

Governance and Performance: Does Bank Risk Matter?

Estu Widarwati^{1*}, Sonia Karmila², Nunik Nurmalasari³

^{1,2,3}STIE Sutaatmadja, Subang, West Java, Indonesia

E-mail: ¹wie2tdz@gmail.com, ²soniakarmila354@gmail.com,

³nuniknurmalasari90@gmail.com

^{*}Corresponding Author

JEL Classification:

G20

G30

G32

G34

Received: 21 Januari 2022

1st Revision: 25 Februari 2022

2nd Revision: 27 Maret 2022

Accepted: 13 April 2022

Abstract

Governance becomes a guideline for the banking management system and is essential for banking survival during regular economic crises. We investigate the impact of governance on performance in the Indonesians' conventional and examine the mediating role of bank risk in bank governance and performance relationship. The samples are 18 conventional banks listed on Indonesia Stock Exchange (IDX) from 2014 to 2021 and analyzed using panel data regression and the Sobel test. We find that the risk of state-owned banks is higher than private and foreign banks, which could lead to lower performance. Then the results indicate that board size and board age impacted bank risk and performance. Banks should consider the board size for efficiency and the maximum standard of their directors' age based on arguments related to innovation-based work productivity in the competitive banking industry. Examining the differences in bank ownership and bank characteristics linked to bank risk needs the subsequent exploration of banking governance research. This result is strong evidence of mediation in this study.

Keywords:

governance, board, bank risk, Z-score, bank performance

How to Cite:

Widarwati, E., Karmila, S., & Nurmalasari, N. (2022). Governance and Performance: Does Bank Risk Matter? *Etikonomi*, 21(2), 281–294. <https://doi.org/10.15408/etk.v21i2.24364>.

INTRODUCTION

Good performance is the driving force for the competitive advantage that every banking industry must have. It is closely related to the role of banks in the country's economy. The vital role played by the bank when it does not have a good performance will result in instability of the economic cycle and even stop the wheels of a country's economy. In other words, the banking sector is demanded to maintain healthy performance so that all processes in the economy in that country can run properly.

In conditions of economic instability, the role of banks is crucial, namely policymakers for economic security. The sluggish world economy in 2019 pushed some central banks in several countries to make some economic stability policies, such as lowering benchmark interest rates to keep the country's economy from slowing down. The Indonesia Central Bank also has lowered its benchmark interest rate four times to continue to boost the domestic economy. Even though the world economy is slowing down, Indonesia's banking show stable performance but is still not optimized yet based on the inefficiency of the bank and decreasing net income margin (NIM). However, there is good growth in the capital adequacy ratio (CAR).

Various factors influence financial performance, and one of them is governance. Since the global crisis in 2008 triggered the financial crisis that caused many companies, including banks, to fail, many researchers have developed a determinant model of performance and identified that the weakness of governance implementation is one of the leading causes. A survived company during the crisis period has emphasized good (Francis et al., 2012), which encourages the urgency of corporate governance reform in various industries, including the banking sector. The global financial crisis has highlighted the need for strengthening of governance mechanisms of financial institutions. Weaknesses in the bank governance structures contribute to bank insolvency (Dedu & Chitan, 2013) and have been identified as the critical determinants of the recent financial crisis (Abid et al., 2021).

The factors that cause the weak governance of the bank include the lack of relationship between shareholders and management, weak direction and control exercised by the board in managing assets, debts, and even operating the bank system. The management works and is too free in making important decisions for the bank's sustainability. The management does not apply the principles of good governance in conveying business developments and financial reports to shareholders and creditors. This argument is considered an opportunity for irresponsible parties to do things outside the company's interests. Therefore, this impact is a reduced level of investor confidence in the company.

Lukviarman (2016) explains that the concept of a governance system is related to a set of logical subsystems and associated feedback loops that affect every company's strategic decision-making process. The tools of a dynamic governance system will support the implementation of a governance model. The governance model is a framework and decision-making process designed for the growth and sustainability of companies in their

environment. Moreover, top management characteristics are considered to dominate a governance system adopted by the company. The governance system consists of three main components: governance structure, governance process, and governance outcome, where the understanding of governance systems and models will later help companies in operationalizing governance. Especially in organizational processes, governance systems and models need to be implemented as a unit so that later they can interact better and provide optimal results.

