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IS ENVIRONMENTAL REPORTING IMPORTANT FOR PUBLIC COMPANIES' MARKET VALUATION? THE CASE OF EUROPEAN UNION DEVELOPING MARKETS

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ABSTRACT: The aim of our study is twofold: to determine the quality of environmental information published by companies listed in developing EU markets (Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania) and to assess the impact of this reporting on their market value. The research period covers 21 years, from 2003 to 2023. To test the quality of environmental reporting, we used the LSEG database. To assess the impact of environmental data disclosure on companies' market value, we used the modified Ohlson Valuation Model. We apply a technique that makes it possible to assess whether environmental reporting has had a significant impact on companies' market value. Contrary to our expectations, the quality of environmental information disclosed by companies was and is definitely unsatisfactory despite the non-financial reporting obligation. Nonetheless, the research showed a positive relationship between environmental reporting after the implementation of the directive on non-financial reporting in 2017 and their market value.

KEYWORDS: environmental reporting, European Union, developing markets, public companies, market value

Introduction

In recent years, there has been a notable increase in awareness regarding the importance of environmental protection in the socio-economic development of countries. The change in perspective is confirmed by the outcomes of many debates and studies conducted at the EU level (Dyllick and Muff, 2016; Geels et al., 2017; Howard-Grenville et al., 2017). According to the United Nations Agenda (Agenda 2030, 2015), companies are required to present the impact of their activities on stakeholders across three pillars: environmental (E), social (S) and governance (G), collectively known as ESG (Billio et al., 2021). However, given the significant threats posed by environmental degradation to society, the environmental pillar (E) should be seen as the most important (Jagannathan et al., 2017).

Current research on environmental reporting reveals that companies frequently disclose incomplete information about their environmental impacts (Braam et al., 2016; Janicka & Sajnóg, 2023). However, the quality of the reporting depends on many factors, including the corporate governance structure (Ezhilarasi & Kabra, 2017; Odoemelam & Okafor, 2018; Xie et al., 2019), the existence of an environmental audit committee (Kalyani et al., 2019; Pérez-Cornejo et al., 2019) or a CSR committee (Mahmood et al., 2018; Mnif Sellami et al., 2019), or the size of the environmental external assurance and corporate governance index (Moalla et al., 2021).

While numerous institutions develop standards and guidelines for reporting companies' environmental impact (Vukić et al., 2017), the EU can be considered a global leader. While the first regulations appeared in the EU at the beginning of the 21st century, significant changes have been observed since 2014 (Busch et al., 2021), when the EU introduced the directive on non-financial reporting (Non-Financial Reporting Directive – NFRD), (Directive 2014/95/EU, 2014). However, the obligation to report non-financial information specified in the NFRD applied to large enterprises, including public companies, banks, investment companies and insurers, was insufficient. Consequently, the directive on sustainable development (Corporate Sustainability Reporting Directive – CSRD) was adopted in 2022 (Directive 2022/2464/EU), which introduced numerous changes and improvements compared to the NFRD.

The purpose of our study is twofold: (1) to determine the quality of environmental reporting of companies listed on the stock exchanges of developing EU markets and (2) to assess the impact on companies' market value. Combining the approach presented by the International Monetary Fund (IMF) and the most recognised providers of ESG data (MSCI, Bloomberg, and LSEG, previously Refinitiv) (Boffo et al., 2020), our research includes Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania.

We hypothesise that reporting of environmental data in emerging and developing EU markets improved after the NFRD implementation, reflecting the potential influence of this reporting on public companies' market value. To test our hypothesis, we use data from the LSEG database covering a period of 21 years, i.e. 2003–2023. We use a modified Ohlson Valuation Model (OVM) (Ohlson, 1995), which establishes a link between companies' market value and accounting fundamentals. Using this model, we propose a modified approach to estimate the impact of environmental reporting after the NFRD implementation on the market value of companies.

The study contributes to the existing literature in several ways. First, it analyses the little-explored impact of the EU's legislative framework of non-financial reporting on EU markets, particularly developing ones. Sustainability damages are often found in developing economies due to their weak regulatory systems. Second, this study embraces companies that operate in developing EU markets, which are often neglected in the empirical literature despite their increasing influence on regional and global scales. Third, by incorporating legislative variables alongside firm-level variables in our modified OVM model, we apply a technique that makes it possible to assess whether environmental reporting after the implementation of the directive has had a significant impact on companies' market value.

