

EU Non-Financial Reporting Research

Albertina Monteiro¹, Catarina Cepêda^{2*}, Amélia Silva³

Porto Accounting and Business School, Polytechnic of Porto, CEOS.PP, Porto, Portugal^{1&3}

Porto Accounting and Business School, Polytechnic of Porto, Porto, Portugal²

amonteiro@iscap.ipp.pt¹, clmc@iscap.ipp.pt², ameliafs@gmail.com³



Article History

Received on 3 July 2022

1st Revision on 26 July 2022

2nd Revision on 10 August 2022

3rd Revision on 13 August 2022

4th Revision on 13 September 2022

Accepted on 19 September 2022

Abstract

Purpose: This paper presents a longitudinal evaluation of the research about Directive 2014/95/EU regarding Non-Financial Reporting (NFR), identifying the theoretical approaches, methodological adopted, and research topics.

Research methodology: Data was collected from the Web of Science (WoS) database, between 2016 and 2021. The search criteria resulted in a total of 59 valid articles, after which we performed a quantitative bibliometric analysis using VOSviewer software.

Results: Publications on this Directive 2014/95/EU has increased from 2015 to 2021. Findings show that most articles resorted to quantitative and qualitative methodologies, emphasizing content analysis, combined with other research methods. The frameworks based on stakeholders and institutional theories are very popular in the field. Research is focused on (1) Directive 2014/95/EU regulation, implementation, compliance, and investigation, (2) determinants and impacts of NFR, (3) NFR level/evolution and (4) reasons and skills for NFR. Papers published on EU non-financial information are very heterogeneous and lack consensus as to its impact on NFR.

Limitations: This study only included the WoS database as a source of data collection, and it would be valuable in future studies to add other quality databases.

Contribution: This research contributes to illuminating institutional pressures implication for NFR development. Therefore, this analysis is essential for institutions operating in accounting information standardization, as well as for information preparers given the necessity to acquire skills to ensure this new challenge related to the reporting of corporate social responsibility.

Keywords: *Non-Financial Reporting, Directive 2014/95/EU, Institutional Pressures, Bibliometric literature review*

How to Cite: Monteiro, A., Cepêda, C., & Silva, A. (2023). EU Non-Financial Reporting Research. *International Journal of Financial, Accounting, and Management*, 4(3), 335-348.

1. Introduction

With the economic activity progress, accounting has been an essential tool to support decision-makers ([Schwartz, 2016](#)). “Sustainable development-accounting hybrid requires a focus on a problem issue enmeshed in a wider ecological, social and economic context” ([Bebbington, Russell, & Thomson, 2017](#)). Noteworthy that sustainability is currently one of the world’s most focal issues ([Samossir, Murwaningsari, Augustine, & Mayangsari, 2020](#)).

Conventional accounting and sustainable or social accounting are observed from different viewpoints. For instants, [Bebbington et al. \(2017\)](#) mention that conventional accounting is somewhat more suited to quantitative objectives i.e. “clearly defined objects, linear cause-effect relationships” and single results, which contrasts with social accounting as it is clearly but qualitative accounting that is based on “a radical transformative program, rather than a discrete object or entity”.

Nevertheless, advances are visible in accounting that increasingly reports on company's sustainability issues reinforcing the Non-Financial Reporting (NFR) relevance and corporate accountability in pursuit of greater transparency ([Gray, 2010](#)).

However, several organisations promote NFR quality and usefulness, as Global Reporting Initiative (GRI), United Nations (UN), International Organization for Standardization (ISO), World Business Council for Sustainable Development (WBCSD), International Labour Organization (ILO) and International Integrated Reporting Council (IIRC).

Disclosing about sustainability is a way to increase transparent and reliable non-financial information ([Balluchi, Furlotti, & Torelli, 2020](#); [Tukur, Shehu, Mammadi, & Sulaiman, 2019](#)). Despite its benefits, many companies do not report non-financial information voluntarily, which is why the literature has focused on the possibility of assigning a mandatory character to these disclosure processes ([Venturelli, Caputo, Cosma, Leopizzi, & Pizzi, 2017](#)).

According to [Bhutta & Saeed \(2011\)](#) and [Mahoney, Thorne, Cecil, & LaGore \(2013\)](#), the main theoretical perspectives around NFR are: (1) Stakeholder Theory, (2) Legitimacy Theory, (3) Media Agenda Setting Theory and (4) Signalling Theory.

Stakeholder Theory and Legitimacy Theory, developed from a broad political viewpoint because, they are focused on the relationship between an organization and its operating environment ([Bhutta & Saeed, 2011](#)). Legitimacy Theory is derived from the concept of organisational legitimacy ([O'donovan, 2002](#)) and it has inspired many studies on voluntary social and environmental reporting ([Deegan, 2002](#)). According to [O'donovan \(2002\)](#), "legitimacy theory is based on the idea that in order to continue operating successfully, corporations must act within the bounds of what society identifies as socially acceptable behaviour". Legitimacy Theory predicts that companies disclose non-financial information to respond to societal pressure and therefore to gain stakeholders' support ([De Villiers & Marques, 2016](#)). Undoubtedly, stakeholders have begun to show more interest in how companies react and act towards the natural environment, employees and customers, investors, managers, and throughout the entire chain following the entire line of stakeholder theory at NFR ([Miniaoui, Chibani, & Hussainey, 2019](#); [Omodero, 2015](#)). Communication with stakeholders is fundamental for companies, as it allows them to understand how companies are positioned in society and how they also develop their business ([Amorim & Bras, 2011](#)).

Media Agenda Setting Theory, according to [Ader \(1995\)](#), "is a relationship between the relative emphasis placed by the media on various topics and the degree of salience these topics have for the general public". There is indeed a cause-effect of how the media leads to greater community concern about a particular issue. Despite this, at the general level, the media are not seen as reflectors of public priorities but rather are seen as possible shapers of those entities ([N. Brown & Deegan, 1998](#)).

Under Signaling Theory, companies with social and environmental reports generally have higher Corporate Social Responsibility (CSR) performance scores ([Mahoney et al., 2013](#)).

Other theories widely addressed in NFR are the agency theory and fit/mismatch theory. Agency theory reinforces that firms face functions separation and interests' divergence among different stakeholders, and often only a small group makes decisions, and thus has a different position in NFR ([Frydman & Camerer, 2016](#)). For [Aureli, Magnaghi, & Salvatori \(2019\)](#), a dominant approach in explaining transposition differences is based on the fit/mismatch theory between European legislation and the domestic situation. Thus, and in regulatory contexts such as the European Union (EU) Directive under study, this theory helps to understand the contexts of each country's legislation. Furthermore, the literature in this field of research refers to other theories, such as institutional theory, neo-institutional, resource-based, social identity, and stewardship theories (e.g., [Guthrie, Manes-Rossi, & Orelli, 2017](#)); [Dumay, La Torre, & Farneti, 2018](#); [Bostan, Bircă, Tabără, & MUNTEAN JEMNA, 2019](#); [Carungu, Di](#)

[Pietra, & Molinari, 2020](#); [Krasodomska, Michalak, & Świetla, 2020](#); [Tarquinio, Posadas, & Pedicone, 2020](#); [Krasodomska, Simnett, & Street, 2021](#)).

