CSRD Impact in Portugal: First-year Evidence and Determinants of Application

Kátia Lemos, Sónia Monteiro and Marta Araújo
CICF – Research Center on Accounting and Taxation, School of Management, Polytechnic University of Cávado and Ave (IPCA), Barcelos, Portugal

klemos@ipca.pt
smonteiro@ipca.pt
a21438@alunos.ipca.pt

Abstract: The growing importance of Environmental, Social and Governance (ESG) issues has transformed traditional corporate reporting, challenging the historical focus on financial disclosure alone. While financial reports long served as the main communication tool between companies and stakeholders, growing concerns regarding climate change, social inequalities, business ethics and corporate responsibility revealed the limitations of purely financial information in assessing long-term value creation. Consequently, non-financial disclosure emerged as a key element of corporate transparency, initially supported by voluntary frameworks such as the Global Reporting Initiative (GRI) and the International Integrated Reporting Framework. However, the lack of standardisation led to heterogeneous reporting practices, limiting comparability and reliability. To address these issues, the European Union (EU) shifted from a voluntary to a mandatory sustainability reporting framework. The Non-Financial Reporting Directive (NFRD) represented an important first step, although prior studies identified limitations regarding reporting quality and comparability (Anguiano-Santos et al., 2024; Radu et al., 2023). In response, the EU approved the Corporate Sustainability Reporting Directive (CSRD) in 2022, introducing substantial changes to corporate reporting. The CSRD expands the scope of companies subject to disclosure obligations, incorporates the double materiality principle, requires external assurance, and mandates compliance with the European Sustainability Reporting Standards (ESRS) developed by EFRAG. This study analyses the impact of the CSRD in Portugal during its first year of implementation. The research examines 46 companies listed on Euronext Lisbon, including 28 firms previously covered by the NFRD. Using quantitative content analysis, a compliance index based on 88 ESRS disclosure requirements was developed. The results reveal a relatively low overall compliance level (mean = 0.390), suggesting that Portuguese companies are still adapting to the new framework. Firms previously subject to the NFRD presented significantly higher compliance levels, indicating that prior experience facilitates adaptation. Governance disclosures achieved the highest compliance, whereas environmental disclosures showed the lowest. Regression results identify leverage as a negative determinant of compliance, while sustainability reporting practices, PSI index inclusion and prior NFRD experience positively influence compliance levels. The study contributes to the emerging literature on CSRD implementation and highlights implications for companies, auditors and policymakers regarding sustainability integration and reporting practices.

Keywords: Corporate sustainability reporting directive (CSRD), Sustainability reporting, ESG disclosure, European sustainability reporting standards (ESRS)

1. Introduction

Corporate disclosure plays a fundamental role in promoting transparency, accountability, and communication between organizations and their stakeholders. Growing public awareness of environmental, social, and governance (ESG) issues, together with increasing pressure from regulators, investors, and society, has transformed expectations regarding corporate reporting. While financial information has traditionally been the primary basis for assessing corporate performance, concerns related to climate change, social inequality, human rights, and corporate responsibility have highlighted the need for broader and more comprehensive disclosure practices.

In response to these developments, voluntary frameworks such as the Global Reporting Initiative (GRI) and Integrated Reporting gained widespread adoption and contributed to the expansion of non-financial disclosure. However, the absence of common reporting standards limited the comparability, consistency, and reliability of sustainability information, as companies were free to select their preferred reporting frameworks and disclosure practices.

To address these shortcomings, the European Union introduced the Non-Financial Reporting Directive (NFRD) (Directive 2014/95/EU), requiring large public-interest entities to disclose information on environmental, social,

employee, human rights, and anti-corruption matters. Although the NFRD represented an important step towards greater transparency, its flexible approach resulted in heterogeneous reporting practices and limited comparability across companies.

To strengthen the sustainability reporting framework, the European Union adopted the Corporate Sustainability Reporting Directive (CSRD) (Directive (EU) 2022/2464) in 2022. The CSRD substantially expands the scope of reporting entities, introduces more detailed disclosure requirements, mandates the use of the European Sustainability Reporting Standards (ESRS), and requires external assurance of sustainability information. A key innovation of the directive is the adoption of the double materiality principle, which requires companies to consider both the impact of sustainability issues on financial performance and the impact of corporate activities on society and the environment. Through these changes, the CSRD seeks to improve the quality, consistency, and comparability of sustainability disclosures across the European Union.

