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THE INFLUENCE OF ENVIRONMENTAL PERFORMANCE, ENVIRONMENTAL DISCLOSURE AND ENVIRONMENTAL COST ON ECONOMIC PERFORMANCE

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Abstract

This research aims to examine the effect of environmental performance measured with PROPER, environmental disclosure measured with GRI index version 4.0, and environmental cost measured by comparing the cost incurred for CSR and net income. The populations in this study are agriculture, mining, manufacturing and other non-financial service companies listed in Indonesia Stock Exchange in 2013-2016 with 58 companies in number. This study used purposive sampling method, leaving 15 companies that match the criteria. Hypothesis testing in this study used Multiple Linear Regression. The results of the testing showed that (1) environmental performance had significant effect on economic performance (2) environmental disclosure had no significant effect on economic performance (3) environmental cost had significant negative effect on economic performance. From Adjusted R square test result it showed independence of environemntal performance, environmental disclosure and environmental cost only being able to influence the dependent variable of economic performance with 15,6% in percentage. Meanwhile, the rest of the percentage 84,4% was *determined by other variables not included in this study.*

Keywords: *Environmental Performance, Environmental Disclosure, Environmental Cost, Economic Performance*

1. INTRODUCTION

In the modern era, the development of companies in the world occurred rapidly. Increasingly new emerging companies make the competition tighter to make as many as profit as possible, but it makes many companies not pay attention to the impact of environmental damage occuring due to business activities they run. Related to this matter, the company needs an accurate and realistic planning according to the company condition.

Economic performance is a company's management performance which in this case is company's financial performance, marked with annual return (Rohmah & Wahyudin, 2015). According Wulandari & Hidayah (2013) economic performance of is basically needed as a tool to measure company's health (financial health). By looking at the good economic performance it can provide a good and clear display of the success of a company. The existence of the company can not be separated from the public in the environment.

In Indonesia, mining companies are companies that change the landscape a lot and have a negative impact on the survival of the surrounding community.

One of them is PT Indominco Mandiri, a subsidiary of PT Indo Tambangraya Megah Tbk (ITM) listed on the Indonesia Stock Exchange. ITM controls a number of companies in Kalimantan. In 2014, ITM produces 29.1 million tons of coal for sale locally in Indonesia and exports the coal to other countries especially Thailand.

Until now the activities of company have changed landscapes, from forests and food lands to abandoned mines and arid lands where people complain of water scarcity caused by mining activity. Whereas according to the Ministry of Environment and Forestry (KLHK) PT Indominco Mandiri never gets a blue rating on the Corporate Performance Evaluation Program in Environmental Management (PROPER) in 2014. The result of PROPER of PT Indominco is not announced because there are complaints from the community and it is located under the control of law enforcement (www.greeners.co).

Awareness of corporate social responsibility and new perspectives on firms considered growing well can not be measured only from the achievement of profit, but also from company’s environmental and social concern. Environmental performance can illustrate the good and bad environmental conditions around the company. The better the environment surrounding the company is, the better the environmental performance carried out by a company is, and vice versa.

Environmental disclosure is a disclosure that explains how much the company cares about the environment. The amount of corporate awareness of the environment can be indicated in the annual report that can attract potential investors and also the users of financial statements expected to be able to raise company's economic performance (Rohmah & Wahyudin, 2015). In general, disclosure is a presentation of company’s information considered important in the achievement of the purpose of financial statements and to serve the various parties considered important to the company (Suwardjono, 2010). In practice environmental performance and disclosure of environmental performance will certainly require the costs in its implementation. According to Ikhsan (2004: 104) environmental costs include internal and external costs associated with environmental damage and protection efforts made by a company. Environmental costs are the impacts that arise from the financial side of the company that should be accountable as a result of activities that affect the quality of the environment (Ikhsan, 2004: 24).