NFR is subject to increasing research, however, EU Directive 2014/95/EU implementation on NFR is increasing the information disclosure and its usefulness to stakeholders ([Raucci & Tarquinio, 2020](#)). Directive 2014/95/EU requires that large European companies must include annual non-financial statements on sustainability and diversity either as a part of their management report or as a separate document. “Directive 95/2014/EU gave new impetus to non-financial issues, requiring entities of public interest with more than 500 employees to disclose a minimum content of information about environmental, social and employee matters, respect for human rights, anti-corruption and bribery matter” ([Nicolò, Zanellato, & Tiron-Tudor, 2020](#)).

The EU Directive introduction is a step forward since it will facilitate to standardize NFR rules and will increase its transparency and usefulness ([Krištofik, Lament, & Musa, 2016](#)). However, [Nicolò et al. \(2020\)](#) results show that mandatory regulation introduction did not encourage NFR by public companies. [Venturelli et al. \(2017\)](#) refer to those best results in terms of NFR score were achieved by companies already involved in CSR practices, such as assured and voluntary sustainability reports.

According to [Venturelli et al. \(2017\)](#) although most sustainability reports are prepared according to international standards (e.g., GRI), assessing NFR quality is not so easy to do. The idea that only regulation could improve NFR quality and comparability was initially widely accepted in the literature ([Deegan, 2002](#)). However, previous studies argue that NFR may increase non-financial information disclosed quantity, with no impact on quality information ([H. S. Brown, de Jong, & Levy, 2009](#)).

To assess information quality, it is important to verify these requirements' presence through measurement “in basic terms, the concept of quality can be linked to all the requirements of the document itself, namely, availability, accessibility, comprehensibility, speed, relevance, significance, completeness, clarity, completeness, truth, verifiability, correctness, neutrality, impartiality, and objectivity” ([Venturelli et al., 2017](#)). [Di Vaio, Palladino, Hassan, & Alvino \(2020\)](#) research points out that EU Directive does not specify human resources disclosure, and they note that it redirects on performance, belief, and disclosure quality in terms of social and environmental concerns. For instances, [Zulaecha & Murtanto \(2019\)](#) shows that strategic management is a must to achieve high sustainability performance.

Given its importance to NFR regulation and quality, this research, based on a literature review on Directive 2014/95/EU, aims to highlight institutional pressures standing for NFR development and to verify its impact and evolution in scientific production. This research covers the gap in the literature by providing an overview of NFR regulation state of art in the field of EU Directive, to systematize existing studies on this topic. To achieve this overall objective, a systematic literature review is carried out on papers specifically focused on EU Directive in sources indexed on WoS database to answer the following specific objectives:

1. Identify the EU Directive timeline research;
2. Identify the main theoretical approaches;
3. Identify the main methodologies adopted;
4. Identify the main research topics.

This paper, with four sections is structured as follows: after the topic introduction and research objectives, the methodology is presented. The third section discusses research results and then main conclusions are presented along with their implications, limitations, and future research.

2. Research Methodology

Systematic literature reviews facilitate literature analyses in a precise and reliable fashion ([Liberati et al., 2009](#); [Vale, Bertuzzi, & Monteiro, 2022](#)). Following previous studies (e.g., [A. P. Monteiro, Aibar-](#)

[Guzmán, Garrido-Ruso, & Aibar-Guzmán, 2021](#); [A. Monteiro & Cepêda, 2021](#)), we conducted a comprehensive research to collect publications specifically focused on EU Directive.

The keyword used in WoS database was “Directive 2014/95/EU”. From the search, 90 publications were generated, 60 papers, 27 proceedings papers, 3 early access, 2 editorial material and 2 reviews. Thus, we obtained a total of 60 papers selected on 11 May 2021 from WoS database. From 60 papers, 1 was not related to NFR, as it was excluded from the analysis. This research includes articles published until the date of collection. The sample under study consists of 59 articles.

3. Results and Discussions

In this section, we seek to answer the research objectives.

1. *EU Directive timeline research*

In this research, we identified 59 articles on EU Directive. The first publications that reported EU Directive were in 2015. It was a pioneer study developed by de Roo, with the title “The role of the EU directive on non-financial disclosure in human rights reporting”. This research analysed the Directive 2014/95/EU effect on human rights disclosure. [de Roo \(2015\)](#) emphasizes the mandatory reporting information importance on this subject in large public interest entities, however, while affirming that it is a very important step, [de Roo \(2015\)](#) states that the directive still has some problems.

The second study was published in 2016 and belongs to Peter Krištofik, Marzanna Lament and Hussam Musa, with the title “The reporting of non-financial information and the rationale for its standardization”. This study, based on a literature review and empirical research on motivations for CSR reporting and trends in NFR shows that communication with stakeholders is the key reason for NFR and highlights the need to standardise CSR reporting to ensure its transparency and accountability. Authors identify a growing trend for CSR reporting to follow guidelines other than GRI throughout the period under review. Indeed, the authors indicate that there will be no need for a single mandatory standard, but a reporting template to be followed by reporting companies to ensure transparency and comparability.

Publications on this EU Directive have increased from 2015 to 2021. The year that recorded the most publications was 2020 with 23 articles. Indeed, there was substantial achievements in research in the field in 2020. However, it is expected that in the year 2021, a year not yet completed when collecting the articles in the Web of Science database, the number of publications will be higher than in 2020. Figure 1 presents the number of publications per year. The topic is current and its political and economic interest is increasingly recognized.

