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The Association Between Corporate Social Responsibility And Corporate Financial Performance

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Abstract

The objectives of this study is to investigate the association between CSR and Corporate Financial Performance (CFP). This study investigates 800 firms listed on Indonesian Stock Exchange in 2010 - 2012. Financial performance is measured by accounting-based approach and stock-market-based approach. While, CSR practices is measured by Corporate Social Disclosure Index (CSRDI). Thus, the association was analyzed under multivariate linear regression by considering time difference. Firm size, growth, and risk are included as control variables. This study finds: (1) CSR provides positive impact on the financial performance until one next period; (2) financial performance measured by ROA influence positively CSR only the next two years; (3) there is significant positive relationship between firm size and CSR. The paper has implications in enhancing the understanding of company performance through understanding the association between CSR and CFP.This may increase the understanding of the association between CSR and CFP. The findings of this study contribute to the literature and regulator on CSR.

Keywords: *Corporate Social Responsibility, corporate financial performance, sustainability*

Introduction

Nowadays, business is not always associated with profit. According to Lindrawati and Budianto (2008), the existence of business cannot be separated with ethical and social responsibility issues. Corporate social responsibility (CSR) appears to have become more ubiquitous and perceived as being relevant to corporations all over the world (Aras et al., 2008). KPMG International's survey (2013) report that 71% of the 4,100 companies surveyed in 2013 and 93% of the largest 250 global companies based on the Fortune Global 500 rankings have done and reported its corporate social responsibility activities. According to the survey, there is dramatic increase over the last two years in the numbers of Asia-Pacific companies that reported corporate responsibility activities. For the first time from 20 years survey (since 1993 there were eight times surveys), Indonesia companies are included in the survey. It may show international

recognition of CSR practices in Indonesia. In Indonesia CSR activities are regulated under Corporation Law (UU No. 40/2007). This law requires companies that conduct activities relating to the natural resources used, to carry out social and environmental responsibility.

However, there are some myths about CSR. One of them is a costly program without any benefit received, as argued by Jalal (2009). This perception was contradicted with some CSR literatures which argue that CSR can give some advantages for the corporate. CSR improve firm financial performance because CSR activities maintain company sustainability (Branco and Rodrigues, 2007). Hence, sustainable company increases long term financial performance, investment returns, and value creation (Burhan and Rahmanti, 2012). The second myth is a perception that CSR is an after profit activities. It means that company must have a good financial performance before has CSR program. This point of view was derived from the perception that the implementation of CSR spends high cost without any significant financial impact received. This statement was contradicted with Wood and Young (1997) in Jalal (2009) who argued that CSR is a long term investment activities so CSR is a before profit program. Thus, there have been extensive studies undertaken to investigate those issues. There are more than one hundred twenty-seven published studies that investigate the relationship between corporate social performance and financial performance (Margolis and Walsh, 2003).

Some of studies have indicated a positive relationship between CSR and financial performance, whereas others have not. Orlitzky et al. (2003) investigates the causality relationship between corporate financial performance and social responsibility activities. By using meta-analysis technique, this study finds a positive significant relationship between both of them. There was strong bidirectional causality between corporate financial performance and social responsibility (Orlitzky et al., 2003). Another study was conducted by Montabon et al. (2007). On their studies, they try to investigate the relationship between environmental management practice and corporate performance. This study uses a content analysis on 45 companies' annual report. The result shows that there was a positive significant relationship between environmental management practice and corporate performance. Nuryaman (2013) also conduct a study to investigate the relationship between CSR and corporate performance on the companies listed on Indonesia Stock Exchange. The result shows that the disclosure of CSR has a significant effect on company profit. Similarly, the result also shows that CSR positively effect on stock prices.

Although some those studies provide positive effect between CSR and financial performance, there were several studies that show an insignificant relationship between CSR and corporate performance. Aras et al. (2008) show there was a relationship between firm size and CSR, but they were not able to find any significant relationship between CSR and profitability. Another study was conducted by Fiori et al. (2007). They find insignificant relationship between CSR and stock price. This study was conducted by using multiple regression analysis. Brine et al. (2006) also was not able to find any significant relationship between corporate profitability and CSR activities on Australia's firms.

Thus, previous studies of the relationship between CSR and the company's performance show mixed results. One of possible reasons is different direction of causality between CSR and financial performance. Mostly previous studies, except Orlitzky et al. (2003), only examine one direction, i.e. the effect of CSR to the financial performance, although conceptually it can be other direction. According to the slack resource theory (McGuire et al., 1988) company should have good financial condition in order to do CSR activities, because CSR activities are non operating activies. Second, possible reason is all of those previous studies have not considered the time lag between CSR and financial performance. Conceptually, CSR increases company sustainability thefore the effect of CSR to the company should be long term. In other direction, company takes times to build financial capacity in order to do CSR activities. Lastly, different result may be caused by utilising different proxies for firm financial performance. Therefore, this study enhances previous literatures in term of (1) bidirectional causality relationship, (2) lag-lead relationships in 3 years time period, and (3) various proxies for corporate financial performance.

