

The Effect of Risk and Corporate Governance on Profitability: The Role of Sustainability Report as a Moderator (A Study on Mining Companies Listed in the Indonesia Stock Exchange in the 2013–2020 Period)

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Abstract. This study aims to investigate the role of risk and corporate governance on profitability by utilizing sustainability report as an instrument in determining business sustainability of Indonesian-listed mining companies. The study was carried out by framing 20 mining companies employing the use of time series data in the period between 2013–2020. As means of analysis, a statistical analysis via the use of partial least squares (PLS) was present. The result of this study indicates that risk has a negative effect on profitability. Further, corporate governance has a positive effect on profitability. Despite the significance of risk and corporate governance on profitability, sustainability report had no significance as a moderator. Based on these results, the volatile conditions that occurred in mining stocks in 2013–2020 had a direct impact on profitability, while the sustainability report has not been able to provide a real effect as an instrument that can provide information related to the company's long-term vision and its contribution to protecting the environment can reduce risk, especially for investors in the mining sector, due to the principle of accountability raised in it. This study only focuses on mining companies in Indonesia, so it has not been able to generalize the role of the sustainability report in strengthening investor confidence in all business sectors in Indonesia.

Keywords: Risk \cdot Corporate Governance \cdot Sustainability Report \cdot Mining Company

1 Introduction

The contribution of the business sectors to state revenues has experienced diverse proportions and the mining sector is one sector that has a considerable influence on the PNBP (Non-Tax State Revenue) of a country, including Indonesia. The data from the Indonesian Ministry for Energy and Mineral Resources (IMEMR) has indicated that this sector has contributed significantly to the state revenue with an increase of 58%

or equivalent to Rp.217.8 trillion from the total PNBP of Rp.407 trillion [1]. Nevertheless, the increase does not seem to be in line with conditions in the capital market which indicated that the mining sector has decreased from 2013 to 2018 [2], triggered by the emergence of a wave of energy revolution in developed countries coupled with the economic slowdown in China, resulting the demand of oil and coal commodities [3]. This makes the government take mitigation actions to reduce the impact generated by the slowdown that occurs, one of which is by Bank Indonesia as the holder of the regulation-making a deleveraging policy caused by negative sentiment from trade [4]. The mining sector in the capital market is increasingly fluctuating and tends to decline. State revenue has increased from the mining sector, inversely proportional to conditions in the capital market, which shows that mining sector shares are decreasing from year to year which will lead to a decline in investor confidence to invest in the mining sector.

Movement of stock prices is identical to the level of risk that obtained throughout the investment process, the value of a stock's pricing is an indication of the company's performance that could subsequently be a long-term thrust of performance and determine the overall business policy. Furthermore, company value is a certain condition that has been achieved by a company as an illustration and public trust in the company after going through a process of activities for several years. Managers are the most observable parties to measure the value of the company as well as the long-term effects of the company's business decisions. In the mining sector, a high risk has been proven significantly influence a company's stock price. Other than that, the supply and demand factor, has necessitate managers being responsible for the price's movement. And thus, requiring them being able to manage portfolios of risks determined [5]. And thus, proper risk management should boost a company's value, especially for investors who expect a maximum return on investment [6]. This concept is in line with the modern portfolio theory [7] which relates the amount of return at a certain level of risk in each stock invested.

Conceptual development in corporate governance have existed as an outcome and basis of evaluation triggered by internal problems occurring in companies that results in fraud, managerial errors, and massive loss of shareholder wealth, and thus, making investors more selective in investing [8]. It has been indicated in many studies that good corporate governance practices can leverage a company's value, financial performance and minimize possible risks relevant to agency problems since corporate governance is directed to reduce information asymmetry and assist investors to obtain sufficient information in making investment decisions [9]. The application of an appropriate corporate governance can indirectly reduce risk due to the implementation of principle that is identical to agency theory, stating that the principal (i.e., shareholders) delegates the authority to the board of directors to appointed agents (managers) as the person who will carry out the company's business operations following with the company's goal of maximizing firm value. Further, agency theory assumes that managers are selfish and pursue their own goals at the expense of shareholders [10]. It is important to note that institutional ownership is part of the concept of corporate governance which influences a company's profitability as well as firm value. Apart from that, managerial ownership refers to the 'Entrenchment Effect' hypothesis, where it has been argued that controlling shareholders have more power and authority over the company than non-controlling

ones. It has been found that a company with a relatively low level of managerial ownership would be less likely to pay dividends to their shareholders, and hence, causes a decrease in the company's value. One of the roles of corporate governance in improving financial performance is the presence of Non-Executive Directors (NEDs). It is assumed that more independent NEDs are infuse to the board, the more profitable a company will be.

