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How Does Monitoring Mechanism Work to Avoid Idiosyncratic Risk?

Liliana Inggrit Wijaya, Rizky Eriandani, Zunairoh

Management Department, University of Surabaya, Surabaya, Indonesia

Abstract: This study analyzes the impact of corporate social responsibility (CSR) associated with idiosyncratic risk. This study involved corporate governance (CG) in strengthening the negative relationship between CSR and idiosyncratic risk in the Indonesia Stock Exchange to analyze thoroughly. The main design is quantitative research with data processing method used the panel most miniature square regression model with imbalance data for the 2016-2019 period and 551 samples. The results proved that CSR significantly reduces idiosyncratic risk. CSR in the environmental dimension is proven to be more sensitive and robust in reducing idiosyncratic risk. Institutional ownership and independent commissioners strengthen the negative influence of CSR on idiosyncratic risk. The results showed support for the theory of risk management, signaling, and corporate governance mechanisms. The better the CSR performance, the company can manage its resources and give a positive signal to stakeholders because the monitoring mechanism has succeeded in suppressing idiosyncratic risk. This study can be seen from its novelty in relating CSR to idiosyncratic risk by involving a monitoring mechanism for emerging capital markets, namely the Indonesian Stock Exchange. There are still little researches on CSR related to monitoring mechanisms. In addition, researchers concentrated on the idiosyncratic risk because the company's policies drive it.

Keywords: corporate social responsibility, idiosyncratic risk, risk management theory, signaling theory, corporate governance mechanism.

监控机制如何避免异质风险？

摘要: 本研究旨在分析与特殊风险相关的企业社会责任的影响。为了进行彻底的分析，本研究涉及公司治理，以加强印度尼西亚证券交易所的企业社会责任与特殊风险之间的负相关关系。主要设计是定量研究，数据处理方法采用面板最小平方回归模型，不平衡数据为 2016-2019 年期间和 551 个样本。结果证明，企业社会责任显著降低了异质风险。事实证明，环境维度的企业社会责任在降低特殊风险方面更为敏感和稳健。机构所有权和独立委员加强了企业社会责任对异质风险的负面影响。结果表明支持风险管理、信号和公司治理机制的理论。企业社会责任绩效越好，公司就可以管理其资源并向利益相关者发出积极信号，因为监控机制成功地抑制了异质风险。通过涉及新兴资本市场的监控机制，即印度尼西亚证券交易所，这项研究可以从其将企业社会责任与特殊风险联系起来的新颖性中看出。与监控机制相关的企业社会责任研究还很少。此外，研究人员专注于特殊风险，因为公司的政策推动了它。

关键词： 企业社会责任、特质风险、风险管理理论、信号理论、公司治理机制。

1. Introduction

Several studies have focused on the economic implications of corporate social responsibility (CSR) in recent years. More than 80% of multinational

companies have included CSR as a global management strategy to increase transparency [1]. Investor's confidence can be built upon environmental disclosure as the axis of CSR, which serves to identify risks

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About the authors: Liliana Inggrit Wijaya, Rizky Eriandani, Zunairoh, Management Department, University of Surabaya, Surabaya, Indonesia

sustainably. CSR is considered a management insurance policy that serves as a safety tool to direct the focus of stakeholders in making decisions [2]. CSR itself functions as an information network for the community to convey the change in the business environment and the factors that drive this change [3]. Thus, CSR can transmit signals to meet investors' expectations of risk aversion [4].

CSR is very closely related to stakeholders since its image is mainly reflected in its caring activities for society. CSR requires a business that serves the needs of customers and other stakeholders in an environmentally and socially responsible manner and at the same time. Companies that are unable to meet the needs of stakeholders will have a degrading image, which can lead to various possible risks such as boycotts from customers, difficulties in obtaining resources, being rejected by the environment, disruption of operating activities, and fines from the government. Most stakeholders usually have a limited understanding of companies [1], so that companies are reluctant to be involved in CSR, which in turn hurts their operations and social development. This is a consequence of the high information asymmetry that limits the dissemination of quality information to external parties, namely stakeholders.

Financial resources for CSR activities can be perceived as a profitable investment or as harmful waste. Mechanisms to overcome these problems require good corporate governance (CG) in implementing CSR. CG is used as a monitoring mechanism for the implementation of CSR. CG can be used to minimize conflicts of interest by determining the distribution of rights and responsibilities to all parties in the company [5]. There are three sources of agency problems. First, managers tend to demand not only luxury amenities but also the right to make strategic decisions. Second, the tendency of managers to make risky investments (over investment). Third, managers tend to minimize risk, which results in companies losing profitable investments (underinvestment). One of the characteristics of CG is the existence of institutional ownership, which is considered a function of the company's monitoring mechanism. This monitoring is expected to minimize the risks arising from agency conflicts.

Several studies have focused on market risk as a risk that cannot be diversified. Meanwhile, the risk that can be diversified has received less attention, so that studies exploring idiosyncratic risk are still minimal. The question is, to minimize risk, can the company diversify its portfolio properly? In this study, the company risk being discussed is the idiosyncratic risk. Idiosyncratic risk will supposedly be reduced with the right decision, but managers have the flexibility to change the level of idiosyncratic risk through the selection of investment projects [6]. Several researchers with the idea that dependent decision-

making that benefits certain parties causes the idiosyncratic risk to increase [7] support this statement.

This study analyzes CSR about idiosyncratic risk. This study involved CG to investigate monitoring mechanisms to strengthen the negative relationship between CSR and idiosyncratic risk to deepen the analysis. This study contributes in three ways. First, it can be seen from its novelty in relating CSR to idiosyncratic risk by involving a monitoring mechanism for emerging capital markets, namely the Indonesian Stock Exchange. The existing phenomenon shows that information asymmetry in the Indonesian capital market is very high with a loose CG mechanism. Therefore, it is hoped that this research will help disclose company-specific risk reduction information as a basis for investment decisions. Several studies have concluded that information asymmetry can decrease if CSR is appropriately implemented and is negatively associated with risk [3,8].