Despite the significance of this regulatory reform, empirical evidence on the implementation of the CSRD remains limited, particularly in Portugal. Existing Portuguese studies have mainly focused on compliance with the NFRD (Carmo & Ribeiro, 2022; Pereira et al., 2020). More recently, Azevedo et al. (2025) provided a preliminary assessment of Portuguese companies' preparedness for CSRD implementation, focusing exclusively on firms included in the Portuguese Stock Index (PSI). Consequently, evidence regarding the adaptation of the broader population of listed companies to the new reporting requirements remains scarce.

This study addresses this research gap by examining the first year of CSRD implementation in Portugal. Specifically, it evaluates the level of compliance of companies listed on Euronext Lisbon with ESRS disclosure requirements and investigates the determinants of compliance. By providing one of the first empirical analyses of CSRD implementation in the Portuguese context, this study contributes to the emerging literature on sustainability reporting and offers relevant insights for regulators, auditors, and companies involved in the transition towards the new European sustainability reporting framework.

The remainder of this paper is structured as follows. Section 2 reviews the relevant literature on sustainability reporting and develops the research hypotheses. Section 3 describes the research methodology, including sample selection, data collection procedures, the construction of the ESRS Compliance Index, and the regression model. Section 4 presents and discusses the empirical results regarding the level of compliance with the ESRS requirements and its determinants. Finally, Section 5 concludes the study, highlights its main contributions, discusses its limitations, and suggests avenues for future research.

2. Literature Review and Research Hypotheses

The introduction of the Corporate Sustainability Reporting Directive (CSRD) represents a major regulatory shift in European sustainability reporting. While a substantial body of research has examined compliance with the Non-Financial Reporting Directive (NFRD) (Lourenço, 2017; Romão et al., 2018; Mion & Adaui, 2019; Fuster & Ortiz, 2019; Caputo et al., 2020; Pereira et al., 2020; Balluchi et al., 2021; Arif et al., 2022; Carmo & Ribeiro, 2022; Ottenstein et al., 2022), empirical evidence regarding the implementation of the CSRD remains limited due to its recent application. Existing studies mainly focus on companies' preparedness and early compliance with the new reporting requirements (Celli et al., 2024; Nicolo et al., 2025; Raimo et al., 2025; Sharma, 2025; Azevedo et al., 2025).

The CSRD represents a significant shift in how European companies report. While earlier frameworks, such as the GRI, relied on voluntary adoption, the CSRD establishes a harmonised, legally binding reporting framework aimed at improving the quality, comparability and reliability of sustainability information. This transformation can be interpreted from several theoretical perspectives. According to institutional theory, organisations adapt their structures and practices in response to coercive pressures arising from regulations and institutional expectations (DiMaggio & Powell, 1983). In the context of the CSRD, the ESRS requirements are a powerful regulatory mechanism that encourages firms to align their reporting practices with the new European framework.

Legitimacy theory suggests that organisations disclose sustainability information to maintain social approval and demonstrate their alignment with societal expectations (Suchman, 1995). Similarly, stakeholder theory emphasises that firms respond to the information needs and expectations of investors, regulators, employees, customers and society at large (Freeman, 1984). Consequently, sustainability reporting can be viewed as both a regulatory obligation and a mechanism for preserving legitimacy and strengthening stakeholder relationships (Talha, 2026).

Recent evidence on ESRS implementation supports the relevance of these theoretical perspectives. Drawing on institutional theory and strategic legitimacy theory, Nicolò et al. (2025) argue that organisations adapt their sustainability reporting practices in response to regulatory pressures and the need to maintain legitimacy among stakeholders. From a European perspective, Pichler and Lehner (2017) identified the implementation of the NFRD as an important step towards greater transparency and accountability. The CSRD can therefore be interpreted as the next stage in the evolution of mandatory sustainability reporting within the European Union.

Based on this theoretical background, nine research hypotheses are developed.

Company size

Company size is one of the most widely examined determinants of sustainability disclosure. Larger firms typically possess more sophisticated information systems, face greater public scrutiny, and are subject to stronger stakeholder pressures. Consequently, they tend to provide more extensive sustainability information (Dienes et al., 2016; Hahn & Kühnen, 2013; Carmo & Ribeiro, 2022; Nicolo et al., 2025).

