

# THE EFFECT OF ENVIRONMENTAL PERFORMANCE ON COMPANY VALUE WITH FINANCIAL PERFORMANCE AS INTERVENING VARIABLE AT THE MANUFACTURING COMPANY LISTED IN INDONESIA STOCK EXCHANGE

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## ABSTRACT

*Environmental problems have become a central issue for several countries around the world, especially in Indonesia and become a concern to the various parties, including government, public, even the accounting disciplines. The reason is that Indonesia has decreased in Environmental Performance Index and causes a lot of negative impacts, not only for the community itself but also the company that takes the raw material from nature for their production activity. This study aimed to investigate the effect of environmental performance on company value directly and indirectly through financial performance as an intervening variable. The object is some manufacturing companies listed in Indonesia Stock Exchange from 2011-2014. This study used purposive sampling to determine the sample, that generates 20 manufacturing companies as a study sample. Data used in this study is secondary data obtained from the annual report and PROPER Assessment Report. This method used path analysis to see the direct and indirect effect between the independent variables with the dependent variable. The results showed that environmental performance does not give significant effect on company value, while environmental performance gives a significant effect on financial performance, financial performance gives a significant effect on company value, and environmental performance has a significant effect on company value through financial performance as intervening variables. Furthermore, financial performance is intervening variables that may mediate the relationship between environmental performance and company value.*

**Keywords:** *Environmental Performance, Company Values, Financial Performance*

## INTRODUCTION

Nowadays, environmental problems have become a central issue for countries around the world, especially in Indonesia. Based on the Environmental Performance Index (EPI) results compiled by the environmental experts from Yale University and Columbia University, Indonesia has a decrease in the Environmental Performance Index. In 2012, Indonesia held its ranking at

74th of 132 countries in the world with Environmental Performance Index 66. In 2014, the ranked decreased quite significantly, which is ranked 112th out of 178 countries with index 44.36. It shows that environmental management in Indonesia is getting worse, where one of them due to lack of pollution control and about 85% of the pollution caused by the emissions from motor vehicles. Besides,

the forest fires and industrial activities have a role in contributing to air pollution in Indonesia as well ([www.kompasiana.com](http://www.kompasiana.com)).

The industrial sector, especially in Indonesia is the main component of economic growth. It had shown from the industrial sector roles for the national economy, which is nearly 25% before the economic crisis. Indonesia has several industry sectors, one of them is the manufacturing sector, which named as the leading sector. It is a sector that gives a significant contribution to the economic growth in Indonesia. The data about the growth of the contribution of manufacturing industry to national GDP in 2011 until 2014 as follows 21,76%, 21,45%, 20,98%, and 21,02% (Badan Pusat Statistik, 2015).

Based on the data, the GDP growth of the manufacturing industry from 2011 to 2014 is positive and getting bigger. It shows that the performance of the manufacturing industry is getting stronger, so it gives a massive contribution to the national economy and attracts investors to invest their money continuously. Therefore, the company is more aligned to the investors (the capitalist) that only material profit-oriented, consequently the companies exploiting the natural resources and community (social) uncontrollably. Aside from the contribution on economic growth in Indonesia, manufacturing industry also contributed to the pollution of soil, water, and air, so it caused the environmental

degradation, which interferes the human life (Anggraini, 2006). The environmental issues subsequently become a concern to the various parties, including government, public, even the accounting disciplines.

The attention from the government is a government has set the norms and legal instruments about the environment which has been conceiving in law since 1982. In addition, since 2002, the government through the Ministry of Environment held a Program Performance Rating (PROPER) in environmental management, which was an effort to encourage the company structure in environmental management (Titisari and Alviana, 2012) and aimed to encourage the increasing of corporate compliance in environmental management with the sustainable basis (Purnomoand Widianingsih, 2012). According to the law, the company which runs the operations activities are required to keep, maintain and manage the living environment, and it is presumed that environmental performance is not only considered as a charity but also seen as competitiveness (Hansen and Mowen, 2009:410) to achieve the superior performance for the company, which will increase the firm value. Increasing the firm value is a long-term goal to be achieved by each company. Accounting discipline has a role in dealing with environmental issues as well.