Corporate sustainability is a new threshold that has been developed in line with the wishes of investors, the desire that companies does not merely focus on business processes and economic value but also being attentive to sustainable development that balances ones' financial, environmental, and human development. Furthermore, corporate sustainability has widely received a lot of research focus in recent years as companies, investors, and consumers pivots their attention toward significantly important corporate sustainability [11]. It is imperative to understand that sustainability report adheres to accountability as one of an influential principle in corporate governance practices. In the context of mining industries, the form of accountability is translated to social, economic, and environmental well-being by implementing good mining practices where mining operations are not only pursuing the company's economic impact but also must be environmentally friendly, empowering socio-economic communities around the mine to grow and develop sustainably. At present, corporate sustainability is no longer focused solely on internal but rather, has expanded towards environmental aspects as well as corporate social performance which is often referred to as the triple bottom line [12]. The development of the mindset of investors in investing needs to become a considering that must be fulfilled by managers in the effort to shift the company's management process, especially for companies in the mining sector that possesses high risk and high social and environmental impacts in mining areas. This is perhaps a true fact, based on the case of mining companies in Indonesia from 2013 to 2020 which experienced stock price fluctuations in the capital market. Thus, studies on the quality drivers of sustainability reporting have received attention in the current literature [13, 14].

For example, the research by Shad et al. [15] suggests that sustainability reports and enterprise risk management has been found to have a positive impact on company performance as measured by the company's economic added value. Furthermore, sustainability reports moderated enterprise risk management and the company's economic value added. In line with that of Shad et al.'s [15] study, Ukko et al. [16] had emphasized that sustainability strategy moderated the effect between operational capabilities with financial performance.

Based on these arguments, this study aims to determine the use of the sustainability report as a proxy of sustainable corporate practices that moderates the effect between company's risk and corporate governance with firm performance. By understanding the interaction among these variables, environmental and socially oriented company could be well informed with regard to necessitate their understanding of whether or not sustainability report increases the level of profitability by involving risks and corporate governance as predictors.

Literature Review

2.1 Risk and Profitability

A company's risk portfolios (for example, liquidity, credit, market) are commonly being used as proxy in the financial management literature [17]. In a capital market context, the risk is a variability that exist as an outcome of an expected revenue stream [18]. Further, it could also be an indication of an inappropriate capital budgeting application. In line with this argument, risks are clustered into operational risk and financial risk. Financial risk can be avoided because it arises from the risk of bankruptcy of ordinary shareholders and variations in earnings per share due to the use of debt capital [19]. Some experts also reveal that in the investment process, companies must be able to bear risks to generate returns from invested funds (core risk) as well as risks from business operations (noncore risk) [20]. Where a systematic risk is a form of risk that cannot be diversified while unsystematic risk shows that risk can be diversified [6] which in its implementation is manifested into three types of risk, namely market risk, business risk, and financial risk. Financial risk is considered as one of the most common issues encountered by many companies, particularly those listed on the stock exchange by assuming that that the company's valuation depends heavily on certain market conditions [21]. In a perfect market condition, it has been assumed that debt has a direct influence on the volatility of the return on equity and profitability of a company. Moreover, companies that possesses a higher level of fixed assets (or a high ratio of fixed assets to total assets) throughout their operations use are categorized as a high-level fixed asset companies. It is important to note that a high-fixed-asset companies have more exposure on financial risk compared to those with a low-fixed-asset ratios. This condition exists because during economic downturns a high-fixed asset companies are less flexible to adjust their cost structure. Another important determinant of a company's performance is profitability. It is an important determinant of survival in the long term because it indicates the capability of a company management in maximizing their potential [22]. Also return on equity (ROE) is other important aspect. It is defined as the amount of net profit generated as a percentage of shareholder equity, and hence, ROE measures the company's ability to obtain earnings by determining level of profit proportions on the capital that shareholders have invested. And thus, ROE is one of the profitability indicators that is believed to have a causal relationship with firm value. This implies that a lower risk for a company will increase the company's profitability, and therefore the relevant hypothesis is: H1: Risk has a significant negative effect on profitability.