H1: *Larger firms are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Industry sector

Previous studies suggest that firms operating in environmentally sensitive industries face stronger legitimacy pressures and therefore disclose more sustainability-related information (Hahn & Kühnen, 2013; Sierra-Garcia et al., 2018). Recent evidence also indicates that companies in high-impact sectors tend to achieve higher levels of CSRD compliance (Nicolo et al., 2025; Raimo et al., 2025).

H2: *Firms operating in the industrial sector are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Internationalisation

Internationally active firms are exposed to multiple regulatory environments and a broader range of stakeholders. As a result, they often face higher transparency expectations and stronger incentives to disclose sustainability information (Romão et al., 2018; Fuster & Ortiz, 2019).

H3: *Firms with greater international exposure are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Profitability

The relationship between profitability and sustainability disclosure remains inconclusive. While profitable firms may possess greater resources to invest in reporting practices, some studies argue that less profitable firms may disclose more information to legitimise weaker financial performance (Duran & Rodrigo, 2018; Carreira et al., 2025).

H4: More profitable firms are expected to exhibit higher levels of compliance with ESRS disclosure requirements.

Leverage

Highly leveraged firms may increase disclosure levels to reduce information asymmetries and strengthen creditors' confidence. Prior evidence identifies leverage as a relevant determinant of non-financial reporting practices (Ottenstein et al., 2022).

H5: *Firms with higher leverage are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Reporting format

Research suggests that sustainability information disclosed through a separate sustainability report tends to be more detailed and comprehensive than information incorporated solely within the management report (Balluchi et al., 2021; Hoffmann et al., 2018).

H6: *Firms issuing a separate sustainability report are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Audit firm

External assurance enhances the credibility of sustainability disclosures. Previous studies indicate that companies audited by Big Four audit firms tend to provide higher-quality sustainability information due to greater expertise and reputational concerns (Fernandez-Feijoo et al., 2018; García-Sánchez et al., 2024).

> ***H7:*** *Firms audited by Big Four audit firms are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

PSI Index membership

Companies included in the Portuguese Stock Index (PSI) are generally larger, more visible, and subject to greater investor scrutiny. Consequently, they may face stronger incentives to comply with sustainability reporting requirements (Azevedo et al., 2025).

> ***H8:*** *PSI-listed firms are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

Previous NFRD experience

Prior experience with mandatory non-financial reporting may facilitate adaptation to the new ESRS requirements. Companies previously subject to the NFRD have already developed reporting processes, governance structures, and disclosure practices that may support compliance with the CSRD (Mion & Adaui, 2019; Azevedo et al., 2025).

> ***H9:*** *Firms previously subject to the NFRD are expected to exhibit higher levels of compliance with ESRS disclosure requirements.*

3. Research Methodology

Sample selection

This study examines the impact of the Corporate Sustainability Reporting Directive (CSRD) during its first year of implementation in Portugal. Consistent with prior sustainability reporting research (Arkoh et al., 2024; Benvenuto et al., 2023; Farisyi et al., 2022), the analysis focuses on listed companies, which are subject to greater market scrutiny and disclosure requirements.

The sample comprises companies listed on Euronext Lisbon. As of December 2024, 49 firms were listed on the Portuguese stock exchange. Annual reports, sustainability reports, integrated reports, and other publicly available disclosure documents relating to the 2024 financial year were collected from corporate websites.

After excluding three companies that had not yet published their 2024 reports at the time of data collection, the final sample consisted of 46 firms. Among these, 28 companies were already subject to the Non-Financial Reporting Directive (NFRD) and therefore belonged to the first wave of CSRD implementation, while the remaining 18 companies were not yet required to comply with the CSRD.

Data collection and Compliance Index

A mixed-method approach was adopted, combining qualitative content analysis with quantitative statistical analysis.

The content analysis focused on sustainability information disclosed either within the management report or in separate sustainability reports. Compliance was assessed against the disclosure requirements established by the European Sustainability Reporting Standards (ESRS).

The analysis covered the ten ESRS topical standards, comprising five environmental topics (E1–E5), four social topics (S1–S4), and one governance topic (G1). In total, 88 mandatory disclosure requirements were examined: 40 environmental, 40 social, and 8 governance requirements.