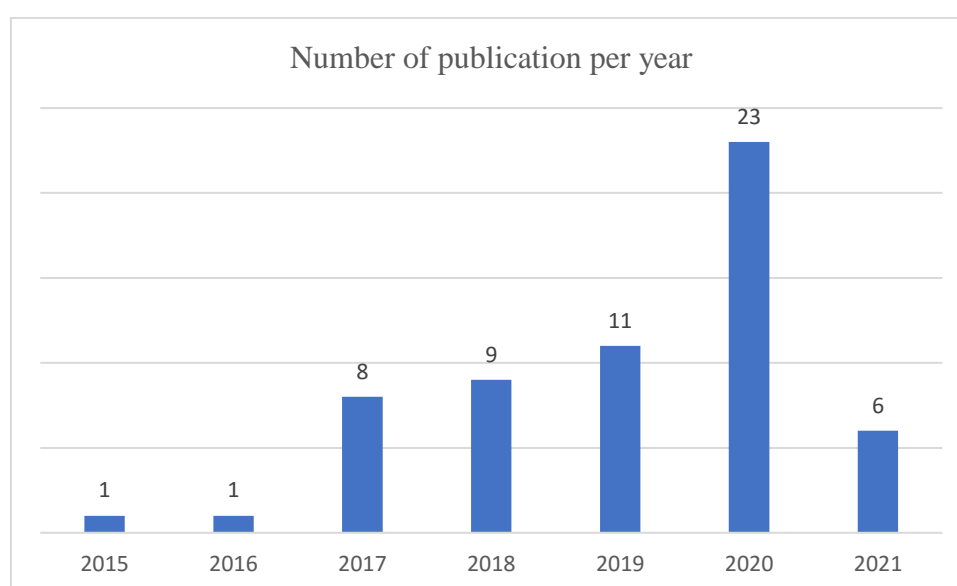


Figure 1 - Number of publications per year
Source: Vosviewer

In addition, we verify that 52 articles were published by multi-authors and 7 by single authors as per figure 2.

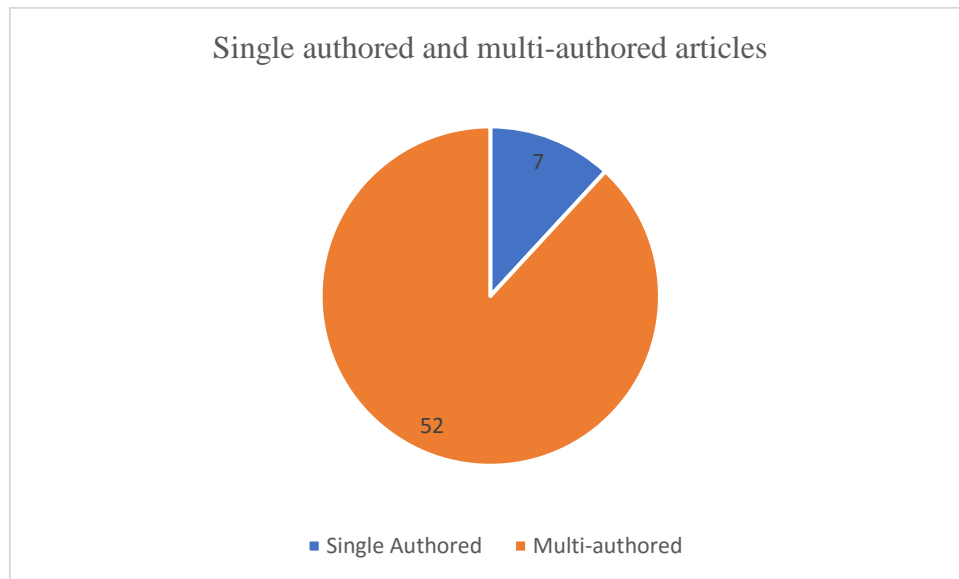


Figure 2 - Number of single/multi authored publications
Source: Vosviewer

2. *Main theoretical approaches*

A structure based on the theoretical foundation that supports a particular topic in a study is called a theoretical framework ([Merten, 1998](#)). In the field of NFR, specifically on EU Directive, various theories have been the theoretical framework for several studies, as shown in figure 3. For instance, [Hahn & Kühnen \(2013\)](#) found that most literature on CSR adopts four main theories (the Legitimacy Theory, Stakeholder Theory, Institutional Theory, and the Signalling Theory). Where possible, we have sought to identify the prevalent theoretical framework used in each study and categorize papers accordingly. The biased nature of this process must be acknowledged. According, in our sample, from the total of 59 studies, only 22 follow a theoretical approach. The most widely employed theories, as [Hahn & Kühnen \(2013\)](#) point out, are legitimacy, institutional and stakeholders' theories (figure 3). Thus, we would like to draw attention to a couple of interesting points from figure 3.

As for the most used theory in this theme, Legitimacy Theory, we highlight [Mittelbach-Hörmanseder, Hummel, & Rammerstorfer \(2021\)](#) research, who concluded that there is a tendency for companies to disclose CSR information to maintain corporate legitimacy among a broad group of stakeholders ([Mittelbach-Hörmanseder et al., 2021](#)). Nevertheless, [Nicolò et al. \(2020\)](#) analyzes whether the EU directive implementation increased the level of CSR disclosure by public companies on an integrated report between 2016 and 2017. The authors point out that directive coercive pressures have not exerted a decisive influence on disclosure level and that it has become an institutionalized practice.

Regarding [Tarquinio et al. \(2020\)](#) research, who examined the new regulation influence on CSR reporting (2016 to 2018), used the theoretical lens in institutional theory to assess the early stages of institutionalization of new mandatory information practices in Italian firms. [Tarquinio et al. \(2020\)](#) research highlight a generalized reduction in the indicators disclosed by the companies belonging to the sample, indicating that Italian government pressures did not have the expected results. Also, within this theory, [Dumitru, Dyduch, Gușe, & Krasodomska \(2017\)](#) find that prior regulation, local institutional characteristics, ownership, industry, and auditors have an impact on CSR disclosure quality. For instance, [Primec & Belak \(2018\)](#) argue for the institutional development importance in the context of

corporate governance and institutional measures influence firms' ethical behavior and, consequently, their success.

Studies on stakeholder theory, indicate that company's orientation towards stakeholders improves CSR practices and their disclosure. [De Micco, Rinaldi, Vitale, Cupertino, & Maraghini \(2020\)](#) found that stakeholder involvement hardly affected CSR as legislation affected the extent and quality of content disclosed and fostered the standardization reporting process. Despite this, beyond legitimacy and stakeholder theory, [Dumay et al. \(2018\)](#) emphasize that company stewardship is necessary to increase trust, because unforeseen consequences of dishonest behaviour by managers or shareholders force a new application of stewardship theory that acts as a general guide to behaviour and disclosure by managers. [Dumay et al. \(2018\)](#) studied the gap between reporting and manager behaviour to challenge the current theoretical underpinnings of intellectual capital disclosure practice and research. The authors concluded that existing inconsistency between reporting and organizations' behaviour is not sufficient to trust in firms, even with the expansion and renewal of disclosed information.

Other theories are used in studies analysed: Social Identity Theory ([Krasodomska et al., 2020](#)); Neo-Institutional Theory ([Carungu et al., 2020](#)); Agency Theory ([Mio, Fasan, Marcon, & Panfilo, 2020](#)); Resource-Based Theory ([Bostan et al., 2019](#)) and Dominant Fit/Misfit Theory ([Aureli et al., 2019](#)), however legitimacy, institutional and stakeholder theories are the most influential in NFR regulation topic. Since none of the paper employed the contingency theory, we suggest that this can be an opportunity to explore the potential of the theoretical approach to explain the contingent factor that influence the efficacy of NFR models.

