SUSTAINABILITY PERFORMANCE: IT'S IMPACT ON RISK AND VALUE OF THE FIRM

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Abstract

This study aims to analyze the relationship between the sustainability performances (corporate social performance, good corporate governance, and financial performance) and the risk as well as the value of the company. Employing the data from publicly listed mining firms in Indonesia and structural equation modeling to examine the hypotheses, we find that the corporate social performance improvement can be served to increase the corporate financial performance. Implementation of good corporate governance may contribute to improve financial performance and reduce the risk of the company. In short term, investors will appreciate the social and environmental responsibility undertaken by the company only if its implementation can contribute to the improvement of the company's financial performance. In long term, social and environmental performance improvements made by the company will be able to increase the value of the company directly. Investors consider companies that apply the principles of good corporate governance not just as regulatory compliance, so that it can provide benefits for improving corporate performance and value of the company, in the short term and long term.

Keywords: Corporate Social Performance, Financial Performance, Firm Risk, Firm Value, Good Corporate Governance, Sustainability Performance

1. INTRODUCTION

One of the company's purposes of existence is to maximize shareholder wealth, which can be achieved through an increase in the firm value. However, this often creates a gap divergence of interests between the company and shareholders, whose age is relatively shorter than the life of the company. Shareholders often tend to focus more on short-term increase in value and profit. Economic activity and development are only focused on short-term profits, often ignoring the social and environmental impacts, giving rise to social problems, pollution and environmental degradation, global warming, and others. Therefore, global awareness of sustainable development encourages stakeholders to implement development by observing the principles of sustainability.

Sustainable development is defined as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987). Economic and social welfare are built with attention to the protection of natural resources and the environment. The principle of sustainability focuses on integrated growth between the economic, social, and environmental.

Sustainability performance can be defined as the company's performance in all aspects and dimensions to support the sustainability of the company (Schaltegger and Wagner, 2006). Companies are not only required as a business entity that pursues success financially, but also act as good corporate citizens (Visser et al., 2010). This concept is confirmed that the company should broaden its responsibilities in the social and environmental aspects. The company is deemed to have rights, obligations and responsibilities in the community, as well as other citizens.

Corporate governance also plays an important role in sustainability issues. Weak implementation of corporate governance practices has been identified as one cause of the global financial crisis in 1998 and 2008. The transparency aspect of the impact of economic, environmental, and social is a key component for an effective relationship between the company and its stakeholders.

There is quite a lot of research that proposes a framework for integrating social and environmental dimensions into the company's financial performance with various results. This is likely due to differences in the research methodology (Margolis and Walsh, 2001). It may also be due to a lack of understanding of the factors through which social and environmental performance could affect the company's enterprise value (Servaes and Tamayo, 2013).

Eccles et al. (2012) conducted a study on the impact of sustainability culture on behavior and performance of the company. The research was conducted on 180 companies in the United States that have high sustainability performance. The results show that companies with high sustainability performance has significantly better performance, both in accounting and in the stock market.

Siew et al. (2013) examined the relationship between sustainability and financial performance practices of construction companies listed on the Australian Stock Exchange. The results showed that companies that deliver non-financial reports have better performance compared to companies that do not deliver non-financial reports. But the results of the study found no significant relationship between sustainability and financial performance practices in the construction industry in Australia.

Oikonomou (2011) in his study of companies in

the United States, found that corporate social responsibility has a negative correlation but not significant to the systematic risk of the company. Meanwhile, companies that are not socially responsible have a significant positive correlation against financial risks. Toms et al. (2011) examined the relationship between environmental performance and the risk of companies in the UK. The results showed a significant negative correlation between environmental performance and the firm risk.

Although the general view agrees that social performance can improve long-term profitability and support the sustainability of the company, but some criticize that the implementation of corporate social responsibility will only shift the focus of the company's business (Ho, 2010).