Environmental accounting is a part of accounting science. Basically,

environmental accounting is to prosecute awareness of companies and organizations took advantage of natural resources or environment. The environmental accounting concept usage could encourage the companies ability to minimize the environmental problems by increasing the efficiency in environmental management by assessing the environmental performance from a cost perspective (environmental cost) and benefits or effects (Nuryanti et al., 2015). Thus, it may create eco-efficiency benefits for the company, that is organizations able to produce the goods or services which are more useful while reducing the negative environmental impacts, resource consumption, and costs simultaneously (Hansen and Mowen, 2009:410).

The concern of environmental issue also comes from the community, as there are some industrial activities performed in the community environment. The companies existence in community environment has positive and negative effects (Titisari and Alviana, 2012). The positive effects are employment opportunities created for people around the industrial area. Hence, it may increase their revenue and support their economic improvement, the availability of consumer goods required, and give the contribution to the local income from the taxes. Meanwhile, the negative effects including pollution and chemical waste produced by

industrial activities may cause soil, water, and air pollution. From the negative impact above, the community realized that disturb their daily lives, and become larger. Thus, it is hard to control. When society perceive that the operations are not in accordance with the norms, they will withdraw or revoke the 'contract' through various ways to prevent the actions which are inconsistent with public expectations. The stakeholder theory mentioned that the stakeholders basically have the ability to affect the economic resources used for the companies production activities (Setyawan and Zulaikha, 2012).

From the description above, it proved that the company existence was affected by the stakeholders' support. Therefore, legitimacy theory revealed that the organization is continuously trying to convince the society that its activities are in accordance with the norms where they located (Cuganesan et al., 2007). By acquiring the legitimacy and trust of the community, it may secure the company from undesirable things and improve the companies brand image. Hence, it may increase sales, which may affect the companies financial performance. It is supported by research conducted by Purnomo and Widianingsih (2012) who found that environmental performance has a positive effect on financial performance. Another study also conducted by Pérez-Calderón et al., (2012) showed that there is

a positive correlation between environmental performance and financial performance. The companies financial performance can be shown from the financial ratios, such as profitability ratios. If profit is defined as economic profit, then profit maximisation in the long term will be consistent as well with the company value maximization (Wardhani, 2013).

Empirical research about the relationship between environmental performance and company value has been done generally, but these studies still show the various result, such as the research conducted by Iqbal et al., (2013), shows that the environmental performance effect on company value. This study is in line with research conducted by Hariati and Widya (2015) showed a positive relationship between environmental performance with company value. The different results shown by research conducted by Tjahjono (2013), the result showed that environmental performance does not have a direct influence on company value, but it has an indirect influence on company value through financial performance. Besides, the empirical studies used financial performance as an intervening variable has been done by other researchers, such as Ratih (2011) that examined the effect of Good Corporate Governance on company value with financial performance proxied by NPM and ROA as intervening variable

in the company which wins The Most Trusted Company. This research used a simple path analysis. The result shows that GCG has no direct effect on NPM and ROA. NPM has no significant effect on company value, but ROA has a significant effect on company value. The GCG also has no indirect effect on company value through NPM and ROA, which means that NPM and ROA are not an intervening variable that mediated the relation between GCG and company value.

Wardhani (2013) examined the effect of CSR disclosure on company value with financial performance and going concern as an intervening variable in the manufacturing company listed in IDX from 2007 to 2009. This research used path analysis that more complex, as there are two intervening variables. The results show that CSR disclosure has no significant direct effect on financial performance, going concern value, company value. In addition, CSR disclosure has no significant indirect effect on company value through financial performance, but CSR disclosure has a significant indirect effect on company value through going concern value. It means that going concern value is the intervening variable that mediated the relation between CSR disclosure and company value, while financial performance is not the intervening variable that mediated the relation between CSR disclosure and company value. According

to Tjahjono (2013) in the indirect relation between environmental performance with the company value, the company financial performance can be used as an intervening variable. Therefore, from the environmental issues and the impact on company value either directly or indirectly, this topic is interesting for further study, that is how the effect of environmental performance on company value by adding the financial performance as an intervening variable.

