

THE INFLUENCE OF RETURN ON EQUITY, ENVIRONMENTAL RISK MANAGEMENT AND STOCK PERFORMANCE ON CORPORATE SUSTAINABILITY PERFORMANCE

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Abstract: This study aims to determine the relationship between a firm's financial and environmental performance and the quality of the resulting corporate sustainability report. The analysis is conducted on 36 Indonesian listed firms in three sectors: primary industry and chemicals, mining, and consumer goods. Pooled Ordinary Least Square (OLS) model is used to identify the strength of the relationship between the independent and dependent variables. The results show that, with firm age and size serving as the control variables, Return on Equity, Stock Performance, and Environmental Risk Management considerably positively affect a firm's Corporate Sustainability Performance (CSP). According to the findings, the independent variables ROE, environmental risk management, and stock performance impact the firm's corporate sustainability performance quality, which is significant over the long run. Therefore, businesses should consider improving CSP quality as a strategic investment and maintain a solid rapport with stakeholders. By examining how a firm's financial performance and environmental risk management affect the quality of CSP, this study contributes to the CSP field.

Keywords: corporate sustainability performance, environmental risk management, natural resources, return on equity, stock performance

Abstrak: Penelitian ini bertujuan mengetahui bagaimana kinerja keuangan dan lingkungan perusahaan mempengaruhi kualitas laporan keberlanjutan perusahaan yang dihasilkan. Analisis dilakukan terhadap 36 emiten Indonesia di 3 sektor seperti industri primer dan kimia, pertambangan, dan barang konsumsi. Model Pooled Ordinary Least Square (OLS) digunakan untuk mengidentifikasi kekuatan hubungan antara variabel independen dan dependen. Terungkap bahwa Return on Equity, Stock Performance dan Environmental Risk Management berpengaruh positif signifikan terhadap Corporate Sustainability Performance, dengan usia dan ukuran perusahaan bertindak sebagai variabel kontrol. Hasilnya menunjukkan bahwa variabel independen: ROE, Environmental Risk Management, dan Stock Performance mempengaruhi kualitas Corporate Sustainability Performance, yang sangat penting dalam jangka panjang. Oleh karena itu, perusahaan harus memasukkan peningkatan kualitas CSP sebagai investasi strategis dan mengelola hubungan yang kuat dengan pemangku kepentingan. Penelitian ini berkontribusi pada CSP dengan menganalisis pengaruh kinerja keuangan perusahaan dan Environmental Risk Management terhadap kualitas CSP.

Kata kunci: corporate sustainability performance, environmental risk management, natural resources, return on equity, stock performance

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INTRODUCTION

Government Regulation No. 14, covering the Master Plan of National Industry Development (RIPIN), was released in 2015, and it has had a substantial positive impact on Indonesia's industrial performance compared to prior years. The mission of RIPIN is to advance "Indonesia as a strong industrial country." National industry growth should be properly planned, with consideration for all industrial stakeholders based on mutual understanding and mutual benefit, in order to promote Indonesia as a solid platform for an industrial company. According to Freeman (2008) a stakeholder is commonly defined as an individual or group affected by an organization's objectives and achievement. Within this theory, stakeholders are identified and grouped, which belong inside or outside the organization, and which kind of stakeholders should be considered by management (Stekelenburg et al. 2015). Hence, with this long-term planning policy, Indonesia's Industrial production increases by the year, with many foreign investors planting their investments in Indonesia (Public Relation Bureau Ministry of Industry the Republic of Indonesia).

Indonesia's industrial performance increase brings a significant impact on the national environment. Continuing from the issuance of RIPIN, the government and companies alike started to widen their focus on managing the stakeholder's interest instead of focusing solely on the company's profitability. Stakeholders in the market tend to pay more attention to the company's long-term sustainability than short-term profitability. Natural resources companies such as mining, chemicals, and consumer goods companies, whose production relies on natural resources, should take part in preserving the environment for them to be able to keep producing in the future. Following this, according to the regulations, providing a Corporate Environmental and Social Environment (CESR) report is obligatory for companies who conduct their business in the field related to natural resources (Andrini, 2016). According to Indonesia Investment Report, Indonesia's top industry sector, which is the major contributor to Indonesia's annual GDP growth and production, relies on natural resources such as mining, chemicals, and consumer-goods firms, would have more resources as a base production material in stock, thus helping their sustainability as a firm for the long term. Therefore, by realizing the importance of a company's involvement and responsibility in managing the natural environment,

companies promoting themselves on doing CSR and providing CSP have become a rising trend in the market to attract stakeholders locally and globally.