Sustainability is an objective to be achieved by all companies. Indonesia as a developing country also began paying attention to sustainability issues. However, research on the dimensions of sustainability in Indonesia has not been done in a comprehensive and integrated way. This study aims to fill the research gap in the study of the sustainability performance, which generally uses separated proxy measurement and has not been integrated in a comprehensive manner, with contradictory and inconclusive findings. This study develops a theoretical approach regarding sustainability performance which is assessed in a comprehensive and integrated way, together with its direct and indirect implications to the risks and value of the company.

This research is expected to increase awareness of all parties about the importance of maintaining the balance between economic growth, social and environmental, in implementing sustainable economic development. In addition, the implementation of corporate governance is also encouraging companies to operate efficiently and responsibly, in order to achieve short term financial performance and provide long term sustainable benefits.

The first section of this article introduces the main agenda of the research and its contribution. The second section discusses the theory and previous research in order to develop hypotheses. The third section is about the methodology and the data that is analyzed from publicly listed companies mining sector in Indonesia. The fourth section describes the results of the analysis and discussion. The fifth section discusses the conclusions, implications based on empirical findings, and the limitations for future research.

2. LITERATURE REVIEW AND HYPOTHESES

2.1. Corporate social performance and financial performance

One of the important concepts of business performance measurement based on the principle of sustainability is related to Corporate Social Responsibility (CSR). This is the way of companies to achieve a balance in terms of economic, environmental, and social norms. While at the same time, meeting the expectations of shareholders and stakeholders. Social and environmental responsibility of companies is seen as the contribution of the company for the sustainable development. Social and environmental performance is the configuration of the principles of social and environmental responsibility, including the response process and the impact that can be observed in the relationship between business organizations with corporate human resources, as well as stakeholders and the environment (Visser et al., 2010).

Supporters of the theory of stakeholders (Freeman, 1984) suggests that there is a positive relationship between social and environmental performance with financial performance. Companies that perform social and environmental responsibility will receive many benefits, such as improvement in the relationship between companies and consumers (Brown and Dacin, 1997; Bhattacharya and Sen, 2004; Chu and Lin, 2012), the revenue growth (Lev et al., 2010) and the reduction of various types of labor costs, capital costs, and the cost of raw materials (Lougee and Wallace, 2008). Consumer awareness of the importance of social responsibility and corporate environment in support of a sustainable environment, also influence the consumer's decision to buy or use a product (Suki, 2013). Good management theory argues that good management practices can improve the relationship with stakeholders, resulting in better performance overall (Waddock and Graves, 1997). Social and environmental performance will improve satisfaction of stakeholders that will ultimately affect better company's financial performance.

H_1: Companies with better corporate social performance have better financial performance.

2.2. Good corporate governance and financial performance

The management of the company involves a series of relationships between the company's management, board, shareholders, and stakeholders. Agency theory (Jensen and Meckling, 1976) describes the relationship between shareholders and company management. Corporate governance mechanisms which can help ensure management acts in the best interests of the company, as well as minimizing agency costs.

Good corporate governance is imperative in ensuring the values required by various stakeholder groups, and improving company performance (Ganescu and Gangone, 2012). Implementation of corporate governance can improve supervision and support efficient operations (Krafft et al., 2013). Effective governance systems within the company's organization can help the company to achieve its goals, one of which relates to the company's financial performance.

H_2: Increased adoption of good corporate governance will improve financial performance.

2.3. Sustainability performance and firm risk

A risk management perspective suggests that social and environmental performance, under certain conditions, can produce positive moral values. Positive moral values will provide a guarantee for the company to operate well in the middle of a neighborhood and stakeholder's community (Godfrey, 2005). Companies that have good social and environmental performance can also reduce

market-based risk (Busch et al., 2012).

$H_{3.a}$: Better corporate social performance will reduce the firm risk.