To measure the degree of compliance, an ESRS Compliance Index was developed following the approach adopted by Pereira et al. (2020). Each disclosure requirement was evaluated using a binary scoring system, whereby a score of 1 was assigned when the requirement was disclosed and 0 otherwise.

The compliance index was calculated as follows:

$$\boldsymbol{CIndex} = \sum_{n=1}^{i} \frac{\boldsymbol{i_n}}{\boldsymbol{i}} \quad (\mathbf{1})$$

$\boldsymbol{CIndex}$–ESRS Compliance Index.

$\boldsymbol{i_n}$ – Information item i under analysis. A dichotomous (dummy) variable that takes only the values 0 or 1.

$\boldsymbol{i}$ – Number of items comprising the compliance index.

Variables and research model

To identify the determinants of ESRS compliance, a multiple linear regression model was estimated. The dependent variable is the ESRS Compliance Index, while the independent variables correspond to the factors identified in the literature and reflected in the research hypotheses.

The explanatory variables include:

- **Firm Size**: natural logarithm of total assets;
- **Industry Sector**: dummy variable equal to 1 for industrial firms and 0 otherwise;
- **Internationalisation**: dummy variable equal to 1 for multinational firms and 0 otherwise;
- **Profitability**: return on equity (net income divided by total equity);
- **Leverage**: total liabilities divided by total equity;
- **Reporting Format**: dummy variable equal to 1 when sustainability information is disclosed in a separate report and 0 when disclosed within the annual report;
- **Audit Firm**: dummy variable equal to 1 for Big Four audit firms and 0 otherwise;
- **PSI Membership**: dummy variable equal to 1 for companies included in the PSI index and 0 otherwise;
- **NFRD Experience**: dummy variable equal to 1 for firms previously subject to the NFRD and 0 otherwise.

The regression model is specified as follows:

$$\boldsymbol{CIndex} = \boldsymbol{\alpha_0} + \boldsymbol{\beta_1 Size} + \boldsymbol{\beta_2 ISector} + \boldsymbol{\beta_3 Inter} + \boldsymbol{\beta_4 Prof} + \boldsymbol{\beta_5 Lev} + \boldsymbol{\beta_6 RepFormat} + \boldsymbol{\beta_7 AudFirm} + \boldsymbol{\beta_8 PSI} + \boldsymbol{\beta_9 NFRD} + \boldsymbol{\varepsilon_i} \quad (2)$$

This model enables the identification of the firm-specific characteristics associated with higher levels of compliance with the ESRS disclosure requirements.

4. Results and Discussion

4.1 ESRS Compliance Level

The primary objective of this study is to assess the level of compliance of Portuguese listed companies with the ESRS disclosure requirements during the first year of CSRD implementation. Table 1 presents these results, showing how the two groups differ in terms of dissemination.

Table 1: Comparison of compliance rates

	Total sample (46 companies)		**Sub-sample (28 companies)**		
	Mean	**Std Dev**	**Mean**	**Std Dev**	
Compliance Index	0,390	0,321	0,586	0,201	

The results reveal a relatively low overall level of compliance. The mean ESRS Compliance Index for the full sample of 46 companies is 0.390, indicating that, on average, firms disclosed less than 40% of the assessed ESRS requirements. In contrast, companies previously subject to the NFRD achieved a considerably higher mean compliance level of 0.586. These findings suggest that Portuguese companies are still adapting to the new reporting framework. The relatively low level of compliance observed during the first year of implementation suggests that the transition towards the CSRD is an ongoing process. Similar findings were reported by González Tablada et al. (2026), who found that initial compliance efforts are characterised by gradual organisational adaptation rather than immediate, total compliance. From an institutional perspective, it takes time for organisations to develop the internal reporting capabilities, data collection systems and governance mechanisms required to support the new ESRS.

Firms with prior experience in mandatory non-financial reporting appear to be better prepared to meet the more demanding disclosure requirements introduced by the CSRD. This finding is consistent with the evidence reported by Pichler and Lehner (2017) during the implementation of the NFRD, as well as the case-study evidence presented by González Tablada et al. (2026). Companies with previous experience of sustainability reporting tend to have established routines, accumulated expertise and more mature governance structures, which facilitates their adaptation to new reporting requirements. According to Institutional Theory, organisations with pre-existing reporting capabilities are better placed to respond to new coercive pressures.