Corporate sustainability performance can be defined as a company's environmental, social, and economic performance. However, corporate sustainability performance mainly considered environmental impacts rather than other aspects (Henri & Journeault, 2010). Companies operating in the industry sector must prepare a corporate sustainability performance report, as their production directly impacts the environment. A corporate sustainability report is essential for information on the company's long-term survival within the industry (Hahn & Kühnen, 2013). According to a past study by Laskar and Maji (2018), results stated that Indonesian firms disclose only about 72% of GRI-specified items. Additionally, the samples taken in this research are for the period ranging from 2016 to 2019, where GRI 2016 was the base for CSR reporting.

To the best of the authors' knowledge, there hasn't been any research done on how underlying issues have affected CSP practices in Indonesia. Therefore, studying CSP has become one of the critical fields in Indonesia. It is crucial to do this in order to advance the subject of CSP research, which is primarily concerned with how underlying causes affect CSP practices. Several studies focus on impacting CSP on CFP; however, only limited studies observe the relationship between CFP and CSP, especially in Indonesia. Those are the main reasons for this study. Therefore, this study is expected to contribute significantly to the existing CSP literature. Using the good management theory and the slack hypothesis, Waddock and Graves (1997) sought to explain how CSP affects financial performance and how financial performance might affect CSP. These authors concluded that there is a beneficial interaction going both ways. The slack resources theory provides an essential possibility for a firm to invest in something that is a top priority for the corporate's sustainability (Margolis & Walsh, 2016). According to slack resource theorists, better financial performance potentially results in the availability of slack (financial and other) resources that allow companies to invest in social performance domains, such as community relations, employee relations, or the environment (Waddock & Graves, 1997). Allocating slack resources to the social domains, if accessible, would also improve social performance, and higher financial performance would indicate greater CSP. Furthermore, according to Fischer

and Sawczyn (2013), businesses with strong CFP may use their extra financial resources to boost their CSP further. Therefore, this study will make the researcher understand more about organizational behaviors in terms of CSP by setting the CSP as the dependent variable. In addition, the research study contributes to the companies on how to enhance or boost the CSP through CFP.

This study used profitability (ROE) and stock performance to observe CSP. Besides profitability as the first independent variable, stock performance as the second independent variable can be seen as one crucial measurement of financial performance. A high stock return indicates that the company's finances are doing well, and the investors can have a high return.

Because industrial enterprises' goods rely on nature, businesses that want to be sustainable for a long time must also be aware of environmental risks. Additionally, Waddock and Graves (1997) explained the risk variables proposed in an earlier study as influencing CSP. Therefore, the third independent variable is environmental risk. According to Dong and Burritt (2010), sustainability disclosure procedures vary greatly depending on the type of industry, with polluting companies disclosing environmental, social, and governance activities the most frequently. These industries include the mining, chemical, and consumer goods sectors. Therefore, this research's primary sample is those within the mining, chemicals, and consumer goods industry.

According to the legitimacy theory, polluting corporations have increased social visibility and significant regulatory risk (Pati et al. 2016; Odera et

al. 2016; Muttakin & Khan, 2014; Kouloukoui et al. 2019). Sensitivity is the most frequent factor affecting CSR, according to the industry. Since their activities include a greater risk of environmental impacts, "more sensitive" industries are thought to have community concerns. According to the literature, "more sensitive" businesses include those related to mining, oil and gas, construction and building supplies, chemicals, forestry and paper, steel and other metals, electricity, gas distribution, and water. The following fields are regarded as being "less sensitive". Finally, the purpose of this research is: 1) Discovering the firm's ROE affects corporate sustainability performance; 2) Analyzing environmental risk management affects corporate sustainability performance (CSP); 3) Analyzing the stock performance affects corporate sustainability performance (CSP).