Risk management has become an important aspect of business management. Corporate governance has an important role in risk management. Good corporate governance clearly regulates the rights and obligations of various parties in the organization so that each party can act for the best interests of the company and reduce the risks arising from the conflict of interest between the various stakeholder groups (Crowther and Seifi, 2010). Companies with good corporate governance practices are well recognized to have lower levels of risk by the market (Lameira et al., 2011). Implementation of effective corporate governance can encourage adequate internal and whole risk control.

$H_{3.b}$: Increased adoption of good corporate governance serves to reduce the firm risk.

The financial performance of the company demonstrates management's ability to manage its resources efficiently to generate profits. The decisions in the financial field will affect the risks faced by the company. The financial manager should look for a certain balance between risk and return, that will provide optimal results (risk return trade off).

$H_{3.c}$: Better financial performance will reduce the firm risk.

2.4. Sustainability performance and firm value

Social and environmental responsibility can be interpreted as an approach to value creation in the long term, not just for shareholders, but for all stakeholders, based on the ability to take advantage of opportunities and manage risk (Chirieleison, 2004; Ghelli, 2013). Increased awareness of the importance of social and environmental responsibility has prompted many institutions in the field of investment to include it as one of the factors considered in making investments, or which is known as socially responsible investing (SRI). Disclosure of information about social and environmental responsibility is a process to communicate the social and environmental impact of economic activities of an organization to specific groups and to the whole society (Gray et al., 1987). In accordance with the theory of signal (Spence, 1973), such information is a signal to outsiders (investors), which may influence investment decisions.

Implementation of social and environmental responsibility of companies can be seen as an effort to help direct the focus of management towards maximizing the long term value of the company. This paradigm shift can become a trade-off between short-term costs to be incurred by the company to undertake social and environmental responsibility, to the sustainability benefits for the company in the long term.

$H_{4.a}$: Increased corporate social performance will enhance firm value.

Corporate governance that functions effectively, can ensure the safety and suitability of shareholder and stakeholders' rights. Good corporate governance can create an environment that is transparent to guarantee that each party is able to take responsibility and contribution to the growth and creation of the value of the company. Good governance can attract investors' confidence to invest. The role of corporate governance is manifested in the creation of corporate value and transparency support (Lamm, 2010). Good corporate governance will have an impact on the growth of the company and also on the overall economic development. This is because the corporate governance practices are appropriate to reduce risks for investors, attract capital investment, and enhance corporate value (Spanos, 2005).

$H_{4.b}$: Increased adoption of good corporate governance will enhance firm value.

Good financial performance is one of the key factors in maintaining the continuity of the company in the long term. In addition to considering the effectiveness of management in managing investment companies, investors also pay attention to the performance of management in managing the resources of the company to generate profits. The main objective of financial management is to maximize the company's value, which can be realized if the company has good financial performance (Ross et al., 2010). Good financial performance of a company is a positive signal for investors that will increase investor confidence in the company and will enhance the company's stock price in the stock market.

$H_{4.c}$: Increased corporate financial performance will enhance firm value.

2.5. Firm risk and firm value

Risks can be a threat or an opportunity for companies to increase their value. If an investment with greater risk is successful, the result will benefit the shareholders. But if the investment fails, the impact will decrease the value of the company. The disclosure of the risk can decrease the asymmetric information between managers and investors, so that the investment decision can be done properly. Investment decisions will ultimately affect the value of the company.

H_5 : Stable risk will improve financial performance.

3. EMPIRICAL METHODOLOGY

3.1. Data and sample

This study was conducted on 14 public companies in the mining sector listed on the Indonesian Stock Exchange (IDX) during 2009-2014. The data are taken from IDX website and the official websites of the sampled firms.

3.2. Endogenous variables

Corporate financial performance. This study defines the Corporate Financial Performance (CFP) as the accounting measurement performance, which reflects the company's internal efficiency in the use of resources. Accounting performance measurement are reflected by Return on Assets (ROA), Return on Equity (ROE), Return on Sales (ROS), and Nett Profit Margin (NPM) (Brigham and Houston, 2013).