In contrast to this condition, CSR disclosure can increase the cost of pollution reduction [1]. Second, there are still little researches on CSR related to monitoring mechanisms. Investments made by managers are allocated not only in profitable projects but also in unprofitable ones. Managers can use investments in CSR as encouragement for personal reasons that do not benefit the company. In this study, the specific monitoring mechanism appointed is institutional ownership and the proportion of independent commissioners. Institutional ownership and independent commissioners are considered to reduce top management's opportunistic actions [9]. Institutional investors and independent commissioners as active monitors can reduce agency conflicts and information asymmetry and avoid risks. Institutional investors have a vast network that provides funds and avoids financial difficulties [6].

This research is expected to contribute to corporate governance, risk management, and stakeholder theory. Good governance must uphold the principle of transparency to reduce the value of the idiosyncratic risk that can provide benefits for all investors. Stakeholder theory provides an overview of fair governance in achieving the company's main goal, namely maximizing company value. The manifestation of good governance is corporate social responsibility (CSR) to the environment as a company investment in reducing idiosyncratic risk, further maximizing company value.

The practical contribution of the research is that it can provide knowledge to capital market participants in assessing the company's risk to avoid losses. The findings that are of concern to investors are monitoring mechanisms that support corporate governance. Companies that have monitors within the company but use external parties will make it easier for the company to be more optimal in monitoring because it interacts

directly with the company board, or the idiosyncratic risk can be reduced.

The novelty given in this study is the use of an adopted approach in the form of a monitoring mechanism approach dimension that favors stakeholder theory, namely avoiding idiosyncratic risk. So far, the approach that has been relied on is an approach with a financial orientation that has not touched the idiosyncratic. The results of existing studies have ignored the idiosyncratic risk so that this study will be unique and have practical novelty.

On the other hand, the professionalism possessed by institutional investors and independent commissioners can reduce the possibility of directors investing in CSR for personal reasons [6]. Companies that invest through CSR will improve their reputation to reduce tax payments and risks in the future [3]. Third, this study is also helpful in disclosing risk reduction information useful as a reference for decision-making. Many studies focus only on market risk, but many investors do not have a well-diversified portfolio and require high returns to bear the unique risk of stocks [10]. In other words, investors are currently paying attention to the specific risks of their securities, so that idiosyncratic risk still needs further investigation. In this study, researchers concentrated on the idiosyncratic risk because the company's policies drive it. Literature review and hypothesis building were described in section 2. Statistics, samples, and summaries were written in section 3. The results of the study and conclusions were respectively written in section 4 and section 5.

2. The Background of Indonesian Institutions

2.1. Corporate Social Responsibility in Indonesia

CSR refers to the voluntary actions of companies that integrate the environment and society into business. In legitimacy theory, CSR is considered as part of the social contract. Furthermore, CSR can be a company guideline and strategy [11] to convey environmental responsibility and business risks [12]. In addition, stakeholder theory says that a business entity should function for its interests and provide contributions and benefits accountable to stakeholders. Companies have a strong incentive to maintain good relationships with various stakeholders through CSR [2].

The current global phenomenon, which also happens in Indonesia, is influenced by CSR. Companies must pay more attention to environmental and social aspects in the internal and external scope. One of the criteria for CSR typology is direct or indirect influence, namely the implementation of CSR in social activities whose implementation and benefits are felt directly or indirectly by the community. The number of companies implementing CSR shows that

CSR implementation in Indonesia is increasing. CSR is implemented in various forms, including grants and empowerment [13]. In addition, its contribution can be seen from the print and electronic media, which show that CSR-related publications are increasingly exposed widely. The central and local governments, both the province and district or city, regulate the implementation of GCG in Indonesia. CSR practices are categorized into two implementation patterns from direct and indirect benefits and impacts on stakeholders: activities carried out simultaneously with the community, direct benefits to the community, and activities not carried out simultaneously with the community. However, the benefits can affect the community directly.

Companies cannot be separated from their business environment when carrying out their operational activities. If the CSR program is defined as one of the strategic aspects of its operations, the implementation of the CSR program will be included in the operational costs. CSR activities can increase capital spending, improve energy efficiency, and meet regulatory requirements [1]. This means that the implementation of pollution reduction and energy efficiency can increase company financing. Nonetheless, CSR can be considered an investment strategy. Investors must be careful about spending their funds in the form of CSR because it can increase default risk [13]. In achieving its goals, companies must consider various stakeholders so that CSR can help reduce the risk of losing support from stakeholders [13].

2.2. Corporate Social Responsibility and Idiosyncratic Risk

The risk of an investment is measured by the variance or standard deviation of the expected return. The bigger the spread, the higher the risk and the rate of return. Risk is formed by two components: risk, which can be diversified, and risk, which cannot be diversified. Thus, the total volatility of shares is formed from systematic volatility that is not diversified and idiosyncratic volatility that represents the uncertainty of a company. Idiosyncratic risk comes from deviations in the rate of return that the company can control. Idiosyncratic risks include company-specific problems such as equipment breakdowns, work strikes, natural disasters, and mismanagement. This risk is unique because it originates from a company with special characteristics according to its conditions. Investors will respond to this type of risk quickly through information published by the company. Since portfolio diversification can eliminate idiosyncratic volatility, the traditional asset-pricing model ignores this risk and only concentrates on market risk [14]. Idiosyncratic risk cannot be ignored, considering that managers can distort investment and financial policies through personal risk management.