Improving bank performance will protect stakeholders' interests and increase compliance with applicable regulations. That applies in general to the banking industry. Banks must implement good governance as a guideline in their business activities. Boards are the central part of governance to monitor and advise management, protecting the interests of shareholders both in standard economic times and crises (Adams & Ferreira, 2007). The number of boards is essential for better bank governance. Adams & Mehran (2012) and Aebi et al. (2012) have observed that board size is positively related to Tobin Q, respectively ROE, claiming that increasing the board size generates added value due to the growing complexity of banks over time. Thus, better monitoring and advising of managers are enabled.

However, increasing the number of board members may lead to coordination, control, and flexibility problems in the decision-making process, such as the finding of Andres & Vallelado (2008). A lack of supervision within the institution, which is the responsibility of the bank's board of commissioners, and wrong investment decisions can reduce investor confidence in the bank. Therefore, banks need to implement a sound governance system to minimize bank risk (Pathan, 2009; Dedu & Chitan, 2013) and create an excellent performance to achieve the expected goals and objectives effectively and efficiently.

The importance of analyzing the performance within the bank is closely related to seeing the extent to which a bank can carry out its financial management properly and see the bank's resilience to bank financial risks. One of the risks that banks often face is insolvency risk, which means that the bank's assets cannot cover its liabilities and debts. Therefore, exploring performance using a risk approach is preferable based on the argument that Government is related to an attitude if someone makes a decision that some risks must be taken or faced later. Besides, the limited human thinking power regarding future perceptions includes seeing the risks that can occur without realizing it.

Banks are expected to continue to perform well, be resistant to insolvency risks, and avoid the risk of bankruptcy. The implementation of good governance can help banks minimize risks for the better. The Z-score is commonly used to assess the risk and stability as a whole and is better known as the time-varying Z-score method. According to Cihák & Hesse (2007), the greater the z-score of a bank, the healthier or more avoid the risk of insolvency. Conversely, the smaller the z-score a bank has, the more vulnerable it will be to problems with insolvency risk.

Governance becomes a guideline for managers in banking to implement a sound system for managing the bank. Through good governance, managers will make financial decisions that benefit all parties (stakeholders). However, research concerning the role of governance mechanisms ineffective bank risk control is limited. Furthermore, very little is known about the role of governance in the banking sectors of developing economies. Banks are an industry engaged in finance, giving, and receiving money from the public, so good governance is needed. The bank regulatory requirements may induce the "agent problem" between shareholders, who wish to maximize the value of investments, and the regulator, who seeks financial stability for each entity and the reduction of the systemic risk (Jensen & Meckling, 1976).

Governance becomes a determinant for banks to continue developing and survive even when a crisis occurs, both from the bank's internal and external environment. The management holds a significant role in adopting and implementing good governance, considering that the other stakeholders, such as shareholders or debt holders, cannot impose effective governance in banks (Dedu & Chitan, 2013).

Governance is crucial for the banking industry sector. Implementing Good Corporate Governance (GCG) in banking is one of the aspects that is considered to be related to the risk level of the banking sector. Moreover, its application in Indonesia has been regulated in the Financial Services Authority Regulation concerning the Implementation of GCG for Commercial Banks. Based on the results of Indonesian Banking Development Institute (LPPI) research in 2016-2018, the composite value of GCG at banks in Indonesia is lower than the expected average composite value of 1 (one) regarding the standard of Indonesia Central Bank about the implementation of GG for commercial banks. Therefore there is a need for improvement and innovation in governance implementation in Indonesian banking.

The topic of governance is still relevant to be explored after the findings of Zhuang et al. (2001) that strengthening governance is essential for sustainable performance, significantly minimizing risk in times of crisis. This research follows El-Chaarani (2014), focusing on the linkage of governance to bank risk. It explores new the role of bank risk as moderation between governance and performance in Indonesian banking. It is based on the importance of the bank's role as a mediator in the financial market so that bank risk must control through factors that can determine its magnitude, including board size and age of directors.