METHODS

The sample for this study included companies that were listed on the Indonesia Stock Exchange between 2016 and 2019. The companies are engaged in using natural resources, including mining, chemical manufacturing, and the production of consumer goods. The secondary data from annual reports, sustainability reports, Bloomberg, and other trustworthy sources are used in this analysis. Eventually, as seen in Table 1, the total sample observed that meets the criteria in this research is 436 companies for 4 years, which is 144 firm-year. This study uses four main variables and two control variables, namely Corporate Sustainability Performance (CSP), Return on Equity (ROE), Environmental Risk Management (ERM), Stock Performance (SP), Firm Size and Firm Age.

Table 1. Summary of the sample observed

| Sampling Criteria | No. of Companies |
|--|------------------|
| Companies within the basic industry and chemicals sector, are publicly listed in the Indonesian Stock Exchange (IDX) and have received official PROPER ratings from 2016 to 2019 | 80 |
| Organizations within the mining sector, are publicly listed in the Indonesian Stock Exchange (IDX) and have received official PROPER ratings from 2016 to 2019 | 84 |
| Companies within the consumer goods sector, are publicly listed in the Indonesian Stock Exchange (IDX) and have received official PROPER ratings from 2016 to 2019 | 61 |
| Organizations that did not provide enough environmental information in their annual reports or/and sustainability report during the year 2016 to 2019 | (90) |
| Companies that are not listed under the annual PROPER rankings during the year 2016 to 2019 | (91) |
| Number of organizations that fulfill the criteria | 36 |
| The overall sample taken (36 x 4) | 144 firm-year |

Dependent variable-Corporate Sustainability Performance

This study measures CSP using GRI 2016 standard index with 78 items by following prior studies in Indonesian companies (Karina & Setiadi, 2020). Each CSR item in the research instrument is assigned a value of 1 if it is disclosed and a value of 0 if it is not disclosed as part of the measurement used to calculate the CSR Index. To acquire a value on each company's CSR, one must calculate the entire CSR item disclosed by adding up the value of each item. This is calculated by:

$$CSR_i = (\sum X_{ij}/n_j) \times 100\%$$

where: CSR_i (CSR index); n_j (Total items disclosed in a company); X_{ij} (Dummy variable: 1 if item is disclosed: 0 if item is not disclosed).

Independent variable - Return on Equity

According to Subramanyam et al. (2014), ROE is defined as a company's net income in relation to average shareholder equity. In short, it can be seen as a company's profitability, how well a firm can generate their income or return from their business capital. It can be calculated as:

Return on Equity: Net Income/Average Shareholder's Equity

Independent variable - Environmental Risk Management

A measurement tool from Indonesia that can analyze whether a company is doing an excellent job of managing its environmental risk is PROPER (Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup), or in English, "Company Performance Ranking Assessment Program in Environmental Management". There are five types of rank inside PROPER, gold, green, blue, red, and black, where gold is the highest rank a company can achieve. Companies that achieve a gold rank means that their production has created a set number of products within a limited amount of resources and produce less pollution (Devie et al. 2019). In general, performance ratings by PROPER can be divided onto five ranks with the explanations:

- Gold, acquired by companies in which their business and/or activities have continuously demonstrated

environmental excellence in the production/service process, has implemented ethical business and is responsible toward the community

- Green, acquired by companies in which their business and/or activities have more than the required environmental management under the rules (beyond compliance) through environmental management Implementing a system, effectively using resources according to the 4Rs (Reduce, Reuse, Recycle, and Recovery), and making some laudable efforts in the area of corporate social responsibility.
- Blue, which was acquired by businesses that have made some efforts in the area of corporate social responsibility.
- Red, acquired by businesses whose operations and/or activities do not adhere to the prevailing standards for corporate social responsibility.
- Black, acquired by businesses whose operations or activities have knowingly engaged in actions or omissions that cause environmental deterioration or contamination or that violate the law.

Each of these colors is assigned a score, with gold receiving the highest score of 5, followed by green, blue, red, and black with scores of 4, 3, and 2, respectively.

Independent variable – Stock Performance

When examining a company's sustainability through an investment viewpoint that is factored into market value, stock performance is helpful. Stock performance is one metric used to determine market value. Stock return is the most used metric for assessing a company's stock performance. The evaluation of stock return reveals the performance of the company's shares. In this study, stock return is measured annually. The stock return is determined by:

$$R_j = (P_1 - P_0 + D_1) / P_0$$

Where P₀ denotes the price paid for the stock, P₁ is the stock price at the conclusion of the holding period, and D₁ is the final dividend, if any, that was paid. The stock price increase is represented by the quantity P₁-P₀, and the dividend, or D₁, represents the whole change in the investment value. The return calculation is, therefore, equal to the investment's change in value divided by the initial investment.

