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Khanifah, Khanifah; Udin, Udin; Hadi, Nor et al.

Article

## Environmental performance and firm value : testing the role of firm reputation in emerging countries

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## **Environmental Performance and Firm Value: Testing the Role of Firm Reputation in Emerging Countries**

#### Khanifah Khanifah<sup>1</sup>, Udin Udin<sup>2</sup>\*, Nor Hadi<sup>3</sup>, Fitri Alfiana<sup>1</sup>

<sup>1</sup>Universitas Wahid Hasyim, Jawa Tengah 50232, Indonesia, <sup>2</sup>Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia, <sup>3</sup>IAIN Kudus, Kudus, Jawa Tengah 59322, Indonesia. \*Email: udin\_labuan@yahoo.com

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#### ABSTRACT

This study aims to analyze the empirical evidence about the effect of environmental performance on firm value mediated by firm reputation in emerging countries. The sample of this study is the mining industry sectors listed on the Indonesia Stock Exchange from 2015 to 2018. The data is analyzed using partial least squares based structural equation modeling with WarpPLS 6.0 software. The results show that environmental performance has a positive and significant effect on firm reputation. In contrast to the expectation, environmental performance has a negative and significant effect on firm reputation further becomes a significant mediator in the relationship between environmental performance and firm value. These findings recommend for future studies to expand the objects and extend the observation period.

**Keywords:** Environmental Performance, Firm Reputation, Firm Value **JEL Classifications:** G32, K32, Q56, L14

#### **1. INTRODUCTION**

Firms are generally established to maximize profit-oriented and corporate value. Maximizing firm value is seen as very important for firms to increase shareholder wealth (Sucuahi and Cambarihan, 2016). Increasing firm value influences shareholder value which is characterized by a high return on investment. The value of the firm can be measured through several aspects. One of them is the market price of the firm's stock which reflects the overall assessment of investors for each equity owned. Stock market prices act as a barometer of the firm management performance (Ojikutu et al., 2017).

Firms that are oriented towards profitability generally will focus activities to increase the maximum value. In this case, firm value is the firm's selling price that is considered feasible by the prospective investor if the firm is sold. For firms that sell their shares to the public, the indicator of firm value is the price of shares traded on the stock exchange (Purnaya, 2016). The value of the firm can provide maximum prosperity or profit for shareholders

if the firm's stock price increases. The higher the stock price, the higher the shareholder's profit (Nurlela dan Islahudin, 2008). High firm value is the desire of the owner of the firm because with a high firm value shows the prosperity of shareholders is also high (Agustia et al., 2019).

Based on the concept that firm value is the price that investors will pay for a firm, the value of a firm formed will give a signal to investors about the price of a firm. Therefore, the factors that influence the value of the firm are also signals for investors that must be considered in their investment activities (Purwono, 2014). In this increasingly fierce economic condition, firms are required to pay attention to environmental factors that are arguably far from the firm's main operational activities, especially those related to the firm's external environment, which have a greater effect on firm reputation (Suka, 2016).

Conventional accounting only considers the operational activities of firms that focus on the interests of stockholders and

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bondholders, while other parties such as employees, consumers, and society are not often ignored. Firms sometimes ignore social and environmental responsibilities because of not affecting the firm's operational activities because the relationship is only non-reciprocal, i.e. transactions between the two do not cause direct reciprocal achievement. In the era of firms in the direction of a green firm, accountants have an important factor in changing the views of the firm because accountants have to present information on the firm's operations in the form of financial statements, including if there are environmental activities carried out by the firm. So from that reporting carried out must be based on environmental accounting (Meiryani et al., 2018; Sajilan et al., 2019).

Many factors can drive an increase in firm value. One of them is the firm's ability to improve environmental performance. The Corporate Performance Rating Program in Environmental Management (PROPER) in assessing the firm's environmental performance uses ratings in its rating. This ranking refers to RI Minister of Environment Regulation Number 6 of 2013 concerning PROPER. Blue, red and black ratings are used for firm compliance criteria for environmental regulations. While the gold and green ratings are used for more required assessment criteria. Based on the results of the last PROPER assessment in 2016 and 2017 according to the Decree of the Minister of Environment and Forestry of the Republic of Indonesia No SK. 966/Menlhk/Setjen/Kum, only 169 firms received the required assessment criteria and 1617 firms met compliance criteria with environmental regulations.

