

The Value Relevance of Risk Disclosure and Risk Governance: Efforts to Maintain Sustainability in the Banking Industry

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Abstract. As a financial institution with an essential role in developing the economy and national development, banks are required to have good financial performance. During the COVID-19 pandemic, many banks were affected, which increased their credit risk. In various conditions, banks need to make efforts to maintain their performance. This study, thus, aims to examine these efforts by examining the role of risk governance in moderating the value relevance of risk disclosure in the banking industry listed on the Indonesia Stock Exchange for the period 2018-2022. In two different economic conditions (before and during COVID-19), management efforts to explain the management of the company through risk disclosure and governance should have a positive impact on the sustainability of the company. Tests conducted on 145 firm samples with the *Generalized Least Squares* model revealed that risk disclosure and risk governance exert a positive effect on market performance. However, risk governance weakens risk disclosure in terms of market performance.

Keywords: Market Performance, Sustainability, Risk Disclosure, Risk Governance, COVID-19.

1 Introduction

Banks are financial institutions that provide various financial services to individuals and companies. Compared to other industries, banks are high-risk industries. Therefore, management is required to manage and report the risks faced, as well as have good governance to maintain operational sustainability. However, in 2020 and 2021, banks became one of the industries affected by COVID-19. Unstable economic conditions make it difficult for debtors to pay installments.

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This phenomenon caused the Financial Services Authority (OJK) to issue a credit restructuring program, which provides relief for debtors affected by COVID-19. At the end of 2020, OJK noted that banking NPLs had increased by 2.53% to a level of 3.06%, which can be said that at the end of 2020, the bank's condition was not good due to an increase in credit risk [1]. In addition to the increased credit risk due to the pandemic, the world supply chain has also been disrupted, which has affected the decline in foreign investment in Indonesia. The Ministry of Finance of the Republic of Indonesia stated that COVID-19 also had an impact on the decline in foreign investment in Indonesia.

The increased risk and decreased investment caused by COVID-19 is a consideration for corporate risk disclosure, as it will be in the spotlight of investors and other stakeholders [2]. The information provided by the company to outsiders is crucial, as it is used to make decisions and explain how a company should signal to users of financial statements. Supriyadi and Setyorini [3] explain that risk disclosure in the banking industry shows the control of directors, company values, and human resource development in accordance with company strategy and goals. The market response to banking risk disclosure indicates that the information has value relevance, which is the market response to corporate risk disclosure. The maximum disclosure of information will minimize information asymmetry between the company and investors. On the other hand, disclosure of risk information that is not maximized will cause information gaps, which in turn can harm the company. This research also confirms by [4] that there is a positive association between bank value and several categories of established risk disclosures.

When managing risk in banking, risk governance can help banks identify risks and carry out appropriate risk management strategies. Risk governance is a variable that is relevant to risk disclosure and bank performance because it can increase risk disclosure, provide better information to stakeholders in decision-making, and improve the quality of the company's financial statements. Risks in banking, such as credit risk, operational risk, compliance risk, legal risk, and reputation risk, need to be managed to minimize losses [5]. Good risk governance will assure shareholders that invested funds can be managed appropriately in accordance with functions and responsibilities and for the benefit of the primary user [6]. Good risk governance will also increase public confidence in the risk information disclosed by management and as an indicator for more optimal decision-making. Company performance is good quality when risk governance in the company is also adequate. This will affect how the company issues the risk disclosure [7].

Therefore, this study aims to examine whether the risk disclosures made by banking companies can maintain their sustainability and whether risk governance plays a role in these efforts. In addition, COVID-19 provides an opportunity for the research to be conducted in different economic conditions. As such, this research is vital to ascertain whether companies and investors will behave differently when faced with different situations.

2 Literature review

2.1 Agency theory

According to agency theory, everyone is motivated by their self-interest, which causes a conflict of interest between the principal (shareholders) and the agent (management). Jensen and Meckling [8] put forward that agency problems can arise due to the opportunistic behavior of agents who manage the company for their interests. Hence, there needs to be a control mechanism that allows the principal to ensure that the agent acts in the principal's interest. One of them is implementing good governance.

