“Corporate social responsibility disclosure and firm performance: Evidence from Vietnam”

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CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE AND FIRM PERFORMANCE: EVIDENCE FROM VIETNAM

Abstract

Corporate social responsibility (CSR) is quite a new concept to business and society in Vietnam. Information on CSR reflects a firm's commitment to ethical behavior in its activities and reputation. However, it is questioned whether the information disclosure has any relationship with firm performance. Employing panel regression of about 200 listed firms on the Vietnam Stock Exchange and space-based measurement of CSR disclosure, the study confirms a positive impact of CSR disclosure on firm performance. Firms use CSR disclosures to indirectly improve their performance. Firms that disclose CSR with greater degree of information experience higher marginal profitability. This finding supports stakeholder theory, legitimacy theory, and signaling theory in using CSR disclosure as a tool to improve firms' reputation and transparency, maintain long-term operation, and hence improve financial performance. During the COVID-19 pandemic, firms that engage more in CSR will suffer less from the pandemic than firms that do not. Thus, the study implies a promising CSR picture for corporations in Vietnam. Investors, policy makers and any related authorities can utilize these findings to get more insight into the business through CSR disclosures.

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INTRODUCTION

Corporate social responsibility (CSR) has become increasingly important in business philosophy nowadays. The impact of CSR on the society is undeniable, but to a firm itself is still a puzzle. CSR reflects the relationship between companies and "their social and environment concerns" while doing business (UNIDO). CSR activities address stakeholders concern about the environment, social and governance issues related to firms. Information on these activities provides further evidence on a firm's operations, labor productivity, financial efficiency and the firm's role in their industry (Buallay et al., 2020; Chauvey et al., 2014; Edmans, 2011; Healy & Palepu, 2001; Sharfman & Fernado, 2008; Saka & Oshika, 2014; Xu et al., 2021). Therefore, CSR disclosure, the way CSR information is disseminated, is considered important to the public and different stakeholders (Chan et al., 2014).

A series of theoretical and empirical studies have been carried out to examine the relationship between CSR and a firm's activities. Agency theory explains the impact of CSR disclosure on information transparency and capital market efficiency (Anwar & Malik, 2020). Stakeholder theory specifies the importance of different stakeholders and the need for addressing their needs (Di Bella & Al-Fayoumi, 2016) through CSR activities. Signaling theory supports a positive impact of CSR through lower level of asymmetric information (Lin et al., 2009; Watson et al.,

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2002). Legitimacy theory employs the context that firms are bound by social contracts, thus CSR disclosure is a way to control its economic and political position (Neu et al., 1998). In general, all the theories provide a link between CSR and business: CSR helps to build good reputation, a clear and transparent picture about the firm, which then influences the efficiency and financial performance.

When it comes to empirical studies, mixed results are evidenced (Yoo, 2018; Theodoulidis et al., 2017; Singal, 2014b; Lee et al., 2013). They are usually conducted in Europe and other developed countries. There is a lack of research on CSR disclosure in Vietnam, one of the fastest growing countries in the world. There is a lack of awareness from citizens of CSR and its role (Tran & Jeppesen, 2016).

The study employs dataset of about 200 listed companies on the stock exchange of Vietnam. Data was collected during normal time and during the pandemic. Two questions are addressed: (1) Is there any relationship between CSR information and financial performance of listed firms in Vietnam? (2) Does CSR disclosure matter during the COVID-19 pandemic? Employing the unique and updated dataset extracted from listed companies' annual reports, this study hopes to reiterate the role of CSR to the business in Vietnam where the concept of CSR is quite new and has not been extensively pursued.

The study is divided into the following parts. After the introduction, literature review explains the indirect relationship between CSR disclosure and firm activities and previous findings. Next is the data and methodology part. Empirical results and discussion are then presented. Final part is the conclusions and implications.