Based on this phenomenon, the researchers argue that environmental management activities also have a share in the firm's activities to achieve its objectives. Environmental performance is used as a research variable because the firm now believes that the measurement of firm performance is not only seen from how much profit is generated, but also how the firm is responsible for the environment. Next is the reputation of the firm. Reputation is characterized as a result of firm branding, in the field of accounting seen as goodwill, in the field of organizational theory seen as a manifestation of firm identity, and in agency theory and signal theory seen as actions and behavior in the future, promises that justify and promote principal expectations about action agent, and so on (Schwaiger, 2004).

The study of Taghian (2012) regarding firm reputation and business performance concluded that stakeholder perceptions could be used for the effectiveness of firm management reputation. The main implication of this research is that consumer subjective valuation is the consumer's perception of the firm reputation related to their assessment of organizational performance. Besides, reputation alone is not enough to drive organizational performance and increasing reputation does not always lead to increased profitability.

The problems faced by the firm are related to the reputation or bad firm image as reported in Warta Ekonomi.co.id. For example, the reputation of a motivator, consultant, and firm leader that falls due to not recognizing the child with his first wife. That could destroy his reputation as a "super" person he/she had built for a long time. Another example, as reported on merdeka.com that the reputation of the Lion Air airline in the aviation industry is known to be bad. The reason is related to flight delay. Although it is undeniable that Lion Air is the most airline in carrying passengers every day. Purwono (2014) notes that firm reputation become a very valuable intangible asset. The good name of the firm will impact on increasing consumer trust, loyalty and stakeholders towards the firm.

Table 1 shows the number of awards and value of the mining industry sector firms listed on the Indonesia Stock Exchange for 4 periods, namely 2015-2018. From Table 1, it can be seen that the number of awards and the value of firms that experience fluctuations (fluctuations). The greater the number of awards and firm value shows that the market believes in the firm's prospects. In Table 1 shows that the number of awards obtained by firms from various parties has an impact on increasing stakeholder trust in the firm and the value of the firm which is more than one compared to the value of the firm <1 more. That means the market believes in the prospects of mining industry firms.

Mining industry sector firms were chosen because mining firms have a high risk of environmental damage compared to other industrial sectors. The mining industry sector utilizes the economic value of the natural resources found on earth. Mining activities will have an impact on land conversion, changes in vegetation structure, disturbance of forest habitat, biodiversity, and ecological processes, as well as the natural topography where the industry is carried out. Therefore, the selection of the mining industry sector in this study is expected to be able to provide information for those who need it in decision making, especially those related to firm value and investment decisions, especially investment in mining industry sector firms.

Informing the ideal value the firm pays attention to financial and non-financial aspects. This is in line with the balanced scorecard theory that the goals and measures in the balanced scorecard are

Table 1: Rewards and firm value of mining industry in2015-2018

Code	Year	Number of rewards	Firm value (Tobin's Q)
ADRO	2015	11	0.63769
	2016	14	1.03822
	2017	46	1.04398
	2018	10	0.76203
GEMS	2015	1	1.94547
	2016	1	3.42846
	2017	7	2.52725
	2018	8	1.93679
BYAN	2015	7	2.84554
	2016	11	2.57683
	2017	7	3.35416
	2018	24	4.3462

Source: www.idx.co.id, 2019

more than just financial and nonfinancial performance measures. In other words, the evaluation of the firm's performance does not only rely on financial aspects but also nonfinancial aspects. In this study aims to measure the performance of the firm in a nonfinancial perspective, namely with environmental performance and firm reputation (Malagueño et al., 2018).

#### **2. LITERATURE REVIEW**

#### 2.1. Legitimacy Theory

Legitimacy theory explains that legitimacy is a benefit for firms to continue concern (Sawitri, 2017). Legitimacy theory states that organizations try to ensure that the operations of a firm are accepted according to the expectations and limits of society. Organizational legitimacy is a process of legitimacy whereby the organization seeks approval and avoids sanctions from community groups (Tilling, 2004).

