

Effect of Corporate Social Responsibility Disclosure on Financial Performance

Hang Thi Thuy Ta

University of Labor and Social Affairs, Vietnam

Ngoc Thi Bui (Corresponding author)

University of Labor and Social Affairs, Vietnam

Room No. 44, A8, 120 Hoang Quoc Viet Street, Cau Giay District, Hanoi, Vietnam

E-mail: buithingoc.ldxh@gmail.com

Received: Jan. 3, 2018 Accepted: Feb. 22, 2018 Published: June 1, 2018

doi:10.5296/ajfa.v10i1.12592 URL: <https://doi.org/10.5296/ajfa.v10i1.12592>

Abstract

Corporate social responsibility is the commitment by business to contribute to sustainable development through the balance of three factors which are economic, social and environmental factor. Enterprises carry out corporate social responsibility through specific activities such as controlling environmental pollution, natural resource conservation, energy conservation, employment safety, especially supporting and developing community. Corporate social responsibility disclosure plays an important role in implementation of corporate social responsibility, promotion of business's image and creation of good impression to stakeholders. This study was conducted using a two-step Generalized Method of Moment (GMM) technique with instrumental variables for balanced panel data through the annual reports and sustainable development reports of 43 enterprises listed on the Vietnam stock market from 2006 to 2016 (473 observations). The results showed that the level of corporate social responsibility disclosure has a positive effect on return on assets. This study has important implications for enterprises in terms of investing activities and corporate social responsibility disclosure.

Keywords: Corporate social responsibility disclosure, financial effectiveness, return on assets (ROA)

1. Introduction

Sustainable development is the trend of the times and businesses cannot afford to ignore this trend. The practice and disclosure of corporate social responsibility information is considered a tool for businesses to communicate the activities of sustainable development of society. Gray et al. (1995) provided that corporate social responsibility disclosure is the process of providing information about corporate activities affecting environment and society. Enterprises are accountable for such information to related parties, apart from financial information publicized to shareholders. Non-governmental organizations and nations have introduced standards and regulations to guide firms to establish and display corporate social responsibility information, including the United Nations Global Compact (UNGC), International Finance Corporation (IFC), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), The Sustainability Accounting Standards Board (SASB). Depending on conditions, legal regulations and needs, enterprises can disclose corporate social responsibility information in accordance with standard or legal requirements. According to the above standards, corporate social responsibility may include following key information:

Environment: Environmental policies or environmental concerns of enterprises, environmental pollution control in business operations, conservation of natural resources, prevention and remedies for environmental consequences of the manufacturing process or natural resources, information about emissions, discharge of waste water, waste treatment.

Energy: Information about a company's energy policies, energy conservation in the course of business operations, utilization of waste materials for energy production, research towards energy savings by reprocessing products.

Employment: Information regarding regulations and standards on labor safety, working conditions, health care for workers, training, financial support for housing, information about the daily allowance for employees, maternity leaves, holidays, information regarding policies for seasonal/ contractual employees or plan of hiring seasonal/ contractual employees, provision of information regarding recruitment/ jobs for women or ethnic minorities or special interest groups.

Supporting and developing community: Information about donations with money, artifacts or services of enterprises to support community activities, events, arts, sports, funding for health projects and providing information related to public health.

Products: Researching and developing products to improve product quality and to meet safety standards.

With increasing community interest in corporate social responsibility, many studies in the world have been conducted to verify the impact of corporate social responsibility disclosure to business efficiency such as Mahoney & Roberts (2007), Makni et al. (2009), Saleh et al. (2011), Tjia & Setiawati (2012), Vurro & Perrini (2011), Lu et al. (2015), Strouhal et al. (2015), Jitaree (2015). Impacts are expressed in a variety of indicators, such as the impact on a firm's share price, return on assets (ROA), return on equity (ROE), market value compared to book value Tobin'Q, revenues of enterprises. Although these studies had different results, the majority

concluded that corporate social responsibility disclosure has a positive impact on business efficiency. Several studies had reported negative results Makni et al (2009) and in some cases there were not statistically significant Strouhal et al. (2015), Khlif et al. (2015), Tjia & Setiawati (2012). In Vietnam, some studies have investigated the current state and benefits of corporate social responsibility disclosure. The results showed that Corporate Social Responsibility disclosure increases the value of enterprises Tobin'Q Nguyen et al. (2015), Nguyen & Trinh (2016), increases the return on assets Ho & Ho (2017). However, research time was short and these studies used panel data with the Fixed Effects Model (FEM) and the Random Effects Model (REM) for the survey. Using these estimation methods will not be reliable if endogenous phenomena exists in the model. To overcome this situation, it is necessary to use other estimation methods and extend research time. It is critical to ensure reliability of the study on the effect of corporate social responsibility disclosure on corporate financial performance. For this purpose, in this study the authors used a two-step Generalized method of moment (GMM) for balanced panel data with 473 observations of 43 firms over a period of 11 years from 2006 to 2016.

2. Theoretical foundations and hypothesis

From an academic point of view, many researchers have investigated the theoretical basis to explain the relationship between practice and disclosure of corporate social responsibility and financial performance of firms in different contexts. In this study, the authors used two theories to explain the relationship between corporate social responsibility disclosure and corporate financial performance.