In the financial economics literature, this diversifiable risk is known as idiosyncratic risk, unique and specific only for a company. Idiosyncratic risk affects the balance of stock prices when investors cannot make a well-diversified portfolio. In this condition, the risk that must be taken into account is the company's total risk, including the idiosyncratic risk. Thus, companies with a sizeable total variance (high idiosyncratic risk) will be required to have a high return to cover risks because the portfolio is not perfectly diversified [6]. Idiosyncratic risk is inversely proportional to portfolio returns [16], and increased risk encourages overvalued investors in assessing stocks with high idiosyncratic risk. In facing market competition, the company's operational assessment includes CSR activities that create solid relationships with stakeholders [17], thereby reducing idiosyncratic risk. Companies that participate in CSR can effectively minimize their operational uncertainty and reduce idiosyncratic risk. In addition, CSR can minimize the damage due to bad news. A good image built using CSR activities can minimize information asymmetry and uncertainty of company operations. Managers can decide to take an investment policy in CSR to cover the possible risk of bankruptcy. Several studies have proven the beneficial impact of corporate involvement on CSR, reducing idiosyncratic risk [14]. Better CSR performance means companies can manage their resources and risks, which positively signals stakeholders, reducing company risk [18]. Environmental and social responsibility efforts in improving the company's ability to manage and reduce risks include brand damage, reputation, boycotts, mismanagement, and government fines [14]. CSR can reduce the risk of losing stakeholder support and reduce market uncertainty and reduce disruption, loss, or damage to profitability, and reduce the impact of idiosyncratic risk.

H1: CSR harms idiosyncratic risk.

2.3. Corporate Governance, Corporate Social Responsibility, and Idiosyncratic Risk

In Indonesia, corporate governance has a legal regulation as stipulated in the Decree of the Minister of State for SOEs Number: PER-01 / MBU / 2011. Governance is a system used by companies to provide rights and responsibilities to all company stakeholders. There are several components in corporate governance in the government regulations, including ownership and the board of commissioners. According to The Asian Corporate Governance Association (ACGA), Indonesia had the lowest Good Corporate Governance (GCG) implementation in BUMN and private companies throughout 2018. In addition, the keys to realizing GCG are ethics, governance, and law enforcement. Corporate governance (CG) is a set of mechanisms that can protect companies from corporate

takeovers. Good governance helps companies to reduce cost variability, including agency conflicts.

Institutional ownership is the proportion of share ownership by institutional investors to outstanding shares. These institutional investors include companies, banks, foundations, investment companies, insurance companies, and pension funds. Institutional investors influence the company's decision-making because of their nature as the majority shareholder. Institutional ownership has an essential meaning in the management of supervision because it will encourage more optimal supervision. From an active monitoring point of view, institutional investors actively monitor the company's business, minimize information asymmetry and agency conflicts [19], and reduce corporate risk in two ways. First, institutional investors apply very high managerial skills, professional knowledge, and voice rights to influence managers in making business decisions, increase efficiency, and regulate corporate governance. Second, institutional investors can provide funds by using their relationships to help funding sources in developing companies [20]. Institutional ownership can minimize agency problems between managers and shareholders.

The positive impact of CSR on financial performance can be facilitated by setting up appropriate governance mechanisms to make company operations more effective. Institutional investors can influence corporate behavior through several mechanisms. First, they can advise management on steps and give support to achieve goals. Second, they can provide additional capital to implement specific plans such as CSR. Third, they can use voting rights to support or oppose the manager's plan. This mechanism can be used to reduce company risk. In addition, institutional investors (mutual funds, hedge funds, pension funds, or banks) are an essential group of investors in a company who can become supervisory managers. They tend to put considerable pressure on management to create wealth for investors so that managers pay much attention to meeting the financial targets set by investors [7], and through their interactions, institutional investors can correct their own cognitive biases [6]. Institutional investors have more significant incentives and efficiency in the company information-gathering process, so company supervision is more effective and further reduces the asymmetry of company information.

The second CG component in this study is the board of commissioners, which plays a vital role in the company, especially in implementing GCG. The board of commissioners oversees the board of directors' performance work to maximize the company's value. The existence of a board of commissioners in Indonesia has been regulated by the Indonesia Stock Exchange, which states that in the context of implementing GCG, a company must have at least one independent commissioner. An independent commissioner is a

member of the board of commissioners who come from outside the issuer or public company, does not have shares, has no affiliation with the board of directors or other members of the board of commissioners or controlling shareholder, and does not have business relations with the public company. According to POJK Article 20 Number 33 of 2014 concerning the board of directors and commissioners of issuers or public companies, the board of commissioners consists of more than two boards of commissioners. Meanwhile, independent commissioners are at least 30% of the total commissioners elected through the previous GMS. Independent commissioners cannot take sides, prioritize their benefits in carrying out their duties, and prioritize common interests by company goals and strategies.

The existence of independent commissioners is hoped to bring tighter supervision on the board of directors. The primary purpose of an independent commissioner is to protect the interests of minority shareholders and oversee company management [6]. This function is to avoid an attitude of exploitation (the use of control to maximize one's wealth through the wealth of other parties) of majority shareholders against minority shareholders. Independent commissioners cannot take sides, prioritize their benefits in carrying out their duties, and prioritize company goals and strategies [6]. The company's independent commissioners provide increased oversight of managerial decisions and activities. Thus, the independent commissioner has a role in monitoring all the behavior of directors. If the independent commissioners can carry out their duties effectively, then there will be no disadvantaged parties because the decision-making is done by taking into account the interests of all parties so that the company can implement GCG appropriately. The higher proportion of independent commissioners, the better the implementation of GCG to reduce agency conflicts between the principal and the agent, resulting in an effective CSR implementation. A high proportion of independent commissioners will monitor directors who are selfish to minimize agency costs. It can increase investor confidence in the company because investors have a good perception of the company. After all, the company has implemented GCG appropriately. Consequently, the stock price will increase, which will increase the market value of the company's assets with a lower risk level. Institutional investors and independent commissioners want CSR not to become an unprofitable investment tool to reduce the idiosyncratic risk.