2.2 Signal theory

Signaling Theory explains how companies use various signals to communicate information to stakeholders, especially in situations where there is information asymmetry. According to Spence [9], this signaling process involves the sender or owner of information providing signals or information that is useful for recipients to make decisions based on these signals.

2.3 The effect of risk governance on market performance

Corporate governance is one of the mechanisms that is expected to minimize unexpected things through supervision of agent performance. This mechanism can provide assurance to shareholders that the invested funds can be managed properly in accordance with the functions, responsibilities and interests of the company [10]. Therefore, the implementation of corporate governance should influence both operational performance and market performance. Corporate governance has an important aspect, namely, the existence of risk governance. Risk governance contributes to identifying risk management in the company. The level of risk disclosure and the number of risk committees formed by a company are two important aspects of risk governance. Risk disclosure is imperative because it can reduce information asymmetry that can harm savers and investors [11] although it is not always responded to by shareholders, especially in developing countries [12]. However, over time, provisions of PSAK no.60 have emerged that companies must disclose information so that investors and other stakeholders can identify the level of risk and different types of risk.

According to agency theory [8], the role of governance in a company is an important factor in efforts to reduce agency conflicts. Research by Prameswari and Meiranto [13] asserted that risk governance affects company performance. The research was conducted by testing two criteria on risk governance, namely risk disclosure and the number of committees. The results uncovered that risk disclosure has a positive influence on company performance, while the number of committees formed does not affect company performance. The test results are consistent with the research by Puspita and Ghozali [14] and Faisal and Ismoyorini [7]. The market should respond positively when the company has good risk governance since it displays the seriousness of management in managing the company. Based on this argument, it is hypothesized:

H1: Risk governance has a positive effect on market performance.

2.4 The Moderating Role of Risk Governance on the Value Relevance of Risk Disclosure

Risk governance is a fundamental aspect of corporate governance. It concentrates on identifying, assessing, and managing risks that can affect the company's ability to achieve its goals and survive in the long term. Risk governance in this study is related to signaling theory. When the risk governance practices in the company are good, the company signals to stakeholders that the company manages its risks effectively. Research on risk disclosure moderated by risk governance on market performance is supported by Sopriyadi and Setyorini [3]. The results of their research demonstrated that risk disclosure and firm value are positively correlated. The board of directors has the role and responsibility to implement its business strategy by implementing technology and ensuring that the market receives banking information well. Further, the market believes that risk management disclosure is an important source for determining the future and sustainability of the business. Risk disclosure is necessary to increase investor and stakeholder confidence, which affects market performance [11]. The risk management committee as a part of risk

governance also shows its role by encouraging more disclosure to reduce information asymmetry [15]. Therefore, good corporate governance practices will strengthen the positive impact of risk disclosure on the company's market performance.

H2: Risk governance strengthens the positive effect of risk disclosure on market performance.

3 Research method

This research is a quantitative study using secondary data obtained from the financial statements of banks on the Indonesia Stock Exchange in 2018-2022. The population of this study was all banks listed on the IDX in 2018-2022. The sampling technique used in this study was *purposive sampling* technique, with the following criteria:

1. Banking companies listed on the Indonesia Stock Exchange for the period 2018-2022
2. Banking companies that published annual financial reports for the period 2018-2022
3. Banking companies with complete data for the measurement of the variables tested in this study

Statistically, the researchers tested the effect of risk disclosure on market performance moderated by risk governance. The researchers also included leverage, profitability, size, and COVID period as control variables. The following are the measurements for these variables:

Table 1. Measurement of research variables

No.	Variable Name	Definition	Measurement
1.	Market Performance	Market performance is the results and work behavior achieved by a company, which shows how good its investor prospects are.	$Tobin's Q = \frac{MVE + Debt}{Total Assets}$
2.	Risk Disclosure	Risk disclosure is a process carried out by the company to disclose information about the company's activities to the public.	$RDI = \frac{\text{The sum of the RDI scores revealed}}{\text{The sum of item RDI (25 items)}}$
3.	Risk governance	Risk governance combines governance, risk, and compliance in one organized model to help businesses reduce waste, increase efficiency, mitigate non-compliance risks, and share data more efficiently.	$TKR = \frac{\text{(Risk governance standard scorement)}}{\text{(Total criteria in risk governance disclosure met (total items))}}$
4.	Leverage	Leverage is used to measure how much of a company's assets come from debt or capital. Leverage is a ratio that states the relationship between debt and total capital or company assets.	$DAR = \frac{Total Debt}{Total Asset}$