Stakeholder theory

Edward (1984) was the first to propose the stakeholder theory. He supposed that the goal of a business is to meet the needs of stakeholders who may influence or be influenced by the attainment of their goals. If this is done a firm's profits will be generated. Based on the stakeholder theory in strategic management, Ullmann (1985) presented 8 scenarios to explain the differences in the results of the relationship between Corporate social responsibility disclosure and corporate financial performance. According to him, the relationship between corporate social responsibility disclosure and corporate financial performance depends on other factors such as the power of stakeholders and management strategies. He provided that corporate financial performance has a positive impact on social efficiency and corporate social responsibility disclosure.

Legitimacy theory

Legitimacy theory is derived from the concept of organizational legitimacy, Dowling & Pfeffer (1975) defined: "An entity can exist when its value system is congruent with the value system of the larger social system. When there is a real or potential disparity between two value systems, the legitimacy of that entity is threatened".

Developing legitimacy theory, Deegan (2002) supposed that enterprises and society have a continuous and interconnected relationship. For example, companies buy human resources, raw materials from society, conversely, companies provide products and services for society,

discharge waste from the production process of enterprises to environment and society has to pay for the consequences. Enterprises try to control their legitimate existence to ensure capital flow, labor and customers, while avoiding the management activities of the government harming the business and boycotting products or other disruptive actions of competitors.

Stakeholder theory and legitimacy theory indicate that practice and disclosure of corporate social responsibility will lead to better financial performance. Conversely, in the case of good corporate financial performance, corporate social responsibility disclosure is also greater. Based on these theoretical foundations, the author constructed the following hypothesis:

H1: There is a positive relationship between social responsibility disclosure and financial performance.

3. Methodology

3.1. Data collection

Samples selected by the authors were non-financial companies listed on the stock market from 2006 to 2016. The reason why the author chose this period is because 2006 Vietnamese stock market boom with the appearance of the Hanoi Securities Trading Center in March 2005. The number of listed companies increased sharply. As of 31 December 2006, there were 193 companies listed on both exchanges (106 companies listed on Hochiminh Stock Exchange and 87 companies listed on Hanoi Stock Exchange). Financial and banking organizations were not chosen because information provided by these companies is significantly different from other types of enterprises. The last sample was 43 listed companies on the Vietnam stock market randomly selected by the elimination of financial firms, creditors, and those were not listed companies during the research period as well as companies which the authors could not collect annual reports or sustainable development reports. Thus, 43 enterprises were surveyed for 11 years with the balanced panel data with a total observations of $43 \times 11 = 473$. Shown in table 1.

Table 1. List of companies surveyed

	Code	Company's name
1	AGF	An Giang Fisheries
2	BHS	Bien Hoa Sugar
3	BMC	Binh Dinh Minerals
4	BMP	Binh Minh Plastics
5	CAN	Halong Canfoco
6	CII	Ho Chi Minh Infrastructure
7	CLC	Cat Loi Tobacco
8	CYC	Chang Yih Ceramic
9	DHA	Hoa An Stones and Materials
10	DHG	Hau Giang Pharmaceutical
11	DMC	DOMESCO Medical
12	DTT	Do Thanh Technology Corp.
13	FPT	FPT Group

14	GIL	Binh Thanh Im-export
15	GMD	Gemadept
16	HTV	Ha Tien Transport
17	IMP	Imexpharm Pharmaceutical
18	ITA	Tan Tao Industrial Park
19	KDC	Kinh Do Corporation
20	KHA	Khanh Hoi Investment and Services
21	KHP	Khanh Hoa Power
22	MCP	My Chau Printing and Packaging
23	PGC	Petrolimex Gas
24	PJT	Petrolimex Tanker
25	PNC	Phuong Nam Cultural
26	PPC	Pha Lai Thermal Power
27	REE	Refrigeration Electrical Engineering
28	SFC	Saigon Fuel Co.
29	SFI	Sea and Air Freight International
30	SGH	Saigon Hotel Corp.
31	SJD	Can Don Hydro Power
32	SMC	SMC Trading and Invm't
33	SSC	Southern Seed JSC
34	TAC	Tuong An Vegetable Oil
35	TDH	Thu Duc House
36	TNA	Thien Nam Trading and Exim
37	TS4	Seafood No 4
38	TYA	Taya (Vietnam) electric wire & cable
39	VGP	Vegetexco Port
40	VIP	Viet Nam Petroleum Transport
41	VIS	Vietnam - Italy Steel
42	VNM	Vinamilk
43	VTC	VTC Telecom

3.2. Determining and measuring variables

3.2.1. Corporate social responsibility disclosure variable

In this study, the author measured corporate social responsibility disclosure according to content analysis method based on annual reports and sustainable development reports of companies. The analyzing process was based on the list of indicators categorized in 4 groups shown in table2: information about environment (10 indicators), information about employment (12 indicators), information about supporting and developing community (8 indicators) and information about the products (5 indicators). The indicators of information were inherited from studies of Gunsanan et al. (2009), Jitaree (2015), Nguyen (2016) and according to circular 155/2015 issued on 06/10/2015 by Vietnamese Ministry of Finance on

guidelines on information disclosure on the stock market.