1. LITERATURE REVIEW

Corporate social responsibility refers to a philosophy treating stakeholders responsibly and ethically. CSR concept has changed constantly over time, it means different things in different context (Welford et al., 2007) but in general it conveys that companies make money and have the responsibility of treating in an acceptable manner in the society. Companies consider ethical issues, environment protection and relations with community, employees and other related parties. These considerations can be categorized into four main responsibilities using Carroll's Pyramid: economic, legal, ethical and philanthropic (Carroll, 1991). Economic responsibility is the core responsibilities, the foundation of the pyramid. Legal responsibilities, the way companies comply with laws during operation and the ethical responsibilities are the next two layers. Philanthropic responsibilities refer the company's contributions to the better world (Carroll, 1991; Bualley et al., 2020).

By making information on CSR available, firms communicate to the society and stakeholders about their economic actions and its impact. In other words, CSR disclosure is the provision of CSR information, transparent and comprehensive information on the environment and ethical consequences of a firm's activities (Delbard, 2008). CSR disclosure provides image and useful information for decision making (Friedman & Miles, 2001). Firms with good CSR disclosure get better reputation, larger advantages in business transactions, as well as higher loyalty from employees and customers (Herzig & Schaltegger, 2006).

Friedman (1970) and other neo-classical economists assert that CSR does not associate with the ultimate purpose of managers to maximize the shareholder wealth (Friedman, 1970). The disclosure of CSR reflects the additional cost has been spent on social concerns rather than making profits. Executive's priority is to return as much money as possible, any concern related to CSR should be addressed using their personal money (Friedman, 1970).

Agency theory, on the other hand, explains the role of CSR and CSR disclosure. Agency theory is a management and economic theory summarizing the issues between principals and their agents. Social and environment information is a useful factor for agent in calculating debt contractual obligations, benefit for managers, cost of debt (Reverte, 2009), reduces information

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asymmetry and increases capital market efficiency (Anwar & Malik, 2020).

Stakeholder theory expands traditional shareholder theory that considers maximizing shareholder wealth only. Companies need to pay attention not only to shareholders but also to other stakeholder groups: employees, customers, investors, community, natural environment and suppliers. These groups are affected and can affect the achievement of a firm's goal (Freeman, 1984). On the one hand, the responsiveness to these groups could bring opportunities, reduce transaction costs, thus resulting in better performance and higher shareholder wealth (Ruf et al., 2001; Margolis & Walsh, 2003). It allows firms to benefit from the long-term and trustworthy relationship with stakeholders. On the other hand, the negligence of key stakeholders may lead to the supply chain disruptions and labor strikes, create negative impact on firms (Freeman, 1984).

Apart from the agency theory and stakeholder theory, signaling theory is also used to illustrate the influence of CSR disclosure on the business. Signaling theory describes the behavior between two parties when they have different information. A sender (the signaler) chooses how to signal the information, while a receiver chooses how to interpret this news (Spence, 1973). Spence (1973) states that one can use observed signals to infer unobserved characteristics of the firms. By that, management scholars have employed the signaling perspective to explain the adoption of CSR helps inferring something about the productivity or the business situation (Montiel et al., 2012; Turban & Greening, 1996). Firms can employ CSR and CSR disclosure to signal its ability to fulfill the stakeholder's demand, reducing the asymmetric information between firms and outsiders (Ross, 1977; Tasnia et al., 2020), which will result in better reputation, lower cost of capital (Watson et al., 2002). Inadequate level of CSR may signal conflicts among stakeholders and the corporate social irresponsibility leading to lower performance (Lin et al., 2009).

Finally, legitimacy theory legitimizes a firm's behavior to the society because firms are bound by the social contract, even though they can choose to operate within their institutional constraints (Suchman, 1995). Any failure to conform to norms in the society can create threats to the firm's efficiency, resources and survival. Voluntary disclosure constructs good reputation and allows firms to continue its operations (Campell, 2000; Deegan & Samkin, 2009).

Given the above theories and the fact that CSR disclosure reflects CSR practices, the paper expects a positive relationship between CSR disclosure and firm performance. Firms get benefits from being good and give impression of doing good actively (Laskar & Maji, 2016; Platonova et al., 2018). Godfrey et al. (2009) support a positive relationship between CSR and firm performance through extending the stakeholder characteristics in negative circumstances. The authors posit "insurance-like protection" property of CSR. In the context of a negative event, CSR activities mitigate the negative judgments and sanctions from stakeholders because of goodwill arising from these activities (Godfrey, 2005; Fombrun et al., 2000). Albuquerque et al. (2020) takes the recent healthcare pandemic to illustrate the role of CSR in building resilience in the negative event. US firms that are highly associated with environment and society perform relatively better in the first quarter of 2020.

