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Corporate Social Responsibility Disclosure, Environment Protection Quality and Financial Performance: A Case of Listed Firms in Vietnam

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Abstract

The 2022 KPMG Sustainability Reporting Survey highlights a rising trend in sustainability reporting, with 79% of top companies issuing such reports. Vietnam's global integration requires sustainable growth, but inconsistent sustainability reporting remains among listed companies due to the lack of a mandate (Son, 2023). Aligning with international standards is vital for meeting stakeholder expectations and ensuring transparent CSR disclosure (Etikan, 2023), which is key to Vietnam's sustainable development and in line with national objectives. This research examines the relationships between CSR disclosure (CSRD), environmental protection quality (EPQ), and the financial performance (FP) of listed enterprises in Vietnam spanning from 2020 to 2022. Employing a multifaceted approach, the research draws on signaling, stakeholder, and legitimacy theories to measure the level of CSRD and examine its correlation with FP. Moreover, the research examines the mediating impact of EPQ on the relationship between CSRD and FP. Relying on a dataset comprising 60 listed companies from HNX30 and VN30—two measures that include firms with substantial market capitalization and high liquidity in the Vietnamese stock market—the research employs quantitative and regression analysis methods. The findings reveal CSRD, leverage, and PEPI (Provincial Environmental Protection Index, representing EPQ) as three key factors influencing Tobin Q. Furthermore, the research illuminates the mediating role of PEPI in the CSRD-FP relationship and the positive effect of FP on EPQ. Based on these findings, recommendations are proposed for the government, businesses, and stakeholders to elevate the level of CSRD, enhance local environmental protection outcomes, foster public satisfaction, and improve corporate FP.

Keywords: Corporate social responsibility disclosure, environmental protection quality, financial performance

1. INTRODUCTION

The KPMG Survey of Sustainability Reporting 2022 is a comprehensive global study analyzing sustainability practices among 5,800 companies across 58 countries, territories, and legal areas. The report highlights a growing trend in sustainability reporting, with 79% of leading companies now publishing sustainability reports. However, while more companies are setting carbon reduction targets, specific actions in other areas such as biodiversity preservation, remain limited, and fewer than half of the surveyed companies recognize biodiversity loss as a risk. Less than 50% of the world's largest companies provide comprehensive reports on the social and governance aspects of Environmental, Social, and Governance (ESG) criteria. This indicates a gap in reporting standards despite increasing awareness and commitment to sustainability among global corporations. In the context of Vietnam, as the country integrates further into global markets and supply chains, sustainable growth has become crucial. Both public and private sectors are recognizing the correlation between sustainability and long-term success (London, 2012). The State Securities Commission of Vietnam required listed firms to report specific sustainability information, but the level of disclosure varies due to the absence of comprehensive reporting requirements. The call is now for Vietnamese businesses to align their sustainability reporting with global standards to satisfy domestic and international stakeholders (Trang & Yekini, 2014; Thanh Hung Nguyen et al., 2021. The research "Corporate Social Responsibility, Environment Protection quality, and Financial Performance:

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A Case of Listed Firms in Vietnam" examines the relationship between CSRD, EPQ, and FP in Vietnam. It aims to explore how CSR practices can contribute to sustainable development in areas such as environmental protection, thereby guiding businesses and policymakers towards aligning CSR initiatives with national development goals. The study reflects a growing interest in understanding how the level of CSRD impacts organizational performance and sustainability efforts in Vietnam's developing economy.

2. THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

2.1 Corporate social responsibility disclosure and financial performance

Signaling theory, first developed by Spence (1973) to address information asymmetry, has evolved significantly in its application to corporate information disclosure. Ross (1977) extended this theory to emphasize how companies strategically disclose information to enhance their reputation and attract stakeholders, particularly investors, and reduce the adverse effects of information asymmetry by conveying specific signals about a company's performance and prospects (Verrecchia, 1983). Voluntary disclosure, where firms provide more information than legally required, serves as a way to signal quality and competence (Campbell et al., 2001). In practice, firms tend to disclose favorable information while concealing unfavorable details (Morris, 1987), positioning themselves as advantageous competitors (Verrecchia, 1983). Information disclosure enables stakeholders to measure a company's market position and operational effectiveness, thereby influencing investment decisions positively.