H2: Good corporate governance strengthens the negative impact of CSR on idiosyncratic risk.

3. Research Methods

The research data criteria were as follows: first, the company had to be listed on the Indonesia Stock

Exchange in 2016-2019. Second, the company had to disclose CSR activities in the annual report in total and per environmental dimension. Third, all necessary data for the control variables were available. Based on these criteria, the research sample was 551 firm years. The hypothesis was tested by regressing all samples obtained.

The dependent variable in this study was an idiosyncratic risk. This risk was a particular risk in certain investments and could be minimized or even eliminated by having a well-diversified portfolio. In this study, the idiosyncratic risk was measured using the idiosyncratic proxy volatility (IVOL).

$$R_{i,t} = \alpha_1 + \sum_{j=1}^{12} \alpha_2 \cdot j R_{i,t-j} + \beta_t (R_m - R_f) + \varepsilon_{i,t} \quad (1)$$

where $R_{i,t}$ is the average rate of return on individual stocks in the portfolio R_m ; is the average market rate of return, R_f is the risk-free rate of return, $\varepsilon_{i,t}$ is the residual error? Stock return $R_{i,t}$ can be calculated using historical data on its daily stock price from January 1, 2016, to December 31, 2019. The formula is used to find out the value of stock returns:

$$R_{i,t} = \frac{P_{t(i,t)} - P_{t-1(i,t)}}{P_{t-1(i,t)}} \quad (2)$$

$P_{t(i,t)}$ is the closing price for period t (current period) and P_{t-1} is the closing price for period t-1 (previous period). The rate of market increase can be calculated using the daily composite stock price index (IHSG) from January 1, 2016, to December 31, 2019. The formula for calculating the market index value is as follows:

$$R_m = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} \quad (3)$$

where $IHSG_t$ is the IHSG population during t, and $IHSG_{t-1}$ is the IHSG population during t-1. A residual error $\varepsilon_{i,t}$ was obtained from the equation model, measuring the stock's average idiosyncratic risk volatility (IVOL). IVOL is measured as follows:

$$IVOL_{i,t} = \sqrt{\text{Var}(\varepsilon_{i,t})} \quad (4)$$

Idiosyncratic risk volatility was derived from the standard deviation ($\sqrt{\text{Var}(\varepsilon_{i,t})}$) of idiosyncratic risk. The independent variable was CSR, which was collected from the annual report. The instrument used was the GRI index, which had been adjusted to the conditions in Indonesia. CSR analysis was carried out using content analysis, where the disclosure was calculated using the CSR disclosure ratio. The moderating variable in this study was institutional ownership as a form of good corporate governance. The first control variable was TobinsQ, the ratio between the market capitalization value and its book value. The second variable was cash holding (CASH) which was conducted by looking at the logarithmic value of total cash. The third variable was company

size (SIZE) which was calculated using total assets. The fourth variable was the long-term debt ratio (LEV_LT). The fifth variable was earning per share (EPS). This study used PLS regression analysis in analyzing CSR. The regression model to test the first hypothesis was as follows:

$$IVOL_{(it+1)} = \alpha_0 + \alpha_1 CSRTot_{it} + \alpha_2 CSREnv_{it} + \alpha_3 Controls_{it} + \varepsilon_{it} \quad (5)$$

where $IVOL_{(it+1)}$ is the idiosyncratic risk in year t + 1, $CSRTot_{it}$ is the Total Corporate Social Responsibility in year t, $CSREnv_{it}$ is the Environmental Corporate Social Responsibility in year t, $Controls_{it}$ is the Tobins_Q, Cash, EPS, Size, and Lev_LT in year t, and ε_{it} is the specific error of the company.

The model includes the company-level control variable and the constant effect of industry and year. This study tested the hypothesis on the effect of moderation of the institutional ownership factor and the independent commissioners by introducing the PLS regression model as follows:

$$IVOL_{it+1} = \alpha_0 + \alpha_1 CSRTot_{it} + \alpha_2 CSREnv_{it} + \alpha_3 IO_{it} + \alpha_4 CSRTot_{it}IO_{it} + \alpha_5 CSREnv_{it}IO_{it} + \alpha_6 Controls_{it} + \varepsilon_{it} \quad (6)$$

$$IVOL_{it+1} = \alpha_0 + \alpha_1 CSRTot_{it} + \alpha_2 CSREnv_{it} + \alpha_3 IDK_{it} + \alpha_4 CSRTot_{it}IDK_{it} + \alpha_5 CSREnv_{it}IDK_{it} + \alpha_6 Controls_{it} + \varepsilon_{it} \quad (7)$$

where $IVOL_{(it+1)}$ is the idiosyncratic risk in year t + 1, $CSRTot_{it}$ is the Total Corporate Social Responsibility in year t, $CSREnv_{it}$ is the Environmental Corporate Social Responsibility in year t, IO_{it} is the institutional ownership in year t, IDK_{it} is the independent commissioner in year t, $Controls_{it}$ is Tobins_Q, Cash, EPS, Size, and Lev_LT in year t, and ε_{it} is the specific error of the company.