Firm risk. In this study, the risk indicator

reflected by systematic risk, idiosyncratic risk (Bali and Cakiki, 2008), and the standard deviation of the return.

Firm value. The value of the company is reflected by the indicator of Tobin's Q (Chung and Pruitt, 1994), Price to Earning Ratio (PER) and Price to Book Value (PBV).

3.3. Exogenous variables

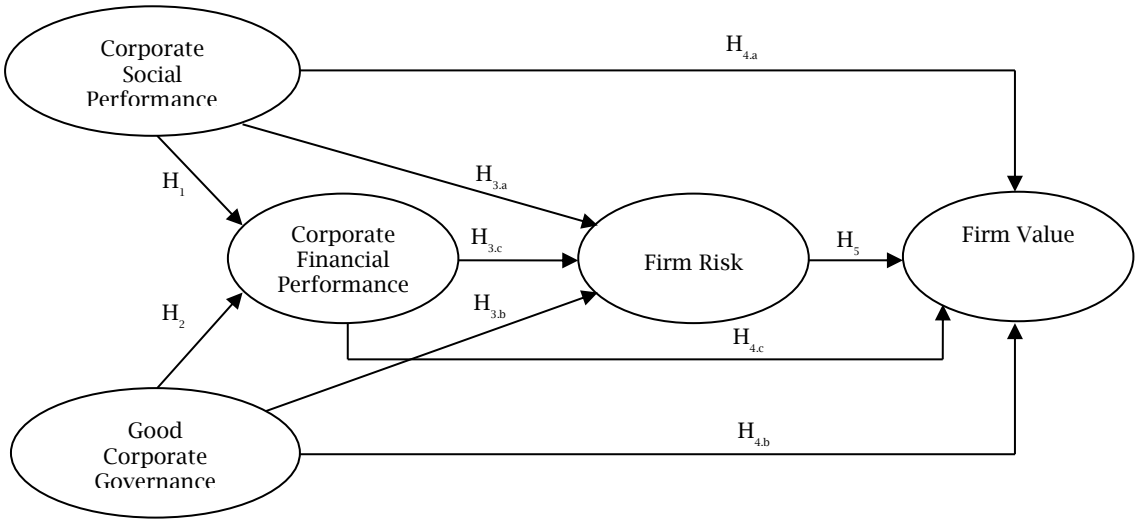
Corporate social performance. Social and environmental performance is measured on the disclosure of information on corporate responsibility with regard to the impact and its business activities on society and the environment. Disclosure index of social responsibility and environmental reporting using the framework of the third version of the Global Reporting Initiatives (GRI G3.1). Indicators are the variables that make up the economic, environmental, labor practices and decent work, human rights, society, and product responsibility. Rate disclosure of social and environmental responsibility of companies uses content analysis method (Guthrie and Abeysekera, 2006). Any disclosure uses a dummy variable that is equal to 1 to identify the firms that have disclosed in accordance with the GRI G3.1; otherwise, 0. The score of each item of disclosure summed to obtain a score per indicator disclosures for any company.

Good corporate governance. Content analysis was used to assess the disclosure on corporate governance in the company's annual report (Moloi, 2008). Corporate governance index is calculated by assessing the number of disclosures for each indicator of the number of corporate governance disclosure of corporate governance expected, with reference to the OECD (2004) and Cheung et al. (2014). Indicators are the variables that shape the rights of shareholders and key ownership functions, the equitable treatment of shareholders, the role of stakeholders in corporate governance, disclosure and transparency, and the responsibilities of the board.

3.4. Models

The conceptual framework proposed in this study as shown in Figure 3.1.