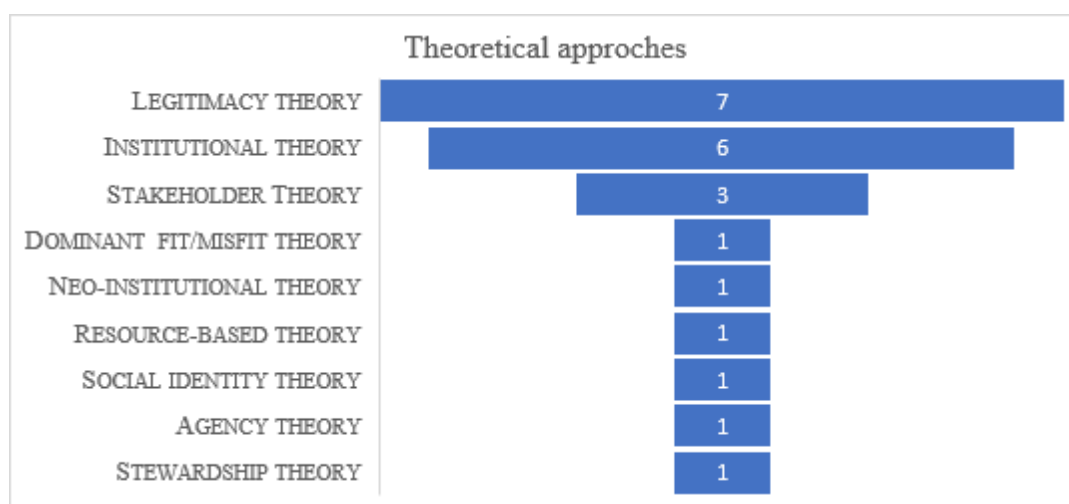


Figure 3 - Theoretical approaches
Source: prepared by the authors

3. *Main methodologies adopted*

Research methods used in the EU Directive publications were analysed. EU Directive-focused studies use quantitative and qualitative methodology extensively. We found that most studies (62.27%) use content analysis (30.51%) and content analysis combined with other research methods (32.20). Studies focused on literature review/theoretical analysis represent 30.51% of the sample, followed by case study (5.08%) and quantitative research based on survey (1.69%) (figure 4).

The content analysis technique is related to the assessment of NFR quantitative and qualitative aspects. Regarding this analysis technique, 18 studies use this technique to analyze the level/evolution of non-financial information disclosure, 16 combine it with regression analysis to analyze the determinants and/or impacts of non-financial information disclosure, 2 carry out a content analysis of documents published by international bodies within the scope of EU Directive and 1 study combines content analysis with semi-structured interviews.

Most studies that do a literature review/theoretical analysis focus the analysis on EU Directive regulation and enforcement (14), the remaining studies (3) do a literature review/ theoretical analysis, including a systematic literature review. Since it is a multidimensional topic, we see an enormous potential in mixing qualitative field research and quantitative survey research. For instance, the qualitative research could provide in-depth insights into the nature the corporate narrative regarding the disclosure of no-finance information, while quantitative research could offer greater support on the disclosure of key indicators of no-finance performance and their associations with contextual factors.

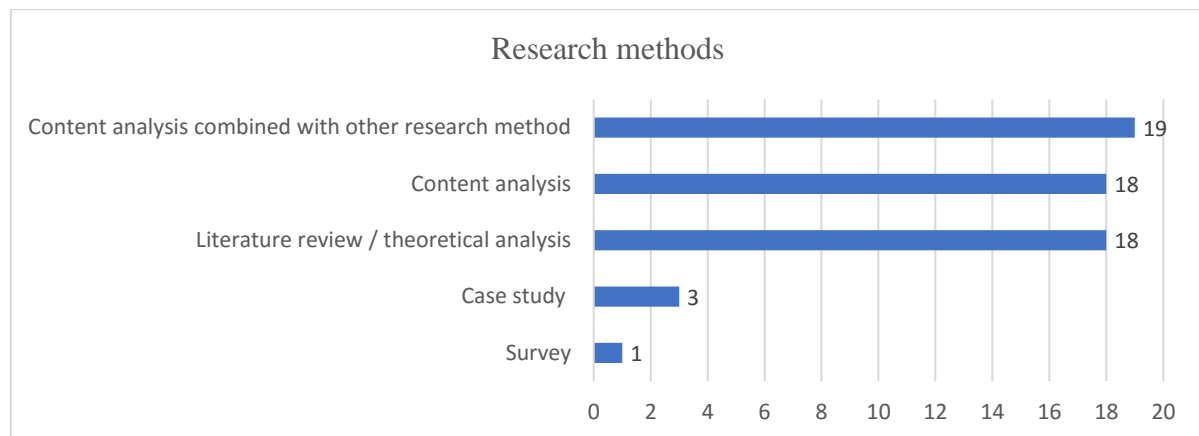


Figure 4 – Research methods
Source: prepared by the authors

4. Main research topics

In this research, we identified 4 main research topics. The topic with more publications is “EU Directive regulation, implementation, compliance, and investigation” (20 papers) and “determinants and impacts of NFR” (20 papers), followed by topics “NFR level/evolution (16 papers) and “reasons and skills for NFR” (3) topics (figure 5).

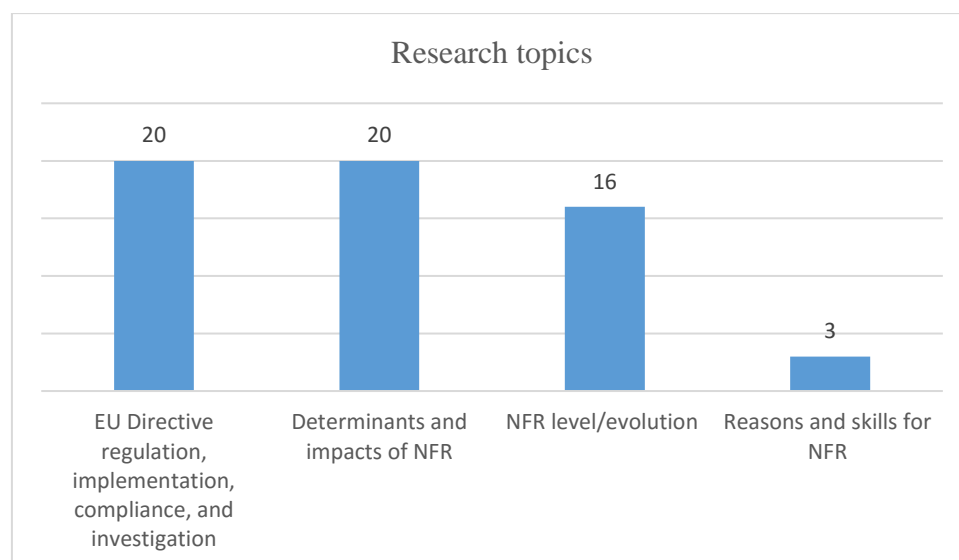


Figure 5 – Research topics
Source: prepared by the authors

Publications on “EU Directive regulation, implementation, compliance and investigation” and “determinants and impacts of NFR” are 20 papers each. First studies in this research topic refer that regulation requires organization changes and that NFR will be a result of an internalization process