2. LITERATURE REVIEW

2.1 Legitimacy Theory

The theory of legitimacy was first drafted by Dowling & Pfeffer (1975) which defined the theory of legitimacy as a condition or status that exists when entities provide harmony to social groups in which the entity is part of the social group. When a disharmony takes place between an entity and a social group in that area, the region will get a threat of legitimacy. Donovan (2002) argues that the legitimacy of an organization can be comprehended as something which the society gives to the company and something wanted or sought from society. Thus, legitimacy has benefits to support the viability of a company (going concern).

2.2 Stakeholder Theory

Stakeholder theory was first introduced by Freeman (1984) who said that stakeholder is a group or individual that can influence the achievement of organization’s goals. The activities of a company are influenced by internal and external factors so-called stakeholders.

The survival of a company heavily depends on stakeholder's support and the support should be sought so that all the activities related to company's goal should seek the support. The stronger the support is, the greater the company's effort to adapt with the stakeholders is.

2.3 Hypothesis Development

2.3.1 The effect of *Environmental Performance* on *Economic Performance*

Environmental Performance is the company's performance in creating a better environment (green) (Suratno et. al., 2006). Environmental performance is a measurable result of the environmental management system, which is related to the control of its environmental aspects (Iksan, 2009). Based on the theory of legitimacy the greater the share of the company in the environmental activities is, the better the image of the company in the eyes of society and stakeholders is.

With the company's improved performance, the company's economic performance will be better, so that the market will respond positively through fluctuations in stock prices followed by increased profitability. Relatively many investors are interested in buying shares of the company to invest. This is a reflection of the achievement of economic performance.

H1: environmental performance has significant effect on economic performance

2.3.2 The effect of *Environmental Disclosure* on *Economic Performance*

Environmental disclosure is the disclosure of information related to the environment disclosed in the company's annual report (Suratno, 2006). The disclosure of the environment is a process of communicating the social and environmental impacts of the economic activities conducted by an organization to a particular group and to society overall (Sembiring, 2005). Firms with high levels of disclosure will be more reliable. In this matter investors will respond positively with higher stock price fluctuations, and vice versa.

In accordance with the theory of stakeholders, the statement is the amount of environmental information disclosed by the company affecting the stakeholders, resulting in stock prices and affecting the annual return of the company.

H2: environmental disclosure has a significant effect on economic performance.

2.3.3 The effect of *Environmental Cost* on *Economic Performance*

Environmental cost is the internal and external costs associated with environmental damage and protection efforts undertaken by a company. Environmental costs are the financial and non-financial impacts that should be borne out as a result of activities affecting the quality of the environment. Costs allocated for continuous quality improvement can increase profits by increasing damage-free output (Ikhsan, 2004).

This causes the company's operating costs to decrease, so that the profits will increase. The existence of a company will gain legitimacy if it is able to meet the expectations of the stakeholders. The positive response will have an impact on increasing the company's profitability through increasing the annual return of the company.

H3: environmental cost has significant effect on economic performance.

3. RESEARCH METHOD

3.1 Population and Sample

This research conducted to research non-financial companies listed on the Indonesia Stock Exchange during the period 2013-2016. The analysis technique used in this research is by using multiple regression analysis. The methods of collecting samples in this study use purposive sampling technique. The samples in this study are 15 companies meeting the criteria established in the time period for 4 years. Then, 60 companies are assigned as the sample in this study.

3.2 Measurement Variable

a Dependent Variable (Y)

The measurement of economic performance in this study uses Ratio Return on Assets (ROA).