Control variables

The size of the firm, as determined by the total number of assets, and the firm's age are two factors that are controlled in this study in order to prevent dependent variables from having an impact. These factors were chosen because they have been shown to have a significant impact on CFP (Rahmawati et al. 2020). All variable definitions and data sources are shown in Table 2.

Hypotheses 1: Return on Equity and Corporate Sustainability Performance

Higher profits' beneficial effects on CSP have been extensively covered in prior studies. According to a number of research (Hussain et al. 2016; Orazalin & Mahmood, 2019; Menassa & Dagher, 2020; Abdul Rahman & Alsayegh, 2021), profitability and corporate sustainability disclosures are positively correlated. To set themselves apart from less lucrative businesses, highly profitable corporations typically release more sustainability data (Kouloukoui et al. 2019; Nuskiya et al. 2021). Increased earnings will make more significant financial resources available, enabling businesses to address the social requirements of all stakeholders, which is another compelling argument in favor of this beneficial association (Uwalomwa & Egbide, 2012). Agency theory states that managers of successful companies reveal more information to support large compensation packages (Barako, 2007; Artiach et al. 2010).

It was believed that firms could significantly enhance their sustainability performance by providing excellent financial performance. This financial performance can be measured by calculating the firm's return on equity. Previous studies show the impact of providing sustainability performance reports has been widely proven positive. By reporting sustainability, firms can improve their company value (Kuzey and Uyar, 2017) and signal a sustainability commitment to stakeholders, creating an even more competitive advantage (Uwuigbe et al. 2018). Enhancing the positive connection on CSP, based on the stakeholder theory, the relationship between CFP and CSP is also mainly positive, since stakeholders within this industry focus on the company's sustainability. This theory explains the importance of satisfying the stakeholder's demand, one of which can be achieved by providing a sustainability report.

Disclosing a corporate sustainability report, will reduce asymmetric information and provides transparency, thus forging a better relationship with the stakeholders (Nobanee and Ellili, 2016). In conclusion, companies with a higher ROE will have an excess fund to invest in CSP, thus improving their sustainability.

Hypotheses 2: Environmental Risk Management and Corporate Sustainability Performance

A study by Newson and Deegan (2002) examined 149 of the largest selected public and industrial companies by market capitalization from Australia, Singapore and South Korea. It provided additional evidence on relationship risk and CSP. Wondery et al. (2008) noted the relationship between risk and CSP in 127 of the most prominent companies in emerging markets such as Brazil, China, India, Indonesia, South Africa and Thailand. The results showed that CSP is relevant to industrial sectors. Companies disclose information on production efficiency and corporate performance related to environmental and social aspects of the company sector. The results so far show that companies operating in different sectors exhibit different levels of CSP.

Industrial companies produce a hefty number of products by using machinery and factories each year, thus increasing pollution and wastage, damaging the environment. Because of this, companies are starting to pay more attention to their sustainability issue, thus inventing more risk management (Morioka et al. 2017). According to the slack resources theory, firms need to allocate some of their funds to make a suitable CSP since one of the main goals of this theory is to minimize environmental risk, which is seen as a top priority within the industrial sector. Another critical point to mention is that industrial companies also require natural resources as the base ingredient to start production, thus emphasizing the importance of investing in environmental risk management and increasing the quality of CSP produced. Assessing the environmental risk in a firm is essential, as it will help on the firm's environmental management (Nuzula, 2019). Indonesia has a tool to measure a company's environmental risk management, called PROPER (Program Penilaian Peringkat Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup), or in English called "Company Performance Ranking Assessment Program in Environmental Management". Companies

who scored high on this assessment would eventually have a better sustainability performance, emphasizing the positive relationship between environmental risk management and CSP.