Literature Review And Hypothesis Development

Corporate Social Responsibility

There is lack consensus about definition of corporate social responsibility (Hopkins, 2007; Horrigan, 2010; Mullerat, 2011). The prominent definition of CSR is developed by The World Business Council for Sustainable Development (WBCSD). According to the WBCSD, CSR is a business commitment to give a contribution for continuous economic development, working ethically with employee and their family, local community, and society in order to reach a good live. In other words, CSR is a way for the company to manage its business not only for the interests of the shareholder but also for the other parties outside the company, such as the government, environment, workers, local communities or what is often referred to as the stakeholder (Branco and Rodrigues, 2007).

There are several benefits to be gained from the activity of CSR. CSR represents company focus to its stakeholder. So, CSR make the company have a good relationship with its stakeholder. The relationship will consistently improve and strengthen by continuing CSR. Thus, the credibility of company will increase (Lindrawati & Budianto, 2008). Frombun and Shaley (1990) states that CSR may have external effects on organizational reputation which help build a positive image to customers, investors, bankers, and suppliers. According to Hopkins (2004), company which has a CSR program will be easier to get customer attention. Its product will be more attractive for customers. In other words, CSR can bring a positive image and positive branding for the company. Then, CSR can bring a competitive advantage because it will contribute to company's strong financial performance (Branco and Rodrigues, 2007).

Measurement of CSR is a critical point since there is no agreed upon basis for measuring CSR activity up to now. Aras et al. (2008) identified at least three methods that have mainly been used by prior studies for the measurement of CSR. The first method is an expert evaluation of corporate policies. The second method is content analysis of

annual report and other documents. The third one is by using the measurement of pollution control. Each of those methods has their own advantages and disadvantages.

Further, there is no obligation to report CSR activities, thus CSR reporting is company's voluntary disclosure. CSR reporting framework mainly based on Global Reporting Initiatives (GRI). GRI framework was most widely used around the world (Nuryaman, 2013; KPMG International, 2013), therefore this study uses GRI framework in order to design CSR activities check list. This framework consists of 3 categories (G3.1 guidelines) (GRI, 2011). First category is economic performance with 9 items, second category is environmental performance with 30 items, and the last category is social performance. The social performance consist of four aspects, namely labour practices (14 items), human rights (9 items), society (8 items), and product responsibility (9 items). In total, there were 79 items will be reported under GRI. The details of 79 items are provided in Appendix.

Corporate Financial Performance

Corporate performance measurement was a process to make a decision whether the company has showed good performance or not in order to reach company's goal and strategy (Lindrawati& Budianto, 2008). Gitman (2011) states that performance measurement was an implementation of corporate responsibility to its shareholder. In relationship with CSR, some empirical studies focus on corporate financial performance measurement. Basically, there are 2 types of financial performance that was used for measuring financial performance (Aras et al., 2008 and Orlitzky et al., 2003). The first one is the accounting based financial performance measures. This measurement focuses on historical firm performance based on financial reporting data. Some measurements include in this group are return on asset (ROA), return on equity (ROE), return on sales (ROS), earnings per share (EPS). The second measurement takes the market point of view, such as market share price and return. Aras et al. (2008) states that the second method gives more independent result than the first method. In order to get complete relationship, both financial measurement bases are used in this study.

Relationship of Corporate Social Responsibility and Corporate Financial Performance

Corporate Social Responsibility Increase Corporate Financial Performance

The positive relationship between CSR and financial performance was predicted according to both modern stakeholder theory and agency theory of Jensen and Meckling (1976) as argued by Aras et al. (2008) and Orlitzky et al. (2003). Based on those theories, company will try to fulfil all stakeholders' needs and give the satisfaction to them. So the management will develop new capability to manage firm resources effectively and efficiently, in order to fulfil all demands (Orlitzky et al., 2003). Those things are also recognized as a good management theory. CSR is a representation of company's 'good attitude' to stakeholders.

Orlitzky et al. (2003) states that CSR has a several benefit, namely increase firm's image, reduce advertising expense, increase worker's motivation, and increase investor's interest. Thus, CSR can help company for developing manager's competencies, resources, and capability that shown in organizational culture, technology, structure, and human resources (Orlitzky et al., 2003). Those new competencies can bring efficiency in asset and resource management whereby can improve corporate financial performance. In addition, CSR might have external effects. CSR may help build a positive image with external stakeholders. In sum, the reputation perspective will be external mediator, and managerial competencies and learning will be internal mediator between CSR and financial performance association. Due to these advantageous of CSR activities, it is predicted that there is a positive relationship of CSR and financial performance.

