The impact of corporate social responsibility and risk management on financial performance: The case of Vietnamese textile firms

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CHRONICLE	ABSTRACT
	The objective of this study is to assess the impact of corporate social responsibility (CSR) and risk management (RM) on financial performance (FP), and evaluate the moderate role of firm size in the relationship between risk management and financial performance. The study was conducted on a research sample of 389 Vietnamese textile firms. The results show that corporate social responsibility (CSR) was an optimal measure to minimize risks and improves financial performance. The good CSR policy reduces corporate risk and improves financial performance. Other way, the bad CSR policy increases corporate risk and impacts negatively on financial performance. In addition, the moderate role of firm size in the relationship between risk management and financial performance is statistically significant.

1. Introduction

Corporate social responsibility (CSR) has been studied for a long time in most economic sectors. Recently, CSR seems to be popular and is considered as an important issue for businesses around the world (Mirsha & Saura, 2010). The reason is that the benefits CSR brings are quite clear such as: reducing rates of staff transferring, increasing customers' satisfaction, improving reputation; motivating employees; increasing access to capital, market share, and operation efficiency (Galbreath, 2010). Research on the relationship between CSR and financial performance attracted the attention of many scholars, according to the statistics of the National University of Hong Kong (2015), the articles related to CSR appear mostly in management journals and there have been about 310 articles on CSR (included in the title) in the Journal of Business Ethics since 1982, 90% of which were published after 2000. According to the Academy of Management Journal (AMJ) (2016), from 1958 to 2015, AMJ issued 87 publications on this topic.

However, studies of the effect of CSR on financial performance are a question with big doubt. A large number of studies show a positive relationship between CSR and financial performance (Lys et al., 2015). Some studies have shown a negative relationship between CSR and financial performance (Wagner, 2005; Lopez et al., 2007). Therefore, there are many different views and disagreements about the relationship between CSR and financial performance. What leads to the differences between these research results? In this article, we examine the relationship between CSR and financial performance through mediate variable - the risk management of Vietnamese textile firms.

2. Research hypotheses

CSR is an important issue in contemporary international debates. Over the past two decades, CSR has seemed to become popular and has been considered to be related to all corporations around the world (Aras et al., 2010, Nguyen, 2012). According to McWilliams and Siegel (2000), CSR is the action of firms that are conducive to social welfare which go beyond and outside the framework of company benefits and legal obligations. According to Gendrom (2013), CSR is all the relationships a company maintains with its related parties. The components of CSR include the investment in the community, employee relationships, work maintenance and creativity, environmental concerns and financial performance. Mishra et al. (2010) argued that CSR is voluntary actions on the legal basis of firms to ensure benefits for related parties such as employees, communities, environment, investors, and customers, etc.

Previous studies on the benefits and impacts of CSR yielded diverse results. The benefits that CSR offers can be categorized into business benefits (benefits for businesses) and social benefits. Or it can be categorized into monetary benefits and non-monetary benefits (Weber, 2008). Monetary benefits include direct financial effects such as revenue increase and cost reduction. At the same time, it also includes benefits that do not directly lead to cash flow but are still measured in monetary terms such as risk reduction, brand value increase (Gerpott & Thomas, 2004; Naderer, 2005). Non-monetary benefits are benefits that are not directly measured in currency but they still affect the competitiveness and financial performance of businesses. These benefits can be quantified by the customers' rate of repeated purchase, the rate of employee turnover, etc. These benefits can be qualified by the access to capital, employees' satisfaction, corporate risk reduction, and so on. So we propose the research hypothesis:

H1: CSR has a positive impact on financial performance

In addition, the views of related parties and some scholars have suggested that CSR can help companies minimize their risk (Godfrey et al., 2009; Harjoto & Laksama, 2016). According to Godfrey et al. (2009), participating in CSR activities can bring moral capital to related parties and then this moral or goodwill capital will act as a protector - like insurance when negative events occur (Godfrey et al., 2009). Godfrey et al. (2009) found that participating in CSR activities (activities aimed at the secondary related parties of the company or big society) provides the same benefits as insurance, while participating in CSR (activities aimed at the company's trading partners) does not bring such benefits of CSR about company risk. Harjoto and Laksama (2016) examined the relationship between CSR and the deviation of optimal risk levels. In their study, they found that stronger CSR performance was associated with smaller deviations from the optimal risk level. Moreover, they examined the mechanism by which CSR has an impact on financial performance and found that CSR has a positive indirect effect on business' value through the impact of CSR on risk. In other words, CSR performance is positively related to financial performance because CSR minimizes and avoids risks (Harjoto & Laksama, 2016).