Organizational legitimacy can be seen as something that is given by the community to the firm and something that the firm wants or wants from the community. Thus, legitimacy is a potential benefit or resource for the firm to go on going (going concern) because there is a reciprocal relationship between the two entities, namely the firm and the environment (O'Donovan, 2000).

Firms as part of the community, in carrying out operational activities should obey and act following the values or norms and regulations that exist in the community so that the firm is said to be a legitimate firm. When a firm does not comply with regulations or norms in the community, there is a threat to the survival of the firm. Thus, firms will continue to strive to ensure that they operate within the limits of the norms and regulations that exist in society (Venkatachary et al., 2017).

#### 2.2. Signaling Theory

In general, the signal is interpreted as a signal made by the firm (manager) to outsiders (investors). These signals can take various forms, both those that can be directly observed and those that have to be studied more deeply to be able to find out. Whatever form or type of signal that is issued all is intended to imply one with the expectations of the market or external parties will make changes to the assessment of the firm. The signal theory states that managers (agents) or firms qualitatively have excess information compared to outside parties (Bae et al., 2018). Signaling theory is useful for describing behavior when two parties (individuals or organizations) have access to different information (Connelly and Ireland, 2011).

Signaling theory suggests how a firm should give a signal to users of financial statements. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Signals can be in the form of promotions or other information stating that the firm is better than other firms. Signal theory explains that signaling is done by managers to reduce information asymmetry. Managers provide information through financial reports that they apply conservatism accounting policies that produce higher quality profits because this principle prevents firms from taking action to exaggerate profits and help users of financial statements by presenting profits and assets that are not overstated (Jama'an, 2008).

This theory is based on the assumption that managers and shareholders do not have access to the same firm information. There is certain information that is only known by managers, while shareholders do not know the information so there is asymmetric information between managers and shareholders (Prasetya, 2012). As a result, when the firm's environmental performance changes, it can bring information to shareholders that will result in the firm's value changing. In other words, manager behavior in terms of determining environmental performance can be considered a signal by outsiders.

Dividend policy formulated with return on equity will form a sustainable growth rate. The growth rate of this firm will signal to shareholders. This is because the growth rate will show the firm's prospects in the future. Logically, when there is information about dividend policies, changes in growth, the existence of awards received by the firm and information relating to financial performance will affect changes in the value of the firm through changes in its stock price. If the change is positive (good news), in general it causes the firm value to rise along with the increase in stock prices. Conversely, if the change in the direction of negative or decreasing (bad news) will cause the stock price to fall and result in a decline in the value of the firm (Purwono, 2014).

#### 2.3. Firm Value

Firm value is an investor's perception of the level of success of the firm that is often associated with stock prices. High stock prices make the firm value too high (Fama, 1978). A high firm value will make the market believe not only in the firm's current performance but also in the firm's prospects in the future (Agustia et al., 2019). The wealth of shareholders and firms is presented by the stock market price, which is a reflection of funding investment decisions and asset management.

Firm value is defined as the stock market value. The reason is, the higher the stock price, the higher the shareholders' profits so that this situation will be in demand by investors because with increased stock demand, the value of the firm will also increase (Nurlela dan Islahudin, 2008).

#### 2.4. Environmental Performance

Environmental performance is the firm's performance in creating a green environment (Zandi et al., 2019). In Indonesia, the firm's environmental performance is measured through the PROPER Firm Performance Rating Program developed by the Ministry of Life (KLH). PROPER is an instrument used by KLH to measure the level of firm compliance based on applicable regulations. PROPER is announced regularly to the public, so that firms that are assessed will get reputation incentives or disincentives, depending on the level of compliance.

The rating of the firm's performance in environmental management has been developed by the Ministry of Environment as an alternative instrument since 1995. The program was originally known as PROPER PROKASIH. The use of color in the PROPER assessment is a communicative form of delivering performance to the community, ranging from the best, gold, green, blue, red, to the worst, black. In simple terms, the public can know the level of compliance with environmental management in the firm by only looking at the available color rating. For parties who need more detailed information, KLH can deliver specifically.