Corporate Financial Performance Increase Corporate Social Responsibility

CSR often represents an area of relatively high managerial discretion, so the initiation or cancelation of CSR activities may depend on availability of excess fund (McGuire et al., 1988). According to the slack resource theory, high level of financial performance may provide the slack resources necessary to engage in CSR and responsiveness. Thus, there is a positive association between corporate financial performance and CSR, which prior financial performance is directly associated with subsequent CSR activities.

Following these theories, this study investigates the relationship occurred between CSR and corporate financial performance. So that this study hypothesized that CSR is both a predictor and consequence of firm financial performance.

H1: CSR practices will influence corporate financial performance
H2: Corporate financial performance will influence CSR practices done by the company

Methodology

Population, Sample and Data Sources

Population of this study is companies that were listed on the Indonesia Stock Exchange (IDX) during 2010 – 2012. Only companies that have complete data are selected as sample. The sample selection is illustrated on Table 1. The final pool sample is about 800 firm years. Further, the number of sample reduces when the relationship in model is developed in one until two years period lag. It becomes between 542 and 626 firm years in one year lag, and between 249 and 329 firm years in two years lag. Final sample is further reduced due to outlier reason.

Data are collected from companies' annual report for financial information and CSR activities. Then, share returns are collected from Fact Books that were published by IDX for year 2010 – 2013.

Table 1. Sample Selection

Descriptions	Firm years
Listed companies at IDX since 2010	1,389
Not available annual reports	247
Not report CSR activities in annual reports	237
Not available audited financial statement	6
Business combination without providing a restated financial statement	3
Incomplete data	Between 8-53*
Final pool sample	Between 843-888*

* each model has different number firm years that the specific data is not available.

Research Model

The causality relationship between CSR activities and corporate financial performance was investigated by multivariate linear regression. The causality relationships also consider the time difference between them, i.e. contemporaneous, lagging one period, and lagging two periods.

Hypothesis 1 were tested using model 1-6 as follows, which $\alpha_1$is predicted > 0

$$FP_t = \alpha_0 + \alpha_1 CSRDI_t + \alpha_2 DTA_t + \alpha_3 GO_t + \alpha_4 SIZE_t + \varepsilon_1 \quad (1)$$

$$FP_{t+1} = \alpha_0 + \alpha_1 CSRDI_t + \alpha_2 DTA_t + \alpha_3 GO_t + \alpha_4 SIZE_t + \varepsilon_1 \quad (2)$$

$$FP_{t+2} = \alpha_0 + \alpha_1 CSRDI_t + \alpha_2 DTA_t + \alpha_3 GO_t + \alpha_4 SIZE_t + \varepsilon_1 \quad (3)$$

Hypothesis 2 were tested using model 12-14 as follows, which $\beta_1$is predicted > 0

$$CSRDI_t = \beta_0 + \beta_1 FP_t + \beta_2 DTA_t + \beta_3 GO_t + \beta_4 SIZE_t + \varepsilon_2 \quad (4)$$

$$CSRDI_{t+1} = \beta_0 + \beta_1 FP_t + \beta_2 DTA_t + \beta_3 GO_t + \beta_4 SIZE_t + \varepsilon_2 \quad (5)$$

$$CSRDI_{t+2} = \beta_0 + \beta_1 FP_t + \beta_2 DTA_t + \beta_3 GO_t + \beta_4 SIZE_t + \varepsilon_2 \quad (6)$$

In the above regression models, FP is corporate financial performance that is measured by ROA, ROE, ROS, and share return. CSRDI is Corporate Social Responsibility Ratio Disclosure Index. DTA, GO and SIZE are control variables. DTA is debt to asset ratio. GO is growth opportunity. SIZE is firm size. α is regression coefficient for hypothesis I, β is regression coefficient for hypothesis II, and ε is unstandardized residual (error).

Operational Variable

Corporate Social Responsibility

CSR activities are measured by Corporate Social Disclosure Index (CSRDI) which is developed based on GRI framework (G3.1 Guidelines). This study uses content analysis method in order to identify whether company has disclosed its CSR activities under each GRI category. This method was chosen because it is substantially objective and also enables the usage of larger samples (Aras et al., 2008). However, this method has a weakness in term self reporting bias,. i.e. what firms report may not actually represent what they actually do.

