on the environment, social dialogue and the description of main principles, aims and their implementation. However, the least percentage of companies seemed to disclose information about respect for trade union rights, whistle-blower code of conduct and air pollution. The last subcategory may be not popular among the companies due to the nature of business, which is not having direct impact on the environment. Authors believe that this gap will be covered by the new CSRD requirements. However, it is worth noting that the largest growth in reporting was observed in the sub categories of instruments in place to fight corruption and bribery and ethical norms and code of conduct at work, which maybe contributed to the changes in legislations and the increased number of scandals related to unethical behaviours of both employers and employees. In general, it can be concluded that the share of companies reporting in each selected subcategory has increased significantly after the implementation of the NFRD.

The results of the study also revealed that as of the year 2020 several companies have obtained the following certificates: ISO9011 quality management system (six companies), ISO 14001 Environmental management systems - (six companies), ISO 45001 occupational health and safety (four companies) and one company has integrated EMAS system. Surprisingly the ISO37001 Anti-bribery management systems was not the case and none of the companies obtained this kind of certification.

The results of the study demonstrated that over the years the quality of the Non-Financial reporting has increased and reports have become more detailed. It was also revealed that the impact of the directive on the disclosure of Non-Financial information became apparent already in the first year after its enforcement. The overall level of disclosure had increased by 78% within six years. The highest growth was observed in areas where the level of reporting was low before the directive enforcement i.e., fight against corruption and human rights. However, the level of detail of the information provided in these areas was poor, showing that companies may still underestimate importance of such disclosures. The most detailed information was disclosed in the area of management diversity, while in regard to environment, the most information was disclosed by companies facing the highest environmental risk. Although the reports emphasised the importance of environmental issues and the companies monitored the impact of their performance, the level of detail of the provided information was quite low.

In general, it can be concluded that Estonian listed companies have successfully adapted to the new requirements. Most of them have disclosed the detailed information on various issues. The information provided on risks, management principles and established internal regulations increases credibility with stakeholders and adds value to the sustainable business operations.

Over the years, ESG reporting has become more standardised and the reports are becoming more and more comparable. A comparison of the disclosed information allows authors to state that the content of the reports shows the increased transparency and integrity among listed companies.

The authors consider it useful to further improve the quality of Non-Financial reporting by adhering to the requirements of the CSRD as well as implementing other international frameworks and guidelines on Non-Financial reporting. It would also make sense to pay more attention to the development of the field-specific Non-Financial key performance indicators, establishing their reporting principles and accounting methodologies to ensure their consistent presentation. Focus should also be shifted to the education of the ESG reporting specialists able to produce Non-Financial reports of a high quality being successfully, submitted, audited and made publicly available.