5.	Profitability	Profitability is a measure of the progress of a business based on the profits it generates. The level of profitability is measured using <i>Return On Assets</i> . The ratio called <i>Return On Assets</i> (ROA) shows how much an asset contributes to net income.	$Return\ on\ Asset = \frac{Net\ Income}{Total\ Asset} \times 100\%$
6.	Size	Agency problems. Generally, company size is determined by the natural logarithm of total assets (Log TA). This is used to reduce the large difference between the size of small companies.	$Company\ Size = Ln\ of\ Total\ Asset$
7.	COVID Period	The COVID-19 pandemic that occurred in 2020-2021 is one of the causes of declining health in banks. Therefore, the researchers used the COVID-19 period as a control variable. The control variable aims to neutralize whether the pandemic period will affect the independent and the dependent variables.	<p>The measurement of this control variable used a dummy variable with a score of 0 for the pre-COVID-19 period and a score of 1 for the COVID-19 period. Dummy variable</p> <p>0 = Period before COVID-19 1 = Period during COVID-19</p>

The research hypothesis was tested using panel data regression with the following equations.

$$KPi_{i,t+1} = \alpha_0 + \alpha_1 RD_{i,t} + e \dots\dots\dots (1)$$

$$KPi_{i,t+1} = \beta_0 + \beta_1 RD + i,t \beta_2 TKR_{i,t} + e \dots\dots\dots (2)$$

$$KPi_{i,t+1} = \delta_0 + \delta_1 RD + i,t \delta_2 TKR + i,t \delta_3 RD.TKR_{i,t} + e \dots\dots (3)$$

Description:

- KP = Market Performance
- RD = Risk Disclosure
- TKR = Risk Governance
- $\alpha_0, \beta_0, \sigma_0$ = Constant
- α, β, δ = Regression coefficient
- e = Error

4 Research results

4.1 Data overview

This study used a sample of banking companies listed on the Indonesia Stock Exchange from 2018 to 2022. The data used were obtained from the company's *annual report* published on the company's website and through the Indonesia Stock Exchange. The results of the data analysis are presented using EViews. The following is a research sample determined by the purposive sampling method,

Table 2. Research sample

Description	Sample Quantity	Observation
Banking companies listed on the Indonesia Stock Exchange for the period 2018-2022	47	235
Listed banking companies	(1)	(5)
Companies that did not meet the criteria for the variables used	(2)	(10)
Data that could not be processed (<i>outlier</i>)	(7)	(75)
Total Research Sample	37	145

Table 3. Descriptive statistics

	KP	RD	TKR	ROA	DAR	SIZE	PC
Mean	1.077862	0.690000	0.861103	0.573310	0.820828	31.65069	0.496552
Median	0.980000	0.700000	0.880000	0.690000	0.830000	31.24000	0.000000
Maximum	3.300000	0.900000	1.000000	0.850000	0.930000	35.08000	1.000000
Minimum	0.720000	0.350000	0.530000	0.000000	0.530000	28.95000	0.000000
Std. Dev.	0.307104	0.141126	0.086916	0.259826	0.070253	1.704444	0.501721
Skewness	4.382343	-0.617177	-0.952739	-1.552251	-1.225309	0.28460	0.013793
Kurtosis	29.02964	2.927640	4.426759	3.775885	5.464938	2.003233	1.000190
Sum	156.2900	100.0500	124.8600	83.13000	119.0200	4589.350	72.00000
Sum Sq. Dev.	13.58104	2.868000	1.087823	9.721411	0.710701	418.3385	36.24828
Observations	145	145	145	145	145	145	145