The CSRDI becomes an independent variable for Hypothesis I, and a dependent variable for Hypothesis II. Consistent to Haniffa and Cooke (2002), the formula of CSRDI is as follow.

$$CSRDI_j = \frac{\sum_{i=1}^{j} x_{ij}}{n_j} \quad (07)$$

$CSRDI_j$ is Corporate Social Responsibility Disclosure Index from company j. N_j was total items that must be disclosed according to GRI standard (79 items). X_{ij} will be valued 1 if item i was disclosed or valued 0 if item i wasn't disclosed. The amount of $CSRDI_j$ must be greater than 0 or equal/smaller than 1 ($0 < CSRDI_j \leq 1$).

Corporate Financial Performance

Corporate financial performance is measured by accounting and capital market based measures. Three accounting based measures are used in this study, namely ROA, ROE, and ROS. Capital market based measure is represented by share return.

The corporate financial performance becomes a dependent variable for Hypothesis I, and an independent variable for Hypothesis II. Each measurement is developed based on Gitman (2011) as follows.

$$ROA = \frac{Earning\ available\ for\ common\ shareholders}{Total\ Asset} \quad (08)$$

$$ROE = \frac{Earning\ available\ for\ common\ shareholders}{Total\ Equity} \quad (09)$$

$$ROS\ (OPM) = \frac{Operating\ profit}{Sales} \quad (10)$$

$$R = \frac{P_t - P_{t-1}}{P_{t-1}} \quad (11)$$

ROA is Return on Asset for period t. Earnings available for common shareholders is the amount of earning per share. Total asset is the amount of total asset that disclosed on the statement of financial position at the end of year t. ROE is Return on Equity for period t, which total equity is the amount of equity that disclosed on the statement of financial position at the end of year t. ROS is Return on Sales for period t. According to Farris et al. (2010), ROS is also known as operating profit margin. Operating profit is as disclosed on company income statement for period t. Sales is the amount of sales or revenue earned by the firm as disclosed on income statement for period t. SR is share return. P_t is closing share price at the end of period t. P_{t-1} is closing share price at the end of period t-1.

Control Variables

This study employs three control variables, i.e. Debt to Asset (DTA) ratio, growth opportunity, and firm size. DTA ratio is used for measuring firm-risk level. DTA ratio is a ratio that shows the amount of liability (debt) outstanding in compare with total asset owned (Gitman, 2011). Second control variable is company's size. Large companies usually have greater ability to generate profit. Thus, socially responsible behaviour disclosed by larger firms tends to be more than those disclosed by smaller firms (Waddock & Graves, 1997). Firm size in prior studies could be measured by number of employees, number of shareholders, total asset, total sales, and Fortune Rank (Orlitzky et al., 2003). In this study, size is measured by ln of total assets. Third control variable was growth opportunity. Companies which had increased growth trend will increase the amount of their investment, which in turn will affect CSR activities (Thomsen & Pedersen, 2000).

$$DTA = \frac{Total\ Asset}{Total\ Debt} \tag{12}$$

$$Growth = \left(\frac{Sales_t - Sales_{t-1}}{Sales_{t-1}}\right) \times 100\% \tag{13}$$

$$Size = \ln\left(Total\ assets\right) \tag{14}$$

DTA is Debt to Asset Ratio, which is the total asset is the amount of total asset as disclosed on the statement of financial position at the end of year t and the total debt is the amount of total liabilities as disclosed on the statement of financial position at the end of year t. $Sales_t$ ($Sales_{t-1}$) is the amount of sales or revenue as disclosed on income statement for period t (t-1).

Result and Discussion

Descriptive

Table 2 shows descriptive statistics for all variables used on all regression models. CSRDI as proxy for measure CSR activities has an average of 4.5%. It suggests that CSR activities which had done by Indonesia's company on 2010 – 2012 were still considered low (Gunawan, 2007). While ROA, ROE, ROS, and share return have an average of 5%, 12%, 14.3%, and 8.3% respectively, suggests the average firm in the sample has good financial performance.

Table 2. Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
ROA	-0.140	0.290	0.050	0.055
ROE	-0.272	0.568	0.120	0.110
ROS	-0.273	0.725	0.143	0.134
SR	-0.867	1.204	0.083	0.381
CSRDI	0.013	0.203	0.045	0.028
SIZE	7.399	20.270	14.673	1.847
GROWTH	-1.260	11.471	0.268	0.659
DTA	0.004	2.690	0.533	0.288

Then, this study examines the Pearson correlation coefficient and p-value from two-tailed test of significance for each sample of each model (totally there are 24 models). Due to limited space, all correlations were not included in this paper, but it will be provided as request. The Pearson correlations in general show that financial performance measured with accounting-based method has a positive significant correlation with CSRDI. When financial performance is measured by stock-market-based method, there is no significant relationship between financial performance with CSRDI. ROS shows a positive significant correlation with next year and next two years CSRDI. ROA also shows a positive significant correlation with next two years CSRDI. Control variables show various relations with financial performance. Only size shows consistently positive significant correlation with CSRDI.