However, it is worth to note that some empirical studies show a negative or insignificant relationship between CSR disclosure and firm performance (Ingram & Frazier, 1980; Freedman & Jaggi, 1982; Friedman, 1970). Mixed results are also theoretically and empirically informed (Yoo, 2018; Theodoulidis et al., 2017; Singal, 2014b; Lee et al., 2013). During the normal time, high-CSR firms are better off than the other firms in terms of financial performance. During the hard time, especially the COVID-19 pandemic, the impact of CSR has been considered but focus mostly is on the US market and just for the first quarter of the year 2020. Thus, this study aims to provide updated evidence on the role of CSR disclosure in Vietnam where the CSR concept is quite new. In this regard, the following hypotheses are proposed:

H1: There is a positive relationship between CSR disclosure and firm performance.

H2: CSR disclosure mitigates the impact of a negative event on firm performance.

2. DATA AND METHODOLOGY

2.1. Data

The study examines the role of CSR disclosure in business performance. Data on firms listed on The Stock Exchange of Vietnam has been collected for five years on the annual basis from 2016 to 2020 for different sectors: Material, Real estate, Consumer staple, Consumer discretionary, Industrials, Utilities, Health care, Technology and Energy. Financial sector is excluded from this study, since it has different firm characteristics and exceptional, high performance recently.

To proxy for CSR disclosure, this study uses the proportion of pages related to CSR in an annual report, namely CSRD. The selection of the variable CSRD is consistent with a number of studies such as Adams et al. (1995), O'Dwyer and Gray (1998), Halabi and Samy (2009), and Selcuk and Kiymaz (2017) using a percentage of pages as a measure of CSR disclosure.

The other quantification technique is the use of dummy variables CSRA that get the value of 1 for years in which the corporation is awarded among the top 100 sustainable businesses announced by the Vietnam Chamber of Commerce and Industry (VCCI); 0 otherwise (http://en.vbcsd.vn) has been considered too. This award employs a series of evaluation criteria in four main areas such as sustainable development, administration, environment and labor. These criteria convey the same meaning with CSR as illustrated in the literature: economic responsibility, legal responsibility, ethical responsibility and philanthropic responsibility.

Apart from CSR information, a firm's specific variables have been employed. They are firm size, financial leverage, sale growth, and liquidity index. To measure the impact of CSR on firm performance, profitability on total assets, ROA, return on equity, ROE, and net profit margin, NPM, has been employed. All these variables are collected from financial statements of a company on a yearly basis, from 2016 to 2020, due to the fact that 2016 is the first year VCCI evaluates the sustainable development of enterprises under the direction of the Government.

2.2. Methodology

This study adopts Nollet et al. (2016) using panel data regression to measure the impact of CSR disclosure on firm performance. One advantage of this model is to allow measuring the impact of time invariant variables on the dependent variable (Hsiao, 2007).

The model is as follows:

$$FP_{it} = \alpha_0 + \beta_1 X_{it} + \beta_2 CSR_{it-1} + \varepsilon_{it}. \qquad (1)$$

FP is the firm performance variable, represented by ROA, ROE and NPM; *X* is a set of explanatory variables: firm size (SIZE), liquidity (LIQUIDITY), financial leverage (LEVARAGE), growth rate (SALESGROWTH) and firm age (FIRMAGE).