Table 2. List of indicators of information about corporate social responsibility

Symbol	Indicators (observed variables)
ENV	I. Information about environment responsibility
ENV 1	The enterprise complies with the law and regulations on prevention of environmental pollution (including number of times and amount of fine for violation of laws and regulations on environment)
ENV 2	Information about pollution control activities in the course of business / The report indicates that the polluting activities of enterprise has been and will be reduced.
ENV 3	Information about conservation of natural resources such as the use of recycled materials, recycled glass, metal, oil, water, recycled paper
ENV 4	Information about preventing and dealing with environmental consequences due to production process or exploitation of natural resources, such as soil improvement or reforestation.
ENV 5	Information about strategies and supporting activities of enterprises towards environmental protection / improving environment
ENV 6	Information about environmentally friendly design of infrastructure
ENV 7	Report information on emissions
ENV 8	Report information on discharging waste water
ENV 9	Report information on solid waste disposal
ENV 10	Report on information on environmental protection awards
EMP	II. Information on responsibilities to employees
EMP 1	Information about enterprises complying with safety standards and working conditions for employees
EMP 2	Information about health care for employees
EMP 3	Information about training, financial support of training courses for employees
EMP 4	Information about recreational activities for employees
EMP 5	Information about homestay accommodation or plan of homeownership, food and other benefits for employees
EMP 6	Information on compensation for employees, maternity leave, holidays
EMP 7	Information about salaries, bonuses and other benefits for employees

EMP 8	Information about employee stock purchase plan
EMP 9	Information about qualifications and experiences of employees
EMP 10	Information on job stability of current and future employees
EMP 11	Information about the relationship of enterprise with the union or workers through the movement of culture, sports, emulation of production
EMP 12	Information about discrimination at workplace and jobs
COM	III. Information about responsibilities with community
COM 1	Information about charitable activities with money, products / services or corporate employees participating in these activities, community events such as sports, culture and arts.
COM 2	Information about employment opportunities for students, special people such as ethnic minorities, children of war invalids, disabled people, victims of Agent Orange and those in difficult circumstances.
COM 3	Information about sponsoring projects of community health and providing health information to the Community / Supporting medical research
COM 4	Information about establishing education funds or scholarships or educational conferences
COM 5	Information about supporting victims of natural disasters, family under preferential treatment policy, victims of Agent Orange, contributions to charity, sponsoring disabled children and orphan
COM 6	Information about supporting the development of industries, economic projects bringing benefits to the local
COM 7	Creating jobs and developing skills for local people
COM 8	Contribution to building electricity infrastructure, roads, schools and stations for localities
CUS	IV. Information about responsibilities to customers
CUS 1	Information about product safety of enterprise
CUS 2	Information about product quality
CUS 3	Information about production and product development
CUS 4	Commitment to quality, product safety and supporting when having trouble using the products
CUS 5	Building customer relationships, collecting contributions and resolving customer complaints

Steps of the process: Corporate social responsibility is a complex field and there are many guiding standards, selecting of standards depends on economic conditions, laws and environment of each country. Therefore, in order to ensure the objectivity of the standard selection process, data collection and survey were conducted by two steps. Step 1 was conducting a survey of the 57 largest listed companies on the Vietnamese stock market, the survey year in 2015. The purpose of this step was to adjust and select the appropriate indicators with conditions and characteristics of Vietnam. Step 2 was based on the indicators of information selected and corrected through step 1, the authors conducted the survey on 43 listed companies with 473 observations. This approach has been carried out by several authors, such as Branco & Rodrigues (2006), Gunawan et al (2009), Saleh et al. (2011), Tjia & Setiawati (2012), Bayoud et al (2012), Jitaree).

Technical process: First the authors read reports and find information related to the indicators in the evaluation list. If an enterprise did not disclose the i^{th} indicator, the label is “0”, if the indicator was disclosed with general presentation or only with quantitative presentation without specific explanation, the label is “1”, if the indicator was disclosed with specific information about activities k , the label is “2”. After determining the score for each indicator for each enterprise in each year, the level of corporate social responsibility disclosure (CSR D) under the average number specified is determined as follows:

$$\text{CSR D}_j = \sum_i^n X_{ij}$$

35

In which:

CSR D_j : indicator of information disclosure of j^{th} enterprise

$X_{ij} = 0$ if i^{th} indicator of information is not disclosed in enterprise j

$X_{ij} = 1$ if i^{th} indicator of information disclosed in enterprise j is general information or quantitative information without specific explanation

$X_{ij} = 2$ if i^{th} indicator of information disclosed in enterprise j is detailed information about specific activities

3.2.2. Financial performance variable

Studies of authors such as Mahoney & Roberts (2007), Makni et al. (2009), Platonova et al. (2016), Cheung & Mak (2010), Jitaree (2015), Mohammed et al. (2016) used ROA as a measure of financial performance and verify the relationship between corporate social responsibility disclosure and corporate financial performance. Inheriting this research model, the author selected ROA as a measure of financial performance. ROA is determined by the following formula:

$$\text{ROA} = \frac{\text{Profit Before Tax}}{\text{Average Total Assets}}$$

The reason why profit before taxes was used is because the corporate income tax rate in

Vietnam during the period 2006 - 2016 varied from 28%, 25%, 22% and 20%. Thus, to eliminate the effect of the corporate income tax rate on ROA, the author used profit before tax for analysis.

3.2.3. Controlling variables

Following variables are controlling variables of the model: corporate size, leverage (debts/equity), foreign ownership, government ownership, revenue growth. Those are variables used by many authors when analyzing corporate profits. They are important factors influencing the estimation of variables affecting corporate financial performance.

Corporate size (SIZE). Bayoud et al. (2012) argue that large-scale enterprises are likely to generate more profits than smaller ones. Therefore, the size of enterprises is considered as an important factor affecting the relationship between corporate social responsibility disclosure and corporate financial performance.