Classical Assumption Test

To obtain the efficient and accurate regression results, the data must be free from violations of classical assumptions. There are four requirements that must be fulfilled, i.e. normality test, heteroscedasticity test, autocorrelation test, and multicollinearity test.

Normality test is done by one sample Kolmogorof Smirnov test. Then, this test also use box plot method which to find outlier data. After removing all outlier data, some models show the unstandarized residual are still not normally distributed. Thus, those data is still used for further analysis, under argument that normality may not be very crucial in large data sets (Gujarati, 2003).

Heteroscedastisity test is done by Spearman's rho correlation. The correlation's significance between residual and all independent variables must be higher than 5% in order to indicate that there is no heteroscedastisity problem. Some models indicate heteroscedastisity problems. Models to test H1 show heteroscedastisity problem for mainly Growth variable (in 7 of 12 models), while models to test H2 show heteroscedastisity problem for ROA variable (in 1 of 12 models), SR variable (in 1 of 12 models), and DTA variable (in 2 of 12 models). Because some variables are research interest variables and to maintain consistency analysis, this data is still used in further analysis, under argument heteroscedastisity problem will not destroy consistency and unbiasedness data (Gujarati, 2003).

Autocorrelation test is done by Durbin-Watson test. The value of Durbin-Watson must be larger than du but smaller than 4 – du (du < DW < 4-du) as indication free from autocorrelation problem. All regressions models are free from this problem.

Lastly, multicollinearity test is done by checking the value of Variance Inflation Factor (VIF) and the amount of Tolerance. The VIF must be no more than 10, and the Tolerance must be more than 0,1. All models indicate no-multicollinearity problem.

Hypothesis Testing

The first hypothesis on this study proposes that CSR activities will influence corporate financial performance. A set of regression analysis was conducted using financial performance (ROA, ROE, ROS, and SR) as dependent variables with CSRDI as the independent variables, and the measure of risk, growth, and size as control variables. As seen on Table 3, all models show significant F-test except model 1.3.4. Adjusted R^2 models are between 2% and 21.3% (except model 1.3.4 shows negative adjusted R^2). The p-value of t-test shows that H1 is only accepted for model 1.1.1, model 1.1.2, and model 1.2.1. It means that CSR activities have a positive significant relationship with ROA on the same year, ROE on the same year, and next period ROA. In general, DTA as a variable control has a negative relationship with financial performance. While, size and growth have a positive significant relationship with financial performance.

Table 3. Result for Hypothesis I

Model	p-value of F-test adjusted R^2 N	Independent Variable	Coefficient	*p-value of t-test*
Model 1.1.1	0.000* 0.162 791	Intercept CSRDI SIZE GROWTH DTA	0.049 0.276 0.002 0.008 -0.069	0.001* 0.000* 0.146 0.002* 0.000*
Model 1.1.2	0.000* 0.064 800	Intercept CSRDI SIZE GROWTH DTA	-0.081 0.373 0.012 0.007 -0.001	0.008* 0.008* 0.000* 0.358 0.929
Model 1.1.3	0.000* 0.213 797	Intercept CSRDI SIZE GROWTH DTA	-0.218 0.122 0.027 0.037 -0.094	0.000* 0.440 0.000* 0.000* 0.000*
Model 1.1.4	0.006* 0.014 721	Intercept CSRDI SIZE GROWTH DTA	0.188 -0.534 -0.005 0.124 -0.060	0.088 0.330 0.549 0.002* 0.089

	0.000*	Intercept	0.076	0.000*
	0.112	CSRDI	0.340	0.002*
Model 1.2.1	484	SIZE	-0.001	0.632
		GROWTH	0.006	0.179
		DTA	-0.057	0.000*
	0.000*	Intercept	-0.066	0.094
	0.055	CSRDI	0.415	0.051
Model 1.2.2	484	SIZE	0.011	0.000*
		GROWTH	0.013	0.120
		DTA	0.020	0.184
	0.000*	Intercept	-0.244	0.000*
	0.150	CSRDI	-0.095	0.718
Model 1.2.3	495	SIZE	0.030	0.000*
		GROWTH	0.006	0.593
		DTA	-0.079	0.000*
	0.007*	Intercept	0.441	0.001*
	0.020	CSRDI	-0.616	0.410
Model 1.2.4	501	SIZE	-0.021	0.035*
		GROWTH	0.030	0.384
		DTA	-0.121	0.017*
	0.000*	Intercept	0.089	0.011*
	0.089	CSRDI	0.299	0.136
Model 1.3.1	234	SIZE	-0.001	0.726
		GROWTH	-0.009	0.227
		DTA	-0.065	0.000*
	0.030*	Intercept	-0.034	0.589
	0.030	CSRDI	0.657	0.072
Model 1.3.2	228	SIZE	0.009	0.040*
		GROWTH	-0.009	0.473
		DTA	0.003	0.902
	0.000*	Intercept	-0.296	0.001*
	0.127	CSRDI	0.079	0.872
Model 1.3.3	234	SIZE	0.034	0.000*
		GROWTH	-0.011	0.736
		DTA	-0.073	0.035*
	0.572	Intercept	0.299	0.175
	-0.005	CSRDI	-1.572	0.230
Model 1.3.4	230	SIZE	-0.009	0.550
		GROWTH	-0.022	0.595
		DTA	-0.036	0.651