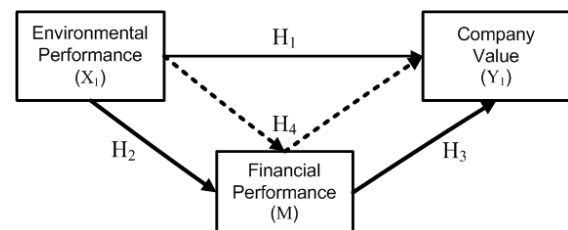
### LITERATURE REVIEW

The company environmental performance is the company performance in creating a good environment (green) (Suratno et al., 2006). The superior environmental performance may reduce long-term risks associated with running out of resources, energy costs fluctuations, debt products, pollution and waste disposal management (Shrivastava, 1995 in Ismail et al., 2011). It may be the competitive advantage basis and an opportunity to increase revenue as well by fulfilling the green consumer (Hart, 1995 in Ismail et al., 2011). This shows the positive influence of environmental performance to financial performance.

Financial performance evaluated the efficiency and effectiveness of the company activities that have been implemented in a certain period (Wardhani, 2013). The correlation between environmental performance and financial performance can be seen from the

viewpoint of revenue and cost (Aniela, 2012). Besides, the superior environmental performance may provide the opportunities for improving the public relations and the corporate image thus it will increase the attractiveness of investor and potential investor to invest which is can rising the company stock prices. If the company stock price is going higher, then the company value is higher as well. The correlation among company value, environmental performance, and financial performance are company value will increase and sustain, if companies pay attention to the social, economic, and environmental as the company sustainability is an economic, social, and community balance (Rimba, 2010 in Wardhani, 2013).

Based on the description, the conceptual framework shown in Figure 1.



**Figure 1. Conceptual Framework**

From the conceptual framework, then the hypothesis in this study can be formulated as follows:

- H<sub>1</sub>: Environmental performance has significant effect on company value
- H<sub>2</sub>: Environmental performance has significant effect on financial performance

H<sub>3</sub>: Financial performance has significant effect on company value

H<sub>4</sub>: Environmental performance has significant effect on company value with financial performance as intervening variable.

## RESEARCH METHOD

### Independent Variables

The independent variable used in this study is environmental performance. Environmental performance in this study measured by using the company achievement level in the PROPER program. The PROPER performance rating system using five color indicators, which scored in a sequence, that is gold = 5; green = 4; blue = 3; red = 2; and black = 1.

### Dependent Variable

The dependent variable in this study is company value proxied by Tobin's Q value. Tobin's Q value is a statistic that can be used as a proxy for measuring the company value from the investor perspectives (Wolfe and Sauaia, 2003). Mathematically, Tobin's Q value can be calculated by the following formula:

$$q = \frac{(EMV + D)}{(EBV + D)}$$

Description:

q = Company Value

EMV = (Closing Price x Number of Outstanding Shares)

EBV = Book Value of Total Assets

D = Book Value of Total Debt

### Intervening Variables

An intervening variable is a variable that is placed between the dependent and independent variable. Hence, it becomes an indirect relationship. The intervening variable also considered as a mediator variable. The intervening variables used in this study is financial performance measured by profitability ratios, Return On Assets (ROA). Return On Assets (ROA) is a ratio used to indicate the ability of company capital that invested in total assets to generate profits for all shareholders or investors (Riyanto, 2010:336). Mathematically, ROA calculated with the following formula:

$$ROA = \frac{Earning\ After\ Tax}{Total\ Assets}$$

### Population and Sampling

The population in this study is the manufacturing company listed in Indonesia Stock Exchange from the year 2011 to 2014. The sampling method used in this study is a purposive sampling method, by taking the sample from a population based on the available information and accordance with the research objectives. The criteria as follows:

1. Manufacturing companies listed on Indonesia Stock Exchange from 2011 to 2014.
2. Manufacturing companies that publish the annual reports from 2011 to 2014.
3. Manufacturing companies that publish the annual reports in rupiahs.