4.2 Determinants of ESRS Compliance

To identify the factors influencing compliance levels, a multiple linear regression model was estimated. Table 2 provides a summary of the results obtained, based on the entire sample.

Table 2: Results of the multiple linear regression model

Coefficients[a]

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics	
		Beta	Standard deviation	Beta			Tolerance	VIF
1	(Constant)	-0,267	0,329		-0,813	0,422		
	LogAssets	0,017	0,019	0,141	0,932	0,358	0,688	1,454
	Industry sector	-0,045	0,067	-0,062	-0,672	0,506	0,713	1,402
	Internationalisation	0,053	0,064	0,075	0,826	0,414	0,813	1,231
	Profitability	-0,099	0,129	-0,065	-0,763	0,451	0,606	1,650
	Leverage	-0,015	0,008	-0,189	-1,912	0,064	0,625	1,601
	Reporting Format	0,217	0,086	0,246	2,530	0,016	0,623	1,605
	Audit firm	0,063	0,065	0,094	0,965	0,341	0,222	4,503
	PSI Index	0,275	0,109	0,412	2,526	0,016	0,534	1,872
	NFRD Experience	0,273	0,068	0,444	3,984	0,000	0,257	3,896

a. Dependent variable: CIndex

Model Summary

Model	R	R^2	Adjusted R^2	Standard deviation of the estimate
1	0.887[a]	0,787	0,734	0,165

a. Predictors: (Constant), LogAsset, Profitability, Reporting format, Sector, Internationalisation, Leverage, Audit firm, NFRD Experience, PSI Index

b. Dependent variable: CIndex

Anova[a]

Model		Sum of squares	Df	Mean of squares	F	Sig.
1	Regression	3,650	9	0,403	14,804	<.001[b]
	Residue	0,986	36	0,027		
	Total	4,637	45			

a. Dependent variable: CIndex

b. Predictors: (Constant), LogAsset, Profitability, Reporting format, Sector, Internationalisation, Leverage, Audit firm, NFRD Experience, PSI Index

The model explains a substantial proportion of the variation in compliance levels ($R^2 = 0.787$) and is statistically significant overall ($p < 0.001$), indicating a good fit.

The results identify three variables as significant positive determinants of ESRS compliance: reporting format, PSI index membership, and previous NFRD experience. In addition, leverage is statistically significant at the 10% level but exhibits a negative association with compliance.

Reporting Format

The results show that companies issuing a separate sustainability report achieve higher compliance levels than those disclosing sustainability information solely within the management report. This finding supports H6 and is consistent with previous research suggesting that separate sustainability reports provide a more structured and comprehensive disclosure framework (Balluchi et al., 2021; Hoffmann et al., 2018).

PSI Index Membership

Membership in the PSI index is positively associated with ESRS compliance, supporting H8. PSI-listed companies are generally more visible to investors and other stakeholders, which increases external scrutiny and creates stronger incentives to adopt more transparent sustainability reporting practices. This result is consistent with previous evidence from the Portuguese context (Carmo & Ribeiro, 2022; Pereira et al., 2020; Azevedo et al., 2025). This result can also be interpreted in terms of legitimacy theory and stakeholder theory. PSI-listed companies tend to be more visible to investors and society, consequently facing greater expectations regarding transparency and accountability. According to Talha (2026), sustainability disclosure can strengthen stakeholder confidence and organisational legitimacy. Consequently, highly visible firms may perceive greater reputational benefits from complying with ESRS requirements.

Previous NFRD Experience

The strongest positive determinant of compliance is prior experience with the NFRD. Companies previously subject to mandatory non-financial reporting exhibit significantly higher compliance levels, supporting H9. This finding suggests that established reporting processes, accumulated expertise, and familiarity with sustainability disclosure requirements facilitate adaptation to the ESRS framework. The positive effect of prior NFRD experience emphasises the significance of organisational learning in transitioning to mandatory sustainability reporting. In line with the findings of González Tablada et al. (2026) and Nicolò et al. (2025), firms that have already established reporting practices seem to be in a better position to adapt to the requirements of the European Sustainability Reporting Standards (ESRS), which supports the institutional view that previous routines facilitate responses to regulatory change.