Notes: * level of significance < 5%, model 1.1.1-1.1.4 has ROA_t, ROE_t, ROS_t, and SR_t as dependent variable respectively, model 1.2.1-1.2.4 has ROA_{t+1}, ROE_{t+1}, ROS_{t+1}, and SR_{t+1} as dependent variable respectively, and model 1.3.1-1.3.4 has ROA_{t+2}, ROE_{t+2}, ROS_{t+2}, and SR_{t+2} as dependent variable respectively.

The second hypothesis proposes that financial performance will influence CSR activities. A set of regression analysis was conducted using financial performance (ROA, ROE, ROS, and SR) as independent variables with CSRDI as the dependent variables, and the measure of risk, growth, and size as control variables. As seen on Table 4, all models show significant p-value in F-test. The adjusted R^2 of models are between 14.6% and 20.1%. H2 is only accepted for model 2.3.1. It means that financial performance, which is measured by ROA, has a positive significant relationship with next 2 years CSR activities. In addition, only size shows consistently a positive significant relationship with CSDRI.

Table 4. Result for Hypothesis II

Model	p-value of F-test adjusted R^2 N	Independent Variable	Coefficient	*p-value of t-test*
Model 2.1.1	0.000* 0.148 817	Intercept ROA SIZE GROWTH DTA	-0.017 0.005 0.004 -0.001 -0.002	0.001* 0.174 0.000* 0.144 0.172
Model 2.1.2	0.000* 0.146 814	Intercept ROE SIZE GROWTH DTA	-0.017 0.000 0.004 -0.001 -0.002	0.001* 0.714 0.000* 0.189 0.230
Model 2.1.3	0.000* 0.146 8.16	Intercept ROS SIZE GROWTH DTA	-0.017 -0.001 0.004 -0.001 -0.002	0.001* 0.793 0.000* 0.192 0.223
Model 2.1.4	0.000* 0.149 776	Intercept SR SIZE GROWTH DTA	-0.016 -7.363E-5 0.004 -0.001 -0.002	0.001* 0.329 0.000* 0.267 0.163
Model 2.2.1	0.000* 0.180 596	Intercept ROA SIZE GROWTH DTA	-0.028 0.000 0.005 0.000 -0.004	0.000* 0.901 0.000* 0.737 0.071
Model 2.2.2	0.000* 0.182 5.96	Intercept ROE SIZE GROWTH DTA	-0.028 -0.001 0.005 -5.947E-5 -0.004	0.000* 0.389 0.000* 0.946 0.066
Model 2.2.3	0.000* 0.180 5.94	Intercept ROS SIZE GROWTH DTA	-0.027 0.001 0.005 0.000 -0.004	0.000* 0.576 0.000* 0.693 0.073

	0.000*	Intercept	-0.027	0.000*
	0.184	SR	-5.464E-5	0.494
Model 2.2.4	540	SIZE	0.005	0.000*
		GROWTH	-0.001	0.588
		DTA	-0.004	0.051
	0.000*	Intercept	-0.033	0.001*
	0.201	ROA	0.027	0.032*
Model 2.3.1	309	SIZE	0.006	0.000*
		GROWTH	-0.001	0.693
		DTA	-0.004	0.228
	0.000*	Intercept	-0.036	0.001*
	0.175	ROE	-0.001	0.606
Model 2.3.2	318	SIZE	0.006	0.000*
		GROWTH	-0.001	0.595
		DTA	-0.04	0.269
	0.000*	Intercept	-0.033	0.002*
	0.180	ROS	0.006	0.229
Model 2.3.3	317	SIZE	0.006	0.000*
		GROWTH	-0.001	0.522
		DTA	-0.004	0.303
	0.000*	Intercept	-0.036	0.001*
	0.193	SR	0.000	0.335
Model 2.3.4	280	SIZE	0.006	0.000*
		GROWTH	0.000	0.840
		DTA	-0.009	0.028*

Notes: * level of significance < 5%, model 2.1.1-2.1.4 has $CSRDI_t$ as a dependent variable, model 2.2.1-2.2.4 has $CSDRI_{t+1}$ as a dependent variable, and model 2.3.1-.2.3.4 has $CSDRI_{t+2}$ as a dependent variable.