The paper is structured as follows. In Section 2, we present a brief review of existing regulations of environmental disclosure in the EU and the consequences of their implementation for capital markets. In Section 3, we describe the materials and methods, while the results are presented in Section 4. The last section provides conclusions and recommendations for future research.

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Literature review

In 2010, discussions on implementing sustainable development principles in Europe were resumed with the adoption of "Strategy for smart, sustainable and inclusive growth" – Europe 2020 (European Commission, 2010). Among its three priorities was sustainable development, i.e., supporting an economy that uses resources more efficiently. The EU's initiatives at that time primarily concerned the natural environment. In order for the EU's actions to bring the desired effects, it became necessary to mobilise companies to publish information on meeting the sustainability criteria, which had taken the form of ESG, i.e. environmental (E), social (S) and governance (G) factors. The first regulations in this area were specified in Directive 2014/95/EU (2014) on non-financial reporting (NFRD) (Aureli et al., 2020a; Posadas and Tarquinio, 2021; Cuomo et al., 2022; Cicchiello et al., 2023; Aboud et al., 2024). The directive was adopted in 2014, and the obligation to publish information has been in force since 2018. The NFRD requires large public interest companies that employ over 500 employees to publish non-financial reports, including comprehensive reports on their ESG activities.

In 2019, the EU published the European Green Deal (EGD; European Commission, 2019). The EGD is a key EU strategy that promotes the transformation of the EU into a "fair and prosperous society living in a modern, resource-efficient and competitive economy that will achieve net zero greenhouse gas emissions in 2050 and in which economic growth will be decoupled from the use of natural resources" (European Commission, 2019). Its implementation is primarily expected to lead to environmental protection (Sikora, 2021; Almeida et al., 2023; Tomala & Urbaniec, 2024).

An important issue in sustainable reconstruction has become reducing information asymmetry in the financial market and obliging companies to publish non-financial reports, as well as ensuring the completeness, timeliness and comparability of the data contained therein (Doni et al., 2020; Breijer & Orij, 2022). The NFRD has proven to be ineffective in all these areas (Aureli et al., 2020b; Venturelli et al., 2022; Mechta et al., 2025). Not only did some of the companies obliged to publish the required information fail to do so (Petruzzelli & Badia, 2024), but the information that was published was often superficial and incomplete (Janicka & Sajnóg, 2023). Because the NFRD did not include specific requirements for preparing the content of non-financial reports, countries had to specify these requirements themselves. This led to a lack of comparability of their content, and therefore a lack of comparability of the actual environmental impact across EU countries (Caputo et al., 2020; García-Sánchez et al., 2023). As noted by Arvidsson and Dumay (2022), companies need to improve not only the quantity or quality of ESG reporting but mainly their ESG performance.

From the perspective of not only sustainable development but also the expectations of financial markets and investors, the adoption of the CSRD (Directive 2022/2464/EU, 2022) in December 2022 brought a very important change (Hummel & Jobst, 2024). The directive, which entered into force in January 2023, covers companies listed on regulated markets (except micro-enterprises) and large companies. All entities that are subject to the CSRD will be obliged to report on sustainable development issues in accordance with the European Sustainability Reporting Standards (ESRS). We are currently in a transitional period between the application of two directives, the NFRD and the CSRD. The first reports that follow the requirements of the CSRD will appear in 2025 and enable an assessment of the current quality of reporting by companies that were previously subject to the NFRD.

We aim to determine whether listed companies from selected EU countries that are obliged to publish non-financial reports have improved the quality of their environmental reporting since the NFRD's implementation in 2017. We selected developing markets from Central and Eastern Europe (Bulgaria, the Czech Republic, Hungary, Poland, and Romania) and Greece, the least developed country from the "old" EU countries. We examine whether these catching-up economies are characterised by high-quality environmental reporting that not only reflects companies' environmental impact but also potentially influences investor decisions. Legal acts adapting national law to the requirements of the NFRD in individual countries are presented in Table 1. Table 2 presents the progress of transposition of the NFRD requirements in individual areas in 2017, when the NFRD entered into force.

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Table 1. Transposition of the NFRD requirements to the national legislative framework

Country	National legal act introducing the provisions of the NFRD
Bulgaria	Amendment to the Accounting Act 237
Czech Republic	Amending Act No. 563/1991 Coll. On Accounting
Greece	Law 4403/2016; Circular ΨΟΥΨ465ΧΙ8-ΒΜ4 2017 (Supporting Document)
Hungary	Amendments to Accounting Act C of 2000
Poland	Act of 15 December 2016, Amending the Accounting Act 61
Romania	Order No. 1.938 of 17 August 2016 on the Amendment and Completion of Accounting Regulations

Source: CSR Europe (2017).