Figure 1. Model



Based on empirical research model line diagram of Figure 1, three structural equation can be arranged as follows:

$$CFP = \gamma_1 CSP + \gamma_2 GCG + \zeta_1 \quad (1)$$

$$FR = \gamma_3 CSP + \gamma_4 GCG + \beta_1 CFP + \zeta_2 \quad (2)$$

$$FV = \gamma_5 CSP + \gamma_6 GCG + \beta 2 CFP + \beta_3 FR + \zeta_3 \quad (3)$$

This study also conducted a sensitivity analysis, that is testing the model with one year and two years' time difference of observations. This is to test the consistency of the results, as has been done in several studies that examined the relationship between non-financial performance and financial performance (Tilakasiri, 2012; Oikonomu, 2011). The rationality of the approach that uses difference in observation time (lag) is the need for a time of change and the length of time it takes for an effect can occur (Scholtens 2008). For model t-0, data for exogenous and endogenous variables are from the years of 2009 to 2014. For model t-1, the data for the exogenous variables are from the years of 2009 to 2013, and endogenous variables from the years of 2010-2014. For model t-2, data on exogenous variables are from the years of 2009 to 2012, and endogenous variables from the years of 2011 to 2014.

4. RESULTS AND DISCUSSION

4.1. Data analyses

This research uses Structural Equation Modeling (SEM) with SmartPLS 3.0 program to determine and analyze the influence of exogenous variables on endogenous variables.

The descriptive statistics analysis appears in Table 1.

Table 1. Statistics Descriptive

Variables and Indicators	Minimum	Maximum	Mean	Standard Deviation
Corporate Social Performance (CSR)				
Economic (EC)	0.222	1.000	0.743	0.238
Environmental (EN)	0.033	1.000	0.544	0.308
Labor practices & decent work (LP)	0.133	1.000	0.588	0.257
Human rights (HR)	0.000	1.000	0.358	0.341
Society (SO)	0.100	1.000	0.558	0.298
Product responsibility (PR)	0.111	1.000	0.501	0.306
Good Corporate Governance (GCG)				
Rights of shareholders (RS)	0.625	1.000	0.805	0.095
Equitable treatment of shareholders (ET)	0.400	0.800	0.602	0.150
Role of stakeholders (RO)	0.200	1.000	0.655	0.264
Disclosure and transparency (DT)	0.556	1.000	0.781	0.100
Board responsibilities (BR)	0.450	0.950	0.752	0.140
Corporate Financial Performance				
Return on Asset (ROA)	-0.170	0.350	0.061	0.100
Return on Equity (ROE)	-2.179	0.510	0.017	0.425
Return on Sales (ROS)	-0.981	0.457	0.146	0.175
Net Profit Margin (NPM)	-1.197	0.340	0.054	0.182
Firm Risk				
Systematic risk (SR)	-2.740	6.786	1.304	1.370
Idiosyncratic risk (IR)	0.019	1.181	0.140	0.142
Standard Deviation of Return (SD)	0.036	1.181	0.164	0.149
Firm Value				
Tobin's Q (Q Tobin)	0.658	7.804	1.823	1.350
Price to Book Value (PBV)	0.160	80.400	4.195	10.770
Price to Earning Ratio (PER)	-168.620	138.190	14.058	38.926

The validity test results of the model demonstrate that there are indicators which cannot reflect the construct so it should be dropped and not used further in this study. The indicator is the systematic risk (SR) on the firm risk variables and Price to Book Value (PBV) on the value of the company variable. The significant indicator that form CSR variable is society and product responsibility. While the GCG significant indicator is the rights of shareholders, equitable treatment of shareholders, disclosure and transparency. Indicators that are not significant from the formative construct are not dropped so it does not omit the meaning of the construct.

4.2. Findings and Discussion

The results of hypotheses testing can be seen in Table 2.

Table 2. Results of Hypotheses Testing

Hypotheses	Relationships	Path Loading	p-value	Remarks
1	CSP --> CFP	0,291	0,017	Significant
2	GCG --> CFP	0,364	0,005	Significant
3.a	CSP --> FR	0,086	0,348	Not significant
3.b	GCG --> FR	-0,361	0,018	Significant
3.c	CFP --> FR	-0,138	0,262	Not significant
4.a	CSP --> FV	0,132	0,233	Not significant
4.b	GCG --> FV	0,072	0,367	Not significant
4.c	CFP --> FV	0,392	0,000	Significant
5	FR --> FV	0,466	0,002	Significant

The test results for indirect effect between variables can be seen in Table 3.