Empirical studies worldwide have explored the impact of CSRD on FP, yielding varied and inconclusive results. For instance, Ngwakwe (2009) found that social responsibility initiatives positively influence the performance of responsible enterprises. Similarly, research by Jitaree (2015) demonstrated a positive relationship between CSR information disclosure and financial indicators such as return on assets (ROA) and net profit margin (NPM). However, contrasting findings exist, indicating a negative or insignificant relationship between CSR disclosure and FP. Studies by Makni et al. (2009) and Nekhilia et al. (2017) illustrate examples where environmental and social CSR disclosures were connected with adverse impacts on financial indicators such as return on equity (ROE) and market returns. Further complexities arise with studies reporting no significant correlation between CSRD and FP (Mahoney and Roberts, 2007; Perkins Cheung and Mak Wilson, 2010). These findings emphasize the complex nature of the CSRD-FP relationship, requiring continuous research to reconcile conflicting evidence. In Vietnam, domestic studies generally align with global trends, showing a positive link between CSRD and corporate performance indicators like ROA and Tobin's Q (Trang & Yekini, 2014; Thanh Hung Nguyen et al., 2021). These studies emphasize the role of CSRD in enhancing transparency and operational efficiency, crucial for fostering stakeholder trust in emerging markets. In this research, the following hypothesis is proposed:

H1: The level of CSR disclosure positively influences financial performance.

2.2 CSRD and environment protection quality

CSR initiatives address key environmental challenges such as climate change, clean energy, water conservation, public health, and sustainable resource use (Marak & Singh, 2014). CSR involves businesses aligning stakeholder interests with a focus on environmental preservation (Singh et al., 2021), playing a crucial role in this regard, safeguarding the environment and achieving sustainable outcomes (Liu et al., 2024). Companies not only comply with regulations but also shape informal environmental governance through lobbying, expertise, and providing capital and technology (Levy & Newell, 2004).

The Porter Hypothesis (Porter, 1991) proposes that environmental protection and economic development can be reconciled. Initially, environmental regulations may increase costs but can encourage innovation and resource efficiency, potentially leading to economic benefits and environmental patents (Keith et al., 2013). Contrary to beliefs, economic growth and environmental quality can advance together through responsible actions by businesses, individuals, and governments. Integrating environmental considerations into CSR activities, as mandated by laws like the Companies Act 2013, marks significant progress in environmental protection. Companies disclosing more environmental information are perceived as more responsible and attract greater investments and societal support (Devie et al., 2019).

Decision No. 2782/QD-BTNMT, issued on October 31, 2019 by the Vietnam Minister of Natural Resources and Environment (MONRE), introduced a comprehensive index for evaluating environmental protection outcomes across Vietnamese provinces and centrally-governed cities. This index, known as the PEPI, consists of two main groups in consideration: (1) assessing the implementation of environmental protection goals and tasks, and (2)

evaluating public satisfaction with the quality of the living environment. Vietnam's Circular 155/2015/TT-BTC and the PEPI criteria highlight the similarity between required environmental disclosures and evaluation standards, incentivizing companies to provide comprehensive information to improve provincial environmental scores. Fully implemented CSR activities contribute significantly to enhancing the living environment (Marak & Singh, 2014). The quality of the natural environment affects emotional recovery, health benefits, and overall life satisfaction (Herzog et al., 1982; Mayer & Frantz, 2004). In addition, perceived government policies also influence pro-environmental attitudes and behaviors. Strong environmental policies bolster confidence in living conditions and government efficacy, enhancing satisfaction with the locality (Eriksson et al., 2006; Biedenweg et al., 2017). As environmental quality improves, so does satisfaction with the living environment (Capaldi et al., 2014), reflected in increased PEPI. Rationally, this research assumes that:

H2: The level of CSR disclosure positively influences environment protection quality.

2.3 Environment protection quality and financial performance

In Vietnam, rapid economic growth has been accompanied by severe environmental challenges. The World Bank estimates that global air pollution alone caused USD 8.1 trillion in losses in 2019, equivalent to 6.1% of global GDP. Similarly, Vietnam faces escalating environmental pollution, impacting long-term economic development. According to Tuan Ha (2021), environmental incidents and pollution endanger Vietnam's economic gains, requiring urgent environmental changes to sustain growth. The National Center for Socio-Economic Information and Forecast emphasizes Vietnam's economic restructuring for competitiveness. But climate change and environmental damage pose significant challenges with 5% of GDP annual losses due to environmental pollution.