Table 2. Implementation of selected provisions of the NFRD into national legal systems by 2017

Country	Definition of a Large Under-taking	Definition of a Public Interest Entity	Report Topics and Content	Reporting Framework	Disclosure Format	Auditor's involvement	Non-compliance Penalties	Diversity Reporting Requaired
Bulgaria	=	a	=	a	a	a	a	a
Czech Republic	a	a	=	=	a	=	a	=
Greece	a	a	a	=	a	=	a	=
Hungary	=	a	=	=	a	=	a	=
Poland	=	a	=	a	=	=	a	=
Romania	a	a	a	=	=	a	a	=

Legend: '=' – requirements are the same as in the NFRD; 'a' – requirements have been adapted.
Source: CSR Europe (2017).

The key provisions of the NFRD were adopted by the surveyed countries on time. Differences in the application of legal regulations between countries mainly result from their imprecision and the lack of detailed guidelines for their application.

The EU regulations governing enterprises and their sustainable transformation significantly impact not only the companies themselves but also their external environment, including the capital market. It is anticipated that investors will gradually divest from companies that have a negative environmental impact. Access to comprehensive and comparable environmental information is crucial for capital market entities, including capital providers, who make investment decisions. Although there are some publications on the implementation of the NFRD and the CSRD in the countries examined (Dragomir et al., 2022; Lippai-Makra et al., 2022; Aluchna et al., 2023; Svobodová et al., 2023; Kuzmanova & Dimanova, 2024; Lukešová, 2024; Pagkalou et al., 2024; Dobre et al., 2025; Krasodomska, 2025), there is a lack of research on the quality of ESG data and an impact of environmental reporting on the market value of companies from less economically developed EU countries. Our study contributes to reducing the research gap in this area.

The question is whether investors perceive ESG data, including environmental data, as an important criterion for their investment decisions and whether this perception is reflected in the company's market value. This study aims to determine whether the implementation of the NFRD requirements regarding environmental reporting affected the market value of companies from less economically developed EU countries.

Research on the impact of non-financial reporting on company market value conducted so far has yielded mixed results. Giese et al. (2019) and Huang (2019) examined the impact of companies' ESG disclosure on companies' value and confirmed that ESG reporting had a positive effect on the company value. Similar results were obtained by, among others, Aydoğmuş et al. (2022), Chang & Lee (2022), Negara et al. (2024), Pei-yi et al. (2018), Quintiliani (2022), Tahmid et al. (2022), Yoon et al. (2018) or Zhou et al. (2022). They also confirmed the positive relationship between companies' ESG disclosure and companies' value. The negative relationship between ESG and company value is found

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in much fewer studies (Junius et al.,2020; Singh et al., 2022; Palupi, 2023). Yu and Xiao (2022) and Rohendi et al. (2024) yielded mixed results.

Naimy et al. (2021) examined this relationship across various economic sectors and found that the relationship depends on the sector in which the company operates. DasGupta (2022) pointed out an interesting relationship: companies with unsatisfactory financial performance are more likely to undertake more intensive activities in the ESG area. He argues that poor financial performance motivates companies to implement better ESG practices, likely to maintain credibility in the future.

Friede et al. (2015) analysed numerous studies on the nature of the ESG and a company's financial performance (CFP) relationship. They revealed that approximately 90% of studies found a non-negative ESG–CFP relationship. The share of positive findings was 48.2%, while 23.0% were neutral, and 18.0% were mixed. Only 10.7% found a negative ESG–CFP relationship. Subsequent research confirmed the positive impact of ESG reporting on CFP, in particular, on company value. This conclusion applies to both individual countries and groups of countries.

Materials and methods

There are many classifications of developing markets prepared by the IMF and most recognised providers of ESG data (MSCI, Bloomberg, and LSEG), so it is not possible to precisely define this group. The IMF classifies Bulgaria, Hungary, Poland, and Romania as "emerging and developing economies" (IMF, 2023). Meanwhile, MSCI contains Poland, Greece, Hungary, and the Czech Republic (MSCI, 2024). LSEG's Emerging Markets Europe index covers the Czech Republic, Hungary, and Poland (LSEG, 2024). As a result, we took public companies listed in Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania. The final research sample comprises 1,154 companies. The research period covers 21 years, 2003–2023.