Leverage (debts/equity) (LEV). Financial leverage is used by research as a factor affecting corporate financial performance. Nguyen & Dang (2017) argued that when a company is dominated by creditors, its financial performance may be affected. Therefore, financial leverage is necessary in the model to test the correlation between corporate social responsibility disclosure and corporate financial performance.

Foreign ownership (FRO). Foreign ownership is an important variable affecting corporate financial performance (Zeitun, 2014). Zeitun assumed that foreign shareholders coming from developed countries with higher profit orientation, they have expertises, experiences and management skills which help boosting corporate performance. Similarly, a study of Nguyen & Dang (2017) also concluded a positive relationship between foreign ownership and corporate financial performance

Government ownership (GRO). According to Doan & Nguyen (2017) state-owned enterprises tend to have less incentive to maximize profits because their profitability and investment are guaranteed by the government. Therefore, GRO variable is necessary to consider the relationship between corporate social responsibility disclosure and corporate financial performance.

Revenue growth (GRW). In a study of Zeitun's (2014) on capital structure and corporate performance of Jordanian countries demonstrated that revenue growth has a positive effect on corporate performance. The author explained that corporates with high growth rate will have better results because they can have more investment opportunities and more profits.

3.3. Data analysis

To examine whether next year's financial performance has a positive relationship with corporate social responsibility disclosure of previous year, the author used the regression equation of dependent variable which is ROA and independent variable which is the level of CSR and controlling variables as follows:

$$ROA_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \beta_4 FRO_{i,t} + \beta_5 GRO_{i,t} + \beta_6 GRW_{i,t} + u_{i,t}$$

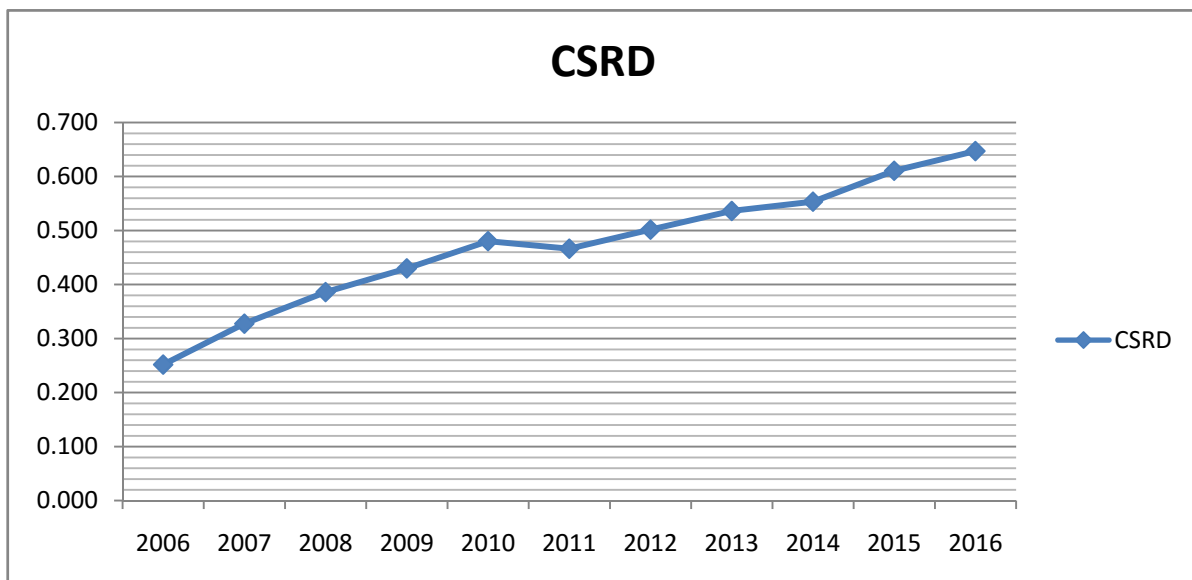
Method of data analysis used in this study is GMM. The reason why the author chose GMM

is that according to stakeholder theory and legitimacy theory, there is a two-way relationship between social responsibility disclosure and corporate financial performance. This statement was also demonstrated in the study of Ullmann (1985), Jitaree (2015). This results in an endogenous relationship between CSR and ROA. Endogenous phenomena makes estimation unstable. To overcome this phenomenon, the author used GMM developed by Arellano & Bover (1995) and Blundell & Bond (1998).

4. Results

4.1. Descriptive statistics

According to survey on the level of corporate social responsibility disclosure of 43 listed companies during the period from 2006 to 2016, the average level of corporate social responsibility disclosure has increased steadily from 2006 to 2016. This indicates that more corporate concern about corporate social responsibility disclosure as well as focus on long-term development goals and bring benefits to the community.