The assessment aspect in PROPER is focused on two categories, namely compliance assessment criteria and assessment criteria more than those required by regulations (beyond compliance). Obedience assessment aspects are related to (a) environmental document requirements and reporting, (b) water pollution control, (c) air pollution control, (d) management of hazardous and toxic materials (B3), (e) control of seawater pollution, potential damage to the land. Whereas the beyond compliance aspect is more dynamic because it is adapted to technological developments, the application of the best environmental management practices and global environmental issues. Beyond compliance aspects are related to: (1) The implementation of environmental management systems, (2) energy efficiency efforts, (3) efforts to reduce emissions, (4) implementation of reduce, reuse and recycle B3 waste, (5) implementation of reduce, reuse and recycle solid waste non B3 criteria equal to 3R for B3 waste, (6) water conservation and decrease in wastewater pollution load, g) biodiversity protection, and (7) community development programs (dlhk. kepriprov.go.id).

#### 2.5. Firm Reputation

Reputation is a concept related to the firm's image and an external party's assessment of the quality of a firm that comes from the firm performance in the past. The firm reputation is built in several periods and is represented as a consistency of the attributes inherent in the firm (Roger and Helen, 2001).

Economists see reputation as a trait or signal. Game theory describes reputation as a character that distinguishes between types of firms and can explain their strategic behavior. Signal theory calls our attention to the contents of information from reputation. Both recognize that the firm's actual perceptions are held by external observers. Because many features of a firm and products are hidden from view, reputation is a signal of information that increases the confidence of observers in the firm products and services (Fombrun, 1996).

Lloyd (2007) examines the reputation of firms from various perspectives. The results of the study show that, in the eyes of its stakeholders, the firm reputation is driven by nine factors: image, identity, management leadership, firm brand, product and service, financial performance, ethical management and leadership, and firm leadership. Taghian (2012) examines the firm reputation and business performance. The results show a positive relationship between the firm reputation that is stakeholder-focused and market share. However, the firm reputation does not seem directly related to the level of profit.

Suka (2016) examines the effectiveness of environmental accounting in increasing firm value. The results show environmental performance and environmental disclosure influence the value of

the firm. It was found a different result between the relationship of environmental disclosure and firm value, as well as the indirect effect between environmental performance of firm value and the disclosure environment as an intervention which stated no significant effect. Sawitri (2017) examines the analysis of the effect of environmental accounting disclosures and environmental performance on firm value. The results of his research show that environmental performance does not affect firm value and the accounting environment has an impact on firm value.

Ratri and Dewi (2017) examines the effect of environmental performance on firm value with corporate social responsibility as an intervening variable. The results of his research show that environmental performance has a positive and significant effect on corporate social responsibility. (1) Corporate social responsibility has a positive and significant effect on firm value. (2) Environmental performance has a positive and significant effect on firm value. (3) Partially environmental performance has a positive and significant effect on firm value with corporate social responsibility as an intervening variable.

#### **3. HYPOTHESES DEVELOPMENT**

#### 3.1. Environmental Performance and Firm Reputation

A sense of responsibility for the preservation of the environment and society must be owned by every firm in carrying out all its activities. Firms that focus on environmental performance will improve the firm image in the future so that it will affect the improvement of financial performance (Butler, 2011). Firms that carry out environmental management properly, the firm will gain social legitimacy. Firms that obtain social legitimacy and considered environmentally friendly by the government and society, the firm reputation will increase. Thus,

H<sub>1</sub>: Environmental performance significantly affects firm reputation

#### **3.2. Environmental Performance and Firm Value**

Environmental management is enough to divert the attention of stakeholders regarding problems that occur a lot and have become global issues, especially in Indonesia. Environmental performance is the performance of firms that care about the environment. Environmental performance is measured by the achievements of firms participating in PROPER. The firm expects investors to react positively to the goodwill of the firm to the surrounding environment, thereby increasing the interest of investors to invest their funds in the firm (Falichin, 2011; Hersugondo et al., 2019; Hersugondo and Udin, 2019). If investor interest rises it will push stock prices up. When stock prices rise, it will provide prosperity to shareholders, which means increasing the value of the firm. Therefore,