Table 1. Explanation of variables

Variable	Definition	Data source
CSRA	Dummy variables get the value of 1 if a firm is in the top 100 sustainable businesses	VCCI website http://en.vbcsd.vn/
CSRD	Number of pages related to CSR and total pages on the annual report	Annual report of companies
YES	Dummy variables get the value of 1 for all years if a firm has at least one year ranked in the top 100, 0 otherwise	VCCI website http://en.vbcsd.vn/
SIZE	Firm size: natural logarithm of total assets	Capital IQ
LIQUIDITY	Current assets/current liabilities	Capital IQ
LEVERAGE	Total liabilities/total assets	Capital IQ
SALESGROWTH	(Current period sales – previous period sales)/ previous period sales	Capital IQ
ROA	Return on assets	Capital IQ
ROE	Return on equity	Capital IQ
NPM	Net profit margin = Net income/total revenue	Capital IQ
FIRMAGE	Logarithm of firm's age	Capital IQ

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Industry effect has been added to the model. CSR can be proxied by CSRD or CSRA as explained above. This variable is added to the model with one lag due to the fact that the annual reports and the VCCI award lists are published at the end of the year.

This study not only measures the impact of CSR disclosure on firm performance, but also evaluates the impact of the pandemic on firm performance, proxied by dummy variable *Y20* equal to zero during 2016–2019 and equal to 1 in 2020. Furthermore, the interaction between this time dummy and the CSR index is added to test whether doing good helps doing better during the pandemic.

With the three proposed hypotheses testing above, the regression models are as follows: Equation (2) for the baseline regression with lagged CSR, equation (3) for the inclusion of time dummy Y20, and equation (4) accounts for both time dummy and the interaction between time dummy and the corporate social responsibility CSR of firms.

$$FP_{it} = \alpha_0 + \beta_{1i} X_{it} + \beta_{21} CSR_{it-1} + \\ + industry\ effect + \varepsilon_{it}. \quad (2)$$

$$FP_{it} = \alpha_0 + \beta_{1i} X_{it} + \beta_{21} CSR_{it-1} + \\ + industry\ effect + \beta_{22} Y2O_{it} + \varepsilon_{it}. \quad (3)$$

$$FP_{it} = \alpha_0 + \beta_{1i} X_{it} + \beta_{21} CSR_{it-1} + \\ + industry\ effect + \beta_{23} Y2O_{it} + \\ + \beta_{24} INTER_{it} + \varepsilon_{it}. \quad (4)$$

In which FP_{it} – firm performance of company i in period t, represented by the three different proxies: ROA, ROE and NPM. X_{it} – firm specific variables including size, liquidity, leverage, growth rate and firm age. CSR_{it-1} – corporate social responsibility disclosure measurement. It can be proxied by CSRD or CSRA. $INTER$ – the interaction term between CSR_{it-1} and $Y2O_{it}$.

3. EMPIRICAL RESULT AND DISCUSSION

The dataset consists of 198 companies after eliminating financial institutions and companies having insufficient data, including large-cap companies, mid-cap companies and small-cap companies.

Table 2. Descriptive statistics for all firms

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	980	.078	.081	–.104	.412
ROE	980	.14	.122	–.247	.542
NPM	980	.169	.229	–.53	1.25
CSRD	980	.103	.081	.011	.469
CSRA	980	.129	.335	0	1
SIZE	980	14.734	1.563	8.525	18.614
LEVERAGE	980	.48	.26	.03	1.853
LIQUIDITY	980	2.339	2.668	.131	17.777
SALEGROWTH	980	.167	.549	–.756	3.366
FIRMAGE	980	2.971	.594	1.386	4.159

Table 2 shows descriptive statistics for all firms in the model, while Tables 3, 4, and 5 show descriptive statistics for mid-cap, large-cap and small-cap companies. Accordingly, the average of ROA and ROE is about 8% and 14%, respectively. The average ROA and ROE of the mid-cap and large-cap firms are quite similar, while that of small firms is slightly lower. When it comes to the information on corporate social responsibility, CSRD and CSRA are two proxies for this measurement. The average CSRD is 0.103, suggesting that on average, there is one page containing CSR information in about 10 pages of an annual report. The mean, max range of this indicator shows the larger degree of CSR disclosure in small firms compared to mid-cap and large-cap companies. As for the CSRA, this dummy variable illustrates the frequency of CSR recognition: whether the company belongs to the top 100 CSR firms in Vietnam. Large firms are associated with higher CSRA, illustrated by the mean of 0.23 of dummy CSRA compared with the approximate 0.14 and 0.07 of medium and small size firms, respectively. Due to the conflict between these two proxies and the large degree of standard deviation of CSRA, CSRD is employed to avoid any bias in the award selection procedure.