Discussion

Our results show that CSR activities have a positive significant relationship with ROA on the same year, ROE on the same year, and next period ROA. This result was consistent to Orlitzky et al. (2003) that CSR activities have positive impact to the corporate financial performance. These support the existence of good management theory. Then, according to stakeholder and agency theory the company will fulfil all demand of all related parties (stakeholder) so that can increase firm's financial performance. This result also supports the existence of mediating effect between them. CSR activities make a company to develop new competency in managing its resources effectively and efficiently. Then, it will lead to increase firm financial performance.

However, this result does not support Branco and Rodrigues (2007) findings. They argued that CSR could give a long term competitive advantage. The result of this study indicates that CSR activities influence financial performance for no more than 2 year (current year and next one year). This short term impact of CSR activities could be

caused by the type of CSR activities that has done by Indonesian companies. According to Gunawan (2007), almost all Indonesia companies focus CSR activities only on charity. In addition, this research's result does not support Hopkins' statement (2004). According to Hopkins (2004), CSR can make firm's product more attractive so can reach market easily and give a competitive advantage for the firm. But the result of this research indicated that there is no significant relationship between ROS and CSR activities. This fact may be caused by a gap between what stakeholder need and what company give to their stakeholders. Gunawan (2007) stated that stakeholders are more interested in CSR activities in form firm's related product aspect. However, the company' CSR activities tends to be focus on community aspect.

Our result also shows that there is no significant relationship between stock price and CSR activities. It means that Indonesian investors have not considered CSR as a key performance measure. This result was consistent to the result of Fiori et al. (2007) study. They argue that investors in capital market focus only on short term benefit, than the long term one, such as CSR activities.

The result for H2 shows that the financial performance will influence positively CSR activities only in the next two years. It suggests that it needs at least two year for profitable companies to realize their capability in CSR activities. This result supports the slack resource theory (Orlitzky et al., 2003). The initiation of CSR activities may depend on availability of excess fund in a company.

Conclusion

This study examines the relationship between CSR and corporate financial performance intensively by (1) lag-lead relationship, (2) causality between them, and (3) employment various proxies of corporate financial performance. The results of this study show that (1) CSR provides a positive impact on the financial performance in the contemporaneous and next 1 year time period; (2) financial performance that is measured by ROA will influence positively CSR only for the next two years; (3) there is a significant positive relationship between firm size and CSR. These results suggest that CSR activities of Indonesia companies tend to be charity, so it only provides positive impact to the firm financial performance in no more than two years (current year and next year). In addition, it needs at least two year to for profitable companies to realize their capability in CSR activities. Indonesian investors have not considered CSR as a key performance measure. Further, company size is a good predictor to the CSR practice. The bigger company size will effect to the more comprehensive CSR activities. This result is also consistent to the slack resources theory. The availability of resource was an important consideration for the firm to do CSR or not. Lastly, these results may explain the mixed result of previous studies about whether there is a positive relationship between CSR and financial performance.

The results suggest that CSR should be a part of company business strategy since CSR had been proven had a mediating effect for better financial performance. But the choice of what CSR will be done is also an important issue since there was a gap of

what stakeholder need and what firm give to stakeholder. To give an optimum result, company should have a clear CSR program which result sustainability for the firm.

However, these results should be interpreted in light of some limitations. Some regression models violate normality assumption and homocedastisity. Further, measurement of CSR activities is based on CSR disclosure. Lastly, this research only examines the effect for 3 years time period. Therefore, future research may take longer periods to capture a more comprehensive picture about the association between CSR and corporate financial performance.

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Appendix

Indicator Protocol Corporate Social Disclosure Based On Global Reporting Initiative Standard (version 3.1)

Economic Performance Indicators	
Aspect: Economic Performance	
EC 1	*Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments*
EC 2	*Financial implications and other risks and opportunities for the organization's activities due to climate change.*
EC 3	*Coverage of the organization's defined benefit plan obligations*
EC 4	*Significant financial assistance received from government*
Aspect: Market Presence	
EC 5	*Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.*
EC 6	*Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation*
EC 7	*Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation*
Aspect: Indirect Economic Impacts	
EC 8	*Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement*
EC 9	*Understanding and describing significant indirect economic impacts, including the extent of impacts*
Environment Performance Indicators	
Aspect: Materials	
EN 1	*Materials used by weight or volume.*
EN 2	*Percentage of materials used that are recycled input materials.*
Aspect: Energy	
EN 3	*Direct energy consumption by primary energy source.*
EN 4	*Indirect energy consumption by primary source.*
EN 5	*Energy saved due to conservation and efficiency improvements.*
EN 6	*Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives*
EN 7	*Initiatives to reduce indirect energy consumption and reductions achieved.*
Aspect: Water	
EN 8	*Total water withdrawal by source.*
EN 9	*Water sources significantly affected by withdrawal of water.*
EN 10	*Percentage and total volume of water recycled and reused.*