Companies' operational and strategic decisions, including financing, investing, and operational choices, are often influenced by the macroeconomic environment (Owolabi, 2017). Therefore, performance is frequently assessed based on the stability of the macroeconomic environment. In addition, according to the Business cycle theory, economic expansion phases, characterized by increasing GDP, typically lead to enhanced firms' FP. During expansion, unemployment falls, consumer confidence rises, and consumption increases, all of which directly affect firms' revenues and profitability. Conversely, in recessions (when GDP drops), firms experience lower demand, reduced profitability, and possibly higher operational costs, weakening FP. Many researchers have found a strong positive correlation between the change in GDP and ROE or ROA regarding FP (Alfadli & Rjoub, 2020; Dewi, Soei, & Surjoko, 2019; Egbunike & Okerekeoti, 2018).

Moreover, environmental pollution creates significant health risks, worsening respiratory illnesses (Gehring et al., 2013), heart diseases (Cesaroni et al., 2014), and metabolism-related disorders (Yang et al., 2018). Studies also link air pollution to psychological pain, including anxiety and depression (Lundberg, 1996; Cho et al., 2014), further straining staff's health and productivity. We expect that:

H3: Environment protection quality positively influences financial performance.

Economists and environmentalists increasingly recognize the complex relationship between economic growth and environmental sustainability. Early perspectives, such as Meadows et al. (1972) in "The Limits to Growth," suggested that unchecked economic growth will certainly cause environmental harm, calling for strict limits on growth to protect the environment, while in contrast, Dasgupta and Heal (1979) argued that economic growth and environmental protection can be compatible. The Environmental Kuznets Curve (EKC), introduced by Grossman and Krueger (1993), suggests a bell-shaped curve where environmental harm initially worsens with economic growth but improves after a certain income level. This hypothesis implies that as countries develop economically, they eventually adopt cleaner technologies and stricter environmental regulations, thereby improving environmental quality. However, empirical studies have led to mixed results, with some supporting the EKC (Esteve & Tamarit, 2012b) and others finding a linear relationship between economic growth and environmental harm (Fodha & Zaghdoud, 2010).

While economic growth is essential for development, managing its environmental impacts is critical for sustainable progress. The EKC offers a theoretical framework suggesting that economic development can eventually lead to environmental improvement after reaching a certain level of income per capita. Estimated results indicate that the EKC hypothesis holds in South Asia, i.e., the environment first deteriorates with economic development, and then it starts improving: a 1% increase in economic growth worsens the environment by 1.709%, while a further increase in economic growth improves the environment by 0.104% (Zakaria & Bibi, 2019). Therefore, it is proposed that:

H4: Financial performance positively influences environmental protection quality.

2.4 Leverage and FP

In previous research on FP, leverage has often been utilized as an indicator of risk, reflecting a balance between shareholders' returns and risk exposure (Hall & Weiss, 1967; Scott & Pascoe, 1986). The general assumption is that a company with higher levels of debt, known as leverage, poses greater financial risk to its equity holders compared to a company with lower debt levels (Bothwell, Cooley & Hall, 1984). The impact of leverage can vary depending on the cost of debt. If the cost of debt is lower than the company's rate of return, shareholders' profits will be amplified. Conversely, if the rate of return on the company's assets is lower than the cost of debt, leverage can have adverse effects. Consistent with Sarkaria and Shergill (2000), this analysis assumes that companies resort to borrowing capital when they anticipate earning more than the cost of debt, thus suggesting a positive association between leverage and FP.

H5: Leverage positively influences financial performance.

2.5 Research gap

Studies examining the relationship between CSRD and corporate performance have yielded varied results, with some showing a positive correlation, others indicating a negative impact, and some finding no significant relationship. These differences can be attributed to several factors. Firstly, differences in spatial and temporal scopes of research contribute to varying perspectives and practices in information disclosure. Economic, social, cultural, and political contexts influence stakeholders' attention to CSR, thereby affecting its impact on corporate performance.

Secondly, methodological variations in measurement also contribute to different findings. Studies use different variables to measure CSRD and corporate performance, such as accounting-based indicators (e.g., ROA, ROE, ROS) and market-based indicators (e.g., Tobin's Q). The method of measuring CSRD varies from simple sentence counting to sophisticated content analysis or stakeholder surveys. Additionally, differences in control variables further complicate the comparability of study outcomes. In Vietnam, current research predominantly reports positive relationships between CSRD and corporate performance. However, methodological differences exist, particularly in the measurement of CSR disclosure, which varies from sentence counting in reports to more complex content analysis. Similarly, studies often rely on traditional financial indicators like ROA or ROE, neglecting broader performance indicators.