4. Manufacturing companies that has positive ROA from 2011 to 2014
5. Manufacturing companies that have followed Program Performance Rating (PROPER) in 2011 until 2014.

Based on the predefined criteria, then the selected sample consist of 20 manufacturing companies.

### Data

This study used secondary data source from the companies annual report from 2011 until 2014 obtained from the Indonesia Stock Exchange official website ([www.idx.co.id](http://www.idx.co.id)) and the companies official website, while for the PROPER ranks, it is obtained from PROPER Assessment Report from 2011 to 2014 published by Ministry of Environment in Indonesia.

### Model

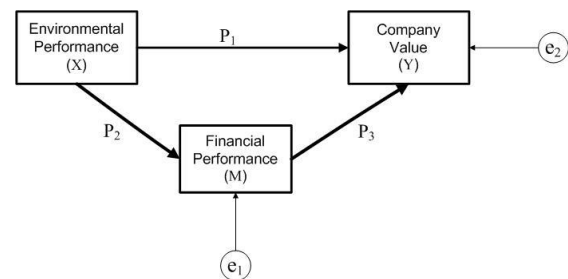
Data analysis method in this study is path analysis with two structural regression model, as follows:

$$\text{Model I } ROA = \alpha + \beta_1 \text{EnP} + e_1$$

$$\text{Model II } Q = \alpha + \beta_1 \text{EnP} + \beta_2 \text{ROA} + e_2$$

Path analysis is helping in seeing

how much the direct and indirect influence between the independent variables and dependent variables. The path analysis model in this study shown in Figure 2.



**Figure 2. Path Analysis Model**

In addition, this study also equipped with descriptive statistical tests, the classical assumption test, goodness of fit model test and hypothesis test assisted with the statistical test equipment, that is SPSS 22.0 for Windows.

## RESULT AND DISCUSSION

### Statistics Descriptive Test Results

The statistic descriptive test result of variables company value, environmental performance, and financial performance for period 2011 to 2014 are presented in Table 1.

**Table 1. Statistics Descriptive Test Results**

Variabel	N	Min.	Max.	Mean	Std. Deviation
Q	80	0,613	18,922	3,71706	4,023396
EnP	80	2	5	3,31	0,821
ROA	80	0,002	0,427	0,13719	0,105956

Source: Secondary Data Processed, 2016

Based on Table 1 it can be seen that there are 80 samples (observations) in this study. The variable of company value proxied by Tobin's Q value describes the condition of company investment opportunities. In Table 1 shows that Tobin's Q value has minimum value, that is 0,613 and the maximum value, that is 18,922. The mean value of Tobin's Q is 3,71706, which is more than 1 (Tobin's Q > 1), it shows that the company has a high growth rate in conditions of investment opportunities. Financial performance proxied by Return on Assets (ROA) has the minimum value, which is 0,02 and the maximum value, which is 0,427. The average value is 0,13719 or 13,7%, which is more than 10%. It means that the average company has relatively good financial performance. Environmental performance measured by PROPER shows the minimum ratings, which is 2 or red ratings and the maximum ratings, that is 5 or gold ratings. The average value is 3 or blue ratings, which means the average company get a blue rating in their environmental performance.

### Classical Assumption Test Results

#### Normality Test Results

This study used Kolmogorov-Smirnov to test whether the data is meet the normality assumption by looking at the significant value. The results of the Kolmogorov-Smirnov test have shown in Table 2.

**Table 2. The Kolmogorov-Smirnov Test Results**

	<b>Unstandardized Residual</b>
N	80
Test Statistic	0,080
Asymp. Sig. (2-tailed)	0,200

Source: Secondary Data Processed, 2016

Table 2 shows the Asymp. Sig. (2-tailed) value is 0,200 which is more than 0,05, and the data residuals meet the normality assumption.

#### Multicollinearity Test Results

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables by looking at the value of tolerance and Inflation Variance Factor (VIF). The multicollinearity test results have shown in Table 3.