Table 1. Proper Rating

Color Category	Information	Score
Gold	Very very good	5
Green	Very good	4
Blue	Good	3
Red	Bad	2
Black	Very bad	1

2) Environmental Disclosure (X2)

Environmental disclosure measurements in this study uses GRI Index version 4.0 (Global Reporting Initiative ver 4.0).

$$\textit{Environemntal Disclosure} = \frac{\text{Number of items disclosed}}{34}$$

3) Environmental Cost (X3)

According to previous studies conducted by Babalola (2012), the measurement of environmental costs is as follows:

$$\textit{Environmental Cost} = \frac{\text{CSR Activity Fee}}{\text{Net profit}}$$

4. RESULT AND DISCUSSION

4.1 Descriptive statistics

Based on the results of statistical description of data processing, the marks are as follows:

$$\text{ROA} = \frac{\text{Earnings after interest and taxes}}{\text{Total assets}}$$

b Independent Variables (X)

1) Environmental Performance (X1)

Environmental performance Measurements in this study was measured from the achievements of companies in PROPER. The PROPER performance rating system covers the rating company within five (5) colors. A score is given in a row by color. It is as follows:

Tabel 2. Descriptive Statistic

Descriptive Statistics

	N	Min	Max	Me an
EP	60	,0109	,2049	,0877 97
ENVRP	60	2	5	3,22
ENVRD	60	,0294	,9118	,198529
ENVRC	60	,0004	,2298	,032652
Valid N (listwise)	60			

Based on the results in table 3, it can be seen that the economic performance has the lowest score of 0.0109 and the highest score of 0.2049 with average score of 0.087797.

The independent environmental performance variables are measured by company achievement following PROPER program with the lowest or minimum score of 2 and the highest or maximum score of 5 with the mean score of 3.22 (rounded to 3).

The independent environmental disclosure variable is measured by the number of disclosure items disclosed which are divided by 34 items of environmental disclosure with the lowest or minimum score of 0.0294 or 2.94% and the highest or maximum score of 0.9118 or 91.18% . Meanwhile, the average score in the environmental disclosure is 0.198529 or 19.85%.

Independent environmental cost variables are measured by the cost incurred for CSR activities which is divided by net profit with the lowest or minimum score of 0.0004 or 0.04% and the highest or maximum score of 0.2298 or 22.98% with an average score of 0, 032652.

4.2 Multiple Regression Model

Multiple regression testing results in this study are shown in table 3.

Table 3. Test Results of Multiple Linear Regression

Variabel	*Coefficient*	t	Sig.
(Constant)	-,002	-,056	,956
ENVRP	,032	3,116	,003
ENVRD	-,006	-,211	,834
ENVRC	-,399	-2,752	,008
R^2	,156		
F	4,633		

Based on table 3 above, the obtained multiple regression equation is as follows:

EP = -0,002 + 0,032ENVRP - 0,006ENVRD -0,399ENVRC

Based on table 3, it shows that the adjusted R square (R2) is 0.156 or 15.6%. So it shows that the percentage of influence of independent variable (environmental performance, environmental disclosure, environmental cost) to the dependent variable (economic performance) is 15.6%. The remaining percentage is 84.4% and it is influenced by other factors not included in this study.

Based on the multiple linear regression formula above it can be seen that the constant score is -0.002. This shows that if the environmental performance, environmental disclosure and environmental cost variables are 0, the economic performance score is -0.002. Based on the test of the research sample, with the assumption that the whole score of the independent variable is 0, the magnitude of the company's economic performance is -0.002.

Environmental performance variable has coefficient 0,032. It states that if every increase of 1 rating of environmental performance with score assumption of coefficient of other variable remains, it will increase economic performance score which is 0,032.

The environmental disclosure variable has a coefficient of -0.006 indicating that if every 1% increase in environmental disclosure, with the assumption that the score of the coefficient of another variable remains, it will lower the economic performance by score -0.006.

Environmental cost variable has a coefficient of -0.399 stating that if every 1% increase in environmental cost, with assumption that the mark of coefficient of other variables remains, it will lower the economic performance with score -0.399.