Moreover, the relationship between EPQ, CSRD, and FP in Vietnam remains underexplored. The introduction of the PEPI in 2020 represents a new approach to be incorporated into examining these relationships. In summary, the lack of consensus in empirical findings emphasizes the complexity of the relationship between CSRD and FP. Variations in measurement methods, contextual factors, and the use of different FP indicators contribute to conflicting results. Future studies should consider these factors to enhance understanding and inform effective CSR strategies in diverse economic environments like Vietnam.

3. METHODOLOGY

3.1 Database

A list of 60 listed companies, including VN30 and HNX30, the companies with the largest market capitalization and highest liquidity on the two largest stock exchanges in Vietnam, was collected from the Fiinpro-X website. Based on information published in the audited financial statements and annual reports for 2020, 2021, and 2022, the author synthesized the information. Information compiled includes financial information to calculate indicators from audited financial statements and information related to CSRD for scoring.

3.2 Measurement of variables

- FP

For FP, ROA and ROE are used as an important scale and have been used in many previous studies. The calculation formula is as follows:

$$ROA = \frac{EBIT}{Total\ assets} \quad (1); \qquad ROE = \frac{EBIT}{Total\ equity} \quad (2)$$

(Source: Abor (2005)))

The calculation of Tobin's Q in this study is based on the research of White and colleagues (2002) as well as the formula used in the article by Martin Kyere and Marcel Ausloos (2021):

$$Tobin's\ Q = \frac{Equity\ market\ value + Total\ liabilities}{Total\ Assets} \qquad (3)$$

Focusing on just one aspect: market-based or accounting-based can lead to inequity as noted by McGuire et al (1988). Minghui Yang and Petra Maresova (2020) explained more about that, by pointing out that market-based measurements are vulnerable to macroeconomic changes because they only take into account market conditions. Meanwhile, accounting-based measurements only take an organizational perspective and depend on past financial data. Therefore, in this study, to eliminate bias, the Tobin's Q represents for the market-based measures; and ROA, ROE indexes are used for accounting-based measures.

- CSRD

In this study, measuring the level of CSRD is carried out through the following steps:

Step 1: Build a table of CSRD indicators

The construction of a list of indicators is carried out based on Circular No. 155/TT-BTC, GRI 2016 Standards, research conducted domestically and internationally combined with appropriate adjustments after analyzing annual reports and actual sustainable development reports from listed companies to match the CSRD situation in Vietnam. Detailed list of indicators is in Appendix 1.

The list includes 4 main criteria:

(1) Information about environmental impact: includes 18 indicators on raw materials, energy, water, emissions and waste and environmental protection issues;
(2) Information related to employees: 10 indicators on information about human resources, and labor policies (insurance policies, training, ...);
(3) Information about responsibility to the community: 6 indicators;
(4) Information about responsibility to products and customers: 10 indicators.

Step 2: Scoring CSRD

Based on the research of Jitaree (2015), Elena Platonova (2018), this study uses an unweighted method, scoring "1" for information published and "0" for other information not found.

Step 3: Calculate the level of CSRD

The published points assigned from step 2 will be added together and then calculated based on the following formula:

$$CSRD_j = \frac{\sum x_{ij}}{n_j};$$

In there:

$CSRD_j$: CSRD index of company j;
x_{ij}: Score of index i of company j (= 1 if announced, = 0 if not disclosed);
n_j: Number of information indexes (in this study n = 43).

- Environment protection quality

The results of implementing the PEPI of provinces and central cities are collected from official website of Vietnam Ministry of Natural Resources and Environment, and divided into 3 levels as follows:

Very good level, achieving PEPI results of 70 points, the item will be assigned a score of "3";
Good level, achieving PEPI results of 60 - under 70 points, as "2";
Average level, achieving PEPI results of 50 - under 60 points, as "1".

3.3 Analysis methodology

The study employs regression analysis for panel data using STATA 17. Descriptive statistics are used to assess the research sample objectively. Pearson correlation coefficients measure linear relationships between variables (ranging from -1.0 to +1.0). Three regression models are utilized: Pooled, Fixed Effects (FEM), and Random Effects (REM). Tests include F-test, Hausman test, and Breusch-Pagan LM test to select the appropriate model. Further diagnostics include Variance Inflation Factor (VIF) for multicollinearity, Durbin-Watson test for autocorrelation, and Breusch-Pagan LM test for heteroskedasticity. Feasible Generalized Least Squares (FGLS) corrects model defects for final estimation results.