**Table 3. Multicollinearity Test Results**

	<b>Model</b>	<b>Tolerance</b>	<b>VIF</b>
1	LnEnP	,900	1,111
	LnROA	,900	1,111

a. Dependent Variable: LnQ

Source: Secondary Data Processed, 2016

In Table 3 shows there are no independent variables that have tolerance value less than 0,10 and VIF value more than 10, it means that there is no correlation between the independent variables or there



is no multicollinearity in the regression model.

#### **Autocorrelation Test Results**

The autocorrelation test can be detected by using the Durbin-Watson test. The result has presented in Table 4.

**Table 4. Autocorrelation Test Results**

Model	Durbin-Watson
LnEnP	2,224
LnROA	

a. Dependent Variable: LnQ

Source: Secondary Data Processed, 2016

Table 4 shows that the Durbin-Watson value is 2,224. This value is compared with value in Durbin-Watson table ( $N = 80$ ;  $k = 2$ ) which the upper value ( $dU$ ) is 1,6882 and the lower value ( $dL$ ) is 1,5859. The D-W value 2,224 is bigger than the upper value ( $dU$ ), and less than 2,3118 ( $4 - dU$ ) or ( $dU < d < 4 - dU$ ), it can be concluded that there is no autocorrelation.

#### **Heteroscedasticity Test Results**

The heteroscedasticity test can be tested using Glejser Test by looking at the significant value. The heteroscedasticity test results have shown in Table 5.

**Table 5. Heteroscedasticity Test Results**

Model	Sig.
1 LnEnP	0,765
LnROA	0,845

a. Dependent Variable: AbsRES\_7

Source: Secondary Data Processed, 2016

In Table 5 shows that the significant value of the environmental performance variable is 0,765 that is bigger than 0,05 ( $> 0,05$ ), and the significant value of financial performance variables is 0,845 that is bigger than 0,05 ( $> 0,05$ ) as well. It means that statistically, the independent variables have no effect on dependent variables, which means there are no heteroscedasticity problems.

#### **Goodness of Fit Model Test Results**

##### **Statistics F Test Results**

The F test aims to determine whether the independent variables simultaneously affect the dependent variable significantly. This test performed by comparing the Fcount with Ftable, or by looking at the significant value. The results have shown in Table 6.

**Table 6. Statistics F Test Results**

	F	Sig.
Regression Model I	8,692	0,004
Regression Model II	64,544	0,000

Source: Secondary Data Processed, 2016

Table 6 shows the significant value of the regression model I is 0,004 which is less than 0,05. It means that the independent variable is explanatory for the dependent variable or independent variable can affect the dependent variable simultaneously, while the significant value of regression model II is 0,000 which is also less than 0,05. It means that the independent variable simultaneously is

explanatory for the dependent variable or independent variable can affect the dependent variable simultaneously.

**Coefficient of Determination (R2) Test**

**Results**

The coefficient of determination (R2) aims to measure the ability of the model to explain the variations of the dependent variable. This study used the Adjusted R2 value to evaluate the regression model. The results have shown in Table 7.

**Table 7. Coefficient of Determination (R<sup>2</sup>) Test Results**

Model	Adjusted R Square
Regression Model I	0,089
Regression Model II	0,617

Source: Secondary Data Processed, 2016

Table 7 shows the Adjusted R Square value of regression model I is 0,089, meaning that 8,9% financial performance variation can be explained by environmental performance variation. Meanwhile, the rest 91,1% (100% - 8,9%) is explained by other factors outside the model and the Adjusted R Square value of regression model II is 0,617, which means that 61,7% company value variation can be explained by environmental performance variation and financial performance, while the rest 38,3% (100% - 61,7%) is explained by other factors outside the model.

**Path Analysis Results**

The regression coefficients of structural model I and model II were processed using SPSS 22.0 have shown in Table 8.