4.2 Panel data regression results

Table 4. Test results of moderated regression analysis with random effect model

Variable	Coef.	Std. Error	t-Statistic	Prob
C	-0.275610	0.793863	-0.347175	0.7290
RD	2.279735	0.525196	4.340733	0.0000
TKR	1.997916	0.463579	4.309768	0.0000
RD*TKR	-2.931309	0.578924	-5.063372	0.0000
ROA	-0.100319	0.127195	-0.788706	0.4316
LEVERAGE	0.959252	0.438811	2.186025	0.0305
SIZE	-0.031033	0.020382	-1.522563	0.1302
COVID	0.094462	0.042816	2.206234	0.0290
R-squared	0.062903			
Adjusted R-squared	0.022159			
S.E. of regression	0.254217			
Sum squared residue	8.918399			
F-statistic	1.543877			
Prob (F-statistic)	0.168348			

$$\text{KP} = -0.2756 + 2.2797 * \text{RD} + 1.997 * \text{TKR} - 2.9313 * \text{RD} * \text{TKR} - 0.1003 * \text{ROA} + 0.9592 * \text{LEVERAGE} - 0.0310 * \text{SIZE} + 0.0944 * \text{COV}$$

Referring to the table, results revealed that the probability value between risk disclosure and risk governance was 0.00 (<0.05), with a coefficient value of 1.99. Thus, it can be concluded that hypothesis 1 in this study, stating that "risk governance has a positive effect on market performance," was supported. The interaction (RD*TKR) showed a probability value of 0.00 <0.05, with a coefficient value of -2.93. Although significant, because the

direction of the interaction coefficient was opposite to the hypothesis, it can be concluded that hypothesis 2 in the study, proposing that "risk governance strengthens the positive effect of risk disclosure on market performance," was not supported. For control variables, only leverage and COVID-19 exhibited significant effects on the company's market value.

5 Discussion

5.1 The effect of risk governance on market performance

The results of testing hypothesis 1 unveiled that risk governance exerted a positive effect on market performance. The significant effect of risk governance indicates that risk governance banks are one of the important mechanisms in the management of banking companies that receive investor attention. The high risk inherent in the banking industry requires management to manage its risks well. This result aligns with research by Prameswari and Meiranto [13]. The results of this study also support agency theory by showing that risk governance is an essential factor in reducing agency conflicts [14]. Risk governance is the company's way of assessing the health level of banks that have been regulated. Strict regulations in the banking industry that include governance as a component of assessing the health level of banks, as stipulated in Bank Indonesia Regulation No. 13/1/PBI/2011, also encourage banks to implement risk governance properly [7].

5.2 The moderating role of risk governance on the relationship between risk disclosure and market performance

The results of testing hypothesis 2 in this study uncovered that risk governance strengthened the significant positive effect of risk disclosure on market performance, which was not supported. This result does not support the research of Supriyadi and Setyorini [3]. Theoretically, companies that disclose their risks adequately will be responded positively by the market. The results of this study reinforce this argument. Nevertheless, the interaction test results displayed the opposite. Risk governance reduces the relevance of the positive value of risk disclosure. Good risk governance practices can have a positive impact on market performance.

Risk disclosure is one of management's efforts to inform the management of the company. Adequate risk disclosure information will be a positive signal for investors. The market response will depend on how the company conveys its information [16]. Under different conditions, management should provide different information. This result is supported by the test results that show that there are differences in risk disclosure during the COVID-19 and before COVID-19 periods. During the COVID-19 period, management disclosed more information items in an effort to justify macroeconomic conditions that had an impact on the company's operations. This difference suggests that the banking industry is justifying in maintaining its sustainability.

6 Conclusion, Limitations, and Suggestions

Based on the testing and analysis that has been done, it can be concluded that risk governance has a positive effect on market performance. On the other hand, this variable weakens the positive effect of risk disclosure on market performance. Differences in economic conditions are proven to have an impact on how companies attempt to make more adequate disclosures to justify the decline in economic conditions and make better

governance efforts.

The results of this study need to be addressed wisely, as it has the opportunity for rater subjectivity in carrying out the indexing process on the measurement of the variable tested. For future research, other measurement methods of risk disclosure can be sought in addition to using indices, especially in the highly regulated banking industry.