3.4 Model specification

This study tests the following hypotheses:

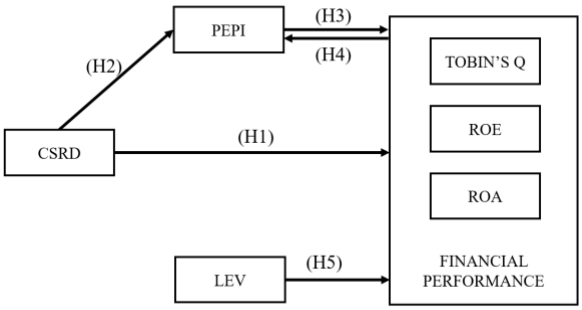

Figure 1. Model specification

4. RESULTS

4.1 Descriptive statistics

The results of the table above show that the average value of the dependent variable ROA, ROE, and Tobin Q are 5,86, 16,46, and 1,49 with a standard deviation of 7,02, 12,59, and 1,36. The highest values of ROA, ROE, and Tobin Q are 48,46, 70,81, 17,11, and the lowest values are -3,78, -14,27, 0,49, respectively, showing diversity in the status of businesses. For the independent variable, the mean ranges from 0,62 to 26,49. In particular, the LEV is the lowest at only about 0,62, while the CSRD is the most prominent at 26,71.

Table 1. Descriptive statistics results

Variables	n	Mean	Std. Dev	Min	Max
ROA	180	5,86	7,02	-3,78	48,46
ROE	180	16,46	12,59	-14,27	70,81
TOBIN Q	180	1,49	1,36	0,49	17,17
CSRD	180	26,71	7,2	8	43
LEV	180	0,62	0,24	0,03	0,95
PEPI	180	1,37	0,48	1	3

(Source: Analysis results from the author's Stata software)

4.2 Pearson correlation coefficient

Based on tables 4.2, 4.3, and 4.4, the author evaluates the correlation between the independent variables and the dependent variable. The correlation between LEV and the dependent variables ROA, ROE, and Tobin Q shows a negative impact, while the remaining variables show a positive impact. Meanwhile, CSRD and PEPI have positive correlation with the dependent variables. The results show that the correlation between independent variables is mostly below the average correlation level from -0.4 to +0.4, with only the relationship between LEV - ROA. Although there are several independent variables that influence each other, all independent variables are retained and used to run the model and subsequent tests.

Table 2. Pearson correlation coefficient matrix – ROA

	CSRD	LEV	PEPI	ROA
CSRD	1.0000			
LEV	0.0604 0.4204	1.0000		
PEPI	0.1990 0.0074	-0.0826 0.2701	1.000	
ROA	0.1217 0.1035	-0.5297 0.0000	0.1474 0.0482	1.0000

Table 3. Pearson correlation coefficient matrix – ROE

	CSRD	LEV	PEPI	ROE
CSRD	1.0000			
LEV	0.0604 0.4204	1.0000		
PEPI	0.1990 0.0074	-0.0826 0.2701	1.000	
ROA	0.1542 0.0387	-0.0330 0.6600	0.1741 0.0194	1.0000

Table 4. Pearson correlation coefficient matrix – Tobin

	CSRD	LEV	PEPI	Tobin
CSRD	1.0000			
LEV	0.0604 0.4204	1.0000		
PEPI	0.1990 0.0074	-0.0826 0.2701	1.000	
Tobin	0.2392 0.0012	-0.2835 0.0001	0.1642 0.0276	1.0000

4.3 Model selection and defect tests

Because p-value > 5% of testing for choosing between three models, it can be seen that the REM model was chosen to perform further tests on the dependent variable ROE. Meanwhile, for Tobin Q and ROA, the model chosen is the FEM model.

4.4 Model for defect tests

The author tested the multicollinearity phenomenon in the model chosen as FEM using the VIF coefficient. The VIF index of all variables is less than 2, not showing signs of multicollinearity. P-values for ROA and ROE are both greater than 5%, so it can be concluded that with the above two models, autocorrelation does not exist. Finally, in the White test, the models have heteroscedasticity because the total p-value < 0,05. Thus, the ROA and ROE models do not suffer from autocorrelation and heteroscedasticity, so the model used will be the REM model. The model with Tobin has a similar defect, so the FGLS model will be used to overcome this defect.