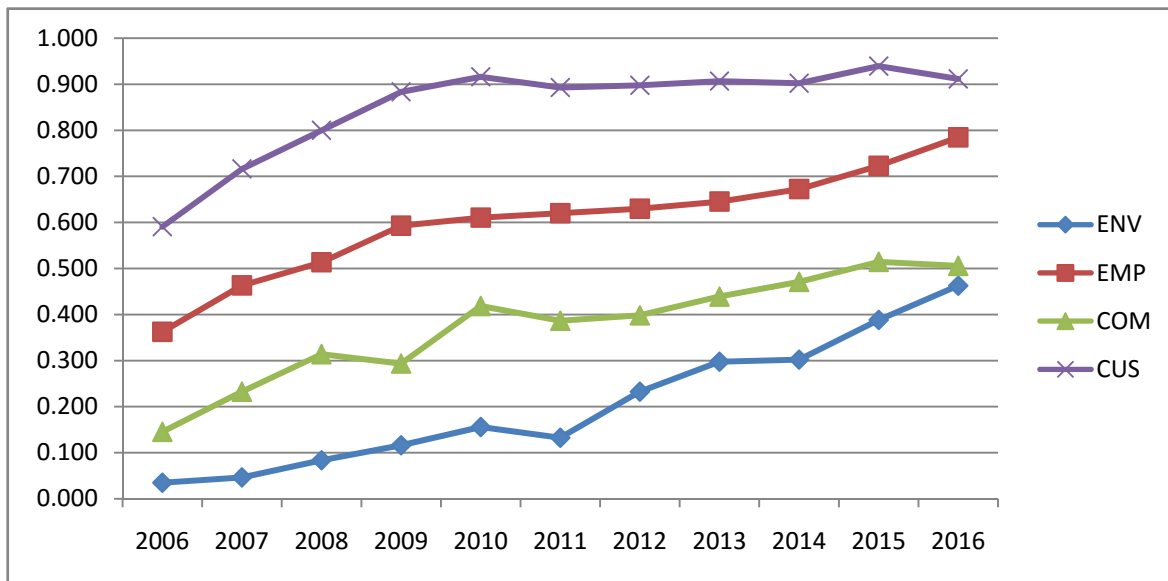


Source: created by authors

Figure 1. Average level of CSR D of enterprises during the period from 2006 -2016

Detailed information on average level of corporate social responsibility disclosure on environmental responsibility (ENV), employment responsibility (EMP), community responsibility (COM), responsibilities to customers (CUS) showed that the level of environmental information disclosure is the lowest. This means that Vietnamese enterprises do not pay much attention to environmental responsibility. The activities of waste discharge, pollution control in business process, strategies to support environmental protection activities have not received enough care from enterprises. This is the difference between Vietnam and developed countries in Europe, where enterprises focus on information disclosure on environment, energy, recycling, pollution due to pressure from customers and investors on the environmental protection actions of enterprises. Information about responsibilities to customers announced by most enterprises includes information on product quality, product safety, production process, product commitment. Enterprises want to use this information to

promote their products to customers and also to show corporate responsibility towards products they provide.



Source: created by authors

Figure 2. Level of information disclosure according to indicators of enterprises during the period from 2006 -2016

4.2. Correlation analysis

Table 3. Correlation coefficient among variables in the model

Variables	ROA	CSRD	FRO	GRO	SIZE	LEV	GWR
ROA	1						
CSRD	0.4385	1					
FRO	0.3525	0.488	1				
GRO	0.1005	-0.0941	-0.1842	1			
SIZE	0.0202	0.46	0.3797	-0.1636	1		
LEV	-0.4182	-0.2684	-0.2768	-0.1024	0.18	1	
GWR	0.1569	0.0148	0.0716	-0.0352	0.0344	-0.0414	1

Source: calculation of authors based on Stata 12

Table 3 shows that corporate social responsibility disclosure in previous year has a relatively high correlation with ROA. This indicates that corporates with more information disclosure

have better asset usage efficiency. In addition, table 2 also shows that return on assets is positively correlated with firm size, the rate of government ownership, the rate of foreign ownership and growth rate but it is negatively correlated with the ratio of debt on equity. This proves that high margin firms are large-scale enterprises with a high proportion of government ownership, high proportion of foreign ownership, high revenue growth rates and low debt-to-equity ratio.

4.3. Regression analysis

Detecting multi-collinearity

Authors used command `if` with model OLS and command `vif`, uncentered with model REM and FEM. Tables 4 showed that in the model REM and FEM variables SIZE have coefficient $VIF > 10$, with presence of multi-collinearity. SIZE variable will be discarded from the model.

Table 4. Detecting multi-collinearity of variables in the model

Variables	Model OLS		Model REM		Model FEM	
	VIF	1/VIF	VIF	1/VIF	VIF	1/VIF
SIZE	1.58	0.611736	10.77	0.092864	10.77	0.092864
CSR	1.63	0.631599	3.8	0.263049	3.8	0.263049
FRO	1.52	0.658508	3.5	0.285404	3.5	0.285404
LEV	1.35	0.738728	3.11	0.322046	3.11	0.322046
GRO	1.07	0.937104	2.59	0.386327	2.59	0.386327
GWR	1.01	0.992073	1.16	0.86241	1.16	0.86241
Mean VIF	1.36		4.15		4.15	

Source: Calculation of authors based on Stata 12

Auto-correlation test

Command `xt serial` was used to implement Wooldridge test with hypothesis H_0 : there is no auto-correlation. The result showed $Prob > F = 0.5122$, there is no evidence to reject H_0 . There is no auto-correlation in the model.

Heteroskedasticity test

Tác giả dùng kiểm định Breusch-Pagan test was used with hypothesis H_0 : there is no heteroskedasticity in the model OLS. Breusch and Pagan Lagrangian test with hypothesis H_0 : there is c in the model REM. Modified Wald test with hypothesis H_0 : there is no heteroskedasticity in the model FEM. The results in table 5 showed that heteroskedasticity exists in all models.