H<sub>2</sub>: Environmental performance significantly affects firm value

### **3.3.** Environmental Performance, Firm Reputation and Firm Value

Environmental performance is the performance of a firm that cares about the environment. Environmental performance is measured by the achievements of firms participating in PROPER. Good corporate environmental performance will encourage firms to get more awards from outside parties. The existence of an award obtained by the firm and disclosed in the annual report will make a firm image will improve. Investors are more interested in firms that have a good image in society because it has an impact on high consumer loyalty to the firm products. Thus, in the long run, the firm sales will improve so that profitability will also increase. If the firm runs smoothly, then the interest of investors to invest their funds in the firm will increase. If investor interest rises it will push stock prices up. When the stock price rises, it will provide prosperity to the shareholders, which means increasing the value of the firm (Retno and Priantinah, 2012). Thus,

 $H_3$ : Firm reputation mediates the relationship of environmental performance and firm value

#### 4. RESEARCH METHODOLOGY

The population of this study is 49 mining industry sector firms listed on the Indonesia Stock Exchange in 2015-2018. The sampling technique used was purposive. Based on the purposive sampling method, 27 firms became the study.

#### 4.1. Measurement

The value of the firm in this study was measured using *Tobin's Q*.

$$Tobin' Q = \frac{MVE + Debt}{Total Asset}$$
(1)

Note: MVE = stock price × number of shares outstanding; Debt = total debt book value (short-term debt + long-term debt); Total Asset = book value of total assets.

Environmental performance is measured through the firm achievements in participating in the PROPER. The program is one of the efforts carried out by KLH to encourage the structuring of firms in environmental management through information instruments (Rakhiemah and Agustia, 2009).

Firm reputation includes social expectations, firm personality and stakeholder trust to the firm. The study of firm reputation is an aspect of firm valuation from a nonfinancial perspective from an external perspective (Lloyd and Mortimer, 2004). In this study, firm reputation is measured by the number of awards the firm receives in the observation period. The method of data analysis in this study used the partial least squares approach based on structural equation modeling with the WarpPLS 6.0 program.

#### **5. RESULTS**

The objects of this study are all mining industry sectors listed on the Indonesia Stock Exchange from 2015 to 2018. Mining industry sectors are chosen because they have a high risk of environmental damage compared to other industrial sectors. The mining industry sector utilizes the economic value of the natural resources found on earth. Mining activities will have an impact on land conversion, changes in vegetation structure, disturbance of forest habitat, biodiversity, and ecological processes, as well as natural topography.

#### 5.1. Convergent Validity Testing

The parameter to measure convergent validity is by looking at the value of average variances extracted (AVE) of each variable. Latan and Ghozali (2016) recommend that AVE value must be >0.50.

Table 2 shows that the AVE value of each variable is more than 0.50, namely 1. Therefore, these indicators have met convergent validity.

#### 5.2. Discriminant Validity Testing

The parameter to measure discriminant validity is by looking at the square root AVE > correlation between latent constructs.

Based on Table 3, the square root of AVE is indicated by numbers in brackets, each of which has a square root of 1000 while the correlation between latent constructs is indicated by a number outside of brackets, namely 0.198; -0.140; and 0.053. Following the parameters of discriminant validity, the square root value of AVE shows greater than the correlation between latent constructs so that the indicators have met discriminant validity.

#### 5.3. Reliability Testing

Reliability testing can be assessed by looking at the composite reliability value and the loading factor.

Table 4 shows that composite reliability value is 1.000. The three composite reliability values are >0.7. These results indicate that the model meets the reliability requirements.

Table 5 shows that the factor loading value is 1.000. The three-factor loading values are >0.7. These results indicate that the model meets the reliability test requirements.

#### Table 2: Average variances extracted

Environmental performance	<b>Firm reputation</b>	Firm value
1.000	1.000	1.000

### Table 3: Correlations among L. versus with square root of AVEs

Variable	Environmental performance	Firm reputation	Firm value
Environmental performance	(1.000)	0.198	-0.140
Firm reputation	0.198	(1.000)	0.053
Firm value	-0.140	0.053	(1.000)

#### **Table 4: Composite reliability**

Environmental performance	<b>Firm reputation</b>	Firm value
1.000	1.000	1.000

#### **Table 5: Factor loading**

Environmental performance	Firm reputation	Firm value
1.000	1.000	1.000

#### 5.4. Adjusted R-squared Testing

Table 6 shows that the value of adjusted R-square of firm reputation is 0.027. This means that the percentage of the effect of environmental performance on firm reputation is 2.7%, while the remainder is 97.3% explained by other variables outside the research. Adjusted R-square value of firm value is 0.002. This means that the percentage of the effect of environmental performance on firm value is 0.2%, while the remainder of 99.8% is explained by other variables outside the research.