4.5 FGLS model

Due to the existence of series autocorrelation and heteroskedasticity, the author uses the FGLS method to overcome this phenomenon in the FEM and REM models. Thus, the study analyzed and estimated the model using methods: (1) Pooled OLS regression, (2) FEM regression and (3) REM regression, and (4) FGLS regression based on the research model:

Table 5. Summary of model results – ROA

	OLS	**FEM**	**REM**
CSRD	0.134** (2.19)	-0.138 (-0.87)	0.131*** (10.67)
LEV	-16.07*** (-8.66)	-6.268 (-1.24)	-14.33*** (-27.85)
PEPI	0.910 (1.18)	0.00375 (0.00)	0.411** (0.78)
cons	10.88 (5.08)	13.40 (2.37)	11.72*** (4.08)
N R-sq	180 0.320	180 0.017	180

*Level of significance: p < 1% = ***, p < 5% = **, p < 10% = **

Table 6. Summary of model results – ROE

	OLS	**FEM**	**REM**
CSRD	0.219* (1.68)	-0.382 (-1.17)	0.0738 (0.42)
LEV	-1.518 (-0.39)	11.09 (1.07)	1.672 (0.31)
PEPI	3.193* (1.94)	0.578 (0.29)	1.992 (1.22)
cons	7.027 (1.55)	19.01 (1.63)	10.64* Ls (1.75)
N R-sq	180 46	180 26	180

*Level of significance: p < 1% = ***, p < 5% = **, p < 10% = **

Table 7. Summary of model results – Tobin Q

	OLS	**FEM**	**REM**	**FGLS**
CSRD	0.0444 *** (3.36)	0.272 *** (5.70)	0.0549 *** (3.42)	0.0814 *** (4.07)
LEV	-1.666 *** (-4.16)	1.030 (0.68)	-1.589 *** (-3.25)	-1.706 *** (-2.78)
PEPI	0.218 (1.31)	0.383 (1.33)	0.243 (1.30)	0.0973 (0.45)
_cons	1.025 ** (2.22)	-6.955 *** (-4.10)	0.663 (1.18)	0.298 (0.42)
N R - sq	180 0.155	180 0.228	180	180

*Level of significance: p < 1% = ***, p < 5% = **, p < 10% = **

The results of the tables above indicate that CSRD does not impact the ROE of enterprises, but it has a positive effect on ROA and Tobin's Q with regression coefficients of 0.131 and 0.0814, respectively. Meanwhile, LEV has a negative impact on ROA and Tobin's Q with regression coefficients of -14.33 and -1.706, respectively. This is also the largest regression coefficient value among the three independent variables. Regarding PEPI, it has a positive impact on ROA with a coefficient of 0.411, but there is no impact on ROE and Tobin's Q.

Thus, it can be observed that hypotheses H1 and H3 may be accepted, while hypothesis H5 shows contrary results. CSRD has a positive impact on FP, specifically with Tobin's Q index of firms. PEPI has a positive impact on FP, specifically with ROA. Finally, LEV has a negative impact on ROA and Tobin's Q, indicating a negative effect on firms' FP.

4.6 Linear Regression – OLS pooled of CSRD and environment protection quality

To test hypothesis H2, a pooled OLS linear regression model is used in the relationship between CSRD and environment protection quality. It can be seen that the CSRD variable reaches statistical significance (because p-value = 0.0074 < 5%). The adjusted R squared at 0.0342 means that the independent variables explain about 3.42% of the variation in the dependent variable in the model. The regression coefficient of CSRD is 0.01, indicating a positive impact on PEPI, although at a small value.

4.7 Linear Regression - OLS pooled of financial performance and environment protection quality

P-values between ROA - PEPI and ROE - PEPI are both more than 5%, while the p-value between Tobin's Q - PEPI is smaller than 5%. Therefore, the empirical results show that only Tobin's Q has an influence on EPQ with a regression coefficient of 0.028, which means H4 is accepted. The adjusted R squared at 0.0215 means that the independent variables in the model are explaining about 2.15% of the variation in the dependent variable.

5. DISCUSSION, RECOMMENDATIONS & LIMITATIONS

5.1 Discussion

In Vietnam, CSRD has significantly improved, especially since the implementation of Circular No. 155/TT-BTC, reflecting increased transparency. This progress highlights growing attention from businesses, the government, and the public towards sustainability. Global awareness of environmental and social issues, such as events like the COVID-19 pandemic, has pressured companies to enhance their CSR efforts. Additionally, the expanding role of mass media has prompted businesses to focus on public image, with CSRD playing a crucial role in enhancing brand reputation and value. Quantitative analyses reveal that CSRD positively impacts the financial performance of companies listed on the Vietnam stock market (H1). This result is consistent with Saleh et al. (2011), Elena Platonova (2018), and Thanh Hung Nguyen et al. (2021). The same positive effect is seen in the LEV - FP (H5) relationship, which aligns with Bothwell, Cooley & Hall (1984) and Sarkaria and Shergill (2000).