Conclusions

References

- Aluchna, M.; Roszkowska-Menkes, M.; Kaminski, B. (2022). From talk to action: the effects of the Non-Financial reporting directive on ESG performance. *Meditari Accountancy Research*. 31(7), 1-25. <https://doi.org/10.1108/MEDAR-12-2021-1530>
- Amir Amel-Zadeh & George Serafeim (2018) Why and How Investors Use ESG Information: Evidence from a Global Survey, *Financial Analysts Journal*. 74:3, 87-103, <https://doi.org/10.2469/faj.v74.n3.2>
- An official website of the European Union. Retrieved from https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en on 31.12.2022
- Aureli, S., M. Del Baldo, R. Lombardi, and F. Nappo. (2020). "Non-Financial Reporting Regulation and Challenges in Sustainability Disclosure and Corporate Governance Practices". *Business Strategy and the Environment* 29 (6): 2392-2403. <https://doi.org/10.1002/bse.2509>
- Breijer, R., Orij, RP. (2022). The Comparability of Non-Financial Information: An Exploration of the Impact of the Non-Financial Reporting Directive (NFRD, 2014/95/EU) *Accounting in Europe*, Volume 19, Issue 2 Page 332-361. <https://doi.org/10.1080/17449480.2022.2065645>
- Camilleri, M. A. (2017). "Corporate Social Responsibility Policy in the United States of America". *Corporate Social Responsibility in Times of Crisis*, 129-143. https://doi.org/10.1007/978-3-319-52839-7_7
- Chen, YC; Hung, MY; Wang, YX (2018). The effect of mandatory CSR disclosure on firm profitability and social externalities: Evidence from China. *Journal of Accounting & Economics*, 65(1), 169-190. <https://doi.org/10.1016/j.jacceco.2017.11.009>
- Cicchello, A.F.; Marrazza, F., Perdichizzi, S. (2022). Non-financial disclosure regulation and environmental, social, and governance (ESG) performance: The case of EU and US firms. *Corporate Social Responsibility an Investment Management*. <https://doi.org/10.1002/csr.2408>
- Fiandrino, S.; Tonelli, A. (2021). A Text-Mining Analysis on the Review of the Non-Financial Reporting Directive: Bringing Value Creation for Stakeholders into Accounting. *Sustainability*. 13(2). <https://doi.org/10.3390/su13020763>
- Fiandrino, S.; di Trana, MG.; Tonelli, A. Lucchese, A. (2022) The multi-faceted dimensions for the disclosure quality of Non-Financial information in revising directive 2014/95/EU. *Journal of Applied Accounting Research*. 23(1), 274-300. <https://doi.org/10.1108/JAAR-04-2021-0118>
- Francesca Cuomo, Silvia Gaia, Claudia Girardone & Stefano Piserà (2022) The effects of the EU Non-Financial reporting directive on corporate social responsibility, *The European Journal of Finance*, <https://doi.org/10.1080/1351847X.2022.2113812>
- Franziska Schütze & Jan Stede (2021) The EU sustainable finance taxonomy and its contribution to climate neutrality, *Journal of Sustainable Finance & Investment*, <https://doi.org/10.1080/20430795.2021.2006129>
- Gurvitš-Suits, N. A., Sidorova, I (2021). Decade of Sustainability Reporting in EU: Main Changes and Trends. Case of Companies Listed on NASDAQ OMX Baltic Main List. *European Integration Studies*, 1 (16), 78-86. <https://doi.org/10.5755/j01.eis.1.16.31241>
- Lippai-Makra, E., Kovács, Z. I., & Kiss, G. D. (2022). The Non-Financial reporting practices of hungarian listed public interest entities considering the 2014/95/EU directive. *Journal of Applied Accounting Research*, <https://doi.org/10.1108/JAAR-04-2021-0086>
- Matuszak, L.; Rozanska, E. (2017). CSR Disclosure in Polish-Listed Companies in the Light of Directive 2014/95/EU Requirements: Empirical Evidence. *sustainability*. 9(12). Article Number 2304. <https://doi.org/10.3390/su9122304>
- Matuszak, Ł., & Róžańska, E. (2021). Towards 2014/95/EU directive compliance: The case of Poland. *Sustainability Accounting, Management and Policy Journal*, 12(5), 1052-1076. <https://doi.org/10.1108/SAMPJ-02-2020-0042>
- Meeh-Bunse, G.; Rep, A.; Schomaker, S. (2019). Non-Financial Reporting Implementation - a Croatian-German Contemplation. *Proceedings of FEB Zagreb 10TH International Odyssey Conference On Economics and Business. Book Series Proceedings of FEB Zagreb International Odyssey Conference on Economics and Business*. 1(1), pp.41-57.
- Monica Singhanian & Neha Saini (2023) Institutional framework of ESG disclosures: comparative analysis of developed and developing countries, *Journal of Sustainable Finance & Investment*, 13:1, 516-559, <https://doi.org/10.1080/20430795.2021.1964810>
- NFRD vs. CSRD. Retrieved from <https://www.cpm-view.com/news/csrd/nfrd-vs-csrd/> on 31.12.2022
- Ottenstein, P., Erben, S., Jost, S., Weuster, C. W., & Zülch, H. (2021). From voluntarism to regulation: Effects of directive 2014/95/EU on sustainability reporting in the EU. *Journal of Applied Accounting Research*, <https://doi.org/10.1108/JAAR-03-2021-0075>

Pizzi, S., Del Baldo, M., Caputo, F., & Venturelli, A. (2021). Voluntary disclosure of sustainable development goals in mandatory Non-Financial reports: The moderating role of cultural dimension. *Journal of International Financial Management and Accounting*, <https://doi.org/10.1111/jifm.12139>

Schroder, P. (2022). Mandatory Non-Financial reporting in the banking industry: assessing reporting quality and determinants. 9(1). Article Number 2073628. <https://doi.org/10.1080/23311975.2022.2073628>

Study of the European Commission on the Non-Financial Reporting Directive. Retrieved from https://www.ceps.eu/wp-content/uploads/2021/04/EV0220277ENN.en_.pdf on 31.2.2022.

Tarquinio, L., Posadas, S. C., & Pedicone, D. (2020). Scoring nonfinancial information reporting in Italian listed companies: A comparison of before and after the legislative decree 254/2016. *Sustainability (Switzerland)*, 12(10) <https://doi.org/10.3390/su12104158>

XBRL the Business Reporting Standard. Retrieved from <https://www.xbrl.org/news/> on 31.12.2022.

What is the CSRD? Retrieved from <https://www.sustain.life/blog/what-is-csrd> on 31.12.2022

The KPMG Survey of Sustainability Reporting 2020, Retrieved from: <https://assets.kpmg/content/dam/kpmg/se/pdf/komm/2022/Global-Survey-of-Sustainability-Reporting-2022.pdf> on 31.12.2022.

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