Table 3. Results of Testing Indirect Effect

No.	Indirect Effect	p-value	Remarks
1	CSP --> CFP --> FR	0.27106657	Not significant
2	GCG --> CFP --> FR	0.26845747	Not significant
3	CSR --> CFP --> FV	0.03429245	Significant
4	CSR --> FR --> FV	0.34918558	Not significant
5	GCG --> CFP --> FV	0.01917822	Significant
6	GCG --> FR --> FV	0.04302029	Significant
7	CFP --> FR --> FV	0.26708348	Not significant

The results of hypotheses testing for t-1 and t-2 can be seen in Table 3.

Table 3. Results of Hypotheses Testing for t-1 and t-2

Model	Hypotheses	Relationships	Path Coefficient	p-value	Remarks
t-1	1	CSR --> CFP	0,308	0,021	Significant*
	2	GCG --> CFP	0,324	0,021	Significant*
	3.a	CSR --> FR	0,035	0,429	Not significant
	3.b	GCG --> FR	-0,505	0,001	Significant*
	3.c	CFP --> FR	0,093	0,250	Not significant
	4.a	CSR --> FV	0,182	0,269	Not significant
	4.b	GCG --> FV	0,054	0,392	Not significant
	4.c	CFP --> FV	0,343	0,003	Significant*
	5	FR --> FV	0,277	0,114	Not significant
t-2	1	CSR --> CFP	0,233	0,100	Significant**
	2	GCG --> CFP	0,469	0,000	Significant*
	3.a	CSR --> FR	-0,184	0,337	Not significant
	3.b	GCG --> FR	-0,349	0,024	Significant*
	3.c	CFP --> FR	0,121	0,420	Not significant
	4.a	CSR --> FV	0,439	0,016	Significant*
	4.b	GCG --> FV	-0,010	0,955	Not significant
	4.c	CFP --> FV	0,275	0,023	Significant*
	5	FR --> FV	-0,061	0,588	Not significant

Note: * significance level α = 5%, ** significance level α = 10%.

The test results for indirect effect between variables for t-1 and t-2 can be seen in Table 4.

Table 4. Results of Testing Indirect Effect Sensitivity Analysis

Model	No.	Relationships	p-value	Remarks
t-1	1	CSR --> CFP --> FR	0.25975566	Not significant
	2	GCG --> CFP --> FR	0.25977609	Not significant
	3	CSR --> CFP --> FV	0.04984794	Significant*
	4	CSR --> FR --> FV	0.42989547	Not significant
	5	GCG --> CFP --> FV	0.04995624	Significant*
	6	GCG --> FR --> FV	0.12894654	Not significant
	7	CFP --> FR --> FV	0.27713883	Not significant
t-2	1	CSR --> CFP --> FR	0.23305346	Not significant
	2	GCG --> CFP --> FR	0.21401997	Not significant
	3	CSR --> CFP --> FV	0.09068694	Significant**
	4	CSR --> FR --> FV	0.31884658	Not significant
	5	GCG --> CFP --> FV	0.02697960	Significant*
	6	GCG --> FR --> FV	0.30137256	Not significant
	7	CFP --> FR --> FV	0.32651419	Not significant

*Note: * significance level α = 5%, ** significance level α = 10%.*

Results of testing the hypotheses can be explained as follows:

H_1: Results of testing the influence of social and environmental performance to the company's financial performance shows the value of the path coefficient 0.291, p-value 0.017 < 0.05. It shows that the social and environmental performance has positive significant effect on financial performance, making H_1 is accepted. The model t-1 shows a significant positive correlation, with path coefficient 0.308 and p-value of 0.021 < 0.05. The model t-2 also shows a significant positive correlation with the path coefficient of 0.233, and the p-value 0.100.