Hypotheses 3: Stock Performance and Corporate Sustainability Performance

The primary determinant for a company’s stock performance is measured using the stock return. A high stock return usually indicates better stock performance, meaning the firm’s economic performance is good. For investors, looking at a company’s stock performance is essential in the long run since stock returns can signal a firm’s future survivability. Since most investors are also looking at long-term profitability and environmental information (Zhang, 2017), companies whose production relies on the environment will eventually engage more in making an excellent corporate sustainability report. Furthermore, some stock exchanges recommend that firms prepare a sustainability report (Delaware, 2018), enhancing the relationship between stock performance and CSP. Due to that, firms need to elevate their social welfare maximization, which aligns with the utilitarianism theory, which would satisfy the stakeholder’s needs by providing a suitable CSP. However, to do so, firms must generate extra funds to provide a suitable CSP. Past studies stated that Utilitarianism is a theory that focuses on the social welfare of the economy, which pursue the sole ethical value or good to be maximized (Riley, 2016). This means that this theory emphasizes the maximization of profit, in context not in a financial way but amounts to maximizing social welfare. Maximizing social welfare implies the most efficient

use of available scarce resources. In this case, social welfare maximization directly relates to the company’s corporate social performance.

According to past studies, the market relies on issuing a company’s CSR reports to signal a firm’s CSP quality (William, 2015). Firms that achieve a positive stock return show better CSP. This is aligned with the slack-resource theory, where firms that achieve better stock return can signal better financial performance for the company, thus having more “slack” on improving their CSP. Since investors are beginning to pay attention to a firm’s sustainability performance (Gadinis & Miazad, 2019), firms with excess funds must invest their slack resources into improving their CSP.

This research examines whether the return on equity, stock performance, and environmental risk management affect Indonesia’s industrial and corporate sustainability performance positively, negatively, or neutral. Another analysis is also conducted on whether the control variables of the firm’s age and size affect corporate sustainability performance. Therefore, the model for this study is expressed below:

$$CSP_{it} = \alpha + \beta_1 \times ROE_{it} + \beta_2 \times ERM_{i(t-1)} + \beta_3 \times SPerformance_{i(t-1)} + \beta_4 \times SIZE_{it} + \beta_5 \times AGE_{it} + \epsilon_{it}$$

Where *i* and *t* denote firms and periods, respectively. Additionally, both stock performance and environmental risk management took account of last year’s performance due to the source report providing their performance for the last 1 year.

Table 2. Variable definitions and data source

| Variable(s) | Definitions | Data Source |
|--|---|--|
| Corporate Sustainability Performance (CSP) | Business’s performance in terms of economic, social, and environmental factors. | Annual and Sustainability Report, Reliable Websites |
| Return on Equity (ROE) | Net income as a percentage of equity | Annual Report and Bloomberg |
| Stock Performance (Stock return) | Value received by shareholders in relation to the cost they paid to buy shares | Annual Report and Bloomberg |
| Environmental risk management | Controls, reduction, prevention, and risk assessment for the company to mitigate their environmental damage | PROPER assessment from Indonesia’s Ministry of Environment |
| Firm Size (SIZE) | Natural log of total assets | Annual Report and Bloomberg |
| Firm (AGE) | Natural log of the firm’s age | Annual Report and Bloomberg |

RESULTS

The descriptive statistics for each variable are shown in Table 3 and include the mean, median, standard deviation, minimum and maximum values. It presents the results of the regression model utilizing contemporaneous values for corporate sustainability performance (CSR_i), stock return, ROE, and PROPER for environmental risk management, with 144 firm-year investigations.

Based on the statistic, the sample's PROPER value average is at 3.201, whereas the maximum value is 5 and the minimum value is 2. This can signify that Indonesia's primary industry and chemicals, mining, and consumer goods firms are starting to pay attention to their social responsibility.