To assess the quality of environmental disclosures, we have used the LSEG database, which provides the most comprehensive analysis of companies' activities (Garcia et al., 2017; Huber et al., 2017). We focus on the environmental measures concerning companies' negative impact on the environment (see Figure 1).

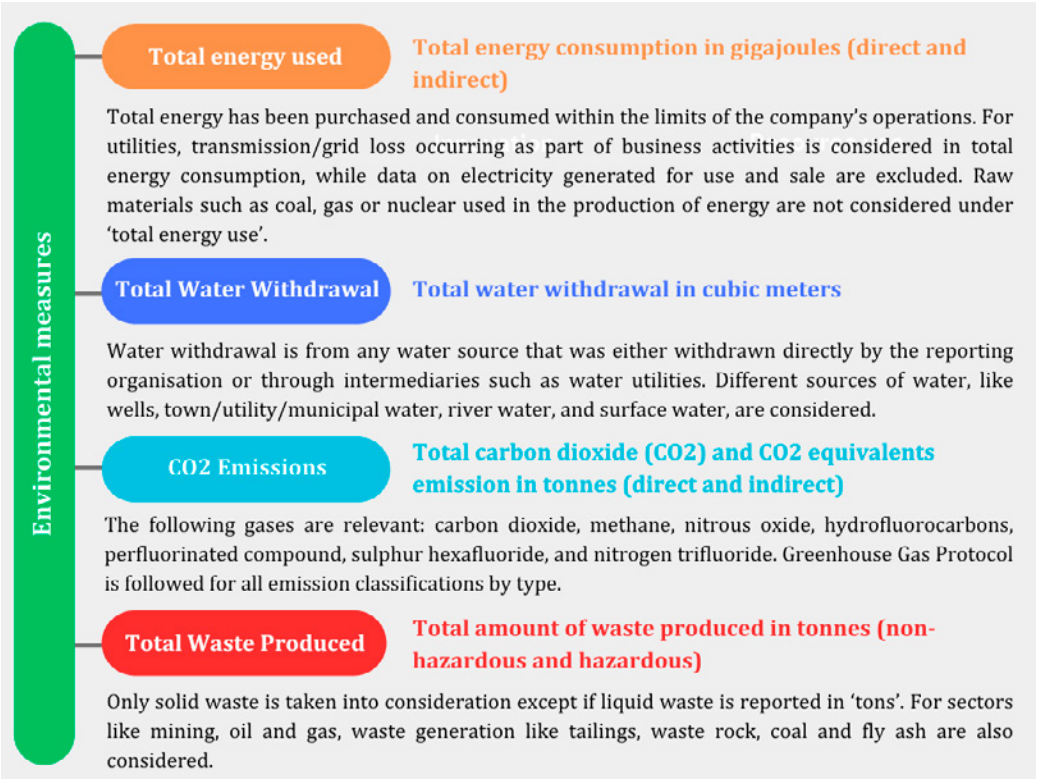

Figure 1. Selected LSEG measures concerning companies' negative impact on the environment

Source: authors' work based on (LSEG, 2023).

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Following other researchers (Albertini, 2013; Deswanto & Siregar, 2018; Dixon-Flower et al., 2013; Gao & Wan, 2023; Hang et al., 2019; Manrique & Martí-Ballester, 2017; Trumpp & Guenther, 2015; Yang et al., 2020; Zhongfu et al., 2011), we also use the aggregated E index. We investigate how many public companies report such measures. We focus on two periods, i.e., before NFRD implementation (2003–2017) and after (2018–2023).

In our analysis, we used the modified OVM. The Ohlson model shows that the company's market value (expressed as its market capitalisation) can be estimated based on the book value of equity, profit and other types of information:

$$MVE_{i,t} = \beta_0 + \beta_1 BVE_{i,t} + \beta_2 NI_{i,t} + \beta_3 OI_{i,t} + \varepsilon_{i,t}, \quad (1)$$

where: MVE – market value of equity, BVE – book value of equity, NI – net income, OI – other information.

Several researchers (Bajic & Yurtoglu, 2018; Guenster et al., 2011; Janicka & Sajnóg, 2024; Torre et al., 2020) have modified the original Ohlson model and replaced the book value of equity and net income with Return on Assets (ROA). We take the same approach and, following Fatemi et al. (2018) and Wong et al. (2021), hypothesise that ROA is positively associated with the company's market value (MVE).