4. Result and Discussion

Table 1 presents the descriptive statistics for the sample. In the sample, idiosyncratic risk has a mean of 0.078 and a maximum of 0.430. The average CSRTot performance is 34.90%, the CSRTot is at least 2.40%. Meanwhile, CSR for the environmental dimension has an average of 32.87%. The IO variable shows how many companies have institutional shares, and the table below shows an average of 0.643 and a maximum of 0.979. The independent commissioner variable (IDK) has a minimum value of 0.200 or 20%, indicating that Indonesia's companies have not fulfilled the minimum 30% regulation.

Table 1 Statistical description (Author's calculations)

Variable	Minimum	Maximum	Mean	Std. Dev
CSRTot	0.024	0.683	0.349	0.121
CSREnv	0.000	1.000	0.375	0.271

Tobins_Q	0.304	91.368	1.769	4.323
Cash	0.001	0.775	0.094	0.099
EPS	-646.636	4050.266	138.750	416.848
Size	24.611	33.474	28.733	1.606
Lev_LT	0.001	2.178	0.178	0.191
IVOL	0.005	0.430	0.078	0.055
IO	0.000	0.979	0.643	0.219
CSRTot_IO	0.000	0.545	0.224	0.110
CSREnv_IO	0.000	0.924	0.240	0.202
IDK	0.200	0.800	0.389	0.109
CSRTot_IDK	0.010	0.470	0.141	0.062
CSREnv_IDK	0.000	0.830	0.153	0.127

Table 2 presents the regression results from equations (1), (2), and (3). The model chosen is the fixed effect model because the results of the chow test and the Hausman test show that the chi-square probability is less than 0.05. All model tests use PLS linear regression to analyze corporate responsibility for idiosyncratic risk. The statistical results show that CSR, both in total and environmental, hurts idiosyncratic risk. In detail, in models (1), (2), and (3), the CSRTot coefficient is not significant for IVOL. In models (1) and (2), the CSREnv coefficient is negative and significant at the five percent level. In model (3), the CSREnv coefficient is negative and significant at the ten percent level. That is, companies with higher social responsibility performance will have a lower idiosyncratic risk and vice versa. The control variable, size, has a negative effect with significance at the one percent level. Tobin's and cash have a positive and insignificant effect on risk. Lev_LT has a significant positive effect on idiosyncratic risk with a significance value of one percent. Earnings per share have no significant positive effect on idiosyncratic risk.

Table 2 Regression result (Authors' calculations based on secondary data)

Variable	$IVOL_{(it+1)}(1)$	$IVOL_{(it+1)}(2)$	$IVOL_{(it+1)}(3)$
CSRTot	-0.748	-0.728	-0.570
CSREnv	-0.021**	-0.029**	-0.084*
Tobins_Q	-0.587	-0.715	-0.845
Cash	-0.149	-0.120	-0.150
EPS	0.44	0.339	0.449
Size	-0.000***	-0.000***	-0.001***
Lev_LT	0.003***	0.003***	0.003***
IO	-	-0.042**	-
CSRTot*IO	-	-0.006***	-
CSREnv*IO	-	-0.038**	-
IDK	-	-	-0.057*
CSRTot*IDK	-	-	-0.145
CSREnv*IDK	-	-	-0.067*
Ob	551	551	551
F (Stat)	17.055***	18.023***	17.034***
Adj R2	0.065	0.074	0.061

***significant 1%

**significant 5%

* significant 10%

Furthermore, to confirm the second hypothesis, the interaction of corporate governance is included to test the impact of institutional ownership and independent commissioners as a form of monitoring mechanism and place it as a moderating variable. In model (2), IO,

CSRTot*IO, and CSREnv*IO have a negative and significant effect on IVOL. Institutional ownership makes the negative effect of total CSR and the environmental dimension on idiosyncratic risk even stronger. In model (3), IDK and CSREnv*IDK have a negative and significant effect on IVOL. In model (3), it is also seen that the CSRTot*IDK coefficient has no significant effect on IVOL. The existence of independent commissioners makes the negative impact of environmental CSR on idiosyncratic risk even stronger.

The empirical results of this study support the results of Liu & Lu's research [21], which documented that CSR performance is negatively related to company risk because these activities can build a reputation and enable companies to manage essential resources well. Investing in CSR activities is a risk management strategy that can protect cash flows and ultimately reduce corporate risk. CSR disclosure can reduce information asymmetry and reduce information uncertainty faced by financial analysts so that profit forecasts can be better determined, in addition to reducing the cost of equity [22]. CSR activities can increase capital spending to reduce pollution and waste, increase energy efficiency, and meet regulatory requirements. This means that the implementation of pollution reduction and energy efficiency can increase company financing. CSR is considered an investment strategy. Investors must be careful about spending their funding sources in the form of CSR because it can increase default risk [14]. To achieve its goals, companies must consider various stakeholders so that CSR can help reduce the risk of losing support from stakeholders [14].

Consistent with developing the idiosyncratic risk reduction hypothesis, empirical testing has shown that CSR and the environment negatively affect idiosyncratic risk. When viewed in more detail, Table 2 shows that social responsibility in the environmental dimension can significantly reduce idiosyncratic risk in companies in Indonesia. Meanwhile, total social responsibility is not significant. The results showed that environmental, social responsibility could reduce idiosyncratic risk than total social responsibility.

Social responsibility in the environmental dimension is significant for companies, especially manufacturing companies. Environmental protection is primarily the responsibility of the government. When a company expresses its concern and involvement in environmental protection through an environmental social responsibility scheme, stakeholders are satisfied so that the environmental category of social responsibility helps a lot in building the company's reputation. The significant results indicate that social responsibility in the environmental dimension makes the market more sensitive to the company. The environmental dimension has become one of the most significant interests in market attitudes towards

corporate responsibility. Investors actively use corporate responsibility information on the environmental dimension in investment decisions [23]. Companies benefit from the environmental dimension of social responsibility, namely a reduction in the cost of equity. Companies committed to active environmental engagement and do not withhold negative news related to environmental policies are more likely to gain market confidence, reducing the level of risk between companies and stakeholders [23]. In addition, the study results indicate that total CSR is an insignificant category of social responsibility. One of the reasons is that contributions and donations to the community or outside the environment have become the custom or norm. CSR activities related to the total category do not help build the company's reputation because other companies are also active contributors.