2.2 Corporate Governance and Profitability

The utilization of corporate governance as a new standard in assessing a company could not be separated from agency theory [23]. It assumes that the separation between the owner (principal) and manager (agent) in a company raises the possibility that the owner's conflict of interests is ignored. In addition, signaling theory is also one of the foundations in the emergence of the concept of corporate governance, where management's intention to share information and receive signals from the market, stakeholders, and the public will be able to bring up information asymmetry so that the use of signals can reduce

gaps by sending relevant and quality information. to different parties [24]. Corporate governance that is oriented towards increasing added value for stakeholders both in providing information and authority has become a new standard known as good corporate governance [25]. Corporate governance itself is a system of checks and balances both internal and external to the company, which ensures that the company demonstrates accountability to all stakeholders and acts in a socially responsible manner in all areas of business activity. There are six principles of good corporate governance contained in The OECD Principles of Corporate Governance, namely; Ensuring the basic framework of effective Corporate Governance; the rights of shareholders; the equitable treatment of shareholders; the role of stakeholders; disclosure and transparency; and the responsibilities of the boards. The implementation of the six principles is carried out to ensure equal treatment of all shareholders, including minority and foreign shareholders. This principle prohibits trading practices based on insider information (insider trading) and self-dealing [26]. Several studies show that the implementation of good corporate governance can provide increased performance, especially in accounting measurement ROA [27], besides that the implementation of good corporate governance can also reduce risk and increase company profitability with an optimal board size composition [28]. Profitability is a measure of the success of a company's operations through decisions made by management on an ongoing basis so clarity of management authority becomes important, so the hypothesis put forward is:

H2: Corporate Governance has a significant positive effect on profitability.

2.3 Sustainability Report

Within the last few decades, sustainability reports that emerged as evolution between environmental with corporate social responsibility reports have become popular [29]. In particular for the mining sector, sustainability reports have been often found in the study of the energy economy which outlines the underlying problems and solutions. Also, it reflects the possible challenges to energy production as well as use, by presenting a framework for energy decisions based on sound economic analysis [30]. Sustainability reports can also communicate the social and environmental effects of an organization to specific stakeholders and interest groups in society at large. Measurement of sustainability reports is carried out by taking into account three interrelated areas, namely economic, environmental, and social. The environment or nature sector needs to be protected from unregulated expansion if it is to protect human welfare [31], this sector becomes very crucial, especially for the mining sector which is very close to environmental change. Furthermore, the social sector is a performance measure in the dimensions of labor, human rights, society, and product responsibility, this indicator is important because it is an integral part of a life cycle sustainability assessment framework that analyzes the environmental, economic, and social dimensions of sustainable development [32–34]. Environmental sustainability is a prerequisite for social sustainability, which can only be achieved through a strong civil society and efficient communal engagement. Actions by companies that pay more attention to environmental and social aspects, with an aim to increase investor's positive awareness to the company's good intentions towards the surrounding environment, and thereby, increasing investor interest to the company [35–37].

Apart from that, the disclosure of sustainability reports is carried out to assist companies in increasing investor interest through the operations of participating companies to realize sustainable performance on nature and resources that can sustain life in the future [38]. The completeness of the sustainability report issued is expected to increase investor confidence and support the implementation of Good Corporate Governance and risk reduction efforts to increase company profitability. Thus, the hypothesis proposed is:

H3: Sustainability Report moderates the effect of Risk on Firm Value.

H4: Sustainability Report moderates the influence of Corporate Governance on Profitability.

3 Research Method

A quantitative method is utilized in this study with a sampling frame of all mining companies that are Go Public (IPO) listed in the Indonesian Stock Exchange between 2013–2020 with an amount of 47 mining companies in total. Purposive sampling approach is used to determine specific criteria that followed the research objectives and provide the most appropriate information related to the formulation of the problem [29]. Therefore, the reason for using this sampling method is because the purpose of this study can only be achieved if using companies that meet the criteria as samples, as follows: (1) companies that have IPOs before the research period; (2) companies that regularly publish audited annual financial reports; and (3) companies that provide complete data related to research. Based on the specific criteria that have been determined, 20 companies are set as samples in this study. In this study, secondary data is collected in the form of the mining company's annual financial statements by analyzing the company's financial ratios according to the variable measurement indicators used. Partial least square is an analytical method in this research using Warp-PLS software.