Moreover, a positive correlation exists between CSRD and PEPI (H2), reflecting how CSR initiatives contribute to local environmental goals and public satisfaction with the living environment. The high evaluation of provinces and cities in environmental protection further supports improved FP among local firms, reinforcing the interplay between responsible corporate behavior and economic outcomes. This finding aligns with Mishra and Suar (2010). PEPI's mediating role between CSRD - FP is a complementary mediation when both the direct and indirect effects are significant and positive (H2 & H3). This result is in agreement with Mishra and Suar (2010), Alfadli & Rjou (2020) and Dewi, Soei, & Surjoko (2019). The research also found a positive effect of FP on EPQ (PEPI) (H4), consistent with Zakaria & Bibi (2019).

When noticing a rising risk of environmental pollution in local areas, the government will enforce stricter regulations, requiring businesses to implement demanding environmental protection measures, such as saving electricity and managing waste disposal. Adopting environmental protection practices can increase business expenses and reduce profits, leading to decreased financial performance, especially at the beginning of adoption. However, as businesses implement more environmental protection measures, they are more willing to publish this information (Bai & Yao, 2023), meaning that CSRD increases. When companies engage in CSR activities, the CSRD index rises, along with improvements in local environmental performance and residents' satisfaction with the quality of the local environment, meaning that PEPI also increases. With CSRD, a company can legitimize its behavior and affect the expectations of various stakeholders (Haniffa & Hudaib, 2006). Logically, having a good reputation dramatically enhances a firm's earnings yield gradually (Pham, Do, Doan, Nguyen & Pham, 2021). That means, in the long term, along with the increase in FP and CSRD, EPQ could be improved over time, which aligns with EKC.

It also should be noted that CSRD helps protect the environment and gives companies a competitive advantage. It was also pointed out by Madueno et al. (2016) that in developing countries, CSRD has a significant influence on economic and environmental performance. Therefore, stakeholders associated with organizations play an essential role in implementing CSR efforts to protect the environment (Montiel, 2008).

5.2 Recommendation

CSRD in Vietnam has been increasingly recognized for its positive impact on business performance, influencing profitability and market value while enhancing stakeholder trust and competitive advantage. Theoretical underpinnings and regression analysis affirm that robust CSRD practices signal transparency and legitimacy,

thereby bolstering enterprise efficiency. To foster further improvements, several recommendations are proposed for stakeholders, including the state, businesses, reporting departments, and other stakeholders. Assessing the level of CSRD in listed companies reveals inconsistencies in social responsibility reporting. Regarding the location of CSR information, some companies prepare separate sustainability reports, while others include this content in their annual reports. In both types of reports, the format and order of information vary greatly, and many companies do not totally comply with the standard presentation guidelines outlined in Circular 155/TT-BTC. This leads to limitations, making it difficult for key stakeholders to find and track CSR information, with the risk of missing crucial details.

The government should issue more legal regulations on CSRD. Vietnamese law does not require companies to prepare sustainability reports but only encourages them to do so. Sustainability content is integrated into annual reports and sustainability reports, and there is no legal requirement for those reports to be audited. Making it mandatory for companies to issue annually audited sustainability reports will improve the CSRD index, provide legal motivation for businesses to engage in more CSR activities, and ensure the reports' truthfulness and fairness. Standardizing the quantity, content, scope, and format of the required information creates a solid foundation for comparing and evaluating companies' CSR activities.

Based on audits and standards of sustainability reporting information, Vietnam can develop its own reliable set of evaluation indicators, facilitating better decision-making and promoting transparency. The measurement scales and standards of reputable global organizations also serve as valuable references and support in the development of the country's own measurement scales. For example, Perkins Cheung and Wilson Mak (2010) and Grigoris Giannarakis (2014) use an ESG index provided by Bloomberg online data; or TzuKuan Chiu and Yi-Hsin Wang (2015) based on the 100 Best rankings. Carmelo Reverte (2009) based on the IBEX 35 index of OSCR (Observatory on Corporate Social Responsibility) at the level; or Lin Zheng et al. (2014) based on CSR Rating (RKS) CSR reporting data in China, Alan Murray (2005) used social and environmental disclosure data compiled archived at the Center for Social and Environmental Accounting Research (CSEEAR), top 100 UK companies.