Companies can reduce risks by disclosing CSR as a concern for balancing economic, social, and environmental dimensions. CSR activities and disclosures are used to gain legitimacy, reputation, trust, and support from stakeholders. In the end, investors will judge that all of this will provide stability in performance, sustainability and reduce risks in the future.

The results showed that the moderating variable of institutional ownership significantly strengthened the negative effect of total CSR and environmental dimensions on idiosyncratic risk. The higher the institutional ownership, the stronger the negative effect of CSR on idiosyncratic risk. Proving that institutional ownership is essential in managing supervision because it encourages an increase in more optimal supervision [24]. From an active monitoring point of view, institutional investors actively monitor the company's business, minimize information asymmetry and agency conflicts, and reduce corporate risk. Institutional investors reduce market information asymmetry. Institutional investors apply a very high level of managerial skills, professional knowledge, and voting rights to influence managers in making business decisions, increasing efficiency, and providing direction on corporate governance. In addition, institutional investors can provide funds by using their relationships to help funding sources in developing the company. The funds are used for investment in CSR, which can later reduce idiosyncratic risk.

The second moderating variable is independent commissioners. The results showed that the independent commissioner significantly strengthened the effect of CSR on the environmental dimension. Meanwhile, the independent commissioner insignificantly strengthened the effect of total CSR on idiosyncratic risk. An independent commissioner is not allowed to take sides and prioritize his benefit in carrying out his duties and must prioritize common interests by the goals and strategies of the company. In addition, the company's independent commissioners

provide increased oversight of managerial decisions and activities. The independent commissioner has a role in monitoring all the behavior of the board of directors.

The higher institutional ownership and independent commissioners, the better the GCG implementation to reduce agency conflicts between principals and agents, and it can be used in effective CSR implementation. Independent commissioners can monitor directors' selfish actions to minimize agency costs and increase investor confidence in a company. In addition, investors perceive the company to be good because the company has implemented GCG properly. Thus, the company's stock price will increase, which will increase the company's assets' market value and avoid idiosyncratic risk. Institutional investors and independent commissioners want CSR not to become an unprofitable investment tool to reduce the idiosyncratic risk.

Tobin's cash and size control variables hurt idiosyncratic risk. Meanwhile, Lev_LT and earnings per share have a positive influence on idiosyncratic risk. Large companies could provide reports for internal purposes [25]. The information is also used as material for information purposes to external parties, so there is no need to pay additional costs. The bigger the company, the more information it will disclose. The result is a lower information asymmetry resulting in the decreasing of idiosyncratic risk.

The research results showed that the more long-term debt, the higher the idiosyncratic risk. When managers have strong confidence in the company's prospects, they can use more debt to signal investors to improve their performance [26]. However, companies that rely on external parties such as creditors to finance their operations have a greater risk than companies that use more of their own internally generated funds. This is because funding originating from debt can help a company finance its business activities and create an obligation to pay within a certain period, which increases the difficulty of paying a more significant proportion of debt than using its capital. Based on agency theory, managers as agents have received a delegation of authority from shareholders to coordinate activities within the company. The most crucial role of shareholders is monitoring and controlling the work and the managers' economic decision-making. This is done to reduce the risk that shareholders must bear as owners of the company. Therefore, shareholders will also assess how management manages the company's internal activities related to investment and funding, in which the policies issued by management can be said to determine how much risk is borne by shareholders.

The funding decision is related to the manager's policy in determining the right proportion between the amount of debt and the amount of capital in the company to maximize firm value. Securities associated with idiosyncratic risk are often found to come from

companies with high levels of advantage and high stock turnover. Long-term advantage has a positive and significant effect on idiosyncratic risk, which means that the higher its long-term debt proportion, the idiosyncratic risk will also increase. Because the use of debt itself poses a risk, a high advantage creates a high idiosyncratic risk. This indicates that the higher the proportion of debt to equity in the company's capital structure, the higher the idiosyncratic risk that shareholders must bear.

5. Conclusion

This study highlighted CSR related to idiosyncratic risk by involving company-monitoring mechanisms to strengthen its relationship. For the robustness test, CSR is measured using two kinds of proxies: CSR total and environment. Consistent with developing the idiosyncratic risk reduction hypothesis, empirical testing has shown that CSR hurts idiosyncratic risk. CSR in the environmental dimension can significantly reduce idiosyncratic risk in companies in Indonesia in a more detailed test. Meanwhile, total CSR is not significant. The results showed that environmental CSR is more able to reduce idiosyncratic risk than total CSR.

The interaction of corporate governance was included to test the impact of institutional ownership and independent commissioners as a monitoring mechanism and place it as a moderating variable to confirm the second hypothesis. The result was that institutional ownership makes the negative impact of CSR, both total and environmental, on idiosyncratic risk getting stronger. Meanwhile, the independent commissioners make the negative impact of environmental CSR on idiosyncratic risk stronger. Tobin's control variables, cash, and size hurt idiosyncratic risk. Meanwhile, Lev_LT and earnings per share have a positive influence on idiosyncratic risk.

Social and environmental performance is measured based on CSR disclosure in the annual report because it is assumed that the more activities carried out, the wider the disclosure will be. The results showed support for the theory of risk management and signaling. The better the CSR performance means that the company can manage its resources and risks and give a positive signal to stakeholders to reduce idiosyncratic risk. This study also enriches corporate governance in institutional ownership and independent commissioners to monitor social responsibility activities.