Table 3. Descriptive statistics for mid-cap firms

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	503	.08	.073	–.104	.412
ROE	503	.143	.113	–.247	.542
NPM	503	.179	.222	–.53	1.25
CSRD	503	.114	.087	.011	.469
CSRA	503	.143	.351	0	1
SIZE	503	15.011	1.27	8.525	17.787
LEVERAGE	503	.488	.249	.03	1.853
LIQUIDITY	503	2	1.63	.131	16.019
SALEGROWTH	503	.189	.579	–.756	3.366
FIRMAGE	503	2.962	.599	1.386	4.159

Table 4. Descriptive statistics for large-cap firms

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	100	.08	.074	–.104	.374
ROE	100	.175	.133	–.247	.542
NPM	100	.187	.199	–.53	.975
CSRD	100	.089	.073	.011	.333
CSRA	100	.23	.423	0	1
SIZE	100	17.147	1.224	13.111	18.614
LEVERAGE	100	.568	.159	.177	.903
LIQUIDITY	100	1.353	.817	.131	4.446
SALEGROWTH	100	.112	.367	–.756	1.587
FIRMAGE	100	3.178	.636	2.079	4.159

Table 5. Descriptive statistics for small-cap firms

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	362	.076	.093	–.104	.412
ROE	362	.123	.128	–.247	.542
NPM	362	.14	.212	–.53	.839
CSRD	362	.091	.073	.011	.469
CSRA	362	.072	.259	0	1
SIZE	362	13.665	1.04	8.525	16.155
LEVERAGE	362	.425	.248	.03	1.853
LIQUIDITY	362	3.126	3.783	.131	17.777
SALEGROWTH	362	.138	.505	–.756	3.366
FIRMAGE	362	2.927	.571	1.386	4.159

Table 6 shows correlation matrix between variables in the regression. They are all smaller than 0.6, which suggests the validity of the regression.

Each of regressions (2), (3), (4) is conducted for ROA, ROE and NPM, respectively. First, the study conducts the Breusch-Pagan test to decide between pooled model or panel data. The Hausman test is then employed to select a fixed-effect model or a random-effect model. However, due to the inclusion of time-invariant variables in the model (industry effect), the random-effect model is preferred. To account for the autocorrelation and heteroskedasticity, clustered standard errors are employed.

Table 7 shows the estimation results of regression number (2) for the three firm performance measurements. For ROA regression, the coefficient related to L.CSRD is 0.0549, suggesting that the increase of one CSR-page in every 100 pages in an annual report is related to an increase of 0.0549% in ROA and 0.12% in ROE. These positive statistically significant coefficients suggest the benefit of CSR: firms pay greater attention to CSR, achieve better financial performance. This finding coincides with Freeman (1984), Ruf et al. (2001), Watson et al., (2002), and Margolis and Walsh (2003) favoring CSR due to the trustworthy relationship with stakeholders and a lower level of asymmetric information. It coincides with legitimacy-based explorations of CSR disclosure (Patten, 2000; Chauvey, 2020): firms use CSR disclosure as a tool of legitimization.

Table 7. Regression results of equation (2)

Variables	(1)	(2)	(3)
	ROA	ROE	NPM
SIZE	–0.00427	–0.00278	0.0210**
	(0.00340)	(0.00572)	(0.00941)
LEVERAGE	–0.0965***	–0.0150	–0.231**
	(0.0245)	(0.0354)	(0.0939)
LIQUIDITY	0.00182	0.00169	0.00998**
	(0.00112)	(0.00161)	(0.00413)
SALEGROWTH	0.0213***	0.0383***	–0.00445
	(0.00424)	(0.00771)	(0.0150)
FIRMAGE	–0.0131	–0.0146	–0.0528**
	(0.00853)	(0.0134)	(0.0217)
L.CSRD	0.0549**	0.120***	0.0717
	(0.0267)	(0.0437)	(0.0933)
CONSTANT	0.217***	0.224***	–0.0607
	(0.0512)	(0.0803)	(0.132)
INDUSTRY EFFECT	Yes	Yes	Yes
Observations	721	721	721
Number of id	181	181	181