4.3 The Effect of Environmental Performance on Economic Performance

The first hypothesis in this study is to test whether the environmental performance has significant effect on economic performance. From table 3 above it can be known that the environmental performance significance score is 0.003. It is smaller than the level of significance with the score 0.05. Thus, the environmental performance has significant effect on economic performance. The results of this study are in line with the research conducted by Al-Tuwaijri et al. (2003), Suratno et al. (2006), Titisari & Alviana (2012) which states that environmental performance has significant effect on economic performance.

This result is in line with the underlying legitimacy theory that the existence of an enterprise among the company's stakeholders will gain legitimacy if the company can meet the expectations of its stakeholders (Rusdianto, 2013). With the environmental performance that can be seen from the PROPER rating, it can be a reference of shareholders.

4.4 The Effect of Environmental Disclosure on Economic Performance

The second hypothesis in this study is to test whether the environmental disclosure has a significant effect on economic performance. After partial hypothesis testing, the environmental disclosure variable has a significance score 0.834> 0,05. It means that the environmental disclosure has no significant effect on economic performance. The result of this study is contradictive with the research conducted by Wulandari & Hidayah (2013), Andayani (2015) and Rohmah & Wahyudin (2015) stating that environmental disclosure has a significant effect on economic performance. However, the results of this study are in line with research conducted by Fuji et al., (2012) and Tunggal Fachrurrozie (2014) stating that environmental disclosure has no significant effect on economic performance.

This result is contrary to the stakeholder theory which explains that the company's ability to balance the diverse interests of stakeholders or shareholders is a key factor in the success and survival of the company (Lako, 2011). The environmental disclosure disclosed by the company should be done by the shareholders.

4.5 The Effect of Environmental Cost on Economic Performance

The third hypothesis in this research is to test whether environmental cost has significant effect to economic performance. After partial test of hypothesis has been carried out, the environmental cost variables have a significance score which is 0.008 <0.05. It means that environmental costs have a significant negative effect on economic performance. The result of this study is contradictive with the research conducted by Fitriani (2013) which states that environmental cost has no significant effect on economic performance. However, the result of this study is in line with research conducted by Acti Ifrueze (2013) which states that environmental cost has a significant negative effect on economic performance.

With the increase in the cost allocation of environmental activities it does show the existence of corporate awareness that CSR should be an obligation to be done by the company, so that the company is able to achieve legitimacy from the community surrounding the company. But it is not positively responded by the stakeholders who will invest their capital. It is shown by the decline in economic performance so that the cost of CSR activities are not able to improve the return of company assets. From these statements it shows that environmental cost has a significant negative impact on economic performance.

5. CONCLUSION

This study aims to test and determine the effect of Environmental Performance, Environmental Disclosure and Environmental Cost to Economic Performance. Based on the results of partial environmental performance test, it significantly influences the economic performance. This indicates that the existence of environmental performance seen in PROPER ranking can be the reference of shareholders.

The results showed that the environmental disclosure variable had no significant effect on economic performance. This is caused by many capital market actors who do not pay attention to environmental disclosure information conducted by the company. Thus, capital market actors still do not show response or do not use information disclosure of company environment in deciding shareholder's investment.

The results showed that the environmental cost variable had a significant negative effect on economic performance. With the increase in the cost allocation of environmental activities it does show the existence of corporate awareness that CSR should be an obligation to be done by the company, so that the company is able to achieve legitimacy from the community surrounding the company.

Limitation in this study is in determining the disclosure index. The reason is because not all companies use GRI version 4 index. Therefore, the determination of the index can be different for each researcher.

REFERENCES

Acti I, M.S., Lyndon M. E. & Bingilar, P. F. (2013) The impact of environmental cost on coerporate performance : A study of oil companies in Nigeria Delta State of Nigeria. *Journal of Buisness & Management*, 2(2), 1-10.

Almilia, L., & Wijayanto, D. (2007). Pengaruh environmental performance dan environmental disclosure terhadap economic performance. *Proceedings The 1st Accounting Conference*, hlm. 1-23.