**Table 8. Coefficient Path**

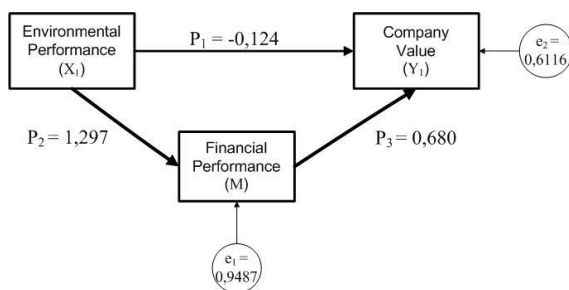
		Unstandardized		
		Coefficients	R <sup>2</sup>	e <sup>2</sup>
		B		
Regression Model I	(Constant)	-3,854	0,100	0,9487
	LnEnP	1,297		
	a. Dependent Variable: LnROA			
Regression Model II	(Constant)	2,654	0,626	0,6116
	LnEnP	-,124		
	LnROA	,680		
a. Dependent Variable: LnQ				

Source: Secondary Data Processed, 2016

From Table 8 it can be seen the path coefficient of P1 is -0,124 which is the

beta coefficient of environmental performance in regression model II, P2 is

1,297 which is the beta coefficient of environmental performance in regression model I, and path coefficient of P3 is 0,680 which is the beta coefficient of financial performance in regression model II, and from the error coefficient (e) calculation obtained the e1 value is 0,9487 and e2 value is 0,6116. Based on the path coefficient test, the interpretation of path analysis can be made in the path diagram shown in Figure 3.



**Figure 3. Path Diagram**

In path diagram in Figure 3, there is a direct and indirect effect of independent variables on the dependent variable. If the indirect effect is greater than the direct

effect (Indirect > Direct), it means that the correlation of an independent variable with the dependent variable is actually an indirect correlation. From Figure 3 it can be summed up that environmental performance has an indirect effect on company value as the value of indirect effect is 0,882 (1,297 x 0,680) is greater than the absolute value of direct effect, that is -0,124. From the description, it can be concluded that financial performance is an intervening variable which mediates the relationship between environmental performance on company value.

**Hypothesis Test Result**

**Statistics t Test Results**

The statistics t-test is used to determine the significant effect of an independent variable on the dependent variable partially or individually. The results of the regression model I and II were processed using SPSS 22.0 presented in Table 9 and Table 10.

**Table 9. Statistics t Test Results of Model I**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	-3,854	,525	-7,341	,000
LnEnP	1,297	,440	2,948	,004

a. Dependent Variable: LnROA

Source: Secondary Data Processed, 2016

From Table 9 it can be created structural regression model as follows:

$$LnROA = -3,854 + 1,297LnEnP + e_1$$

The regression model can be interpreted as follows:

1. If the environmental performance is constant, it will decrease the financial performance at 3,854.
2. Every one percent increase in environmental performance will increase the financial performance measured by ROA at 1,297.

The significance value of environmental performance is 0,004 which is less than 0,05 ( $< 0,05$ ). Hence, it can be concluded that environmental performance has a significant effect on financial performance. Therefore, the Hypothesis of **H2 is accepted**. The beta coefficient is positive, which means the effect is positive.

**Table 10. Statistics t Test Results of Model II**

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	2,654	,375	7,073	,000
LnEnP	-,124	,255	-,487	,628
LnROA	,680	,062	10,921	,000

a. Dependent Variable: LnQ

Source: Secondary Data Processed, 2016

From Table 10 it can be created structural regression model as follows:

$$LnQ = 2,654 - 0,124LnEnP + 0,680LnROA + e_2$$

The regression model can be interpreted as follows:

1. If environmental performance and financial performance are constant, it will increase the company value at 2,654.
2. Every one percent increase in environmental performance will decrease the company value measured by Tobin's Q value at 0,124.
3. Every one percent increase in financial performance will increase the company

value measured by Tobin's Q value at 0,680.

The significance value of environmental performance is 0,628 which is greater than 0,05 ( $> 0,05$ ). It can be concluded that environmental performance has no significant effect on company value. Therefore, the **Hypothesis H1 is rejected**. The significance value of financial performance is subsequently 0,000 which is less than 0,05 ( $< 0,05$ ). Hence, it can be concluded that financial performance has a significant effect on company value. Therefore, the **Hypothesis of H3 is accepted**. The beta coefficient is positive, which means that the effect is positive.