Leverage

Leverage presents a statistically significant negative relationship with compliance, contrary to H5. Although previous studies suggest that highly leveraged firms may increase disclosure to reduce information asymmetries (Ottenstein et al., 2022), the results indicate that financially constrained firms may allocate fewer resources to sustainability reporting activities during the transition to the CSRD framework. Talha (2026) argues that organisations under financial pressure may struggle to reap the benefits of sustainability disclosure. This study identified a negative relationship, indicating that highly leveraged firms may prioritise short-term financial pressures over investments in reporting systems and sustainability-related processes.

Non-Significant Variables

Firm size, industry sector, internationalisation, profitability, and audit firm type do not exhibit statistically significant effects on compliance levels. Consequently, hypotheses H1, H2, H3, H4, and H7 are not supported.

The absence of significant relationships may reflect the relatively homogeneous characteristics of listed Portuguese companies, particularly regarding size and international exposure. Furthermore, previous studies have also provided mixed evidence regarding the factors that influence sustainability reporting (Benvenuto et al., 2023; Arkoh et al., 2024). Furthermore, the mandatory and standardised nature of the ESRS framework could mitigate some of the disparities typically observed under more voluntary reporting systems. During the initial stage of CSRD implementation, it seems that compliance levels are primarily driven by previous reporting experience and practices rather than structural characteristics such as size, sector, profitability or audit firm type. However, as organisations become more familiar with the new framework, these factors may exert a greater influence over time.

Overall, the findings suggest that the first year of CSRD implementation in Portugal reflects an organisational adaptation process driven by regulatory pressures, stakeholder expectations and the pursuit of legitimacy. In line with Institutional Theory, Legitimacy Theory and Stakeholder Theory, as well as recent evidence provided by Nicolò et al. (2025), it seems that firms with prior reporting experience, greater public visibility and more structured reporting practices are better placed to comply with the new ESRS requirements. These findings suggest that the transition from voluntary to mandatory sustainability reporting occurs through progressive organisational learning rather than immediate adjustment.

5. Conclusions, Limitations and Future Research

The implementation of the Corporate Sustainability Reporting Directive (CSRD) represents a significant milestone in the evolution of sustainability reporting within the European Union. By introducing mandatory European Sustainability Reporting Standards (ESRS), external assurance requirements, and the principle of double materiality, the directive seeks to improve the quality, comparability, and reliability of sustainability information disclosed by companies.

This study examined the first year of CSRD implementation in Portugal by analysing the level of compliance of companies listed on Euronext Lisbon with ESRS disclosure requirements and identifying the determinants of compliance. The findings reveal that overall compliance remains relatively low, with an average compliance index of 0.390. These results suggest that many Portuguese listed companies are still in the early stages of adapting to the new reporting framework.

The analysis also demonstrates that prior experience with mandatory non-financial reporting plays a crucial role in facilitating compliance. Companies previously subject to the Non-Financial Reporting Directive (NFRD) achieved significantly higher compliance levels, highlighting the importance of accumulated reporting experience, established governance structures, and organisational learning. Furthermore, PSI-listed companies and firms issuing separate sustainability reports exhibited higher compliance levels, suggesting that market visibility and more structured reporting practices contribute positively to the implementation of the ESRS.

In contrast, leverage was found to be negatively associated with compliance. This finding indicates that financially constrained firms may face greater difficulties in allocating resources to sustainability reporting activities during the transition period. No significant relationships were identified between compliance and firm size, industry sector, internationalisation, profitability, or audit firm type.

The study contributes to the emerging literature on CSRD implementation by providing one of the first empirical assessments of ESRS compliance in Portugal. Unlike previous research focusing primarily on NFRD requirements or on PSI-listed companies alone, this study examines a broader sample of Portuguese listed firms during the first year of mandatory implementation. The findings provide valuable insights into the organisational characteristics associated with successful adaptation to the new sustainability reporting framework.

From a practical perspective, the results are relevant for regulators, auditors, and corporate managers. The findings suggest that prior reporting experience and structured sustainability reporting practices facilitate compliance with the ESRS. Consequently, organisations that are not yet fully prepared for future reporting obligations may benefit from strengthening internal reporting systems, governance mechanisms, and sustainability data collection processes.

Several limitations should be acknowledged. First, the study focuses exclusively on companies listed on Euronext Lisbon, limiting the generalisability of the findings to non-listed entities that will also become subject to CSRD requirements. Second, the analysis covers only the first year of implementation, a period characterised by organisational adaptation and regulatory transition. Third, the content analysis methodology, although widely used in sustainability reporting research, inevitably involves a degree of researcher judgement in the assessment of disclosure practices.