Al-Tuwaijri, S.A. (2003). The relations among environmental disclosure, environmental performance, and economic performance : a simultaneous equations approach. *Accounting Organization and Society*, (29), 447-471.

Andayani, R. (2015). 'Hubungan antara ISO 14001, environmental performance dan environmental disclosure terhadap economic performance. *Jurnal Akuntansi dan Sistem Teknologi Informasi*, 2 (11).

Babalola, Yisau Abiodun. (2012). The Impact of Corporate Social Responsibility on Firms' Profitability in Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, ISSN 1450-2275 Issue 45 (2012).

Fitriani, A. (2013). Pengaruh kinerja lingkungan dan biaya lingkungan terhadap kinerja keuangan pada BUMN. *Jurnal Ilmu Manajemen*, (1), 137-148

Freeman, R.E. (1984). *Strategic Management: A stakeholder approach*. Boston: Pitman.

Ghozali, I. (2013). *Aplikasi analisis multivariate dengan program IBM SPSS 21 Update PLS Regresi*. Semarang: Badan Penerbit Universitas Diponegoro.

Heriningsih, S. (2012). Pengaruh corporate social responsibility dissclosure dan environmental performance terhadap economic performance pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. *Jurnal Ekonomi dan Bisnis*, (10), 18-28.

Ikhsan, A. (2009). *Akuntansi manajemen lingkungan*. Edisi Pertama, Yogyakarta: Graha Ilmu.

Kementrian Lingkungan Hidup. (2016). Program penilaian peringkat kinerja perusahaan diakses 7 September 2017. http://proper.menlh.go.id/portal

Lako. (2011). *Dekonstruksi CSR dan reformasi paradigma bisnis & akuntansi*. Jakarta: Erlangga.

O'Donovan, G. (2002). Environmental Disclosure in The Annual Report: Extending applicability and Predictive Power of Legitimacy Theory. *Accounting, Auditing & Accountability Journal*, (15), 344-371.

Sembiring, E.R. (2005). *Karakteristik Perusahaan Dan Pengungkapan Tanggung Jawab Sosial: Study Empiris Pada Perusahaan Yang Tercatat Di Bursa Efek Jakarta*. SNA VIII Solo.

Rusdianto, U. (2013). *CSR communications a framework for PR Practitioner*. Yogyakarta: Graha Ilmu.

Sunyoto, D. (2011). *Analisis regresi dan uji hipotesis*. Cet. 1, Yogyakarta: CAPS.

Suratno, I.B. (2006). *Pengaruh environmental performance terhadap environmental disclosure dan economic performance studi empiris pada perusahaan manufaktur yang terdaftar di Bursa Efek Jakarta periode 2001-2004*. Simposium Nasional Akuntansi 9 Padang.

Suwardjono. (2010). *Teori Akuntansi : Perekayasaan Pelaporan Keuangan*. Yogyakarta: BPFE.

Titisari, Kartika Hendra & Alviana, K. (2012). 'Pengaruh Environmental Performance Terhadap Economic Performance', *Jurnal Akuntansi dan Keuangan Indonesia*, (9), 56-67.

Tunggal, W.S.P & Fachurrozie (2014). 'Pengaruh Environmental Performance, Environmental Cost dan CSR Disclosure Terhadap Financial Performance', *Accounting Analysis Journal*, (3), 310-320.

Wulandari, I.A. (2016). *Manajemen Laba, CSR Disclosure dan Kinerja Keuangan*. Simposium Nasional Akuntansi XIX Lampung.

Wulandari, R.D. & Hidayah, E. (2013). Pengaruh Environmental Performance Dan Environmental Disclosure Terhadap Economic Performance. *Jurnal Ekonomi dan Bisnis Islam*, 2 (2), 233-244.

http://www.greeners.co/berita/greenpeace-rilis-kerusakan-lingkungan-akibat-tambang-di-kalimantan-timur/ diakses pada tanggal 31 Agustus 2017.