H$_2$: CSR has a positive impact on risk management

Effective risk management will reduce the risks that businesses can face, thereby increasing business performance and increasing financial performance. The businesses that control financial risks will reduce financial costs and financial investments, thereby increasing financial performance (Harjoto & Laksama, 2016). Since then, we hypothesize:

H3: Risk management positively affects financial performance

Large-scale firms will have adequate risk management control systems, thereby better controlling risks, reducing business losses equivalent to reducing operating costs and increasing financial performance. However, for small and medium firms, risk management activities are underestimated, therefore, risk management may not have a clear relationship with financial performance. Therefore, we propose a hypothesis:

H4: Firm size plays a moderate variable in the relationship between risk management and financial performance

3. Research methodology

3.1. Research sample

The research sample is an important factor that determines the success of a quantitative study. Generally, there are two methods to choose: Random sampling and haphazard sampling. The random sampling is more widely used and brings more objective results. In this article, we randomly selects Vietnamese textile firms in the list of Vietnamese textile firms issued by the Textile Association in 2015. This sample source is the most reliable because there are a lot of sources of statistics showing the different numbers about Vietnamese textile firms.

We sent over 600 surveys forms to CEOs of businesses and within 3 months and collected 536 surveys forms. After removing unqualified survey forms, the official sample included 389 Vietnamese textile firms.
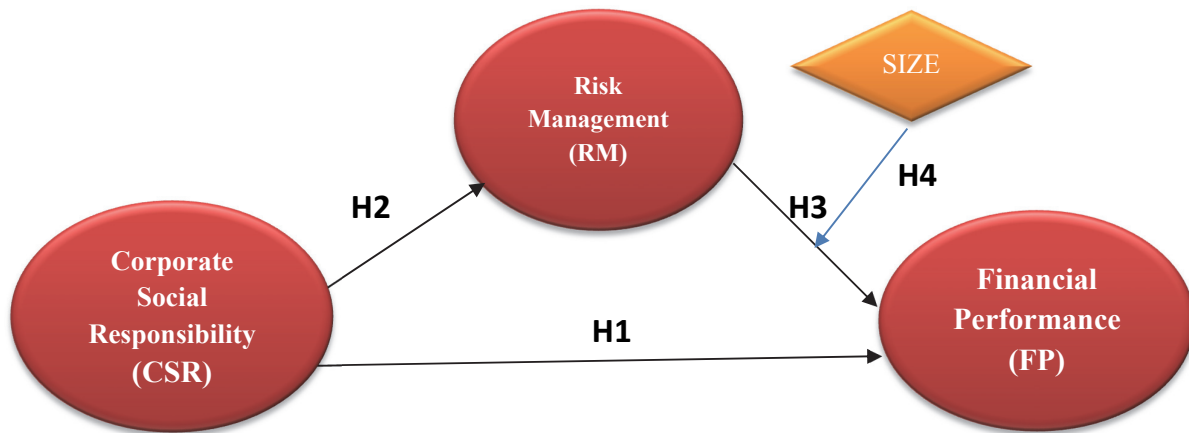
3.2. Research model

Fig.1. Research model

Corporate social responsibility (CSR) is measured on 6 attributes of CSR including employees, environments, communities, suppliers, customers, investors (Mishra et al., 2013). CSR includes 39 targets including CSR activities/policies at firms: CSR_ Environment 9 items, CSR_ Employees 8 items, CSR_Community 6 items, CSR_ Investor 6 items, CSR_ Customers 5 items, CSR_ Suppliers 5 items. All 39 items are measured with 5-point Likert scale from no completely policy/activities to complete policies/activities and performed very well in the last 5 years.

Financial performance (FP) is measured by two aspects of (i) profitability, and (ii) growth (Santos & Brito, 2012). Profitability: return on assets (ROA), return on equities (ROE), return on investment (ROI), ROS and economic value added (EVA). Growth: Growth of assets, growth of net revenue, growth of profit after tax, growth of investment capital and growth of equity. All targets are measured on the Likert

scale from 1 to 5. From the much lower level to much higher level in comparison with the industry average level over the past 3 years.