Cooperation with international organizations can provide valuable expertise and support in implementing and disclosing effective CSR. Although many standards in the world guide the implementation of CSR, in Vietnam, this is a new issue, so both the state and enterprises have no experience. Therefore, the state must take advantage of foreign organizations' financial support, knowledge, and experience. This is feasible because social responsibility is exciting to international organizations, while the level of CSR disclosure by listed companies in Vietnam is still low. To improve CSR awareness and its benefits for businesses, it's essential to start with company leaders, as their decisions influence business strategy. Managers must understand that CSR is not just about ethics or charity but also offers competitive advantages. Companies can improve their market position and FP by integrating social activities into business strategies.

Second, long-term CSR policies are needed, tailored to companies' resources and stages of growth. By gradually implementing social responsibility standards, businesses can align with societal expectations and improve financial outcomes, contributing to national development. Third, environmental management and product quality, though seen as costly, actually benefit businesses. Training managers in these areas helps develop sustainable practices that enhance productivity, avoid legal risks, and boost consumer trust, improving reputation and competitiveness. Fourth, companies should reduce financial leverage by cutting debt, increasing income, and optimizing their capital structure. Effective risk management also helps mitigate financial instability caused by debt. Implementing these strategies strengthens business sustainability in the long run.

Enhancing capabilities and awareness of CSR reporting is vital for reporting departments, particularly in smaller enterprises. Providing extensive training to accounting teams and leadership on CSR concepts and legal requirements will ensure accurate and professional reporting. Moreover, expanding human resources dedicated to compiling and disseminating CSR information via diverse platforms will broaden visibility and appeal to global investors. Other stakeholders, including investors, customers, and suppliers, play key roles in fostering CSR. Investors should prioritize understanding CSR disclosures alongside financial data, as these disclosures impact market valuation indicators like Tobin's Q coefficient. Increased stakeholder awareness and interest in CSR will incentivize businesses to enhance their disclosure practices, thereby minimizing environmental and social risks and attracting sustainable investment.

5.3 Limitations

The study identifies several key limitations that impact the comprehensive analysis of CSRD and its effects on FP. Firstly, the subjective nature of measuring CSRD hampers the assessment of disclosure quality. For instance,

discrepancies in how firms report "Materials used by weight or volume" create inconsistencies within industries, complicating evaluation and scoring. The binary scoring system further oversimplifies complex disclosure practices, undermining the granularity needed for accurate assessment. Secondly, the research focuses broadly on the overall impact of CSRD on FP without delving into specific CSR dimensions (e.g., environmental, human resources, community, customers, products), each of which could influence financial outcomes differently. Understanding these specific dimensions and their interactions could provide deeper insights into the relationship between CSR activities and financial success.

Thirdly, the study's reliance on a limited sample of 60 companies from the HN30 and VN30 indexes over three years restricts the generalizability of findings. The small sample size may obscure variations between large corporations and small to medium-sized enterprises (SMEs), which face distinct operational contexts and challenges. Including a broader range of companies across industries and sizes would enhance the study's applicability and validity. Fourthly, the study was constrained by the initial presentation format of the PEPI in 2020, which categorized environmental performance broadly. This limited the ability to explore detailed regional variations and their correlations with CSR disclosures and financial indicators. Although the PEPI was refined in 2021 to provide more granular data, the study did not incorporate these updates, missing opportunities to analyze complex relationships.

5.4 Future research

In the future, the aim is to expand the current analysis by incorporating information from primary sources for multi-sector companies in Vietnam and worldwide, contributing to this topic at the national level and making relevant contributions in this field. Future research directions could address specific aspects of CSRD at the provincial, national, and industrial levels. This could provide a more precise understanding of the factors influencing the adoption of CSRD in different economic and geographical contexts. It may also help identify the most effective CSR activities and reporting practices within each sector. The measurement criteria for FP, including accounting-based, market-based, mixed measures, and EPQ criteria, also need to be expanded.

On the other hand, longitudinal studies could be conducted to track local EPQ and companies' FP over time, before and after implementing sustainability reports, or before and after the government mandates such reports (if applicable). This would provide a deeper understanding of the causal relationship between the level of CSRD, EPQ, and financial outcomes in the long term. Additionally, exploring the barriers and drivers of greater CSRD adoption, the CSRD-EPQ and EPQ-FP relationship could be considered. Understanding the factors that promote or hinder their adoption is crucial for encouraging the broader implementation of sustainable activities within companies. These studies will contribute to expanding knowledge about the relationship between CSRD and FP, as well as promoting sustainable financial strategies on a global scale.

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