Social and environmental performance has positive significant effect on the company's financial performance. Improvements in non-financial performance, in this case through the implementation of social and environmental responsibility, will be able to improve the financial performance of the company. Sensitivity analysis with a gap of observation of one year and two years show the same results. It shows that companies that perform social and environmental responsibility well, is able to maintain its financial performance as well, in both the short and long term.

H_2: The test results of the influence of the corporate governance to the company's financial performance shows the value of the path coefficient 0.364, p-value 0.005 < 0.05. It shows that the corporate governance has positive effect on the financial performance of the company, so that H_2 is accepted. The model t-1 shows a significant positive correlation with path coefficient 0.324 and p-value of 0.021 < 0.05. The model t-2 also shows a significant positive correlation, with path coefficient 0.469 and p-value of 0.000 < 0.05.

Corporate governance has positive significant effect to the company's financial performance. Improved implementation of good corporate governance will affect the improvement of the financial performance of the company. Sensitivity analysis with the lapse of time of observation of one year and two years consistently show the same results. This shows that companies that implement good corporate governance, can improve its financial performance on an ongoing basis.

$H_{3.a}$: Results of testing the effects of environmental and social performance to the firm risk shows the value of the path coefficients 0.086, with p-value 0.348 > 0.05. It shows that the social and environmental performance does not significantly influence the firm risk, so that $H_{3.a}$ is rejected. The model t-1 and t-2 also show no significant association between social and environmental performance with the firm risk.

Social and environmental performance does not significantly influence the firm risk. Sensitivity analysis with a gap of observation of one year and two years also show the same results. These results are in contrast to the previous studies showing that

CSR activities can reduce systematic risk (Albuquerque et al., 2015, Toms et al., 2011) and unsystematic risk (Cajias and Bienert, 2011) of the companies. This is likely due to the crisis experienced by the mining industry over the study period, as a result of the global economic slowdown which impacted on the declining of the demand for the mine product.

$H_{3.b}$: The test results of the influence of the corporate governance to the firm risk shows the path coefficients -0.361, with p-value 0.018 > 0.05. It shows that the corporate governance negatively affect the firm risk, so that $H_{3.b}$ is accepted. The model t-1 shows a significant negative correlation, with path coefficient of -0.505, and p-value of 0,001 < 0.05. The model t-2 also shows a significant negative correlation, with path coefficients -0.349, and p-value 0.024 < 0.05.

Corporate governance has a significant negative effect to the firm risk. Improved corporate governance practices will reduce the firm risk. A sensitivity analysis with a time difference observation of one year and two years consistently show the same results. These results are consistent with research Lameira et al. (2011) and Ferreira and Laux (2007). Corporate governance has an important role in risk management, because the understanding and implementation of good corporate governance can reduce the risks that may occur (Tara and Sadri, 2015). Implementation of effective corporate governance can encourage adequate internal control, able to adapt to the level of risk and whole risk control (OECD, 2014).

$H_{3.c}$: The test results of the influence of the financial performance of companies to the firm risk shows the value of the path coefficients -0.138, with p-value 0.262 > 0.05. This shows that the company's financial performance does not significantly influence the firm risk. Thus, $H_{3.c}$ is rejected. The model t-1 and t-2 also show no significant relationship between financial performance and the firm risk.

$H_{4.a}$: The test results of the influence of social and environmental performance to the firm value indicates the path coefficient of 0.132, with p-value 0.233 > 0.05. This shows that the social and environmental performance does not significantly influence the value of the company, so that $H_{4.a}$ is rejected. The model t-1 also shows no significant association between social and environmental performance with the firm value. But the model t-2 shows the path coefficient 0.439, with p-value 0.016 < 0.05. It indicates that the social and environmental performance has significant positive effect on firm value. Thus, social and environmental performance significantly influences the value of the company, through the financial performance as mediator, at t-0, t-1, and t-2.