As for the stock return, the variable average is 0.2350, whereas the maximum value is 8.588, and the minimum value is -0.8125. PT Pelat Timah Nusantara achieved the minimum value in 2019; meanwhile, the maximum value was achieved by Semen Baturaja in 2016. The ROE's variable average amounts to 0.1174, whereas the maximum value is 1.242 and the minimum value is -0.3798. Martina Berto achieved the minimum value in 2018. Meanwhile, the maximum value was achieved by Multi Bintang Indonesia in 2017. The CSR_i's variable average amounts to 0.5321, whereas the maximum value is 0.8974 and the minimum value is -0.1282. Sumi Indo Kabel achieved the minimum value in 2016. Meanwhile, the maximum value was achieved by Adaro Energy in 2016. The firm size's variable average amounts to 6.912, whereas the maximum value is 8.103 and the minimum value is 5.684. Mustika Ratu achieved the minimum value in 2016. Meanwhile, the maximum value was achieved by Indah Kiat Pulp & Paper in 2018. The firm age's variable average amounts to 1.608, whereas the maximum value is 2 and the minimum value is 1.114. Kimia Farma achieved the minimum value in 2016. Meanwhile, the maximum value was achieved by PT Bukit Asam in 2019. To obtain a valid regression model, heteroscedasticity and multicollinearity test must be conducted for the result can be classified as BLUE (Best Linear Unbiased Estimator). The heteroscedasticity test is essential to know whether the variance of error in a regression model is not constant. Meanwhile, the multicollinearity test can be conducted by using the Variance Inflation Factor, which measures how much the independent variable behaviour is influenced by its correlation with

the dependent variables. VIF must have a minimum value of 1. Values greater than 10 can point to a collinearity issue. Structural model results in Figure 1.

The Gretl software is being used to perform regression from the model, and one of the three available regression models pooled OLS, fixed effect, and random effect is being built. The heteroscedasticity test is carried out using pooled OLS (Ordinary Least Squares) (Table 4).

Return on Equity has a positive influence on CSP

Looking at the regression result from the heteroscedasticity corrected method, return on equity has a p-value of $1.91e^{-07}$, lesser than 0.05. Thus, return on equity positively influences corporate sustainability performance. The results show that the better a company's return on equity, the more likely it is for a firm to have an excess fund to invest in corporate sustainability performance. This positive association with corporate sustainability performance is coherent with previous findings by Kuzey and Uyar in 2017. This research states that firms with any excess funds are believed to allocate their remaining resources to improving sustainability performance, especially companies that operate within an industry related to the environment. Companies who operate within this industry are more pressured to provide a corporate sustainability performance since their resource is scarce and dependent on the environment. That's why, to ensure stakeholders' long-term survivability, providing better sustainability performance would increase the company's value, which can be reflected in their social welfare maximization, aligned with utilitarian theory. By maximizing the social welfare within this industry, companies would forge a better relationship with their stakeholders, creating even more competitive advantage, as stated by Uwuigbe's study in 2018. The accepted hypothesis can indicate that firms with better ROE tend to invest in improving their CSP. Better CSP will increase the company's value, satisfying stakeholders within the market and increasing their survivability rate in the long run. Satisfying the stakeholder would explain the stakeholder theory within corporate sustainability performance, where stakeholders within this industry are more sensitive to the company's sustainability. Since the samples in this research are from primary industry and chemicals, mining, and consumer goods firms, it is more likely that the stakeholders are shifting their focus on providing excellent CSP.

Table 3. Descriptive statistics

| Indicators | Mean | Median | Std. Deviation | Minimum | Maximum |
|--------------|--------|----------|----------------|---------|---------|
| PROPER | 3.201 | 3 | 0.7346 | 2 | 5 |
| Stock Return | 0.2350 | 0.005187 | 0.9644 | -0.8125 | 8.588 |
| ROE | 0.1174 | 0.08954 | 0.1998 | -0.3798 | 1.242 |
| CSRI | 0.5321 | 0.5449 | 0.2256 | -0.1282 | 0.8974 |
| SIZE | 6.912 | 6.829 | 0.6755 | 5.684 | 8.103 |
| AGE | 1.608 | 1.633 | 0.1755 | 1.114 | 2 |

Table 4. Heteroscedasticity-corrected results

| Indicators | Coefficient | Std. error | t-ratio | p-value |
|-------------------------|-------------|-------------------------|----------|----------|
| const | 0.503121 | 0.209148 | 2.406 | 0.0175 |
| PROPER | 0.0918987 | 0.0158657 | 5.792 | 4.49e-08 |
| Stock Return | 0.0457362 | 0.0146161 | 3.129 | 0.0021 |
| ROE | 0.243689 | 0.0444221 | 5.486 | 1.91e-07 |
| SIZE | 0.0515689 | 0.0231076 | 2.232 | 0.0272 |
| AGE | -0.390770 | 0.0801056 | -4.878 | 2.91e-06 |
| Mean Dependent Variable | 0.532051 | S.D. Dependent Variable | 0.225642 | |
| Sum Squared Residual | 539.4766 | S.E. of Regression | 1.977182 | |
| R-squared | 0.524627 | Adjusted R-squared | 0.507403 | |
| F(5.138) | 30.45967 | p-value (F) | 8.91e-21 | |
| Log-likelihood | -299.4237 | Akaike criterion | 610.8475 | |
| Schwarz criterion | 628.6664 | Hannan-Quinn | 618.0881 | |