In the original OVM, Ohlson did not specify other types of information that may be relevant in predicting MVE. Recent studies have used non-financial results or ESG indicators (Cornell & Damodaran, 2020; Fatemi et al., 2018; Giannopoulos et al., 2022; Khan, 2019; Naffa & Fain, 2022; Pedersen et al., 2021; Torre et al., 2020; Wong et al., 2021). We adopt an innovative approach by incorporating environmental reporting (ENV) as an explanatory variable. It is a binary variable that takes the value of one if the company reported environmental data (E) in any year after the implementation of NFRD (2018–2023), and zero otherwise. A positive relationship is expected between ENV and MVE.

In our model, we also use a vector of control variables that is adjusted for the analysed market value (Table 3 provides an overview). Following previous research (Abdi et al., 2022; Ahmad et al., 2023; Atan et al., 2018; Bahadori et al., 2021; Bajic & Yurtoglu, 2018; Clarkson et al. 2008; Cornell and Damodaran, 2020; Cristache et al., 2019; Fatemi et al., 2018; Garcia & Orsato, 2020; Giannopoulos et al., 2022; Guenster et al., 2011; Iancu et al., 2023; Lee et al., 2009; Nollet et al., 2016; Patin et al., 2020; Velte, 2017; Wong et al., 2021; Zhao et al., 2018), we use company size (SIZE), leverage effect (LEV), current liquidity ratio (CR), and growth rate (GROW)[1].

Table 3. Description of variables considered in the study

Variables	Description	Calculation	Potential relationship
MVE	Market value of equity	Natural logarithm of the market value of equity	-
ROA	Return on Assets	Earnings before interest and taxes to year-average total assets	Positive
ENV	Environmental reporting rate	Dummy, 1 if the company reported environmental data in any year after NFRD implementation (2018–2023), and 0 otherwise	Positive
SIZE	Company size	Natural logarithm of total assets	Positive
LEV	Leverage effect	Total liabilities to total assets	Positive
CR	Current liquidity ratio	Current assets divided by current liabilities	Positive
GROW	Growth rate	Sales revenue for the year to sales revenue of the previous year*	Positive

* adjusted for the inflation rate (HICP).

[1] Due to the use of sales revenue in the growth rate, for the purposes of data comparability over time and correct conclusions, we adjust this indicator for the inflation rate for selected countries from 2003 to 2023. We use the overall Harmonised Index of Consumer Prices (HICP) excluding administered prices, , which is comparable across countries. HICP is computed by Member States according to uniform methodology of the EU.

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Our final version of the modified OVM is as follows:

$$MVE_{i,t} = \beta_0 + \beta_1 ENV_{i,t} + \beta_2 ROA_{i,t} + \beta_3 SIZE_{i,t} + \\ + \beta_4 LEV_{i,t} + \beta_5 CR_{i,t} + \beta_6 GROW_{i,t} + +\varepsilon_{i,t} \quad (2)$$

All variables were winsorised at the top and bottom 1% using panel data regression analysis. Missing data are deleted pairwise. Our research sample consists of 17,163 firm-year observations. The results of the Hausmann test justify the use of fixed effects (FE), and they were selected for the FE model (Redundant Fixed Effects Test) using the Chi^2 statistic. For redundant effects (RE), we used the Breusch-Pagan test using the Lagrange Multiplier.

Results and discussion

Our empirical research shows that the environmental reporting quality in the EU depends primarily on the level of economic development (see Figure 2). The quality of environmental information reported by public companies in the analysed emerging and developing EU markets (Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania) is relatively low.