Aspect: Biodiversity	
EN 11	*Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.*
EN 12	*Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.*
EN 13	*Habitats protected or restored.*
EN 14	*Strategies, current actions, and future plans for managing impacts on biodiversity.*
EN 15	*Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.*
Aspect: Emissions, Effluents, and Waste	
EN 16	*Total direct and indirect greenhouse gas emissions by weight.*
EN 17	*Other relevant indirect greenhouse gas emissions by weight.*
EN 18	*Initiatives to reduce greenhouse gas emissions and reductions achieved.*
EN 19	*Emissions of ozone-depleting substances by weight.*
EN 20	*NOx, SOx, and other significant air emissions by type and weight.*
EN 21	*Total water discharge*
EN 22	*Total weight of waste by type and disposal method.*
EN 23	*Total number and volume of significant spills*
EN 24	*Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.*
EN 25	*Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff*
Aspect: Products and Services	
EN 26	*Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.*
EN 27	*Percentage of products sold and their packaging materials that are reclaimed by category.*
Aspect: Compliance	
EN 28	*Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.*
Aspect: Transport	
EN 29	*Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.*
Aspect: Overall	
EN 30	*Total environmental protection expenditures and investments by type.*

Human Rights Performance Indicators	
Aspect: Investment and Procurement Practices	
HR 1	*Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening*
HR 2	*Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.*
HR 3	*Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained*
Aspect: Non - discrimination	
HR 4	*Total number of incidents of discrimination and actions taken.*
Aspect: Freedom of Association and Collective Bargaining	
HR 5	*Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights*
Aspect: Child Labour	
HR 6	*Operations identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour*
Aspect: Forced and Compulsory Labour	
HR 7	*Operations identified as having significant risk for incidents of forced or compulsory labour, and measures taken to contribute to the elimination of forced or compulsory labour*
Aspect: Security Practices	
HR 8	*Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations*
Aspect: Indigenous Rights	
HR 9	*Total number of incidents of violations involving rights of indigenous people and actions taken*
Labour Practices and Decent Work Performance Indicators	
Aspect: Employment	
LA 1	*Total workforce by employment type, employment contract, and region.*
LA 2	*Total number and rate of employee turnover by age group, gender, and region.*
LA 3	*Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.*
Aspect: Labour/Management Relations	
LA 4	*Percentage of employees covered by collective bargaining agreements.*
LA 5	*Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.*
Aspect: Occupational Health and Safety	
LA 6	*Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advice on occupational health and safety programs.*
LA 7	*Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region.*
LA 8	*Education, training, counselling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.*

LA 9	*Health and safety topics covered in formal agreements with trade unions. Health and safety topics covered in formal agreements with trade unions.*
Aspect: Training and Education	
LA 10	*Average hours of training per year per employee by employee category.*
LA 11	*Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.*
LA 12	*Percentage of employees receiving regular performance and career development reviews.*
Aspect: Diversity and Equal Opportunity	
LA 13	*Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.*
LA 14	*Ratio of basic salary of men to women by employee category.*
Product Responsibility Performance Indicators	
Aspect: Customer Health and Safety	
PR 1	*Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.*
PR 2	*Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes*
Aspect: Product and Service Labelling	
PR 3	*Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements.*
PR 4	*Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling, by type of outcomes.*
PR 5	*Practices related to customer satisfaction, including results of surveys measuring customer satisfaction*
Aspect: Marketing Communications	
PR 6	*Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.*
PR 7	*Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes.*
Aspect: Customer Privacy	
PR 8	*Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data*
Aspect: Compliance	
PR 9	*Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services*
Society Performance Indicators	
Aspect: Community	
SO 1	*Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.*
Aspect: Corruption	
SO 2	*Percentage and total number of business units analyzed for risks related to corruption.*
SO 3	*Percentage of employees trained in organization's anti-corruption policies and procedures.*
SO 4	*Actions taken in response to incidents of corruption.*

Aspect: Public Policy	
SO 5	*Public policy positions and participation in public policy development and lobbying.*
SO 6	*Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.*
Aspect: Anti-Competitive Behaviour	
SO 7	*Total number of legal actions for anticompetitive behaviour, anti-trust, and monopoly practices and their outcomes.*
Aspect: Compliance	
SO 8	*Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.*

Source: GRI (2011) version 3.1