4 Results and Discussion

4.1 Descriptive Statistics

Based on the results of the analysis found 160 observations in this study, this number was obtained from data collection in the period 2013 to 2020 on 20 companies that were sampled while concerning the sustainability report, only 18 companies had made disclosures and 2 companies did not. The results of the analysis for each indicator are listed in Table 1. The financial risk indicator (X1.1) on the risk variable has the highest mean value of 5.18 while business risk (X1.2) has the lowest mean value of 0.28. Furthermore, on the Good Corporate Governance (GCG) variable, the mean value is quite varied with the highest value being the Proportion of Independent Audit Committee (X2.3) indicator with a value of 100 and the lowest being the Managerial Ownership (X2.1) indicator of 5.84. The third variable in this study is profitability which has a negative mean value on the net profit margin indicator (Y2) with a value of -22.49, and the highest value on the Return on Equity (Y1) indicator of 7.38. This study uses a dummy variable which is measured by the condition of whether the company publishes a

Variable	Indicator	Min	Max	Mean	Std. deviation
Risk (X1)	Market Risk (X1.1)	-17,51	99,22	3,18	11,45
	Business Risk (X1.2)	-116,80	110,69	0,28	13,84
	Financial Risk (X1.3)	0,05	385,96	5,18	31,49
Corporate Governance (X2)	Managerial Ownership (X2.1)	0,00	66,30	5,84	14,73
	Institutional Ownership (X2.2)	10,00	99,67	73,11	22,31
	Proportion of Independent Audit Committee (X2.3)	100,00	100,00	100,00	0,00
	Proportion of Independent Commissioner (X2.4)	0,00	67,00	39,77	11,86
	Proportion of Non-Executive Director (X2.5)	33,00	90,90	73,99	11,71
Profitability (Y)	Return on Equity (Y1)	-282,98	218,15	7,38	40,39
	Net Profit Margin (Y2)	-5.395,38	397,77	-22,49	444,72
	Return on Assets (Y3)	-64,39	45,56	3,14	10,19

Table 1. Descriptive analysis.

sustainability report or not. The dummy variable indicates whether or not a sustainability report is issued to measure the differences in the determinants of sustainability reporting between reporting and non-reporting agencies. Based on this opinion, it is known that the reports published by 20 companies from 2013 to 2020 are known to all companies that have consistently published Sustainability Reports for the last eight years.

4.2 Results of the Structural Equation Model (SEM) Analysis of the Warp PLS Approach

Model Goodness Test

From the ten criteria in Table 2, it can be seen that all the criteria have been met. This research model has had a significant p-value on APC, ARS, and AARS. In addition, this research model already has the ideal AVIF, AFVIF, SPR, and RSCR. Furthermore, this model has a GoF value that is classified as medium. Finally, this research model has acceptable SSR and NLBCDR values. Thus, it can be concluded that this research model has fulfilled all the criteria for the goodness of the existing model.

Outer Model Measurement. Risk variables (X1), Corporate Governance (X2), and Profitability (Y1), each follow the formative indicator model. In this regard, the evaluation of the measurement model is carried out by looking at the weight value (indicator

ratio

No.	Model Fit	Value	Conclusion
1	Average path coefficient	APC = 0.202, p = 0.002	Accepted
2	Average R-squared	ARS = 0.171, p = 0.007	Accepted
3	Average adjusted R-squared	AARS = 0.157, p < 0.011	Accepted
4	Average block VIF	AVIF = 1,118	Ideal
5	Average full collinearity VIF	AFVIF = 1,068	Ideal
6	Tenenhaus GoF	GoF = 0.323	Medium
7	Simpson's paradox ratio	SPR = 1,000	Ideal
8	R-squared contribution ratio	RSCR = 1,000	Ideal
9	Statistical suppression ratio	SSR = 1,000	Accepted
10	Nonlinear hivariate causality direction	NLBCDR = 0.875	Accepted

Table 2. Model fit.

weight) as shown in Table 3. The weight of each indicator can be positive or negative in forming the variables. In addition, an indicator can be declared significant if it has a p-value of not more than 0.05. The corporate Governance variable (X2), indicator Number of Independent Commissioners (X2.4) is known to have no weight. This arises because there is no variation in the value of the data on the indicator. All 152 data observations on this indicator show a value of 100, which explains that all commissioners in 20 companies during 2013–2020 are independent commissioners. This is also evidenced by the results of the descriptive analysis in Table 2. In this regard, the Number of Independent Commissioners (X2.3) indicator was removed from the Corporate Governance (X2) variable measurement model. In addition, the indicator Number of Independent Commissioners (X2.4), Return on Assets (Y3) is also known to have a p-value of more than 0.05 so that it can be declared insignificant. Thus, the indicator is also excluded from the measurement model.

Inner Model. The measurement results (Table 4) show the magnitude of the influence and the significance which is the result of the structural analysis of the model using Warp PLS which contains the results of the direct influence and moderation of the variables tested. Furthermore, the determinant coefficient (R2) for profitability is 0.094, based on direct analysis, it is known that Risk has a negative and significant effect on profitability with a coefficient value of -0.117 at a significance level of 10%, then corporate governance also has a positive and significant relationship to profitability with a coefficient value. 0.268 at the 5% significance level. This shows that both hypotheses (H1 and H2) in a direct relationship have been proven. Meanwhile, the moderating function on the sustainability report variable can provide a strengthening effect in the relationship between risk and profitability of 0.028 although it is not significant, while for the relationship between corporate governance and profitability the moderating role is weakening and not significant with a coefficient value of -0.012 (Fig. 1).