([Guthrie et al., 2017](#)); by being mandatory for large companies it contributes to other companies to adopt sustainable actions and optionally disclose non-financial information to become more competitive ([Ogorean, 2017](#)); and it needs to be improved for a more effective NFR ([Hojnik, 2017](#)).

Furthermore, other studies, regarding the EU Directive implementation, analyze: how companies can implement the EU Directive and CSR frameworks in group companies ([Szabó & Sørensen, 2015](#)); the importance of corporate governance attributes ([Primec & Belak, 2018](#)); its effects on sustainability ([Bruno Soares & Buontempo, 2019](#)) and enhance accountability ([Masiero, Arkhipova, Massaro, & Bagnoli, 2019](#)); and how regulations to be implemented in a specific country (France) ([Malecki, 2018](#)). Several studies analyze EU Directive compliance degree ([Fiandrino, Busso, & Vrontis, 2019](#); [Aureli et al., 2019](#); [Biondi, Dumay, & Monciardini, 2020](#)) or whether corporations can fulfil with corporate reporting regulations ([Biondi et al., 2020](#)).

Other studies analyze EU Directive as a process of NFR harmonization and assurance ([Aureli, Salvatori, & Magnaghi, 2020](#); [Kinderman, 2020a](#); [2020b](#); [Krasodomska et al., 2021](#)); the role of accounting academics in regulatory process ([Garcia-Torea, Larrinaga, & Luque-Vílchez, 2019](#)); and its impact on scientific production progress ([Di Vaio et al., 2020](#); [Stefănescu, Tiron-Tudor, & Moise, 2021](#)). Finally, other authors highlight the employee engagement, management commitment and routine/institutionalized reporting practices importance for sustainability reporting evolution ([De Micco et al., 2020](#)). In this topic, the institutional, dominant fit/misfit and stakeholders' theories and quite common.

Regarding the topic “determinants and impacts of NFR. the studies identified as determinants of NFR or disclosure of key performance indicators (KPIs): corporate governance mechanisms, such as the duality of outside directors and Chief Executive Officer (CEO) ([Alonso Carrillo, Priego De La Cruz, & Nunez Chicharro, 2019](#)) and presence of independent directors on the board ([Pizzi, Rosati, & Venturelli, 2021](#)); stakeholders pressure for companies operating in environmentally sensitive industries ([Krasodomska et al., 2021](#)); company size; profitability, ownership structure, financial position and company age ([Moraru, PĂUN, DURA, Dinulescu, & Potcovaru, 2020](#)); firms' market share, their field of activity and ownership structure ([Păun, Dura, Mihăilescu, Moraru, & Isac, 2020](#)), firm size and assurance ([Venturelli et al., 2017](#)); financial performance ([Loprevite, Raucci, & Rupo, 2020](#); [Olayinka, 2022](#)); European policymakers ([Venturelli et al., 2017](#)); prior regulation, local institutional characteristics, ownership, industry and auditors ([Dumitru et al., 2017](#)). ([Mio et al., 2020](#)) found, within the framework of Legitimacy Theory that company size, intangibles, and environmentally-sensitive industry are predicting variables of disclosing non-financial information even after EU Directive implementation, while, from the Agency Theory perspective, the corporate governance mechanism (board size, leverage and ownership dispersion) partially increases, because board size –one of the variables typically employed within agency theory to predict NFR– gained significance in 2017 compared to 2016. On the other hand, several studies are focused on NFR impacts after EU Directive enforcement, namely on earnings per share (EPS), forecast accuracy ([Ferrer, López-Arceiz, & del Rio, 2020](#)), and firm value (measured via stock prices) ([Mittelbach-Hörmanseder et al., 2021](#)).

Other research shows that there is a relationship between firms' market value/structural Capital and NFR disclosure risk information ([Veltri, De Luca, & Phan, 2020](#)) and between environmental and social disclosure quality ([Bernardi & Stark, 2018](#)). [Cosma, Leopizzi, Pizzi, & Turco \(2021\)](#) study reveals that improvements in stakeholder engagement before and after EU Directive introduction are associated to Board characteristics. [Bostan et al. \(2019\)](#) verify that the sustainable nature of management control is a result provided by EU Directive and the ([Accountant, 2016](#)) provisions. In this topic, some authors use theoretical frameworks inspired by Institutional, Legitimacy, Stakeholders, Agency, and Resource-Based theories.

Another research topic focuses on NFR level/evolution. This topic includes [Artene, Bunget, Dumitrescu, Domil, & Bogdan \(2020\)](#) research that found an increase in environmental information disclosure in oil-listed entities. [Mion & Loza Adaui \(2019\)](#) find that NFR quality has increased in Italian

and German firms. ([Leopizzi, Iazzi, Venturelli, & Principale, 2020](#))'s study shows an increase in NFR risk disclosure. [Sierra-Garcia, Garcia-Benau, & Bollas-Araya \(2018\)](#) find that NFR level of Spanish companies has increased in sustainability reports and that it differs between the sector of activity.

Contrarily, [Nicolò et al. \(2020\)](#) find that EU Directive coercive pressures did not exert a decisive influence on disclosure level by State-Owned Enterprises. [Raucci & Tarquinio \(2020\)](#) findings also show, from 2012 to 2017, a reduction in the quantity of indicators disclosed on economic, social, and environmental categories in Italian Companies. [Tarquinio et al. \(2020\)](#), in this same context, verify, from 2012 to 2018, a generalized reduction of indicators disclosed by Italian companies. [Carungu et al. \(2020\)](#) verify that NFR quality of Italian companies does not increase when moving from a voluntary to a mandatory basis.