#### 5.5. Hypotheses Testing

Figure 1 shows the relationship between environmental performance and firm reputation. The test results show a positive path coefficient, which is equal to 0.20 with a P = 0.02 (0.02 < 0.05). This indicates that environmental performance has a positive and significant effect on firm reputation. R-squared on the relationship of environmental performance to firm reputation is 0.04. It means that the contribution of environmental performance to firm reputation is 4%. Therefore,  $H_1$  is accepted.

Figure 2 shows the relationship between environmental performance and firm value. The test results show a negative path coefficient, which is equal to -0.16 with a P = 0.06 (0.06 < 0.1). This indicates that environmental performance has no significant effect on firm value. Therefore, H<sub>2</sub> is rejected.

Figure 3 shows that the path coefficient generated between the relationship of environmental performance and firm reputation is 0.20 with a P = 0.02 (0.02 < 0.05). It means that environmental performance has a positive and significant effect on firm reputation. The path coefficient generated between the relationship of environmental performance and firm value is -0.16 with a P = 0.06 (0.06 > 0.10). It means that environmental performance has no significant effect on firm value. While the path coefficients generated in the relationship between firm reputation and firm value is 0.08 with a P = 0.20 (0.20 > 0.10). It means that firm reputation mediates the relationship between environmental performance and firm value.

#### 6. DISCUSSION

High and low environmental performance can be measured by the reputation of the firm. Increased environmental performance can cause the firm reputation to increase. The firm must have a sense of responsibility for the preservation of the environment and the community in carrying out all its activities. Firms that focus on environmental performance will improve the firm image in the future so that it will affect the improvement of financial performance (Butler, 2011). Firms that carry out environmental management properly, the firm will gain social legitimacy. Firms that gain social legitimacy and are considered environmentally friendly by the government and society so that the firm reputation increases.

To measure firm value, it cannot only be measured by environmental performance. When the environmental performance increases the firm value will likely decrease. This result agrees with the research (Sawitri, 2017) which reveals the possible reasons

#### **Table 6: Adjusted R-squared coefficients**

Variable	Adjusted R <sup>2</sup>	Category
Environmental performance	-	-
Firm reputation	0.027	Low
Firm value	0.002	Low

Figure 1: Direct effect of environmental performance  $(X) \rightarrow$  Firm reputation (Y)

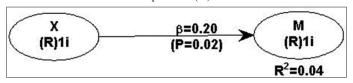


Figure 2: Direct effect of environmental performance  $(X) \rightarrow$  Firm value (Y)

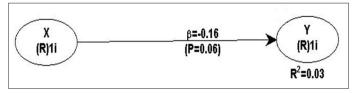
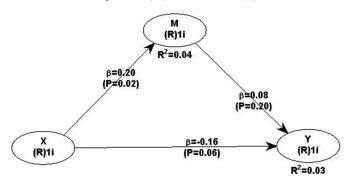


Figure 3: Indirect effect of environmental performance  $(X) \rightarrow$  Firm reputation  $(M) \rightarrow$  Firm value (Y)



due to the shifting paradigm of firms and investors. Where the firm is currently not only aiming for profit but the firm must also pay attention to environmental conditions for the sustainability of the firm. Because the firm performance is inherent in environmental performance, it causes investors not to focus too much on the firm environmental performance so that investor decision making is not only focused on environmental performance with PROPER. The firm performance becomes a unity that cannot be separated from environmental performance, causing environmental performance not to affect the value of the firm.