Some internal attributes of governance will impact performance related to the governance system. The governance system in Indonesia uses two board structures (a two-tier board system), consisting of a board of commissioners and a board of directors. One of the most analyzed variables in governance study is board size because it is not clear the effect of its performance (Arosa et al., 2013). Board size is the number of members who hold board positions in a company and is fundamental to the company's success. Board size is the size of the Board of Commissioners and the Board of Directors in the board structure within the bank. The bigger the board size, the better the extent of supervision, control, and management carried out within the company. Large boards

are less effective than smaller boards, and limited board size may increase performance (Sheikh et al., 2011). According to research conducted by Adams & Mehran (2003), a large board size will improve company performance and provide more control over management. It is in line with research results from Bhatt & Bhatt (2017) show that board size positively affects company performance. The board with high links to the external environment improves access to resources, which positively impacts performance.

However, according to Guo & Kga (2012) and Abid et al. (2021), the greater the size of the board, the less effective it will be because it will create a less conducive climate. Their research shows that the board size harms bank value and performance. Large boards may be less efficient due to difficulty in solving the agency problem among the members of the boards (Arosa et al., 2013). Thus the effect of board size is a trade-off between benefit and cost.

The other critical analysis of governance is board age. Age in the world of work has stereotypes that develop in the community. Many think that the older a person is at work, he will do unsatisfactory results. The lower the productivity level will reduce his work quality compared to his younger colleagues. The latter is often assumed that young workers will be more productive, full of creativity and bright ideas, and more aggressive at work. Age has a role in improving decision quality because taking risks behavior of boards may change according to their age (Wiersema & Bantel, 1992). We use the board of directors' age as a component in determining governance in Indonesians' banking. It is closely related to the level of one's productivity at work. Directors are individuals who manage within the company, so productivity levels are expected to be high to create good company performance. Research conducted by Bhatt & Bhatt (2017) shows that the age of directors positively affects performance. Meanwhile, the results of research by Shuying et al. (2017) find that board age's negative effect on innovation capability leads to decreasing performance. Then first, we test the hypothesis that there is an effect of board size and board age on bank performance.

Furthermore, the importance of analyzing the governance within the bank is closely related to the extent to which a bank can carry out its financial management properly and see the bank's resilience to bank financial risks. One of the risks that banks often face is insolvency risk, which means that the bank's assets cannot cover its liabilities and debts. Bank governance, both board size and board age may change the decision quality in taking the risk. Then secondly, we test the hypothesis that banks' governance influences banks' risk. The role of board characteristics determines bank performance through the trade-off between the advantages and disadvantages of their monitoring and advising roles (Fernandes et al., 2018).

Kakar et al. (2021) show that the primary goal is to increase profitability and optimize performance. The cost of risk can arise on the way to completing this objective. Banks can manage and control the risk because the risk can cause a bank deficit. Therefore bank faces various types of risk, such as insolvency risk. Then thirdly, we test the hypothesis that bank risk impacts bank performance. We explore the mediating role of bank risk in governance and performance relationships. It is based on the argument

that an influential role of the board will reduce the level of bank risk and improve bank performance. Fourthly, we test the hypothesis that bank risk has a mediation role in governance and bank performance relationship. To control our model, we use bank size as a control variable to better explain the results.

Therefore, our study analyzes the mediating role of bank risk in the governance and bank performance relationship from 2014 to 2021. The research formulates problems related to board size and board age's influence on bank performance. Also, both affect the bank risk and the mediated role of bank risk. It is expected to have the practical implication that the banking industry can optimize the governance structure, especially the number and the age of the board, as a strategic decision for minimalizing bank risk. This study helps determine some factors that help improve bank governance and help control bank risk and management risk for increasing return on assets. Furthermore, this research is also expected to reference the Government's consideration of bank performance strategy through good governance structure according to bank board and the level of bank risk.