Previous studies have approached financial performance measurement on both objective measurement and subjective measurement. Objective measure of data is taken from the available sources or researchers calculate themselves based on the accounting data. Subjective measurement is taken from the opinions of firms on a 5-point Likert scale compared with competitors or the previous year and the most popular way is to compare with the industry's average level in the last 3 years (Santos & Brito, 2012). Dollinger and Golden (1992) in their study found that both subjective and objective measurement of financial performance are positively correlated. There are many other studies reported a significant correlation between subjective and objective measurement method in financial performance (Collins & Smith, 2006; Coombs & Gilley, 2005,). In this study, we approach the financial performance measurement by subjective method based on the assessment of business leaders in comparison with the industry's average level in the last three years with a 5-point Likert scale from much lower to much higher.

Risk management (RM): The ability to minimize operational risks in firms, measured by 3 items (Harjoto & Laksmana, 2016). Items are measured based on the Likert scale from 1: Strongly disagree to 5: Strongly agree.

3.3. Analysis approach

To test the research hypotheses, we use SPSS 22 and Smart PLS 3.0 software to perform the following analysis: Descriptive statistics; reliability test of scale by Cronbach's Alpha scale and total correlation of variables; Evaluation of the measurement model by aggregate reliability, convergence value, and discriminant value; hypothesis test by path coefficient and T-value via Bootstrap technique.

4. Results, discussion and conclusion

The research results are as follows: 11 observations of measuring CSR potential variables with Cronbach's Alpha reliability are <0.7 and total correlation coefficient is <0.3. Thus, they should be excluded from the next analysis. We do not evaluate EFA because both CSR and financial performance are structural measures. CSR is made from 6 the first order factor and the financial performance is made from 2 the first order factor. EFA is not suitable for structural measurement. Measurement model evaluation is implemented by synthetic reliability; convergence validity and discriminant validity. Synthetic reliability is measured by Cronbach's Alpha, composite reliability and average variance extract (AVE).

Table 1
Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability
CSR	0.982	0.983	0.982
CSR_Com__	0.911	0.911	0.911
CSR_Custo	0.872	0.872	0.872
CSR_E_	0.910	0.911	0.910
CSR_Envir	0.928	0.928	0.928
CSR_Invert	0.898	0.898	0.898
CSR_Supl	0.872	0.872	0.872
FP	0.947	0.950	0.948
FP_G	0.916	0.917	0.916
FP_P	0.867	0.874	0.868
RM	0.838	0.843	0.839

Convergence of scale is used to assess the stability of the scale. According to Fornell & Larcker (1981), average variance extract (AVE) coefficient with the value of greater than or equal to 0.5 will confirm the convergence value. The load coefficient of each variable is observed to be greater than or equal to 0.7 and it means to be a proof of the reliability of the scales. Table 1 shows that the requirements for AVE

are satisfactory. The outer loading of the scale is high (> 0.5) and has statistical significance (Henseler et al., 2009). Measurement of discriminant validity helps to ensure differences, and there is no correlation between the elements used to measure factors. In order to measure discriminant values, the AVE square root of each measurement factor is greater than the latent variable correlations between that factor and other factors, indicating the differentiation and reliability of the factors (Fornell & Larcker, 1981). Finally, checking the factor load of each target shows the convergence validity and discriminatory validity for twice. This was achieved by considering the load factors of a greater index than any of its other structures (Chin, 1998).

Table 2
Discriminant Validity Fornell-Larcker Criterion

	CSR	CSR_Com	CSR_Custo	CSR_E	CSR_Envir	CSR_Invert	CSR_Supl	FP	FP_G	FP_P	RM
CSR	0.816										
CSR_Com	0.614	0.820									
CSR_Custo	0.011	0.567	0.833								
CSR_E	0.040	0.020	0.037	0.793							
CSR_Envir	0.015	0.688	0.494	0.030	0.826						
CSR_Invert	0.036	0.010	0.022	0.049	0.026	0.799					
CSR_Supl	0.485	0.389	0.537	0.293	0.132	0.782	0.833				
FP	0.331	0.328	0.313	0.325	0.331	0.365	0.310	0.805			
FP_G	0.319	0.313	0.305	0.312	0.321	0.351	0.299	0.059	0.829		
FP_P	0.356	0.356	0.334	0.350	0.354	0.394	0.334	0.080	0.056	0.755	
RM	0.206	0.185	0.221	0.197	0.223	0.240	0.152	0.337	0.330	0.358	0.797