Variable Indicator Weight P-value Conclusion Risk (X1) Market Risk (X1.1) 0,372 < 0.001 Accepted -0.543 Business Risk (X1.2) < 0.001 Accepted 0,695 Financial Risk (X1.3) < 0.001 Accepted Managerial Ownership < 0,001 Corporate Governance (X2) 0,465 Accepted (X2.1)Institutional Ownership -0.489 < 0,001 Accepted (X2.2)Number of Independent Audit Removed Committee (X2.3) Number of Independent -0.058 0.229 Removed Commissioners (X2.4) Proportion of Non-Executive 0.321 < 0,001 Accepted Director (X2.5) Firm Value (Y) Price-Earnings Ratio (Y1) 0,391 < 0,001 Accepted Tobin's O(Y2) < 0.001 Accepted 0,468 Earnings per Share (Y3) 0.014 0.431 Removed Price Book Value (Y4) 0,368 < 0.001 Accepted

Table 3. Indicator weight.

Table 4. Hypothesis test.

Hypothesis	Coefficient	P-value	Conclusion
$H_1: Risk(X_1) \rightarrow Profitability(Y)$	-0,117	0,066*	Significant (-)
H_2 : Corporate Governance $(X_2) \rightarrow Profitability (Y)$	0,268	0,000**	Significant (+)
H_3 : Risk (X1) \rightarrow Profitability (Y) moderated by Sustainability Report (Z)	0,028	0,361	Non-Significant (strengthening)
H_4 : Corporate Governance (X2) \rightarrow Profitability (Y) moderated by Sustainability Report (Z)	-0,012	0,440	Non-Significant (weakening)

N = 160

4.3 Discussion

The results of the analysis indicate that risk negatively and significantly affects profitability, this assumes that the risk management practices that have been carried out by the companies in this study can reduce the level of uncertainty for investors. In line with that, the risk that can be said to be the bottom line of every financial institution becomes a challenge for every manager to be able to carry out management practices to increase

 $R^2 = Profitability (0,094)$

^{*}Sig. p-value < 0.10; **Sig. p-value < 0.05; ***Sig. p-value < 0.01

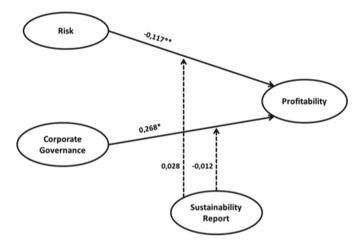


Fig. 1. Analysis results with Warp PLS.

company profitability [40, 41]. Therefore, knowing the impact of risk on the profitability of an institution is an important agenda for all institutions because it will make it possible to manage these risks effectively. The trade-off between risk and return is well recognized, higher returns come with higher risk. Companies that maintain good sustainability performance can act as a damper for the effects of the high risk of a company and make investors feel secure so that they can increase long-term firm value. Studies from Lambey et al. [42], Gharaibeh and Khaled [43] show similar results with studies conducted although the use of risk measurement indicators varies and tends to differ, however, both also show that the lower level of risk significantly increases the profitability of the company. Furthermore, in line with the Signaling Theory of Spence [44], it states that information asymmetry (including the risks inherent in a company) between the company and outsiders or when outsiders do not know enough accurate information about the company's future decisions then it can cause the company to make certain changes in company policies. So companies need to be able to provide clear signals to external parties, especially related to risks for shareholders and investors.

Corporate Governance practices that are carried out positively and significantly can increase the company's profitability. The results of the study confirm the results of a preliminary study conducted by Christensen et al. [27], and Chong et al. [28] which found that Corporate Governance had a significant positive effect on Profitability. The application of corporate governance principles is based on agency theory, especially concerning the separation of authority between managers and owners in determining the direction of company policy, whereby holding ownership, managers are motivated to show sufficient effort in improving company performance and value, to reduce their incentives. For consumption and involvement in non-maximizing projects which might result in low financial performance [45]. Corporate governance confirms that there is a positive and linear correlation between managerial ownership and organizational performance as suggested by Jensen and Meckling [46]. Furthermore, giving shares to managers

(managerial ownership) is seen as one of the mechanisms that can reduce agency problems [47], so by giving shares, it is expected that managers will act like shareholders in decision-making where the greater share ownership owned by management is expected also in line with improving their performance so that it can benefit both parties.