Table 5. Summary of heteroskedasticity tests

Model	Test	Chi-square statistic	Prob > chi-square	Test result
OLS	Breusch-Pagan	83.40	0.0000	There is heteroskedasticity
REM	Breusch and Pagan Lagrangian	140.87	0.0000	There is eteroskedasticity
FEM	Modified Wald	11435.69	0.0000	There is eteroskedasticity

Source: Calculation of authors based on Stata 12

Generalized Method of Moment(GMM)

As discussed above, there exists an endogenous relationship between CSRD and ROA. Endogenous phenomena makes estimation unstable. To overcome this phenomenon, regression method GMM was used which was developed by Arellano & Bover (1995) and Blundell & Bond (1998) to solve this problem. In addition, GMM can solve problems of heteroskedasticity and auto-correlation. In GMM, it is necessary to distinguish between instrumented variable and instrument variable. If the variables are predicted to be endogenous, then they are classified as instrumented variables according to GMM and then only the last values of these variables are appropriate tools. If the explanatory variables are defined as exogenous extrinsic variables, they are grouped into the instrument variable group (iv_instrument variable). The rationale for the GMM test is shown in the Hansen test results to determine whether the equation has used enough variables to measure the difference. The hypothesis in Hansen's test is as follows: H_0 is an exogenous variable, meaning that it is not correlated with the error of the model. The p value of Hansen statistic > 0.05 is not sufficient basis to reject H_0 means that the tool is exogenous. Then the model with instrument variables are appropriate. In addition, if Hansen test is strong, the number of instruments must be less than or equal to number of groups. Arellano Bond test about the auto-correlation with hypothesis H_0 : there is no auto-correlation. In Arellano-Bond test AR (2) if $Pr > 0.05$, we can include that there is no auto-correlation.

In order to implement GMM, authors used command: Xtabond2 with endogenous variable CSRD and selecting two step to make two-step estimation. The results are shown in the table 6 as follows:

Table 6. Regression result of GMM

Variables	Coefficient β	P-value
ROA (-1)	0.618209	0
CSRD	0.033219	0
FRO	-0.00273	0.583
GRO	0.026129	0
LEV	-0.0134	0
GWR	0.050793	0
_cons	0.02455	0
Number of obs= 430 Number of groups =43 Number of instruments = 31	Sargan test of overid. restrictions: $\chi^2(34)=49.82$ Prob > $\chi^2 =0.039$ Hansen test of overid. restrictions: $\chi^2(34)=38.44$ Prob > $\chi^2 =0.275$ Arellano-Bond test for AR(2) in first differences: $z =-0.18$ Pr > $z =0.859$	

Source: Calculation of authors based on Stata 12

The results of GMM in table 6 are appropriate. Table 6 shows that there is no auto-correlation as Arellano-Bond test AR (2) Pr > z which is greater than α (5%). Furthermore, Hansen test shows that there is no endogenous phenomenon in the model as Prob > χ^2 of Hansen test which is greater than α (5%). Besides, the number of instrument variables = 41 < the number of groups of variables = 43 which ensures that Hansen test is strong.

Regression results in table 6 show that the level of influence of CSRD on ROA was 0.033% with a significance of 1%. This result was also found in study of Jitaree (2015) and Ho & Yekini (2014). The results of this study also showed that the debt-to-equity ratio negatively affects ROA with 0.013% with significance of 1%. It can be seen that in Vietnam, firms with high debt-to-equity ratios are often low-performing firms, therefore, when firms borrowing with high interests, their financial performance will be reduced. The results also showed that the proportion of government ownership has a positive influence on the efficiency of asset utilization with the coefficient $\beta = 0.026$ at 1% significance. This shows that enterprises with government ownership in Vietnam have made great efforts in production process and had good results. Government investment in corporates has contributed corporate financial performance. In addition, regression result in Table 6 also shows that corporate performance depends on revenue growth. If the growth rate of enterprise revenue increased by 1%, the asset usage efficiency used by enterprises increased by 0.05% with a significance of 1%.

5. Conclusion

The regression results show that coefficient $\beta = 0.032$ and sig = 0.000 in Table 6 indicating that impact of CSRD of the previous year on ROA was positive and if the average score of CSRD increases by 1 point, ROA would increase by 0.032%. Although the level of influence is weak, this shows a positive sign of practicing and disclosing of corporate social responsibility in terms of environmental responsibility, concern for workers' lives, investment in training and development of community, and specially, information on product quality has contributed to improving corporate performance. Many companies are afraid of costs and resources they must

pay to implement and report corporate social responsibility, but the results of this research showed that the resources of enterprises will be offset because it brings benefits to enterprises such as improving the capacity of employees, attracting good workers, creating business opportunities for enterprises in new markets, creating prestigious image to the community, improving revenue, increasing brand value.

As a result, corporate financial performance depends on corporate social responsibility disclosure. Although the level of influence is weak, it also shows that if an enterprise has an investment strategy for implementing and disclosing corporate social responsibility, it can contribute a small part to the development of enterprises, especially in the new era of investment in sustainable development. However, the survey results also show that the level of corporate social responsibility disclosure of Vietnamese enterprises is low. For that reason, increasing of practicing and disclosing corporate and public disclosure of corporate social responsibility is imperative. Here are some solutions:

For the Vietnamese Government, it is necessary to develop a legal framework for the practice and disclosure of corporate social responsibility in Vietnamese legal system, and consider corporate social responsibility as mandatory in order to raise corporates' awareness for the sake of sustainable development. To achieve this, the Government should soon issue standards and codes of conduct for sectoral and national level on corporate social responsibility which depends heavily on the will and the interests of enterprises. Today, corporate social responsibility has become more common, more practical, and more encouraging for enterprises to implement with common standards and criteria. Vietnam has not yet developed a code of conduct for corporate social responsibility. A small number of enterprises, if they want to implement corporate social responsibility, find it very difficult to implement in a systematic way. It is, therefore, important to develop a set of corporate social responsibility standards based on international experiences while taking into account local conditions. Along with that is the independent, responsible corporate social responsibility rating system.