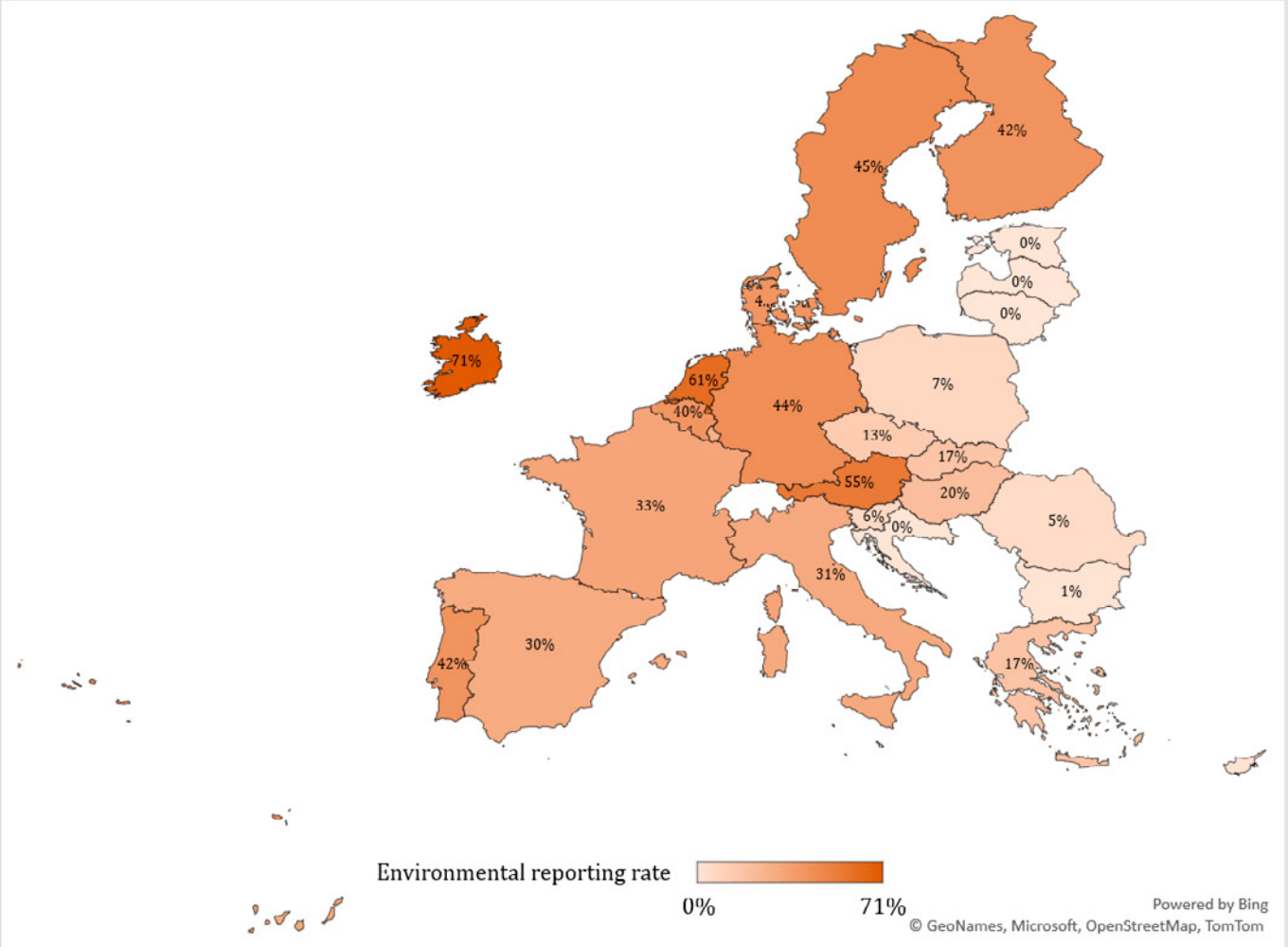

Figure 2. Environmental reporting of public companies in the EU markets after NFRD implementation (2018–2022)

Source: authors' work based on LSEG data.

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Ellili and Nobanee (2023) reached similar conclusions, demonstrating that sustainability disclosure is poor. The scope of environmental data disclosed by Polish banks is quite low (Broniewicz et al., 2024). Wacławik et al. (2024) also concluded that the level of detail in the disclosed environmental data is unsatisfactory.

Focusing on the detailed analysis of the E presented by LSEG, it is evident that the situation is not optimistic in either of the adopted periods, before or after NFRD implementation (see Table 4).

Table 4. Environmental reporting by public companies in Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania, 2003–2023

EU Member States	Number of companies	Before NFRD implementation (2003–2017)				After NFRD implementation (2018–2023)			
		Data in any year		Data for 15 years		Data in any year		Data for six years	
		Number of companies	Share (%)	Number of companies	Share (%)	Number of companies	Share (%)	Number of companies	Share (%)
Bulgaria	209	0	0.0	0	0.0	2	1.0	0	0.0
Czech Republic	23	2	8.7	0	0.0	3	13.0	3	13.0
Greece	145	16	11.0	7	4.8	25	17.2	20	13.8
Hungary	40	5	12.5	0	0.0	8	20.0	5	12.5
Poland	550	27	4.9	0	0.0	39	7.1	29	5.3
Romania	187	0	0.0	0	0.0	9	4.8	1	0.5
Total	1,154	50	4.3	7	0.6	86	7.5	58	5.0

Source: authors' work based on LSEG data.

To accomplish our objective of investigating the association between environmental reporting after NFRD implementation and a company's market value, we first analyse the correlation coefficients between the variables used in the OVM (see Table 5).