### **Sobel Test Results**

The significant effect of the intervening variables (mediation) shown by the multiplication of path coefficient P2 and P3 can be tested using the Sobel test as follows:

$$S_{P_2P_3} = \sqrt{P_3^2 S_{P_2}^2 + P_2^2 S_{P_3}^2 + S_{P_2}^2 S_{P_3}^2}$$

$S_{P_2P_3}$

$$= \sqrt{[(0,680)^2(0,440)^2] + [(1,297)^2(0,062)^2] + [(0,440)^2(0,062)^2]}$$

$$S_{P_2P_3} = 0,311$$

Based on the calculation above, then t value can be calculated. The t value is used to determine or test the significance of the indirect effect (mediation effect) of intervening variables. The t value can be calculated as follows:

$$t = \frac{P_2P_3}{S_{P_2}S_{P_3}} = \frac{0,882}{0,311} = 2,836$$

From the calculation results, the value of  $t_{count}$  is 2,836 which is bigger than the value of  $t_{table}$  with significance level of 0,05, that is 1,99 ( $t_{count} > t_{table}$ ). Therefore, it can be summed up that the mediation coefficient which is 0,882 is significant. It means there is mediation effect on relationship between environmental performance and company value. Thus, it can be concluded that environmental performance has significant effect on company value mediated by financial performance as intervening variable. Therefore, the **Hypothesis H<sub>4</sub> is accepted**.

The coefficient is positive, which means that the indirect effect is positive.

### **The Effect of Environmental Performance on Company Value**

In the first hypothesis (H<sub>1</sub>) showed that environmental performance has no significant effect on company value. This result is consistent with research conducted by Tjahjono (2013) who also found that environmental performance has no significant effect on company value measured by stock price. There is no significant effect as the PROPER is not the factor that determines the fluctuations of company market value in a certain period. Meanwhile, there is another factor that determines the company market value fluctuations. There is no significant effect as well because of the market situation in Indonesia is quite different from other countries. The capital market in Indonesia has not shown a response to company rating performance related to environmental management as one of the company performance indicators, although the Ministry of Environment issued the policies and information related to environmental performance that directly and indirectly affect the company. Investors still consider that environmental performance ratings do not contain relevant information to investors in making investment decisions. The statement supported by Sudaryanto and Raharja (2011) stated that the valuation of company environmental performance

conducted by the Ministry of Environment has not yet to provide meaning to the investors in Indonesia stock market. The results do not support the previous studies conducted by Iqbal et al., (2013) and Hariati and Widya (2015) who states that environmental performance has a significant effect on company value.

### **The Effect of Environmental Performance on Financial Performance**

In the second hypothesis (H2) test result showed that environmental performance has a significant positive effect on financial performance. This results consistent with previous studies conducted by Johansson and Orre (2008); Djuitaningsih and Ristiawati (2011); Titisari and Alviana (2012); Purnomo and Widianingsih (2012); Pérez-Calderón et al., (2012); Arafat et al., (2012); and Tjahjono (2013). These studies found a significant positive effect between environmental performance and financial performance as well. It means that if the environmental performance has increased, the financial performance increased as well. Furthermore, if the environmental performance has decreased, then the financial performance will be decreased as well.

The positive effect is possible as good environmental performance may be the basis of competitive advantage and opportunities to increase the revenues by

fulfilling the green consumers' needs, considering the public nowadays prefer to buy or consume the green products (environmentally friendly products). The company actions in changing the product into environmentally friendly products have the potential to improve financial performance as reflected in products quality. In addition, the company can reduce the cost related to environmental impact. Increased revenue and decreased costs in financial statements will increase the profit.