Other studies analyze NFR to identify compliance levels with EU Directive requirements. [Manes-Rossi, Tiron-Tudor, Nicolò, & Zanellato \(2018\)](#), besides verifying that elements required by EU Directive exceed those defined by other frameworks (International Integrated Reporting Framework–IIRF–and GRI 4 guidelines), conclude that there is a high level of compliance by European large companies with the EU Directive. [Matuszak & Róžańska \(2017\)](#) results show that companies prefer annual reports to communicate voluntary CSR disclosures, and, in many cases, companies' CSR disclosure were not compliant with the new requirements. Authors assess NFR credibility after EU Directive implementation. [Mazzotta, Bronzetti, & Veltri \(2020\)](#) find that Italian companies tend to disclose credible NFR in mandatory contexts. On the other hand, [Peršić & Lahorka \(2018\)](#) find that Croatian companies disclose social information, but the reliability of this information for benchmarking and competitiveness assessment is questionable.

[Gazzola, Pezzetti, Amelio, & Grechi \(2020\)](#) compare non-financial disclosed on companies' websites under the 17 Sustainable Development Goals (SDGs) and the EU Directive and find that Italian public interest entities have implemented active policies linked to the achievement of some specific goals, in compliance with Italian legislation, although there are some divergences of different cultural issues. [Wozniak & Pactwa \(2019\)](#) compare non-financial information disclosure in three mining companies operating in Poland and find that there is divergence in the number of indicators used in the three companies analyzed. Some authors use as theoretical framework the Institutional, Dominant Fit/Misfit and Stakeholders theories.

The fourth topic refers to “reasons and skills for NFR” and includes only 3 papers. The first study conducted under EU Directive identifies that the main reason for non-financial information disclosure is the communication with stakeholders and that there is a need to standardize CSR reports to ensure non-financial information transparency ([Krištofik et al., 2016](#)). [Dumay et al. \(2018\)](#) refer to building trust as an important aspect of NFR, however, increasing, renewing, or extending it is not enough. These authors argue that is needed to guide managers' behaviors. Finally, [Krasodomska et al. \(2020\)](#), regarding accountants' competencies to comply with the requirements of EU Directive, find that this class of professionals does not have sufficient knowledge to do so. Some authors use as theoretical framework Stewardship, Stakeholder, Legitimacy, and Social Identity theories.

As noted by figure 5, one criticism that could be levelled at the research papers of our sample, in our view, is that of a narrow range of sub-topics. This opens a lot of opportunities for researchers who pretend explore the field. There is a lot to do, namely comparative studies of international practices.

4. Conclusion

4.1. Conclusion

[Gray \(2010\)](#) states that accounting does not arise to solve the world's problems, however, it is important to consider sustainability narratives at organisational level. Sustainable disclosure in EU countries was voluntary until the introduction of Directive 2014/95/EU. This Directive requires that companies with more than 500 employees disclose sustainable information. Thus, it is expected that non-financial information disclosure will increase in extent and quality, as well as scientific production.

In this context, in this study a systematic literature review was carried out on the papers specifically focused on EU Directive in sources indexed on WoS database to perform a longitudinal assessment, theoretical approaches, adopted methodologies and its main results.

Findings show that the first publication that reported the Eu Directive was in 2015. It was a pioneer study published by de Roo. The number of publications in this theme had an increasing trend line, and the year with the most articles was 2020. The most used theories are Legitimacy, Institutional and Stakeholders' theories. Results are in line with research developed by [Vale et al. \(2022\)](#). These authors analyse research in social responsibility reporting in Higher Education. We verified that content analysis technique (combined with another research method) is more frequent in studies analyzed. Finally, we found that the main topics in EU Directive research are: (1) Directive 2014/95/EU regulation, implementation, compliance, and investigation, (2) determinants and impacts of NFR, (3) NFR level/evolution, and (4) Reasons and skills for NFR.

This research has contributed to highlighting institutional pressures value for NFR development. With these premises, this research provided an overview of the state of art in the field of EU Directive with the systematization of existing studies. In the literature under study, we verify that there are heterogeneous studies without consensus results. Thus, it is very important to encourage institutions, governments, professionals and academics to contribute to NFR future regulation. It is a research topic that is justified because the information prepared by accounting is useful to all its users ([Cepêda & Monteiro, 2020](#)) however, its usefulness is only contemplated if it meets quality ([Phornlaphatrachakorn, 2019](#)). By identifying the theoretical perspectives and the main research subtopics, this paper contributes to the identification of current research opportunities about Directive 2014/95/EU.

4.2. Limitations

The major limitation of the study is that the database is limited to WoS articles. A more longitudinal search with other databases (e.g. Scopus and google scholar) would be very useful to compare the results.

4.3. Suggestion

Based on the limitations of the study, we suggest a summary table construction with the most used theories in these thematic with several research results, this study together with the one by [De Micco et al. \(2020\)](#) will be very useful for this construction. We also suggest the impact analysis of EU Directive introduction and NFR quality.

Acknowledgment

This investigation was neither publicly nor privately funded.

References

- Accountant, C. G. M. (2016). *Princípios globais de contabilidade gerencial: Contabilidade gerencial eficaz: Melhorando as decisões e construindo organizações de sucesso*: AICPA; CIMA Nova York.
- Ader, C. R. (1995). A longitudinal study of agenda setting for the issue of environmental pollution. *Journalism & Mass Communication Quarterly*, 72(2), 300-311.
- Alonso Carrillo, M. I., Priego De La Cruz, A. M., & Nunez Chicharro, M. (2019). The impact of corporate governance on corruption disclosure in European listed firms through the implementation of directive 2014/95/EU. *Sustainability*, 11(22), 6479.
- Amorim, V., & Bras, F. A. (2011). Study of Information Disclosure on Organizacional Social Responsibility. *Informacao & Sociedade-Estudos*, 21(2), 65-86.
- Artene, A., Bunget, O.-C., Dumitrescu, A.-C., Domil, A.-E., & Bogdan, O. (2020). Non-financial information disclosures and environmental protection—evidence from Romania and Greece. *Forests*, 11(8), 814.
- Aureli, S., Magnaghi, E., & Salvatori, F. (2019). The role of existing regulation and discretion in harmonising non-financial disclosure. *Accounting in Europe*, 16(3), 290-312.