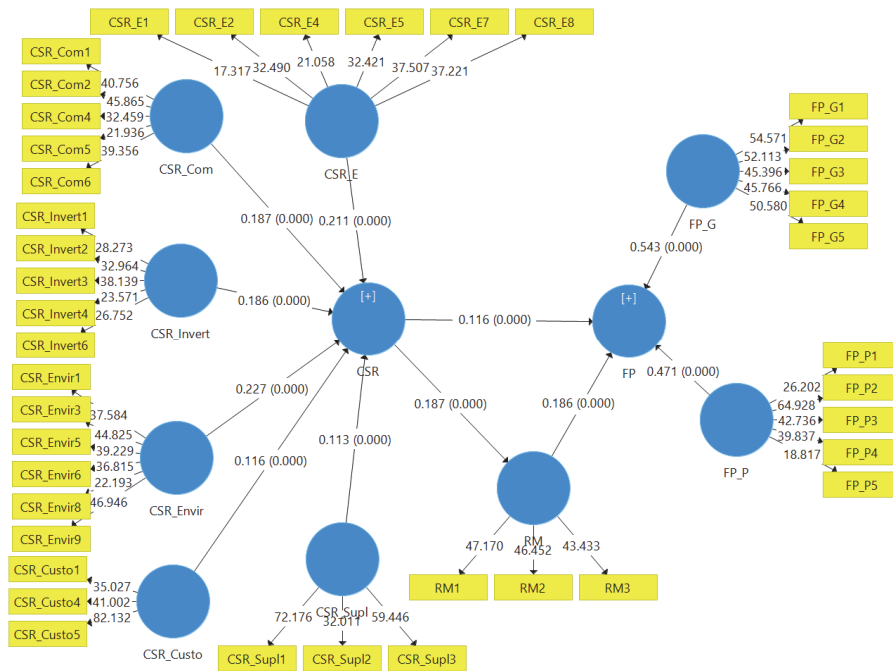Results of running bootstrap after running PLS are as below:

Fig. 2. Results of running bootstrap

Fig. 2 shows that CSR has a positive impact on the risk management of firms with an impact level of 0.187 and significance level of P = 0.000. This means that the more businesses implement CSR, the more likely it is that risk management activities will have high efficiency or reduce risks for firms. It means that hypothesis H2 is accepted. CSR activities will help reduce risk risks for firms. CSR is seen as a special kind of resource for firms and will help increase competitive advantage and reduce risks for firms when implementing this resource. At the same time, highly effective risk management activities also

increase financial performance with an impact level of 0.186 and significance level P = 0.000. This means that risk management reduces costs and risks for firms leading to increase their financial performance. This means that the H3 hypothesis is accepted. At the same time, the results show that CSR has a positive impact on financial performance with an impact level of 0.116 and significance level P = 0.000. This means that the H1 hypothesis is supported. This also means that CSR has a positive impact on financial performance. Thus, according to the bootstrap result in Fig. 2, hypotheses H1, H2 and H3 are supported. Implementing CSR will increase the risk management and thereby reduce risks for firms. At the same time, implementing CSR can also increase the financial performance because CSR activities will increase customer's loyalty and employee satisfaction, and thereby increase revenue and attract high quality man-power and increase financial performance. High risk management makes risks be controlled, reduces losses and enhances financial performance for firms.

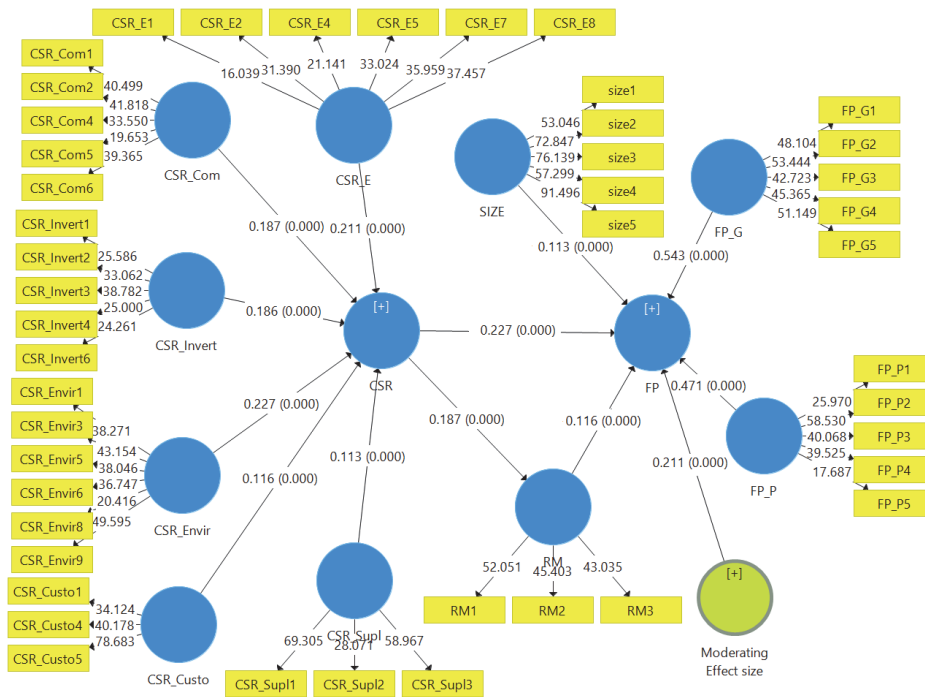*4.1. Verification results of regulatory role of firm size*