The results are supported by the eco-efficiency concept which states that the company that environmentally responsible is likely to gain benefits such as lower social costs, reduce the environmental costs, and maintain or create the competitive advantage. It also supported by stakeholders theory which states that the company conducted the pro-stakeholders program, including the environmental management activities, will positively be responded by stakeholders through the high trust towards the company. The stakeholders trust is reflected by the loyalty, which will increase the products sales. The results of this study is inconsistent with Sarumpaet (2005) who found that environmental performance has no significant effect on financial performance.

### **The Effect of Financial Performance on Company Value**

In the third hypothesis (H3) test result showed that financial performance has a significant positive effect on company value. This result is consistent with several studies conducted by Ratih (2011); Pertiwi and Pratama (2012); Tjahjono (2013); Putri (2013); Alghifari et al., (2013); and Wijaya and Linawati (2015). These studies also found the significant positive influence between financial performance and company value, which means the improved financial performance will improve the company value. When the financial performance is decreased, then the company value is decreased as well.

The positive effect proves that the investors in making the investment decisions firstly is doing the company overview by looking at the financial ratios as an investment evaluation tool. The ratio which most concern to investors is Return of Assets ratio (ROA), as according to Weygandt et al., (2010:402) ROA ratio is the measurement of overall profitability. ROA ratio reflects the company able to generate profits from assets invested in a certain period. The higher ROA, the better assets productivity in generating the net income is as well. The increased profits in a company will be responded positively by investors to invest their funds in the company, which will increase the company value reflected by share prices. Those

statements also supported by Alghifari et al., (2013) who states that company performance measured by ROA also be used as a signal for the investors about the future cash flow, as ROA is obtained from earning after tax that used as the basis for calculating the net cash flow. A company with good financial performance is proved by the large ROA. The large ROA will be responded positively by investors by investing in a company. It will push the company stock price rises, and the rising company stock price will rising the company value as well. The results are not consistent with research conducted by Wardhani (2013) who found out that financial performance has no significant effect on company value.

### **The Effect of Environmental Performance on Company Value with Financial Performance as Intervening Variable**

In fourth hypothesis (H4) test result showed that environmental performance has a significant effect on company value through financial performance as intervening variable, which means that good environmental performance will improve financial performance which will increase the company value as well.

Companies with good environmental performance and has a high level of efficiency may reduce costs. The cost reductions will increase the company

profits and reduce the emissions below the standard set by the regulations. In this case, the company activities in accordance with the applicable regulations, thus the company may avoid the lawsuits related costs. It would be followed by increasing the reputation and brand image, as well as increasing the financial position. Companies which have a good reputation and good financial position will be responded positively by investors and potential investors, which will increase the company value.

The result is in line with research conducted by Rahmawati and Ahmad (2012) and Tjahjono (2013). According to Rahmawati and Ahmad (2012), the indirect effect existed due to the information about environmental performance ratings issued by Ministry of Environment does not directly affect the economic performance as measured from the investors' reaction to the company stock. In other words, the investors have no response to such information, thus it requires the factors that mediate this effect. One of them is financial performance, considering the investors are still using the information from financial statements in making the investment decisions.

## **CONCLUSION AND SUGGESTION**

Based on the hypothesis testing results and the discussion above, to sum up, the environmental performance proxied by

PROPER rating has no significant direct effect on company value proxied by Tobin's Q value. The changes in PROPER has no effect on company value. It is because the valuation of environmental performance conducted by the Ministry of Environment has no meaning for the investor in the stock market. Hence, the market players have not shown a response to company environmental performance ratings as one of the company performance indicators. The investors still consider the environmental performance rating does not contain the relevant information to investors in making the investment decision. However, environmental performance has a significant indirect effect on company value through financial performance as an intervening variable.

Financial performance has a significant effect in mediating the correlation between environmental performance and company value. Environmental performance and financial performance will strengthen each other, so it has a significant effect on company value. This is perhaps because the capital market behaviour in Indonesia is meticulous in determining the investment decisions. Hence, the stand-alone environmental performance variable has no significant effect on investor decisions. Investors are still considering financial performance in making the investment decision. The higher financial performance measured by ROA,



the better the assets productivity in generating profitability is as well. The increase in profit will be responded positively by investors to invest their funds in the company, which will increase the company value reflected by share price.

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