- Aureli, S., Salvatori, F., & Magnaghi, E. (2020). A country-comparative analysis of the transposition of the EU non-financial directive: An institutional approach. *Accounting, Economics, and Law: A Convivium*, 10(2).
- Balluchi, F., Furlotti, K., & Torelli, R. (2020). Italy towards mandatory sustainability reporting. Voluntary corporate social responsibility disclosure of Italian companies and legislative decree 254/2016 statements. A quantitative analysis of the last 10 years *Sustainability and law* (pp. 257-274): Springer.
- Bebbington, J., Russell, S., & Thomson, I. (2017). Accounting and sustainable development: Reflections and propositions. *Critical Perspectives on Accounting*, 48, 21-34.
- Bernardi, C., & Stark, A. W. (2018). Environmental, social and governance disclosure, integrated reporting, and the accuracy of analyst forecasts. *The British accounting review*, 50(1), 16-31.
- Bhutta, N. T., & Saeed, M. M. (2011). Accounting scandals in the context of corporate social reporting. *Journal of Database Marketing & Customer Strategy Management*, 18(3), 171-184.
- Biondi, L., Dumay, J., & Monciardini, D. (2020). Using the international integrated reporting framework to comply with EU directive 2014/95/EU: can we afford another reporting façade? *Meditari Accountancy Research*.
- Bostan, I., Bîrcă, A., Tabără, N., & MUNTEAN JEMNA, L. (2019). Analysis of the Relationships between Sustainable Management Control and Performance Appraisal System. *Postmodern Openings/Deschideri Postmoderne*, 10(4).
- Brown, H. S., de Jong, M., & Levy, D. L. (2009). Building institutions based on information disclosure: lessons from GRI's sustainability reporting. *Journal of cleaner production*, 17(6), 571-580.
- Brown, N., & Deegan, C. (1998). The public disclosure of environmental performance information—a dual test of media agenda setting theory and legitimacy theory. *Accounting and business research*, 29(1), 21-41.
- Bruno Soares, M., & Buontempo, C. (2019). Challenges to the sustainability of climate services in Europe. *Wiley Interdisciplinary Reviews: Climate Change*, 10(4), e587.
- Carungu, J., Di Pietra, R., & Molinari, M. (2020). Mandatory vs voluntary exercise on non-financial reporting: does a normative/coercive isomorphism facilitate an increase in quality? *Meditari Accountancy Research*.
- Cepêda, C. L. M., & Monteiro, A. P. (2020). The accountant's perception of the usefulness of financial information in decision making—a study in Portugal. *Revista brasileira de gestão de negócios*, 22, 363-380.
- Cosma, S., Leopizzi, R., Pizzi, S., & Turco, M. (2021). The stakeholder engagement in the European banks: Regulation versus governance. What changes after the NF directive? *Corporate Social Responsibility and Environmental Management*, 28(3), 1091-1103.
- De Micco, P., Rinaldi, L., Vitale, G., Cupertino, S., & Maraghini, M. P. (2020). The challenges of sustainability reporting and their management: the case of Estra. *Meditari Accountancy Research*.
- de Roo, K. H. (2015). Role of the EU Directive on Non-Financial Disclosure in Human Rights Reporting, The. *Eur. Company L.*, 12, 278.
- De Villiers, C., & Marques, A. (2016). Corporate social responsibility, country-level predispositions, and the consequences of choosing a level of disclosure. *Accounting and business research*, 46(2), 167-195.
- Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures—a theoretical foundation. *Accounting, auditing & accountability journal*.
- Di Vaio, A., Palladino, R., Hassan, R., & Alvino, F. (2020). Human resources disclosure in the EU Directive 2014/95/EU perspective: A systematic literature review. *Journal of cleaner production*, 257, 120509.
- Dumay, J., La Torre, M., & Farneti, F. (2018). Developing trust through stewardship: Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. *Journal of Intellectual Capital*.
- Dumitru, M., Dyduch, J., Gușe, R.-G., & Krasodomska, J. (2017). Corporate reporting practices in Poland and Romania—an ex-ante study to the new non-financial reporting European directive. *Accounting in Europe*, 14(3), 279-304.

- Ferrer, E., López-Arceiz, F. J., & del Rio, C. (2020). Sustainability disclosure and financial analysts' accuracy: The European case. *Business Strategy and the Environment*, 29(8), 2939-2952.
- Fiandrino, S., Busso, D., & Vrontis, D. (2019). Sustainable responsible conduct beyond the boundaries of compliance: Lessons from Italian listed food and beverage companies. *British Food Journal*.
- Frydman, C., & Camerer, C. F. (2016). The psychology and neuroscience of financial decision making. *Trends in cognitive sciences*, 20(9), 661-675.
- Garcia-Torea, N., Larrinaga, C., & Luque-Vílchez, M. (2019). Academic engagement in policy-making and social and environmental reporting. *Sustainability Accounting, Management and Policy Journal*.
- Gazzola, P., Pezzetti, R., Amelio, S., & Grechi, D. (2020). Non-Financial information disclosure in Italian Public interest companies: A sustainability reporting perspective. *Sustainability*, 12(15), 6063.
- Gray, R. (2010). Is accounting for sustainability actually accounting for sustainability... and how would we know? An exploration of narratives of organisations and the planet. *Accounting, organizations and society*, 35(1), 47-62.
- Guthrie, J., Manes-Rossi, F., & Orelli, R. L. (2017). Integrated reporting and integrated thinking in Italian public sector organisations. *Meditari Accountancy Research*, 25(4), 553-573.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: a review of results, trends, theory, and opportunities in an expanding field of research. *Journal of cleaner production*, 59, 5-21.
- Hojnik, J. (2017). Environmental Corporate Reporting under eu Law: Historic Achievement or Just a Moderate Step Forward? *Journal for European Environmental & Planning Law*, 14(1), 41-75.
- Kinderman, D. (2020a). The challenges of upward regulatory harmonization: The case of sustainability reporting in the European Union. *Regulation & Governance*, 14(4), 674-697.
- Kinderman, D. (2020b). The tenuous link between CSR performance and support for regulation: Business associations and Nordic regulatory preferences regarding the corporate transparency law 2014/95/EU. *Business and Politics*, 22(3), 413-448.
- Krasodomska, J., Michalak, J., & Świetla, K. (2020). Directive 2014/95/EU: Accountants' understanding and attitude towards mandatory non-financial disclosures in corporate reporting. *Meditari Accountancy Research*.
- Krasodomska, J., Simnett, R., & Street, D. L. (2021). Extended external reporting assurance: Current practices and challenges. *Journal of International Financial Management & Accounting*, 32(1), 104-142.
- Krištofik, P., Lament, M., & Musa, H. (2016). The reporting of non-financial information and the rationale for its standardisation.
- Leopizzi, R., Iazzi, A., Venturelli, A., & Principale, S. (2020). Nonfinancial risk disclosure: The "state of the art" of Italian companies. *Corporate Social Responsibility and Environmental Management*, 27(1), 358-368.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., . . . Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Journal of clinical epidemiology*, 62(10), e1-e34.
- Loprevite, S., Raucci, D., & Rupo, D. (2020). KPIs reporting and financial performance in the transition to mandatory disclosure: The case of Italy. *Sustainability*, 12(12), 5195.
- Mahoney, L. S., Thorne, L., Cecil, L., & LaGore, W. (2013). A research note on standalone corporate social responsibility reports: Signaling or greenwashing? *Critical Perspectives on Accounting*, 24(4-5), 350-359.
- Malecki, C. (2018). *Corporate social responsibility: perspectives for sustainable corporate governance*: Edward Elgar Publishing.
- 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.
- Masiero, E., Arkhipova, D., Massaro, M., & Bagnoli, C. (2019). Corporate accountability and stakeholder connectivity. A case study. *Meditari Accountancy Research*.