Note: Robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6. Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
(1) ROA	1.000								
(2) ROE	0.871	1.000							
(3) NPM	0.556	0.505	1.000						
(4) SIZE	–0.176	–0.023	0.023	1.000					
(5) LEVERAGE	–0.377	–0.099	–0.231	0.322	1.000				
(6) LIQUIDITY	0.342	0.116	0.257	–0.346	–0.528	1.000			
(7) SALEGROWTH	0.025	0.072	0.050	0.059	0.046	–0.020	1.000		
(8) FIRMAGE	0.067	0.101	–0.070	0.054	0.043	–0.017	–0.075	1.000	
(9) L.CSRD	0.088	0.086	0.094	0.026	–0.099	0.025	–0.003	0.043	1.000

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When accounting for the time dummy *Y20,* the impact of CSR on firm performance has been confirmed with the same pattern: better CSR, better firm performance (Table 8). The magnitude is relatively similar between model (2) and model (3). It means that an increase by one page for every 100 pages of annual reports in one year is associated with about 0.0546 percent, 0.121 percent increase in the firm performance ROA and ROE in the year following. The inclusion of dummy variables *Y20* specifies a negative impact of the pandemic: On average, firm performance during the pandemic year 2020 is lower than during previous years. The range of the coefficient suggests that the pandemic reduces ROA, ROE and NPM by 0.014, 0.03 and 0.03 percent, respectively.

Table 8. Regression results of regression (3)

Variables	(1) ROA	(2) ROE	(3) NPM
SIZE	−0.00262	−0.000318	0.0232**
	(0.00336)	(0.00547)	(0.00940)
LEVERAGE	−0.0981***	−0.0187	−0.235***
	(0.0266)	(0.0316)	(0.0896)
LIQUIDITY	0.00196	0.00176	0.00996**
	(0.00120)	(0.00165)	(0.00411)
SALEGROWTH	0.0192***	0.0338***	−0.00871
	(0.00383)	(0.00702)	(0.0149)
FIRMAGE	−0.00135	0.00239	−0.0379*
	(0.00830)	(0.0131)	(0.0209)
L.CSRD	0.0546**	0.121***	0.0729
	(0.0276)	(0.0451)	(0.0934)
Y20	−0.0140***	−0.0296***	−0.0276**
	(0.00357)	(0.00655)	(0.0118)
CONSTANT	0.163***	0.148*	−0.126
	(0.0502)	(0.0770)	(0.131)
INDUSTRY EFFECT	Yes	Yes	Yes
Observations	721	721	721
Number of id	181	181	181

Note: Robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Apart from the corporate social responsibility CSRD variable, two variables, LEVERAGE and SALEGROWTH, share the same sign of the relationship with the accounting performance. Leverage has a negative relationship with the profitability ratio: highly levered firms have lower performance ratios ROA, ROE and NPM. This result coincided with earlier studies (Titman & Wessels, 1988; Abor, 2005; Arbabiyan & Safari, 2009; Margaritis & Psillaki, 2010; Baker & Martin, 2011). The results confirm pecking order theory claiming the preference of retained earnings over debt financing. Retained earnings are considered as the best choice according to pecking order theory, profitable firms can make use of this fund and need less debt, leading to a negative relationship between leverage and financial performance (Baker & Martin, 2011). The negative result is also supported by agency theory (Jensen & Meckling, 1976), which mentions the conflict between shareholders and managers. High debt level causes inefficient investment, creating a negative effect on performance.

As for SALEGROWTH, a positive sign of the coefficients is consistent with previous studies of Agiomirgianakis et al. (2006), Deitiana (2001), Liu (2010), and Yazdanfar (2013). Firms with high sales growth in the past tend to develop well in the future. Their high profits create better opportunities to expand the business, as well as attract more investors. Growth in sales, therefore, is positively related to firm profitability.