Environmental performance is the performance of a firm that cares about the environment. Environmental performance is measured by the achievements of firms participating in PROPER. This program is one of the programs carried out by KLH to encourage firm compliance in managing the environment. PROPER is announced regularly to the public so that firms that are assessed will get reputable incentives and disincentives (Rakhiemah and Agustia, 2009). Good corporate environmental performance will encourage firms to get more awards from outside parties. The existence of an award obtained by the firm and disclosed in the annual report will make a firm image will improve. Investors are more interested in firms that have a good image in society because it has an impact on high consumer loyalty to the firm products. Thus, in the long run, the firm sales will improve so that profitability will also increase. If the firm runs smoothly, then the interest of investors to invest their funds in the firm will increase. If investor interest rises it will push stock prices up. When stock prices rise, it will provide prosperity to shareholders, which means increasing the value of the firm (Retno and Priantinah, 2012).

#### 7. CONCLUSION

Based on the results, the conclusions of this study are as follows:

- 1. Environmental performance has a positive and significant effect on the firm reputation. This is evidenced by the path coefficient value of 0.20 with a P = of 0.02
- 2. Environmental performance has a negative and significant effect on firm value. This is evidenced by the path coefficient value of -0.14 with a P = 0.08 (0.08 < 0.1)
- 3. Firm reputation mediates the relationship between environmental performance and firm value. This is evidenced by the path coefficient value of 0.017 with P = 0.406 (0.406 > 0.10).

Some suggestions for practical implication and future research direction are as follows:

- 1. In investing, investors need to consider the environmental aspects and firm reputation so that they are not only fixed on monetary measures
- 2. Subsequent research can expand research by adding observation periods and sample variations not only to the mining industry but also to other sectors to generalize research findings.

#### **REFERENCES**

- Agustia, D., Sawarjuwono, T., & Dianawati, W. (2019). The Mediating Effect of Environmental
- Agustia, D., Sawarjuwono, T., Dianawati, W. (2019), The mediating effect of environmental management accounting on green innovation-firm value relationship. International Journal of Energy Economics and Policy, 9(2), 299-306.
- Bae, S., Masud, M., Kim, J. (2018), A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. Sustainability, 10(8), 2611.
- Butler, J.B. (2011), Sustainability and the balanced scorecard : Integrating green measures into business reporting. Management Accounting Quarterly, 12(2), 1-10.
- Connelly, B., Ireland, R.D. (2011), Signaling theory: A review and assessment. Journal of Management, 37, 39-67.
- Falichin, M.Z.M. (2011), Pengaruh Corporate Social Responsibility Disclosure Terhadap Reaksi Investor Dengan dan Corporate Governance Sebagai Variable Moderasi. Semarang: Fakultas Ekonomi Universitas Dipenogoro. p80.
- Fama, E. (1978), The effects of firm's investment and financing decisions on the welfare of its security holders. The American Economic Review, 68, 272-284.
- Fombrun, C. (1996), The reputational landscape. Corporate Reputation Review, 1, 5-14.