- Matuszak, Ł., & Róžańska, E. (2017). CSR disclosure in Polish-listed companies in the light of Directive 2014/95/EU requirements: Empirical evidence. *Sustainability*, 9(12), 2304.
- Mazzotta, R., Bronzetti, G., & Veltri, S. (2020). Are mandatory non-financial disclosures credible? Evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, 27(4), 1900-1913.
- Merten, D. M. (1998). Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches. *Thousand Oaks*.
- Miniaoui, Z., Chibani, F., & Hussainey, K. (2019). The impact of country-level institutional differences on corporate social responsibility disclosure engagement. *Corporate Social Responsibility and Environmental Management*, 26(6), 1307-1320.
- 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.
- Mion, G., & Loza Adauí, C. R. (2019). Mandatory nonfinancial disclosure and its consequences on the sustainability reporting quality of Italian and German companies. *Sustainability*, 11(17), 4612.
- Mittelbach-Hörmanseder, S., Hummel, K., & Rammerstorfer, M. (2021). The information content of corporate social responsibility disclosure in Europe: an institutional perspective. *European Accounting Review*, 30(2), 309-348.
- Monteiro, A., & Cepêda, C. (2021). Accounting information systems: scientific production and trends in research. *Systems*, 9(3), 67.
- Monteiro, A. P., Aibar-Guzmán, B., Garrido-Ruso, M., & Aibar-Guzmán, C. (2021). Employee-related disclosure: A bibliometric review. *Sustainability*, 13(10), 5342.
- Moraru, R. I., PĂUN, A. P., DURA, C. C., Dinulescu, R., & Potcovaru, A.-M. (2020). Analysis of the Drivers of Occupational Health and Safety Performance Disclosures By Romanian Companies. *Economic Computation & Economic Cybernetics Studies & Research*, 54(3), 197-214.
- Nicolò, G., Zanellato, G., & Tiron-Tudor, A. (2020). Integrated reporting and European state-owned enterprises: A disclosure analysis pre and post 2014/95/EU. *Sustainability*, 12(5), 1908.
- O'donovan, G. (2002). Environmental disclosures in the annual report: Extending the applicability and predictive power of legitimacy theory. *Accounting, auditing & accountability journal*, 15(3), 344-371.
- Ogorean, C. (2017). The directive 2014/95/EU—Is there a “new” beginning for CSR in Romania? *Studies in Business and Economics*, 12(1), 141-147.
- Olayinka, A. A. (2022). Financial statement analysis as a tool for investment decisions and assessment of companies' performance. *International Journal of Financial, Accounting, and Management*, 4(1), 49-66.
- Omodero, C. (2015). Genesis of accountability and its impact on accounting. *Available at SSRN* 2626967.
- Păun, A. P., Dura, C. C., Mihăilescu, S., Moraru, R. I., & Isac, C. A. (2020). OHS Disclosures Within Non-Financial Reports: The Romanian Case. *Sustainability*, 12(5), 1963.
- Peršić, M., & Lahorka, H. (2018). Exploring the quality of social information disclosed in non-financial reports of Croatian companies. *Economic research-Ekonomska istraživanja*, 31(1), 2024-2043.
- Phornlaphatrachakorn, K. (2019). Internal control quality, accounting information usefulness, regulation compliance, and decision-making success: evidence from canned and processed foods businesses in Thailand. *International Journal of Business*, 24(2), 198-215.
- Pizzi, S., Rosati, F., & Venturelli, A. (2021). The determinants of business contribution to the 2030 Agenda: Introducing the SDG Reporting Score. *Business Strategy and the Environment*, 30(1), 404-421.
- Primec, A., & Belak, J. (2018). Towards socially responsible corporate governance with authorities' interventions. *Management: Journal of Contemporary Management Issues*, 23(1), 203-219.
- Rauci, D., & Tarquinio, L. (2020). Sustainability performance indicators and non-financial information reporting. Evidence from the Italian case. *Administrative Sciences*, 10(1), 13.
- Samosir, D. K. B. M., Murwaningsari, E., Augustine, Y., & Mayangsari, S. (2020). The benefit of green building for cost efficiency. *International Journal of Financial, Accounting, and Management*, 1(4), 209-219.

- Schwartz, M. S. (2016). Ethical decision-making theory: An integrated approach. *Journal of Business Ethics*, 139(4), 755-776.
- Sierra-Garcia, L., Garcia-Benau, M. A., & Bolas-Araya, H. M. (2018). Empirical analysis of non-financial reporting by Spanish companies. *Administrative Sciences*, 8(3), 29.
- Ștefănescu, C. A., Tiron-Tudor, A., & Moise, E. M. (2021). Eu non-financial reporting research—insights, gaps, patterns and future agenda. *Journal of Business Economics and Management*, 22(1), 257-276.
- Szabó, D. G., & Sørensen, K. E. (2015). New EU directive on the disclosure of non-financial information (CSR). *European Company and Financial Law Review*, 12(3), 307-340.
- Tarquino, 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*, 12(10), 4158.
- Tukur, S., Shehu, J., Mammadi, A., & Sulaiman, U. A. (2019). An assessment of corporate social responsibility of property developers in Bauchi Metropolis, Nigeria. *International Journal of Financial, Accounting, and Management*, 1(2), 119-129.
- Vale, J., Bertuzzi, R., & Monteiro, A. P. (2022). Social responsibility reporting in higher education institutions: A systematic literature review. *Research Anthology on Developing Socially Responsible Businesses*, 2160-2181.
- Veltri, S., De Luca, F., & Phan, H. T. P. (2020). Do investors value companies' mandatory nonfinancial risk disclosure? An empirical analysis of the Italian context after the EU directive. *Business Strategy and the Environment*, 29(6), 2226-2237.
- Venturelli, A., Caputo, F., Cosma, S., Leopizzi, R., & Pizzi, S. (2017). Directive 2014/95/EU: are Italian companies already compliant? *Sustainability*, 9(8), 1385.
- Wozniak, J., & Pactwa, K. (2019). *State of non-financial reporting of polish representatives of the mining industry in a sustainable social dimension*. Paper presented at the IOP Conference Series: Earth and Environmental Science.
- Zulaecha, H. E., & Murtanto, M. (2019). Foreign ownership and sustainability performance in Indonesia. *International Journal of Financial, Accounting, and Management*, 1(1), 1-15.