This study also explains the moderating effect of the use of sustainability reports on the relationship between risk and profitability, which has a strengthening effect, although not significant. Companies in the mining sector have a high risk to the safety of human resources, natural resources and have a responsibility to social life [48]. Companies with a high risk must be followed good sustainability performance because if they don't, it can lead to a negative public stigma which can have an impact on the market response to the company's shares. Before the risk appears in the value of the company, its effect will be seen in the movement of its share price [49]. Likewise, the company's focus on social issues in society refers to social performance which measures the company's activities that contribute to society beyond compliance with applicable laws, regulations, standards and general practices that can improve reputation and enhance the company's image and can generate good profits. Sustainable in the long term [50]. Sustainability report issuance on an ongoing basis and periodically as a dummy variable can reinforce to increase profitability for the company.

The opposite results are obtained from the use of sustainability reports in providing a moderating effect on the relationship between corporate governance and profitability, where negative and insignificant effects are obtained from the analysis process that has been carried out. Referring to the explanation on Energy Economics, good mining practices will have implications for mining companies and must implement sustainability practices and report in the form of sustainability reports to company stakeholders including lenders, investors, buyers/customers so that they know that the mining company has carried out good mining practices, especially in terms of the environment, social and economic community, so that stakeholders can provide a fair assessment of the performance of existing companies. Thus, the application is not carried out will weaken its linkages with corporate governance to profitability. Meanwhile, sustainability reports help companies communicate their performance in environmental, economic, and social activities transparently, and prevent losses on the part of the company or stakeholders due to undelivered information [51]. When a sustainability report is carried out properly, fundamentally, and accountability can minimize risks that can affect the company's sustainability and corporate image. Furthermore, Bachoo et al. [52] argues that companies as abstract entities created by society must demonstrate their legitimacy to society if they are to survive in the long term. From the community side, there is a social expectation that the company will act responsibly for the environmental damage caused by the company's operations [53]. Negative effects from the issuance of sustainability reports may arise due to the implementation of mining practices carried out by mining companies that still do not meet the criteria for responsibility in the environmental, social, and economic sectors.

5 Conclusion and Limitations

This study contributes to the use of sustainable reports as a new standard to determine the sustainability and responsibility of business implementation towards the environment, social, and society (triple bottom line), as stated by Pan et al. [54] that the three pillars are a set of company operational standards used socially responsible investors to screen potential investments. Some of the findings obtained are that managers have been able to carry out risk management practices to increase company profitability, while the implementation of corporate governance also has a positive effect in increasing company profitability. Regarding the role of the sustainable report which in this study provides a moderating effect, it is known that the effect of strengthening the relationship occurs on the effect of risk on profitability although in this study this effect does not occur significantly, this effect is in contrast to the relationship between corporate governance and profitability which gives rise to an effect. Weak and insignificant. The opposite moderating effect on these two relationships is possible because of the low practice of responsibility for the triple bottom line component, especially for the mining company sector in Indonesia.

Nevertheless, the results of this study have not been able to explore in-depth an ideal condition of mining companies in Indonesia, especially with regard to the role of sustainable reports in strengthening or weakening the relationship between risk and corporate governance on profitability. Therefore, it remains an avenue for further exploration and strengthen the findings relevant to the context of sustainability reporting. Moreover, the disclosure of responsible governance practices for the three triple bottom line components in this study has yet been carried out by the entirety of mining companies involved which may trigger different results when every company mining company discloses their report. Finally, this study can contribute to the development of sustainable corporate governance practices as well as valuable information for government and private sector on necessity to behave ethically.

References

- Kementerian Energi dan Sumber Daya Mineral, www.esdm.go.id, Last Accessed 10 January 2021
- Bursa Efek Indonesia: Laporan Keuangan & Tahunan, www.idx.co.id., Last Accessed 7
 February 2020.
- 3. Ang James S., Beck Kristine L.: A Comparison of Marginal and Average Tobin's Q Ratios. International Journal of Business, 5(1), (2000).
- Bank Indonesia. Laporan Pemetaan Sektor Ekonomi (Sektor Pertambangan), www.bi.go.id, Last Accessed 10 January 2021.
- Kumar, S.: New evidence on stock market reaction to dividend announcements in India. Research in International Business and Finance 39, 327-337 (2017).
- Brealey, Richard A., Myers, Stewart C., Allen, and Franklin.: Principles of Corporate Finance, Tenth Edition, Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc. (2011).
- 7. Marling, H., and Emanuelsson, S.: The Markowitz portfolio theory. November, 25, (2012).