- Hersugondo, H., Pertiwi, S.N.A., Udin, U. (2019), Corporate social responsibility and corporate value: Evidence from an emerging economy, Indonesia. Quality Access to Success, 20(172), 51-55.
- Hersugondo, H., Udin, U. (2019), Corporate governance and corporate value: The mediating role of investment effectiveness base on human capital. Quality Access to Success, 20(171), 56-61.
- Jama'an, J. (2008), Pengaruh mekanisme corporate governance, dan kualitas akuntan publik terhadap integritas informasi laporan keuangan (studi kasus perusahaan publik yang listing di BEJ). Jurnal Universitas Diponegoro, 1(1), 1-52.
- Lloyd, S. (2007), Corporate Reputation : Ontology and Measurement. p319. Available from: http://www.repositoryaut.lconz.ac.nz/ bitstream/10292/409/1/LloydS.pdf. [Last accessed on 2010 Oct 18].
- Lloyd, S., Mortimer, K.A.U. (2004), Corporate Reputation: Seeing Through the Eye of the Beholder. Available from: http://www.smib.vuw. ac.nz:8081/www/ANZMAC2006/documents/Lloyd Stephen2.pdf.
- Malagueño, R., Lopez-Valeiras, E., Gomez-Conde, J. (2018), Balanced scorecard in SMEs: Effects on innovation and financial performance. Small Business Economics, 51(1), 221-244.
- Meiryani, M., Susanto, A., Warganegara, D.L. (2018), The issues influencing of environmental accounting information systems: An empirical investigation of SMEs in Indonesia. International Journal of Energy Economics and Policy, 9(1), 282-290.
- Nurlela dan Islahudin. (2008), Pengaruh Corporate Social Responsibility Terhadap Nilai Perusahaan Dengan Prosentase Kepemilikan Manajemen Sebagai Variable Moderating (Studi Empiris Pada Perusahaan Yang Terdaftar di Bursa Efek Jakarta). Aceh: Universitas Syiah Kuala.
- O'donovan, G. (2000), Legitimacy Theory As an Explanation for Corporate Environmental Disclosures. Grad. Dip. Commercial Data Processing, (February). Available from: http://www.vuir.vu.edu. au/15372/1/O%27Donovan\_2000compressed.pdf.
- Ojikutu, O.T., Onolemhemhen, R.U., Isehunwa, S.O. (2017), Crude oil price volatility and its impact on Nigerian stock market performance (1985-2014). International Journal of Energy Economics and Policy, 7(5), 302-311.
- Prasetya, F. (2012), Modul Ekonomi Publik Bagian III: Teori Informasi Asimetris. Available from: http://www.ferryfebub.lecture.ub.ac. id/files/2013/01/Bagian-III-Teori-Informasi-Asimetrisk.pdf. [Last accessed on 2016 Apr 12].
- Purnaya, I.G.K. (2016), Ekonomi dan Bisnis. Yogyakarta: Andi Press.
- Rakhiemah, A.N., Agustia, D. (2009), Pengaruh Kinerja Lingkungan Terhadap Corporate Social Responsibility (CSR) Diclouser dan Kinerja Finansial Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia. Surabaya: Universitas Airlangga. p1-31.
- Ratri, R.F., Dewi, M. (2017), The Effect of Financial Performance and Environmental Performance on Firm Value with Islamic Social Reporting (ISR) Disclosure as Intervening Variable in Companies Listed at Jakarta Islamic Index (JII). Paper Presented at the SHS Web of Conferences.
- Retno, R.D., Priantinah, D. (2012), Pengaruh good corporate governance dan pengungkapan corporate social responsibility terhadap nilai perusahaan (studi empiris pada perusahaan yang terdaftar di bursa efek Indonesia Periode 2007-2010). Jurnal Nominal, 1(1), 84-103.
- Roger, B., Helen, G. (2001), Reputation, trust and supplier commitment: The case of shipping company/seaport relations. Journal of Business and Industrial Marketing, 16(6), 424-438.
- Sajilan, S., Ghani, E.K., Maimunah, S., Lestari, R.M.E. (2019), The relationship of environmental uncertainty, AIS efficiency and energy efficiency with environmental and operational performance in Indonesia. International Journal of Energy Economics and Policy, 9(5), 371-378.
- Sawitri, A.P. (2017), Analisis Pengaruh Pengungkapan Akuntansi

Lingkungan dan Kinerja Lingkungan terhaap Nilai Perusahaan. Surabaya: Universitas PGRI Adi Buana. p1-11.

- Schwaiger, M. (2004), Components and parameters of corporate reputation-an empirical study. Schmalenbach Business Review, 56, 46-71.
- Sucuahi, W., Cambarihan, J.M. (2016), Influence of profitability to the firm value of diversified companies in the Philippines. Accounting and Finance Research, 5(2), 149-153.
- Suka, E.A. (2016), Efektivitas Akuntansi Lingkungan Dalam Meningkatkan Nilai Perusahaan. Indonesia: Universitas Muhammadiyah Yogyakarta. p1-24.
- Taghian, M. (2012), Corporate reputation and business performance.

Asian Academy of Management Journal, 18(1), 3-19.

- Tilling, M.V. (2004), Refinements to Legitimacy Theory in Social and Environmental Accounting Not One Theory but Two (at least). Commerce Research Paper Series. p1-11.
- Venkatachary, S.K., Prasad, J., Samikannu, R. (2017), Challenges, opportunities and profitability in virtual power plant business models in Sub Saharan Africa-Botswana. International Journal of Energy Economics and Policy, 7(4), 48-58.
- Zandi, G.R., Khalid, N., Islam, D.M.Z. (2019), Nexus of knowledge transfer, green innovation and environmental performance: Impact of environmental management accounting. International Journal of Energy Economics and Policy, 9(5), 387-393.