Social and environmental performance has no direct significant effect on the value of the company, in the same period (t-0) and the difference of one year (t-1). But there is an indirect significant effect through the company's financial performance. While in the two-year time difference (t-2), social and environmental performance has a significant positive effect on firm value. This shows that social and environmental responsibility is an investment for value creation in the long term. The results of this study agree with Nguyen et al. (2015), and Bidhari et al. (2013).

$H_{4.b}$: The results of testing the effect of corporate governance on firm value shows the value of the path coefficient 0.072, with p-value 0.367 > 0.05. This indicates that corporate governance does not significantly influence the firm value, so that $H_{4.b}$ is rejected. The model t-1 and t-2 also show no significant relationship between corporate governance and firm value.

Corporate governance has a significant effect on the value of the company, through the financial performance as mediator, both at t-0, t-1 and t-2. The firm risk significantly mediates the relationship between corporate governance with the firm value at t-0.

Corporate governance has no direct significant effect to the firm value. A sensitivity analysis with a time difference observation of one year and two years also show similar results. Corporate governance has a significant effect on the firm value indirectly through the company's financial performance. This indicates that investors would appreciate it if the implementation of corporate governance is not only as the fulfillment of regulatory obligations, but should be able to contribute the enhancement of the company's financial performance.

$H_{4.c}$: The test results of the influence of the financial performance of companies to the firm value indicates the path coefficient of 0.392, with a p-value of 0.000 < 0.05. It shows that the company's financial performance has positive significant effect to the firm value, so that $H_{4.c}$ is accepted. The model t-1 shows a significant positive correlation, with path coefficient 0.343 and p-value of 0.003 < 0.05. The model t-2 also shows a significant positive correlation, with a path coefficient 0.275 and p-value of 0.023 < 0.05.

The company's financial performance has positive significant effect to the firm value. A sensitivity analysis with a time difference observation of one year and two years also show similar results. An increase in the company's financial performance will increase the firm value, both in the short term and long term.

H_5 : Results of testing the effect of the firm risk to the firm value indicates the path coefficient of 0.466, with p-value of 0.002. It shows that the firm risk has positive significant effect to the value of the company, so that H_5 is accepted. But the model t-1 and t-2 show no significant association between the risk of the company and the value of the company.

The firm risk has positive significant effect to the firm value. The higher the risk, the higher the firm value. But the sensitivity analysis with a time difference observation of one year and two years find no significant association between the firm risk with the firm value. Dynamic capital market conditions prompted investors need the latest update so that the firm risk significantly influence the value of the company only in the same period.

5. CONCLUSION

From these results, it can be concluded that the improvement of social and environmental performance can be served to increase the company's financial performance, both in the short

term and long term. Implementation of good corporate governance (GCG) may contribute to improve financial performance and reduce the firm risk, both for short term and long term.

In short term, investors will appreciate the social and environmental responsibility undertaken by the company only if its implementation can contribute to the improvement of the company's financial performance. In long term, social and environmental performance improvements made by the company will be able to increase the value of the company directly.

Investors considering companies that apply the principles of good corporate governance (GCG) not just as a regulatory compliance alone, so that it can provide benefits for improving corporate performance and firm value, in the short term and long term.

The study provides some practical implications that the disclosure of non-financial information can become a relevant consideration for investors in making investment decisions. Social and environmental performance of the company is able to improve the company's financial performance for value creation. Good corporate governance may contribute to improve financial performance and reduce the firm risk.

There are some limitations for this study: first, the model in this study only examines the one way relationship between the non-financial performance to financial performance, risk, and the value of the company. Second, environmental and social performance and corporate governance are not easily measurable. Subjective interpretation is made possible when assessing certain items disclosed by the company, using content analysis approach.

Therefore, we need further testing on the model and the direction of the relationship between variables in the model. In addition, we need to develop a better approach in the measurement of non-financial performance in order to represent the actual conditions.

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