Table 5. Correlation matrix between the variables

Variables	MVE	ENV	ROA	SIZE	LEV	GROW	CR
MVE	1.000*						
ENV	0.290*	1.000					
ROA	0.217*	0.009	1.000				
SIZE	0.744*	0.319*	0.160*	1.000			
LEV	0.069*	0.093*	-0.246*	0.202*	1.000		
GROW	-0.042*	0.054*	-0.033*	-0.011	0.022*	1.000	
CR	-0.139*	-0.012	0.017	-0.183*	-0.296*	0.056*	1.000

* Denote statistical significance at 1%.

The research shows that most of our independent variables in the modified OVM are positively associated with the company's market value. While ENV and ROA were weakly but positively correlated with MVE, stronger correlations were determined between SIZE and MVE. Weak but positive and statistically significant relationships were also found between LEV and MVE. Interestingly, the correlations between CR and MVE and between GROW and MVE were very weak but negative and statistically significant, contrary to our expectations.

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Table 6 presents the results of our regression analyses. We obtained a positive and highly significant coefficient estimate for ENV, suggesting a positive impact of environmental data disclosure on market value after NFRD implementation. Our findings are consistent with several previous studies, which reported that ESG disclosure can increase company value (Abdi et al., 2022; Aboud & Diab, 2019; Bardos et al., 2020; Chauhan & Kumar, 2018; Cho, 2022; Feng & Wu, 2021; Suttipun & Thanyaorn, 2021; Yiwei et al., 2018; Zumente & Bistrova, 2021). They also support the authors' observations that higher profitability is associated with environmental efficiency (Zielińska-Chmielewska, 2023).

Table 6. The impact of environmental reporting after NFRD implementation on the company's market value

Specification	Model 1 (MVE)		Model 2 (MVE)		Model 3 (TQ)	
	Coefficient	p-Value	Coefficient	p-Value	Coefficient	p-Value
ENV	0.240	0.0001	0.021	0.7420	-7.276	0.7571
ExROA	-	-	0.002	0.0000	-	-
ROA	0.001	0.0000	0.001	0.0000	0.763	0.0000
SIZE	0.747	0.0000	0.743	0.0000	-0.029	0.9842
LEV	0.018	0.0000	0.019	0.0000	44.808	0.0000
GROW	-0.001	0.0065	-0.001	0.0131	0.024	0.7821
CR	0.000	0.0066	0.000	0.0065	0.020	0.6432
Intercept	3.911	0.0000	3.973	0.0000	-24.219	0.3474
Hausman	47.840	0.0000	49.920	0.0000	28.492	0.0001
Ch2	280.778	0.0000	280.848	0.0000	278.033	0.0000
Fixed effects	Yes					
F test	1623.127	0.0000	1593.413	0.0000	195.498	0.0000
Adj-R2	0.711		0.715		0.228	
N	17,163					

Our results also suggest that companies with higher asset profitability have higher market valuations. This finding is consistent with several studies that used ROA as a variable in market valuation models (Fatemi et al., 2018; Garcia & Orsato, 2020; Guenster et al., 2011; Wong et al., 2021). For most of our control variables, we obtained significant coefficients with signs consistent with theoretical considerations. Our results suggest that larger companies have higher market valuations. Similar observations were noted by other researchers (Abdi et al., 2022; Atan et al., 2018; Clarkson et al., 2008; Limkriangkrai et al., 2017). The coefficients of LEV and CR are consistently positive in our calculations. These results indicate that a company's debt significantly influences its financial performance, either negatively or positively, as other authors have confirmed (Cristache et al., 2019; Fatemi et al., 2018; Garcia & Orsato, 2020; Giannopoulos et al., 2022; Nollet et al., 2016). Company growth is negatively associated with MVE. While Wong et al. (2021) received similar results, these findings generally contradict previous studies (Bajic & Yurtoglu, 2018; Guenster et al., 2011).

We conducted some additional estimates to check the robustness of our results. In the first robustness test, we employed an interaction between reported E and ROA (ExROA). We investigated whether company profitability has a moderating effect on the relationship between ENV and MVE. In the second robustness test, we checked whether the impact of environmental data disclosure on companies' market value after NFRD implementation remains positive when the Tobin's Q ratio (TQ) instead of the MVE is used. We calculate TQ as the total assets minus the book value of equity, plus the market value of equity, all scaled by total assets. Indeed, it may happen that it is a more accurate measure of companies' market value than MVE (Yavuz et al., 2025).