Table 9. Regression results of regression (4)

Variables	(1) ROA	(2) ROE	(3) NPM
SIZE	−0.00269	−0.000393	0.0231**
	(0.00335)	(0.00547)	(0.00939)
LEVERAGE	−0.0977***	−0.0184	−0.235***
	(0.0262)	(0.0318)	(0.0900)
LIQUIDITY	0.00207*	0.00195	0.0102**
	(0.00120)	(0.00166)	(0.00411)
SALEGROWTH	0.0192***	0.0337***	−0.00879
	(0.00380)	(0.00697)	(0.0149)
FIRMAGE	−0.00103	0.00276	−0.0374*
	(0.00832)	(0.0131)	(0.0210)
L.CSRD	0.0272	0.0661	0.00178
	(0.0264)	(0.0443)	(0.105)
Y20	−0.0219***	−0.0460***	−0.0489***
	(0.00526)	(0.0104)	(0.0174)
INTER	0.0755**	0.157***	0.203**
	(0.0295)	(0.0580)	(0.103)
CONSTANT	0.165***	0.152**	−0.121
	(0.0500)	(0.0767)	(0.131)
Industry effect	Yes	Yes	Yes
Observations	721	721	721
Number of id	181	181	181

Note: Robust standard errors in parentheses, *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

When accounting for the role of CSR on firm performance during the pandemic, the interaction term *INTER* has been included in the model. As for a firm's fundamental variables, SALEGROWTH and LEVERAGE keep quite the same magnitude and direction of impact. The coefficient related to *Y20* suggests a negative impact of the pandemic on the operating performance of companies. As for the interaction part, a positive coefficient associated with INTER, 0.0755 for example, suggests that for one CSR page increase in every 100 pages of an annual report, firm performance has been improved by about 0.0755% during the pandemic. A negative impact of the pandemic therefore has been less severe for relatively high socially responsible firms. This indicates the effect of CSR and corporate legitimacy during the COVID-19 pandemic. CSR disclosure is effective in supporting a firm's reputation and image in time of crisis, which, in turn, mitigates the impact of the event on the firm's performance (Giacomini et al., 2021).

CONCLUSION

The study aims to provide updated evidence on the impact of corporate social responsibility on firm performance in Vietnam, especially during the COVID-19 pandemic. Random-effect regressions have been applied in the sample of about 200 listed firms. The coefficients related to the CSR variable are positive suggesting that CSR disclosure does help firms to improve their financial performance. The coefficients related to the impact of CSR disclosure during COVID-19 (INTER) are positive, documenting that CSR mitigates the severe impacts of the pandemic in relatively high socially responsible firms.

Based on the obtained results, there are some implications for managers, investors and policy makers. First, managers should consider CSR not just as charity but also as a tool to improve firm performance. Second, investors should consider CSR as a value-adding activity for firms when they consider investments. Last but not least, the government and related authorities should develop national strategies for promoting CSR benefit, CSR content and support firms in meeting CSR requirements.

Future venues of research could follow from this study. Analysis can be extended to content analysis rather than space-based analysis. Multi-indicators of CSR disclosure can be used to evaluate the normality of CSR and the most representative measurement. Future studies can include only pollutant industries such as mining, steal, oil, and gas. Board characteristics and gender composition can be considered to examine the determinants of CSR and CSR disclosure.

AUTHOR CONTRIBUTIONS

Conceptualization: Ngoc Mai Tran, Manh Ha Tran.
Data curation: Ngoc Mai Tran.
Formal analysis: Manh Ha Tran.
Investigation: Ngoc Mai Tran.
Methodology: Ngoc Mai Tran, Manh Ha Tran.
Project administration: Manh Ha Tran.
Resources: Ngoc Mai Tran, Manh Ha Tran.
Software: Ngoc Mai Tran, Manh Ha Tran.
Supervision: Ngoc Mai Tran, Manh Ha Tran.
Validation: Ngoc Mai Tran, Manh Ha Tran.
Visualization: Ngoc Mai Tran.
Writing – original draft: Ngoc Mai Tran.
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