Future research could extend the analysis to non-listed companies and investigate how compliance evolves over time as organisations gain experience with the ESRS requirements. Longitudinal studies would provide valuable evidence regarding the maturity of sustainability reporting practices and the long-term effects of the CSRD. In addition, comparative studies across European countries could enhance understanding of how institutional, economic, and regulatory factors influence the adoption and implementation of the new sustainability reporting framework.

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References

Arif, M., Gan, C., & Nadeem, M. (2022). Regulating non-financial reporting: evidence from European firms' environmental, social and governance disclosures and earnings risk. *Meditari Accountancy Research*, *30*(3), 495–523. https://doi.org/10.1108/MEDAR-11-2020-1086

Arkoh, P., Costantini, A., & Scarpa, F. (2024). Determinants of sustainability reporting: A systematic literature review. *Corporate Social Responsibility and Environmental Management*, *31*(3), 1578–1597. https://doi.org/10.1002/CSR.2645

Azevedo, G., Oliveira, J., Sousa, I., Borges, M. F., Tavares, M. C., & Vale, J. (2025). Disclosure of Sustainability Information Under the Corporate Social Responsibility Directive: The Degree of Compliance of Portuguese Stock Index. *International Journal of Financial Studies*. https://doi.org/10.3390/ijfs13010013

Balluchi, F., Lazzini, A., & Torelli, R. (2021). Credibility of environmental issues in non-financial mandatory disclosure: Measurement and determinants. *Journal of Cleaner Production*, *288*. https://doi.org/10.1016/J.JCLEPRO.2020.125744

Benvenuto, M., Aufiero, C., & Viola, C. (2023). A systematic literature review on the determinants of sustainability reporting systems. *Heliyon*, *9*(4), e14893. https://doi.org/10.1016/J.HELIYON.2023.E14893

Caputo, F., Leopizzi, R., Pizzi, S., & Milone, V. (2020). The non-financial reporting harmonization in Europe: Evolutionary pathways related to the transposition of the directive 95/2014/EU within the Italian context. *Sustainability (Switzerland)*, *12*(1), 1–13. https://doi.org/10.3390/SU12010092

Carmo, C., & Ribeiro, C. (2022). Mandatory Non-Financial Information Disclosure under European Directive 95/2014/EU: Evidence from Portuguese Listed Companies. *Sustainability (Switzerland)*, *14*(8). https://doi.org/10.3390/SU14084860

Celli, M., Arduini, S., & Beck, T. (2024). Corporate sustainability reporting directive (CSRD) and his future application scenario for italian SMEs. *International Journal of Business and Management*, *19*(4). https://doi.org/10.5539/ijbm.v19n4p44

Dienes, D., Sassen, R., & Fischer, J. (2016). What are the drivers of sustainability reporting? A systematic review. *Sustainability Accounting, Management and Policy Journal*, *7*(2), 154–189. https://doi.org/10.1108/SAMPJ-08-2014-0050

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160. https://doi.org/10.2307/2095101

Duran, I. J., & Rodrigo, P. (2018). Why Do Firms in Emerging Markets Report? A Stakeholder Theory Approach to Study the Determinants of Non-Financial Disclosure in Latin America. *Sustainability 2018, Vol. 10, Page 3111*, *10*(9), 3111. https://doi.org/10.3390/SU10093111

Farisyi, S., Musadieq, M. Al, Utami, H. N., & Damayanti, C. R. (2022). A Systematic Literature Review: Determinants of Sustainability Reporting in Developing Countries. *Sustainability (Switzerland)*, *14*(16). https://doi.org/10.3390/SU141610222

Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework. *Journal of Business Ethics*, *122*(1), 53–63. https://doi.org/10.1007/S10551-013-1748-5

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.