Fig.3. Moderate role of firm size

From the results of Fig. 3, when considering the role of firm size, the impact coefficient of CSR on financial performance increases from 0.116 to 0.227. The impact of risk management on financial per-formance decreases from 0.186 to 0.116, this result shows the moderate role of firm size on the impact of risk management on financial performance. Moderate variable of firm size has an impact coefficient of 0.211 at the significance level of 1%. The test hypothesis results are as follows:

Table 3

Hypothesis test results

	Original Sample (O)	Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Results
CSR → FP	0.000	0.000	0.000	3.726	0.000	Supported
CSR → RM	0.187	0.187	0.050	41.921	0.000	Supported
Moderating Effect size → FP	0.000	0.000	0.000	36.246	0.000	Supported
RM → FP	0.000	0.000	0.000	30.516	0.000	Supported

As analyzed above, all four test hypotheses are supported. CSR has a positive and statistically significant impact on financial performance. CSR positively impacts risk management and risk management posi-tively impacts financial performance. Finally, firm size as a moderate variable in the relationship between

risk management and financial performance. In short, the relationship between CSR and financial performance in the prior studies can be clearly shown in both positive and negative impacts. But there are also studies that do not find any relationship between CSR and financial performance especially in developing economies. Aras et al. (2010) found no statistically significant link between CSR and financial performance in a developing economy, but only found a significant relationship between firm size and CSR. Perhaps in developing economy CSR is not fully relevant to financial performance. In this study, we found that CSR had a positive impact on the risk management. From that, the risk management also positively affects the financial performance of firms. Therefore, Vietnamese textile firms should focus on voluntarily implementing CSR to minimize operational risks and improve the financial performance of firms. By conducting CSR, both management and employees have more responsibilities with the society, communities and environment. That is why, it makes management and employees have more dedications and health and in consequence increase productivity and higher financial performance.

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Appendix 1
Outer loading

	CSR_Com	CSR_Custo	CSR_E	CSR_Envir	CSR_Invert	CSR_Supl	FP_G	FP_P	RM
CSR_Com1	0.827								
CSR_Com2	0.800								
CSR_Com4	0.807								
CSR_Com5	0.830								
CSR_Com6	0.834								
CSR_Custo1		0.808							
CSR_Custo4		0.859							
CSR_Custo5		0.831							
CSR_E1			0.752						
CSR_E2			0.807						
CSR_E4			0.770						
CSR_E5			0.825						
CSR_E7			0.807						
CSR_E8			0.795						
CSR_Envir1				0.848					
CSR_Envir3				0.807					
CSR_Envir5				0.854					
CSR_Envir6				0.820					
CSR_Envir8				0.797					
CSR_Envir9				0.827					
CSR_Invert1					0.809				
CSR_Invert2					0.790				
CSR_Invert3					0.804				
CSR_Invert4					0.802				
CSR_Invert6					0.788				
CSR_Supl1						0.848			
CSR_Supl2						0.835			
CSR_Supl3						0.817			
FP_G1							0.830		
FP_G2							0.849		
FP_G3							0.828		
FP_G4							0.807		
FP_G5							0.829		
FP_P1								0.726	
FP_P2								0.833	
FP_P3								0.792	
FP_P4								0.776	
FP_P5								0.635	
RM1									0.861
RM2									0.748
RM3									0.777