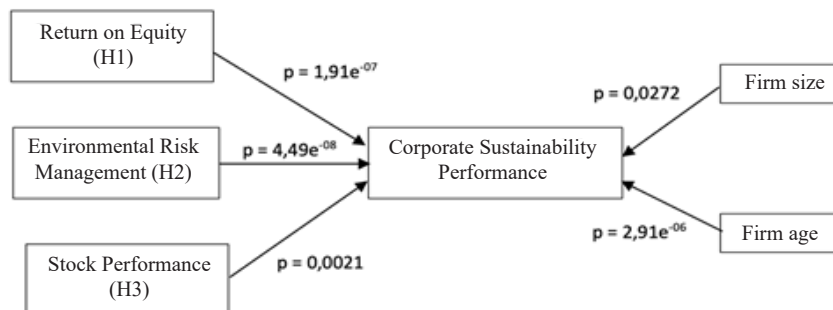


Figure 1. Structural model results

Environmental Risk Management has a positive influence on CSP

The regression result from the heteroscedasticity corrected method shows that the p-value of environmental risk management, measured by PROPER, is $4.49e^{-08}$. The p-value is lower than 0.05; thus, it can be concluded that the null hypothesis is rejected, and the hypothesis is accepted. Accepting the hypothesis means that environmental risk management positively influences corporate sustainability performance.

Since production processes directly impact the environment, the company would need to pay more attention to environmental risk management. Therefore, the relationship between environmental risk management and corporate sustainability performance is positively related since the outcome of CSP is based on the firm's ecological goal and activities to improve its environmental management and system.

Environmental risk management has a positive influence on CSP. In this case, the accepted hypothesis can indicate that companies that receive an excellent PROPER rating will have better corporate sustainability

performance. A good rating indicates that the company is doing well in its environmental risk management and will enhance its value and rate of survivability in the long run. On slack resource theory, one of the most critical aspects for a firm to invest their fund is to minimize the environmental risk, especially within the industrial sector. Also, since companies within this industry resources are dependent on the environment, investing in enhancing corporate sustainability performance would tremendously help preserve their source of materials. Investing in environmental risk management would enhance the quality of CSP and satisfy stakeholders' expectations of the firm's survivability in the long run, thus forging a better relationship with them, as stated by stakeholder theory. Utilitarianism theory talks about the importance of maximizing social welfare, which in this case, relates to the stakeholder theory. To maximize the stakeholder's welfare, firms need a better CSP by improving their environmental risk management and scoring a good result on PROPER. Therefore, firms in Indonesia are encouraged to join the PROPER program and receive their rating to increase their chance of survival in the future, especially within the industry sector.

Stock Performance has a positive influence on Corporate Sustainability Performance

According to the regression result from the heteroscedasticity corrected method, the p-value of stock return towards corporate sustainability performance is 0.0021, lower than 0.05. By achieving a p-value lower than 0.05, the null hypothesis is rejected. Thus, the result indicates that stock return significantly affects CSP. The result of this research does not contradict the stakeholder, utilitarianism, and scarce resource theory, where companies who achieve a high stock return will engage more in enhancing their corporate sustainability performance since firms who achieve a positive stock return will signal better financial performance, which in turn will have more resources to spend on enhancing their corporate sustainability performance.

The new Indonesian business environment further elevates the explanation for this relationship. Since Indonesia's business environment keeps on developing, stakeholders, especially shareholders, are starting to pay attention on the firm's sustainability report. This is strengthened by the release of environmental protection law from the government (Law No, 40/2007) that pushes companies involved in the natural resources sector

to perform socially and environmentally responsible activities. Also, in 2017, the Indonesian government issued a new regulation under Rule 51 by Financial Service Authority, which states that companies who operate within this industry are obliged to release a corporate sustainability report.