- Krechovska, M. Prochazkova.: P.T. Sustainability and its Integration into Corporate Governance Focusing on Corporate Governance Management and Reporting. Procedia Eng, 1144–1151 (2014).
- 9. Newell, R., and Wilson, G.: A premium for good governance. McKinsey Quarterly 3(2), 20-23 (2002).
- 10. Jensen, Michael C. and Meckling, William H.: Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure. Journal of Financial Economics 3, 305-350 (1976).
- Alshehhi, A., Nobanee, H., and Khare, N.: The impact of sustainability practices on corporate financial performance: Literature trends and future research potential. Sustainability 10(2), 494 (2018).
- 12. Albertini, E.: Does environmental management improve financial performance? A metaanalytical review. Organization & Environment 26(4), 431-457 (2013).
- 13. Al-Shaer, H. and Zaman, M.: Board gender diversity and sustainability reporting quality. Journal of Contemporary Accounting and Economics 12(3), 210-222 (2016).
- 14. Michelon, G., Pilonato, S. and Ricceri, F.: CSR reporting practices and the quality of disclosure: an empirical analysis. Critical Perspectives on Accounting 33, 59-78 (2015).
- 15. Shad M., Lai F.-W., Fatt C., Klemes J., and Bokhari A.: Integrating sustainability reporting into enterprise risk management and its relationship with business performance: A conceptual framework. Journal of Cleaner Production 208, 415–425 (2019).
- 16. Ukko J., Nasiri M., Saunila M., and Rantala T.: Sustainability strategy as a moderator in the relationship between digital business strategy and financial performance. Journal of Cleaner Production 236, 117626 (2019).
- 17. Kassi, D. F., Rathnayake, D. N., Louembe, P. A., and Ding, N.: Market risk and financial performance of non-financial companies listed on the Moroccan stock exchange. Risks 7(1), 20 (2019).
- 18. Keown, Arthur J., Martin, John D., Petty, J. William., and Scott David F. jr. Manajemen Keuangan: Prinsip-prinsip Dasar Dan Aplikasi, Jilid 2 (Terjemahan), PT Indeks. (2010).
- 19. Gunarathna, V.: How Does Leverage Affect Financial risk? An Empirical Study in Sri Lanka. Amity Journal of Finance, 57–66 (2016).
- 20. Fabozzi, F. J., and Drake, P. P. Finance: capital markets, financial management, and investment management. John Wiley & Sons 178, (2009).
- 21. Bartram, S. M., Brown, G. W., and Waller, W.: How important is financial risk?.. Journal of Financial and Ouantitative Analysis 50(4), 801-824 (2015).
- 22. Maria, K.: Capital Structure, Profitability, And Firm Value. What's New?. Research Journal of Finance and Accounting 6 (20), 185–192 (2015).
- 23. Pearce, A., John A, dan Robinson. Jr Richard B. (2008).
- 24. Bae, S. M., Masud, M. A. K., and Kim, J. D.: A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. Sustainability 10(8), 2611 (2018).
- Solomon, Jill.and Solomon, Aris.: Corporate Governance and Accountability, John Wiley & Sons Ltd, England. (2004).
- 26. Muh.Arief, F.: The Power of Good Corporate Governance Teori dan Implementasi, Salemba Empat. (2009)
- 27. Christensen, J., Kent, P., and Stewart, J.: Corporate governance and company performance in Australia. Australian accounting review 20(4), 372-386 (2010).
- 28. Chong, L. L., Ong, H. B., and Tan, S. H.: Corporate risk-taking and performance in Malaysia: the effect of board composition, political connections and sustainability practices. Corporate Governance: The International Journal of Business in Society. (2018).
- 29. Evangelinos, K., Skouloudis, A., Jones, N., Isaac, D., and Sfakianaki, E.: Exploring the status of corporate social responsibility disclosure in the UK building and construction industry. International Journal of Global Environmental Issues 15(4), 377-399 (2016).