The practical contribution of the research is that it can provide knowledge to capital market participants in assessing the company's risk to avoid losses. The findings that are of concern to investors are monitoring mechanisms that support corporate governance. Companies that have monitors within the company but use external parties will make it easier for the company to be more optimal in monitoring because it interacts directly with the company board, or the idiosyncratic risk can be reduced.

The limitations of this study are that it has not used a non-financial approach and the use of state economic factors. It is hoped that these two factors will improve research on corporate governance in Indonesia for further research.

This paper highlighted CSR issues in Indonesia, and its findings have implications for regulators and company management. Regulators are expected to set standards that encourage companies to carry out CSR more integrated with their primary business. It means that CSR activities must solve problems caused by the company, not just creating a good image. This study used a research sample for all stocks listed on the IDX. In the future, it can be considered to use a sharia-based stock sample related to the impact of CSR on idiosyncratic risk. The results of this study have not used risk with market size as a strong comparison. In addition, this study does not include a pyramid structure of majority ownership, so the measurements used on moderating variables, especially the independent board, ignore it. Further research can be related to the relationship between independent boards and the dominance of controlling shareholders in the company and relate it to risk and performance with the market size.

References

- [1] KONG X, PAN Y, SUN H, TAGHIZADEH-HESARY F. Can Environmental Corporate Social Responsibility Reduce Firms' Idiosyncratic Risk? *Evidence From. Front Environ Sci.*, 2020, 8(December): 1–15.
- [2] CORDEIRO JJ, PROFUMO G, TUTORE I. Board gender diversity and corporate environmental performance: The moderating role of family and dual-class majority ownership structures. *Bus Strateg Environ.*, 2020, February 2019: 1–18.
- [3] OZDEMIR O, KIM M. Corporate social responsibility and idiosyncratic risk in the restaurant industry: does brand diversification matter? *Int J Contemp Hosp Manag.*, 2020.
- [4] IMRAN A, BOUBAKER S, ARUNACHALAM M. How does CSR mediate the relationship between culture, religiosity, and firm performance? *Finance Res Lett*, 2021, 39(May 2020): 101587.
- [5] KHALID U, OKAFOR LE, BURZYNSKA K. Current Issues in Tourism Does the size of the tourism sector influence the economic policy response to the COVID-19 pandemic? *Curr Issues Tour*, 2021, 0(0): 1–20.
- [6] GONG X, DU Z. Institutional Investor Information Sharing, Stock Market Extreme Risk, and Financial Systemic Risk. *Complexity*, 2020, 2020.
- [7] CHEN RCY, HUNG S, LEE C. Corporate Social Responsibility and Idiosyncratic Firm Risk in the Different Market States. *Corp Soc Responsib Environ Mgmt.*, 2018, 2006.
- [8] BENLEMLIH M, SHAUKAT A, QIU Y, TROJANOWSKI G. Environmental and Social Disclosures and Firm Risk. *J Bus Ethics*, 2018, June 2015.
- [9] BAULKARAN V, BHATTARAI S. Board effectiveness: Evidence from firm risk. *J Econ Bus*, 2020, 110(February): 105907.
- [10] VINHVO X, BAO D, PHAN A. Herd behavior and idiosyncratic volatility in a frontier market. *Pacific-Basin Finance J*, 2020.
- [11] YANG S, HE F, ZHU Q, LI S. How does corporate social responsibility change the capital structure? *Asia-Pacific J Account Econ*, 2017, 1625(August): 1–36.
- [12] DEVIE D, LIMAN LP, TARIGAN J, JIE F. Corporate social responsibility, financial performance and risk in Indonesian natural resources industry. *Soc Responsib J.*, 2019.
- [13] SUSILAWATI DM, SURYANTO, WINDIJARTO. Factors Affecting Improved Performance for Sustaining Sub-District Welfare: Village Leaders in Java Island, Indonesia. *J Hunan Univ Natural Sci.*, 2021, 48(4).
- [14] THANH L, NGUYEN KV. The impact of corporate social responsibility on the risk of commercial banks with different levels of financial constraint. *Asia-Pacific J Bus Adm*, 2020.
- [15] VU T, LI C, LIU C. Effects of the financial crisis on household financial risky assets holdings: Empirical evidence from Europe. *Int Rev Econ Financ*, 2021, 71(July 2020): 342–58.
- [16] THAMPANYA N, WU J, ALI M, LIU J. Determinants of stock return volatility in ASEAN-5 countries. *J Int Financ Mark Institutions Money*, 2020, 65: 101193.
- [17] HSU F, CHEN S. US quantitative easing and firm's default risk: The role of Corporate Social Responsibility (CSR). *Q Rev Econ Financ*, 2021, 80: 650–64.
- [18] ERIANDANI R, WIJAYA LI. Corporate Social Responsibility and Firm Risk: Controversial Versus Noncontroversial Industries. *J Asian Financ Econ Bus.*, 2021, 8(3): 953–65.
- [19] RASHIDI M. The pricing of information asymmetry based on environmental uncertainty and accounting conservatism. *Int J Product Perform Manag.*, 2019.
- [20] CHANTZIARAS A, DEDOULIS E, GROUGIOU V, LEVENTIS S. The impact of religiosity and corruption on CSR reporting: The case of US banks. *J Bus Res*, 2020, 109(January 2019): 362–74.
- [21] LIU M, LU W, LIU M. Corporate social responsibility, firm performance, and firm risk: the role of firm reputation. *Asia-Pacific J Account Econ*, 2019, 00(00): 1–21.
- [22] JO H, NA H. Does CSR Reduce Firm Risk? Evidence from Controversial Industry Sectors. *J Bus Ethics*, 2018.
- [23] CHOI D, CHUNG CY, KIM D, LIU C. Corporate Environmental Responsibility and Firm Information Risk: Evidence from the Korean Market. *Sustain*, 2019, 1–9.
- [24] ARIFIN T, HASAN I, KABIR R. Transactional and relational approaches to political connections and the cost of debt. *J Corp Financ*, 2020, 65(June 2018): 101768.
- [25] RIAZ S, ALI M, AHMED S, OSTERMARK R. Extreme returns and investors' expectations for future volatility: Evidence from the Finnish stock market. *Q Rev Econ Financ.*, 2019.
- [26] RONALD S, NG S, EDUARDUS F. Corporate Social Responsibility as Economic Mechanism for Creating Firm Value Corporate Social Responsibility as Economic Mechanism for Creating Firm Value. *Indones J Sustain Account Manag.*, 2019, (June).