References

1. Kontan, Bankir yakin NPL tahun ini tetap terjaga walau ada risiko kredit meningkat, ed., pp. (2021). <https://newssetup.kontan.co.id/news/bankir-yakin-npl-tahun-ini-tetap-terjaga-walau-ada-risiko-kredit-meningkat>.
2. R. Eriandani, I. Narsa, and A. Irwanto, Environmental risk disclosure and cost of equity, *Polish Journal of Management Studies*, vol. **19**, no. 2, pp. 124-131, (2019).
3. A. Supriyadi and C. T. Setyorini, Pengaruh pengungkapan manajemen risiko terhadap nilai perusahaan melalui kinerja keuangan di industri perbankan Indonesia, *Owner: Riset dan Jurnal Akuntansi*, vol. **4**, no. 2, pp. 467-484 (2020).
4. B. Giner, A. Allini, and A. Zampella, The value relevance of risk disclosure: An analysis of the banking sector, *Accounting in Europe*, vol. **17**, no. 2, pp. 129-157 (2020).
5. N. Mentari and U. T. Putri, Risk Mitigation of Disease Pandemic in the Indonesian Banking Industry: In Response to COVID-19, *Lentera Hukum*, vol. **7**, p. 245 (2020).
6. M. Hamdani, Good corporate governance (GCG) dalam perspektif agency theory, *Semnas Fekon*, vol. **2016**, pp. 279-283 (2016).
7. F. Faisal, N. I. D. Ismoyorini, J. Sudarto, and K. Tembalang, Pengaruh Tata Kelola Risiko Terhadap Kinerja Perusahaan Perbankan, *Jurnal Penelitian Ekonomi Dan Bisnis*, vol. **4**, no. 2, pp. 180-191 (2019).
8. M. C. Jensen and W. H. Meckling, Theory of the firm: Managerial behavior, agency costs and ownership structure, in *Corporate governance: Gower*, pp. 77-132 (2019).
9. M. Spence, Job market signaling, in *Uncertainty in economics: Elsevier*, , pp. 281-306 (1978).
10. M. S. Djanegara, S. Sutarti, and S. A. Dewo, The Influence of Corporate Governance for the Indonesian Banking Industry in a Pandemic Period, *International Journal of Finance & Banking Studies (2147-4486)*, vol. **11**, no. 3, pp. 62-71 (2022).
11. A. Anisa, Pengaruh IFR Dan Tingkat Pengungkapan Informasi Terhadap Nilai Perusahaan Dengan Relevansi Nilai Sebagai Variabel Intervening, *Jurnal Akuntansi Berkelanjutan Indonesia*, vol. **4**, no. 1, pp. 53-72 (2021).
12. A. Menezes da Costa Neto, A. F. d. Oliveira, A. M. C. d. Silva, and A. Barbosa, Value relevance of financial risk disclosures, *Journal of Capital Markets Studies*, vol. **7**, no. 1, pp. 22-37 (2023).
13. R. D. Prameswari and W. Meiranto, Pengaruh Tata Kelola Risiko Perusahaan Pada Kinerja Perbankan Di Indonesia, *Diponegoro Journal of Accounting*, vol. **8**, no. 4 (2019).
14. M. D. Puspita and I. Ghozali, Pengaruh Tata Kelola Risiko Terhadap Kinerja Bank (Studi Empiris pada Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia pada Tahun 2015-2017), *Diponegoro Journal of Accounting*, vol. **8**, no. 3 (2019).
15. E. S. Ayuningtyas and I. Harymawan, Risk management committee and textual risk disclosure, *Risks*, vol. **10**, no. 2, p. 30 (2022).

16. W. A. Darniaty and E. Murwaningsari, Pengaruh Pengungkapan Risiko Terhadap Nilai Perusahaan Dengan Corporate Governance Sebagai Moderating, *Jurnal Ekonomi, Manajemen Dan Perbankan (Journal of Economics, Management and Banking)*, vol. **6**, no. 1, pp. 38-45 (2020).