- Bosch, S., and Schwarz, L.: The Energy Transition from Plant Operators' Perspective—A Behaviorist Approach. Sustainability 11(6), 1621 (2019).
- 31. Akram, R., Fahad, S., Hashmi, M. Z., Wahid, A., Adnan, M., Mubeen, M., and Nasim, W.: Trends of electronic waste pollution and its impact on the global environment and ecosystem. Environmental Science and Pollution Research 26(17), 16923-16938 (2019).
- 32. Guinée, J.: Life cycle sustainability assessment: what is it and what are its challenges?. In Taking stock of industrial ecology. 45–68. Springer, Cham. (2016).
- 33. Klöpffer, W.: Life cycle sustainability assessment of products. The International Journal of Life Cycle Assessment 13(2), 89–95 (2008).
- 34. Zamagni, A.: Life cycle sustainability assessment. The International Journal of Life Cycle Assessment 17(4), 373-376 (2012).
- 35. Falichin, M.Z.M.: Pengaruh Corporate Social Responsibility Disclosure Terhadap Reaksi Investor Dengan dan Corporate Governance Sebagai Variable Moderasi. Semarang: Fakultas Ekonomi Universitas Dipenogoro 80, (2011).
- 36. Hersugondo, H., Pertiwi, S.N.A., Udin, U.: Corporate social responsibility and corporate value: Evidence from an emerging economy, Indonesia. Quality Access to Success 20(172), 51-55 (2019).
- Hersugondo, H., Udin, U.: Corporate governance and corporate value: The mediating role of investment effectiveness base on human capital. Quality Access to Success 20(171), 56-61 (2019).
- 38. Nawawi, A. H. T., Agustia, D., LUSANDI, G. M., and Fauzi, H.: Disclosure of sustainability report mediating good corporate governance mechanism on stock performance. Journal of Security and Sustainability Issues 9(J), 151–170 (2020).
- 39. Creswell, J. W.: Qualitative, quantitative and mixed methods approaches. (2014).
- 40. Tafri, F. H., Hamid, Z., Meera, A., and Omar, M. A.: The impact of financial risks on profitability of Malaysian commercial banks: 1996-2005. International Journal of Social and Human Sciences 3(3), 807-821 (2009).
- 41. Bird, A., & Skinner, T. H.: Enterprise risk management not for you? Wrong. American Banker 170(67), 10 (2005).
- 42. Lambey, R., Tewal, B., Sondakh, J. J., and Manganta, M.: The effect of profitability, firm size, equity ownership and firm age on firm value (leverage basis): evidence from the Indonesian manufacturer companies. Archives of Business Review–Vol, 9(1) (2021).
- 43. Gharaibeh, O., and Khaled, M. H. B.: Determinants of profitability in Jordanian services companies. Investment Management and Financial Innovations. (2020).
- 44. Karasek III, R., & Bryant, P.: Signaling theory: Past, present, and future. Academy of Strategic Management Journal 11(1), 91 (2012).
- 45. Florackis, C., Kostakis, A., and Ozkan, A.: Managerial ownership and performance. Journal of business research 62(12), 1350-1357 (2009).
- 46. Jensen, M. and Meckling, W.: Theory of the Firm: Managerial Behavior Agency Cost, and Ownership Structure. Journal of Finance Econmics 3, 305-360 (1976).
- 47. Ruan, W., Tian, G., and Ma, S.: Managerial ownership, capital structure and firm value: Evidence from China's civilian-run firms. Australasian Accounting, Business and Finance Journal 5(3), 73-92 (2011).
- 48. Gunarsih, T., and Ismawati, Y.: Sustainability report and firm performance: Study in mining and metal and food processing industry Indonesia Stock Exchange 2014-2017. Journal of Governance and Integrity 2(1), 4-11 (2018).
- 49. Adi, A., Darminto, D., and Atmanto, D.: Pengaruh Return on Equity, Debt to Equity Ratio, Earning per Share dan Book Value per Share terhadap Harga Saham (Studi pada Perusahaan Consumer Goods Industry yang Terdaftar di BEI Periode Tahun 2008–2011). Jurnal Administrasi Bisnis S1 Universitas Brawijaya 4(2), 1–10 (2013).

- 50. Rezaee, Z., and Tuo, L.: Voluntary disclosure of non-financial information and its association with sustainability performance. Advances in accounting 39, 47-59 (2017).
- 51. Zhang, Q., Loh, L., and Wu, W.: How do environmental, social and governance initiatives affect innovative performance for corporate sustainability?. Sustainability 12(8), 3380 (2020).
- 52. Bachoo, K., Tan, R., and Wilson, M.: Firm value and the quality of sustainability reporting in Australia. Australian Accounting Review 23(1), 67-87 (2013).
- 53. Archel, P., Husillos, J., Larrinaga, C., and Spence, C.: Social disclosure, legitimacy theory and the role of the state. Accounting, auditing & accountability journal. (2009).
- Pan, X., Sinha, P., and Chen, X.: Corporate social responsibility and eco-innovation: The triple bottom line perspective. Corporate Social Responsibility and Environmental Management 28(1), 214-228 (2021).

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