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The results of the first moderation model (Model 2) confirmed our assumption that the MVE is higher in more profitable companies that reported E. They are consistent with previous research (Kittilaksanawong, 2011). We still noted a positive impact of ENV on MVE, but it was statistically insignificant. Based on the second moderation model (Model 3), we confirmed the legitimacy of using the MVE instead of Tobin's Q ratio in our analysis. We obtained a negative coefficient estimate for ENV and a statistically insignificant result. For most of our control variables (SIZE, GROW, CR), we also obtained insignificant coefficients and with signs inconsistent with our theoretical considerations.

Conclusions

Despite significant efforts both globally and at the EU level to introduce non-financial reporting, practice shows a relatively low quality of environmental information reporting by companies listed in emerging and developing EU capital markets. In general, the assessment of the quality of environmental reporting in all EU Member States is low, and worst in the CEE countries that joined after 2004. This indicates that, in addition to regulations in this area being insufficient, the prevalence of environmental reporting is also relatively poor. Given the number of actions and directives implemented by the EU, one would expect the majority of listed companies in Bulgaria, the Czech Republic, Greece, Hungary, Poland, and Romania to publish environmental information. However, we did not find that the quality of reporting data in these countries was radically better after the NFRD implementation, but it has been improving gradually. This is an important conclusion – the NFRD has not brought the expected improvement in reporting quality. If environmental data is to be an important decision parameter for investors, this quality must be improved.

We confirmed a positive impact of environmental data disclosure on market value after the NFRD implementation. Investors may consider a company's environmental performance, including resource use (energy and water) and the production of environmental pollution (carbon dioxide and waste), to be important factors in a company's valuation. Consequently, managers should prioritise environmental reporting because it may be financially beneficial for the company.

The main limitation of current research is the lack of comprehensive and comparable ESG data. Despite being required to report, companies failed to submit the required reports. The lack of unified environmental reporting standards and the scope of information required in reports meant that published reports were often incomplete, and the reported ESG data incomparable. This situation should change with the adoption of the CSRD and the ESRS.

The unsatisfactory state of environmental reporting in developing EU markets may also be due to the lack of mandatory audits to ensure the accuracy and adequacy of published reports. Currently, public companies do not face any consequences for failing to fulfil their NFRD-related reporting obligations, which have been in force for several years. As the CSRD has been in effect for a relatively short period, it is difficult to assess whether it addressed the shortcomings of the NFRD and improved the quality of environmental reporting. Changes are expected in the next few years. Therefore, it is crucial to conduct systematic research on the quality of environmental reporting in EU countries and to monitor progress. These systematic studies should provide answers to the question of the effectiveness of currently implemented environmental reporting solutions. Currently, this quality is definitely unsatisfactory.

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The contribution of the authors

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CZY SPRAWOZDAWCZOŚĆ ŚRODOWISKOWA JEST ISTOTNA DLA WYCENY RYNKOWEJ SPÓŁEK PUBLICZNYCH? PRZYPADEK ROZWIJAJĄCYCH SIĘ RYNKÓW UNII EUROPEJSKIEJ

STRESZCZENIE: Cel naszego badania jest dwojaki: określenie jakości informacji środowiskowych publikowanych przez spółki notowane na rozwijających się rynkach UE (Bułgaria, Czechy, Grecja, Węgry, Polska i Rumunia) oraz ocena wpływu tej sprawozdawczości na ich wartość rynkową. Okres badawczy obejmuje 21 lat, od 2003 do 2023 roku. Aby przetestować jakość sprawozdawczości środowiskowej, wykorzystaliśmy bazę danych LSEG. Do oceny wpływu ujawniania danych środowiskowych na wartość rynkową spółek, wykorzystaliśmy zmodyfikowany model wyceny Ohlsona. Stosujemy technikę, która umożliwia ocenę, czy sprawozdawczość środowiskowa miała istotny wpływ na wartość rynkową spółek. Wbrew naszym oczekiwaniom jakość informacji środowiskowych ujawnianych przez spółki była i jest zdecydowanie niezadowalająca, pomimo obowiązku sprawozdawczości niefinansowej. Niemniej jednak badania wykazały pozytywny związek między raportowaniem środowiskowym badanych spółek po wdrożeniu dyrektywy a ich wartością rynkową.

SŁOWA KLUCZOWE: raportowanie środowiskowe, Unia Europejska, rynki rozwijające się, spółki publiczne, wartość rynkowa

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