参考文献:

- [1] KONG X, PAN Y, SUN H, TAGHIZADEH-HESARY F. 環境企業社會責任能否降低企業的異質風險？證據來自。前沿環境科學，2020，8（12月）：1-15。
- [2] CORDEIRO JJ, PROFUMO G, TUTORE I. 董事會性別多樣性和企業環境績效：家庭和雙重股權結構的調節作用。巴士戰略環境，2020，2019年2月：1-18。
- [3] OZDEMIR O, KIM M. 餐飲業的企業社會責任和特殊風險：品牌多元化重要嗎？國際當代醫院管理雜誌，2020年。
- [4] IMRAN A, BOUBAKER S, ARUNACHALAM M. 企業社會責任如何調節文化、宗教信仰和公司績效之間的關係？財務報告，2021，39（2020年5月）：101587。
- [5] KHALID U、OKAFOR LE、BURZYNSKA K. 旅遊業的當前問題 旅遊業的規模是否會影響對 新冠肺炎大流行的經濟政策反應？當前問題之旅，2021，0(0): 1 – 20。
- [6] GONG X, DU Z. 機構投資者信息共享、股市極端風險、金融系統性風險。複雜性，2020年，2020年。
- [7] CHEN RCY, HUNG S, LEE C. 不同市場狀態下的企業社會責任和企業特質風險。企業社會責任環境管理，2018年，2006年。
- [8] BENLEMLIH M, SHAUKAT A, QIU Y, TROJANOWSKI G. 環境和社會披露與企業風險。商業道德雜誌，2018年，2015年6月。
- [9] BAULKARAN V, BHATTARAI S. 董事會有效性：來自公司風險的證據。雜誌經濟巴士，2020，110（二月）：105907。
- [10] VINHVO X, BAO D, PHAN A. 前沿市場的羊群行為和特殊波動性。太平洋盆地金融雜誌，2020年。
- [11] YANG S, HE F, ZHU Q, LI S. 企業社會責任如何改變資本結構？亞太 日記帳經濟，2017，1625（八月）：1-36。
- [12] DEVIE D, LIMAN LP, TARIGAN J, JIE F. 印度尼西亞自然資源行業的企業社會責任、財務業績和風險。社會責任雜誌，2019年。
- [13] SUSILAWATI DM, SURYANTO, WINDIJARTO。影響維持分區福利的績效提高的因素：印度尼西亞爪哇島的村長。湖南大學自然科學，2021，48(4)。
- [14] THANH L, NGUYEN KV。企業社會責任對不同財務約束水平商業銀行風險的影響。亞太 工商管理雜誌，2020年。
- [15] VU T, LI C, LIU C. 金融危機對家庭金融風險資產持有的影響：來自歐洲的實證證據。國際評論經濟金融，2021，71（2020年7月）：342 – 58。
- [16] TAMPANYA N, WU J, ALI M, LIU J. 東盟五國股票回報波動的決定因素。雜誌國際金融機構馬克錢，2020年，65：101193。
- [17] HSU F, CHEN S. 美國量化寬鬆與企業違約風險：企業社會責任（企业社会责任）的作用。問題評論經濟金融，2021，80: 650 – 64。
- [18] ERIANDANI R, WIJAYA LI。企業社會責任與企業風險：有爭議的行業與無爭議的行業。亞洲金融經濟巴士雜誌，2021，8(3): 953 – 65。
- [19] RASHIDI M. 基於環境不確定性和會計穩健性的信息不對稱定價。國際 雜誌 產品執行管理，2019年。
- [20] CHANTZIARAS A, DEDOULIS E, GROUGIOU V, LEVENTIS S. 宗教信仰和腐敗對企業社會責任報告的影響：以美國銀行為例。雜誌社，2020，109（2019年1月）：362 – 74。
- [21] LIU M, LU W, LIU M. 企業社會責任、企業績效和企業風險：企業聲譽的作用企業聲譽的作用。亞太 日記帳經濟，2019，00(00): 1 – 21。
- [22] JO H, NA H. 企业社会责任是否會降低企業風險？來自自有爭議的行業部門的證據。雜誌 巴士道德，2018年。
- [23] CHOI D, CHUNG CY, KIM D, LIU C. 企業環境責任和公司信息風險：來自韓國市場的證據。維持，2019年，1-9。
- [24] ARIFIN T, HASAN I, KABIR R. 政治聯繫和債務成本的交易和關係方法。企業金融雜誌，2020，65（2018年6月）：101768。
- [25] RIAZ S, ALI M, AHMED S, OSTERMARK R. 極端回報和投資者對未來波動的預期：來自芬蘭股市的證據。問題評論經濟金融，2019年。
- [26] RONALD S, NG S, EDUARDUS F. 企業社會責任作為創造企業價值的經濟機制 企業社會責任作為創造企業價值的經濟機制。印度尼西亞可持續客戶經理雜誌，2019年，（6月）。