Step-by-step applying policy of corporate social responsibility disclosure: Annual or periodic reports on corporate social responsibility are not only a means of promotion, verifying quality but also an informational tool for owners, government, community and other stakeholders to consider and communicate information with enterprises. The application of corporate social responsibility reporting in Vietnam is a gradual process of institutionalization, both from the government and from enterprises and other organizations, and there may not sufficient conditions for most Vietnamese enterprises to apply in the short term. First of all, this reporting regime should be applied by large-scale enterprises and enterprises which have great impacts on society and environment, such as corporations and specially important corporations and listed companies.

Raising awareness of enterprises on corporate social responsibility has not yet been adequately concerned in Vietnam, in terms of perspective, content and implementation. Most enterprises do not have sufficient awareness of corporate social responsibility as well as its role in enhancing the capacity competition and sustainable development of their business, specially some consider corporate social responsibility as a burden of costs. In particular, people, communities, workers and consumers are more difficult to approach in this problem, while

these are related parties who can promote corporate social responsibility. Therefore, the first thing to do is to continue to propagate and raise awareness of corporate social responsibility more strongly and in a broader scope and subjects, not just limit in the business community, enterprises but move to communities and localities, including general education programs. Enterprises and stakeholders need to be more aware of corporate social responsibility, especially in the context of ever-widening and deeper integration.

6. Limitations and recommendations for future research

Firstly, the research applied a content analysis method to measure the level of corporate social responsibility disclosure. Since corporate social responsibility is a broad category with many guiding standards, in the process of analyzing the authors did not rely on any standard but selectively chose regulations of Vietnam from previous studies to develop a new scale of social responsibility content of Vietnamese enterprises. Therefore, errors and subjectivity of authors are inevitable. The authors wish to be able to measure corporate social responsibility disclosure based on reports of corporate social responsibility of Vietnamese enterprises when regulations on this topic are standardized.

Secondly, GMM is appropriate with short data table with a short period of time but with a large number of firms. However, in this study the number of enterprises classified by sectors was too small, so the examination of the relationship between corporate social responsibility disclosure and financial performance of each sector could not be conducted. The authors wish to have further studies which can add different categories of sectors.

Thirdly, in this study, the authors only used the return on assets ROA as measure of financial performance. Future studies may use a variety of financial performance measures to supplement research results such as return on equity ROE, market value compared to book value Tobin'Q.

References

- Aras, G., Aybars, A., & Kutlu, O. (2010). Managing corporate performance Investigating the relationship between corporate social responsibility and financial performance in emerging market. *International Journal of Productivity and Performance Management*, 59(3), 229-254. <https://doi.org/10.1108/17410401011023573>
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58, 277-297. <https://doi.org/10.2307/2297968>
- Arellano, M., & Bover, O., (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, 68, 29–51. [https://doi.org/10.1016/0304-4076\(94\)01642-D](https://doi.org/10.1016/0304-4076(94)01642-D)
- Bayoud, N. S., Kavanagh, M., & Slaughter, G. (2012). An empirical study of the relationship between corporate social responsibility disclosure and organizational performance:evidence from Libya. *International Journal of Management and Marketing Research*, 5(3), 69-82.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87, 115-143. [https://doi.org/10.1016/S0304-4076\(98\)00009-8](https://doi.org/10.1016/S0304-4076(98)00009-8)

- Branco, M., & Rodrigues, L. (2006). Corporate social responsibility and resource- based perspectives. *Journal of Business Ethics*, 69(2), 111-32. <https://doi.org/10.1007/s10551-006-9071-z>
- Nguyen, T, N, B., Tran, T, T, H., Le, H, O., Nguyen, T, P., Trinh, H, T., & Le, V. (2015). Association between Corporate Social Responsibility Disclosures and Firm Value-Empirical Evidence from Vietnam. *International Journal of Accounting and Financial Reporting*, 2162-3082. <https://doi.org/10.5296/ijafr.v5i1.7394>
- Cheung, P., & Mak, W. (2010). The relation between corporate social responsibility disclosure and financial performance: evidence from the commercial banking industry. *Project submitted in partial fulfillment of the requirements for the degree of master of financial risk management*.
- Deegan, C. (2002). The legitimising effect of social and environmental disclosures-a theoretical foundation. *Auditing & Accountability Journal*, 15(3), 282-311. <https://doi.org/10.1108/09513570210435852>
- Dewi, K., & Monalisa, M. (2016). Effect of corporate social responsibility disclosure on financial performance with audit as a moderating variable. *Binus Business Review*, 149-155. <https://doi.org/10.21512/bbr.v7i2.1687>
- Doan, N. P. A., & Nguyen, T. T. N. (2017). Factors affecting level of sustainable development disclosure of enterprises listed on the Vietnam stock market. *The summary record of scientific conference Accounting- Auditing. QuyNhon University*, pp. 384.
- Dowling, J., & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. *Pacific sociological review*, 18, 122-136. <https://doi.org/10.2307/1388226>
- Dragomir, V. D. (2010). Environmentally sensitive disclosures and financial performance in a European setting. *Journal of Accounting & Organizational Change*, 6(3), 359-388. <https://doi.org/10.1108/18325911011075222>
- Edward Freeman, R. (1984). *Strategic Management: A Stakeholder Approach*. Pitman Publishing. <http://www.worldcat.org/title/strategic-management-a-stakeholder-approach/oclc/9685996>
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *G Auditing & Accountability Journal*, 8(2), 47-77. <https://doi.org/10.1108/09513579510146996>
- Gunawan, J., Djajadikerta, H., & Smith, M. (2009). An examination of corporate social disclosures in the annual reports of Indonesian listed companies. *Journal of Asia Pacific Centre for Environmental Accountability*, 13-39.
- Ho, N. T. T., & Yekini, L. S. (2014). Investigating the link between CSR and Financial performance-Evidence from Vietnamese listed companies. *British Journal of Arts and Social Sciences*, 17(1), 85-101. http://www.bjournal.co.uk/volume/paper/BJASS_17_2/BJASS_17_02_02.pdf