Fuster, M., & Ortiz, E. (2019). Integrated information, external verification and other conditions. *Innovar*, *29*(73), 39–54. https://doi.org/10.15446/INNOVAR.V29N73.78010

García-Sánchez, I. M., Aibar-Guzmán, B., Raimo, N., Vitolla, F., & Schiuma, G. (2024). Climate governance, growth opportunities, and innovation in addressing climate change: Empirical evidence from emerging countries. *Finance Research Letters*, *70*, 106328. https://doi.org/10.1016/J.FRL.2024.106328

Gonzalez Tablada, N., Korca, B., & Schiemann, F. (2026). Preparing for the corporate sustainability reporting directive: Case study evidence of initial compliance efforts. *Accounting in Europe*, 1–31. https://doi.org/10.1080/17449480.2026.2684325

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. https://doi.org/10.1016/J.JCLEPRO.2013.07.005

Hoffmann, E., Dietsche, C., & Hobelsberger, C. (2018). Between mandatory and voluntary: non-financial reporting by German companies. *NachhaltigkeitsManagementForum | Sustainability Management Forum*, *26*(1–4), 47–63. https://doi.org/10.1007/S00550-018-0479-6

Lourenço, H. G. (2017). *A divulgação de informações não financeiras no âmbito da Diretiva 2014/95/UE: o atual grau de cumprimento das empresas cotadas em Portugal*. Dissertação de Mestrado. https://repositorio-aberto.up.pt/handle/10216/108113

Mangiuc, M. D., & Kagitci, M. (2025). CSRD as a paradigm shift in sustainability reporting: From voluntary practice to legal requirement. *Amfiteatru Economic*, 27(70), 1193–1208. https://doi.org/10.24818/EA/2025/70/1193

Mion, G., & Adaui, C. R. L. (2019). Mandatory nonfinancial disclosure and its consequences on the sustainability reporting quality of Italian and German companies. *Sustainability (Switzerland)*, *11*(17). https://doi.org/10.3390/SU11174612

Nicolo, G., Zampone, G., Sannino, G., & Polcini, P. T. (2025). Ready for Change After the Omnibus Package? Early Compliance with the European Sustainability Reporting Standards and Its Key Determinants in the New Regulatory Era. *Business Strategy and the Environment*, *0*, 1–19. https://doi.org/10.1002/BSE.70054

Ottenstein, P., Erben, S., Jost, S., Weuster, C. W., & Zülch, H. (2022). From voluntarism to regulation: effects of Directive 2014/95/EU on sustainability reporting in the EU. *Journal of Applied Accounting Research*, *23*(1), 55–98. https://doi.org/10.1108/JAAR-03-2021-0075

Pereira, L., Lemos, K., Monteiro, S., Ribeiro; V. (2020). Compliance with DL 89/17 related to mandatory non- financial reporting: evidence from companies listed on the portuguese stock exchange, Proceedings of the International Conference of Applied Business and Management (ICABM2020) 25th - 26th of June 2020 | ISAG-EBS, Porto, Portugal, ISBN: 978-989-54164-2-4 | ISSN: 2184-7428

Pichler, K., & Lehner, O. M. (2017). *European Commission – New Regulations Concerning Environmental and Social Impact Reporting*. ACRN Oxford *Journal of Finance and Risk Perspectives*, 6(1), 1–54.

Raimo, N., L'Abate, V., Sica, D., & Vitolla, F. (2025). Integrated reporting and the Corporate Sustainability Reporting Directive: bridging the gap or growing apart? *Management Decision*. https://doi.org/10.1108/MD-10-2024-2408

Romão, A. L., Cabrita, I., Castro, A. S. & Ferreira, A. P. (2018). A divulgação de informação não financeira nas empresas portuguesas. In XVIII Encontro Nacional AECA (pp. 1-26). Lisboa, Portugal.

Sharma, R. (2025). Unveiling the effects of the Corporate Sustainability Reporting Directive (CSRD) on company sustainability reporting practices: a case of German companies. *Sustainability Accounting, Management and Policy Journal*. https://doi.org/10.1108/SAMPJ-01-2025-0091

Sierra-Garcia, L., Garcia-Benau, M. A., & Bollas-Araya, H. M. (2018). Empirical Analysis of Non-Financial Reporting by Spanish Companies. *Administrative Sciences 2018, Vol. 8, Page 29*, *8*(3), 29. https://doi.org/10.3390/ADMSCI8030029

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610. https://doi.org/10.2307/258788

Talha, M. (2026). Mandatory ESG disclosure and corporate performance: Evidence from the EU CSRD. *Corporate Social Responsibility and Environmental Management*. Advance online publication. https://doi.org/10.1002/csr.70471