Managerial Implications

Return on Equity has a positive influence on Corporate Sustainability Performance

Companies that achieve a high ROE must invest in CSP since it can elevate the company's value in the market even more. Also, companies with a high ROE have a significant investment value for investors since this ratio is mainly used to measure the shareholders' value creation. By elevating their corporate sustainability performance value, firms can signal to stakeholders that they can stay sustainable in the long run. Since ROE is one of the indicators of profitability, firms that achieve a high ROE would have higher other profitability indicators. Other than that, firms that achieve a high amount of ROE tend to invest in improving their sustainability performance. This may be caused by the work ethic that the firm use, where firms with higher ROE have better ethical production activities, thus improving their sustainability performance.

Environmental Risk Management has a positive influence on Corporate Sustainability Performance

According to the samples taken, many firms in Indonesia still need to enter the PROPER rankings. Since Indonesia's industrial sector has been growing over the years, firms within this industry need to adapt to international standards, especially regarding their sustainability. Indonesian government made it easier for firms to know their rating on how well they manage their environmental risk. By participating in the PROPER rankings, firms could give transparency to stakeholders in the market, which would also satisfy them in return. Also, firms that achieved a gold rating in PROPER are primarily big and older companies. Therefore, since maintaining an excellent corporate sustainability performance is essential for a firm's survivability, firms in Indonesia are expected to improve their environmental risk management and actively participate in the annual PROPER rankings. Environmental risk management can be improved by participating in socially responsible activities within

the community, such as re-planting trees, adding employee benefits, and many more. Therefore, many firms that achieve gold ratings in PROPER tend to have social-environmental activities outside their production activities. Firms that achieve gold ratings tend to have a green vision, meaning that they focus on society's contribution aside from seeking profit.

Stock Performance has a positive influence on Corporate Sustainability Performance

According to the result generated above, firms that achieve a high stock return should provide better sustainability performance, which is enforced by Indonesia's new regulation to push companies to publish a corporate sustainability report. Since firms in this sample are listed companies in Indonesia, there would be pressure to provide a good sustainability performance. Firms listed on the Indonesia Stock Exchange will have more attention in the market, especially those with higher stock returns. Firms that achieve higher stock returns would have a better image on the market, thus upholding their good image in the market. One of the main ways to maintain its good image in the market is to improve its sustainability.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This paper analyzes the relationships between ROE, stock performance, and environmental risk management towards a company's CSP. Based on the result generated by GRETL, it was proven that ROE and environmental risk management are positively associated with CSP. In addition, stock performance measured through stock return has a significant positive relationship with the company's sustainability report. Thus, it was highlighted in the stakeholder theory, where companies need to pay more attention to forging a good relationship with the stakeholders to keep producing by reporting a suitable CSP. Since the Indonesian government released regulations that require firms to release a corporate sustainability report, shareholders are more aware of the firm's sustainability.

Some suggestions can be given to companies and governments based on the result of this research, for companies firms need to pay attention to their existing financial performance to know to allocate

resources to environmental management and provide an environmental disclosure based on GRI standards to improve their PROPER rating. According to sample selection, there are still more than half the companies within an industry that have yet to disclose their environmental disclosure or receive their PROPER ratings. Therefore, companies are also expected to improve their environmental risk management and disclose environmental reports since those who received a gold rating on PROPER are primarily big and famous companies. Environmental ministry plays a vital role in strengthening the regulations regarding environmental sustainability activities. Since many firms in Indonesia still have not provided environmental disclosure and received PROPER ratings, laws and regulations regarding environmental management should be communicated actively by the government to enhance the company's awareness of environmental management.

Recommendations

There are some limitations found when the author was conducting the research. These limitations would be a benchmark and provide suggestions for future research. This research uses samples from primary industry and chemicals, mining, and consumer goods sectors, which consistently publish annual reports, disclose sustainability reports and receive a PROPER rating for three consecutive years. Due to that, it cannot cover whether the independent variable for a specific sector in Indonesia significantly impacts the firm's environmental performance. Further research could try and observe the impact on a specified chosen company to provide new or enhance existing results. A company's financial performance is measured using Return on Equity (ROE) when there are various methods to measure a company's financial performance.

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