- Ho, V. T., & Ho, T. V. A (2017). Corporate social responsibility and financial performance : evidence of listed companies in Vietnam. *Economics and development*, pp. 36-43.
- Jitaree, W. (2015). Corporate social responsibility disclosure and financial performance: evidence from Thailand. *Doctor of Dowling, J & Pfeffer, J. (1975). Organizational Legitimacy: Social Values and Organizational Behavior. Pacific sociological review, 18, 122-136.*
- Khlif, H., Guidara, A., & Souissi, M. (2015) "Corporate social and environmental disclosure and corporate performance: Evidence from South Africa and Morocco", *Journal of Accounting in Emerging Economies, 5(1), 51-69.* <https://doi.org/10.1108/JAEE-06-2012-0024>
- Lu, Y., Abeysekera, I., & Cortese, C. (2015). Corporate social responsibility reporting quality, board characteristics and corporate social reputation Evidence from China. *Pacific Accounting Review, 27(1), 95-118.* <https://doi.org/10.1108/PAR-10-2012-0053>
- Mahoney, L., & Roberts, R. W. (2007). Corporate social performance, financial performance and institutional ownership in Canadian firms. *Accounting Forum, 31(3), 233-53.* <https://doi.org/10.1016/j.accfor.2007.05.001>
- Makni, R., Francoeur, C., & Bellavance, F. (2009). Causality Between Corporate Social Performance and Financial Performance_ Evidence from Canadian Firms. *Journal of Business Ethics, 409-422.* <https://doi.org/10.1007/s10551-008-0007-7>
- Mohammed, N. A., Zakaree, S., & Oladele, O. K. (2016). Corporate Social Responsibility Disclosure and Financial Performance of Listed Manufacturing Firms in Nigeria. *Research Journal of Finance and Accounting, 7(4), 47-58.*
- Nguyen, X. H., & Trinh, H. T. (2016). Relationship between investment of sustainable development and financial results under quality control of financial reports. *Summary report of conference. Hanoi University of Industry.*
- Nguyen, T. K. C. (2016). Corporate social responsibility in Vietnam nowadays. *Doctoral thesis. University of Social Sciences and Humanities, Vietnam national university.*
- Nguyen, T. M. H., & Dang, T. L. (2017). Impact of ownership structure to performance of listed companies on the Vietnam stock market. *Journal of Science Vietnam national university: Economics and business, No. 1. pp.23-33.*
- Platonova, E., Asutay, M., Dixon, R., & Mohammad, S. (2016). The Impact of Corporate Social Responsibility Disclosure on Financial Performance: Evidence from the GCC Islamic Banking Sector. *Journal of Business Ethics, 1-21.* <https://doi.org/10.1007/s10551-016-3229-0>
- Saleh, M., Zulkifli, N., & Muhamad, R. (2011). An Empirical Examination of the Relationship between Corporate Social Responsibility Disclosure and Financial Performance in an Emerging Market. *Asia-Pacific Journal of Business Administration, 3(2), 165-190.* <https://doi.org/10.1108/17574321111169849>
- Strouhal, J., Gurvits, N., & Nikitina, K. M. (2015). Finding the link between CSR reporting and corporate financial performance: evidence on Czech and Estonian list companies *Central european business review, 4(3), 45-58.*

Tjia, O., & Setiawati, L. (2012). Effect of CSR Disclosure to Value of the Firm: Study for Banking Industry in Indonesia. *World Journal of Social Sciences*, 2(6),169-178.

Ullmann, A. A. (1985). Data in search of a theory: a critical examination of the relationships among social performance, social disclosure, and economic performance of U. S. firms. *The Academy of Management Review*, 10(3), 540-557. <https://doi.org/10.5465/AMR.1985.4278989>

Vurro, C., & Perrini, F. (2011). Making the most of corporate social responsibility reporting: disclosurestructure and its impact on performance. *Corporate governane*, 11(4), 459-474. <https://doi.org/10.1108/14720701111159280>

Zeitun, R. (2014). Corporate Governance, Capital structure and corporate performance: evidence from GCC Countries. *Review of Middle East Economics and Finance*, 75-96. <https://doi.org/10.1515/rmeef-2012-0028>