METHODS

This study investigates the impact of governance on Indonesians' bank performance with bank risk as a mediation variable. We explore yearly data of conventional banks listed on the Indonesia Stock Exchange (IDX) for the 2014-2021 period. Analyzed data by assessing and deepening the literature relating to research, online searching, and other websites linked to data needs. Our sample based on board profile of 18 bank namely Bank Rakyat Indonesia Agro Niaga Tbk, Bank MNC International Tbk, Bank Central Asia Tbk, Bank Bukopin Tbk, Bank Mestika Dharma Tbk, Bank Negara Indonesia (Persero) Tbk, Bank Tabungan Negara (Persero) Tbk, Bank Danamon Indonesia Tbk, Bank Pembangunan Daerah Jawa Timur Tbk, Bank QNB Indonesia Tbk, Bank Mandiri (Persero) Tbk, Bank CIMB Niaga Tbk, Bank of India Indonesia Tbk, Bank Tabungan Pensiunan Nasional Tbk, Bank Mega Tbk, Bank OCBC, Bank Pan Indonesia Tbk, and Bank Woori Saudara Indonesia 1906 Tbk. We exclude bank mergers or acquisitions and incomplete data for variables. Our study focuses on the new role of bank risk that mediates the relation between governance and bank performance, so we use the relevant measurement of each data in bank reports.

Figure 1. Research Model



According to James & Joseph (2015), the study employs return on asset (ROA) as a proxy of bank performance as a dependent variable because it signifies the actual productivity of the bank. Then we used Z-score as insolvency risk for measuring the bank risk that follows Dedu & Chitan (2013). Our independent variable is governance proxied by board size according to Guo & Kga (2012) which is the number of directors and commissaries member, then directors' age measured by average director age according to Bhatt and Bhatt (2017). Based on previous research, we use the control variable as bank size, which is measured by the total asset of the bank (Dedu & Chitan, 2013; James & Joseph, 2015).

Figure 1 shows the research model from this research. The empirical model of this study relates to our aim of examining the mediation role of bank risk on the relationship between governance and bank performance. We build four hypotheses as explained, and we develop the following equations of an empirical model for both direct and indirect effects:

Regression X-Y

$$PRFOMit = \beta_0 + \beta_1 BRDSZE_{it} + \beta_2 AGEBRD_{it} + \beta_3 BSIZE_{it} + e \quad (1)$$

Regression X-Z

$$BRISK_{it} = \beta_0 + \beta_1 BRDSZE_{it} + \beta_2 AGEBRD_{it} + \beta_3 BSIZE_{it} + e \quad (2)$$

Regression Z-Y

$$PRFOMit = \beta_0 + \beta_1 BRISK_{it} + \beta_2 BSIZE_{it} + e \quad (3)$$

Regression X-Z-Y

$$PRFOMit = \beta_0 + \beta_1 BRDSZE_{it} + \beta_2 AGEBRD_{it} + \beta_3 BRISK_{it} + \beta_4 BSIZE_{it} + e \quad (4)$$

Symbol *it* represents Bank and time; respectively, PRFORM is bank performance proxied by Return on Asset (ROA), BRISK is bank risk measured by time-varying Z-score as a proxy of insolvency risk. BRDSZE is the board size, namely the sum of the bank's commissioners and directors members, AGEBRD is the director's age, and BSIZE reflects the bank size as measured by LN assets.

We use panel data regression to test the impact of governance on bank risk and bank performance, especially common effect and fixed effect. We also do the Sobel test to explore the mediating role of bank risk in governance and bank performance relationship.

RESULT AND DISCUSSIONS

Descriptively, our analysis in Table 1 shows bank performance data by *Return On Asset* (ROA) and bank risk measured by Z-score as insolvency risk. The result showed a decrease in the bank performance of Indonesians' conventional Bank, especially during covid 19 in 2020-2021, and it creates higher bank risk as seen in increased Z-score value. We analyze the data and find that Indonesia's conventional banking performance measured by ROA had been good based on the expected value of central bank regulation of all banks thought few. Furthermore, we find that state-owned banks have higher performance (ROA) than private banks and foreign banks.

There was a significant fluctuation in the average z-score of conventional banks in Indonesia from 2014 to 2021. In 2019, the average z-score decreased from 288.29 (2018) to 180.24. The decrease in the average z-score may have been caused by an increase in capital adequacy ratio, which was not accompanied by increasing in ROA, which tended to decline. Furthermore, based on the sample of state-own bank, private bank, and foreign bank, each still shows instability performance during 2014-2021 based on its z-score, but the data shows that the average insolvency risk of state-own banks is higher than private banks and foreign banks risk.

The result of descriptive data of bank governance refers to the composition of the board size in banking is stated regulation of Indonesia Central Bank concerning the Implementation of Good Governance for commercial banks where the commissioners' board is at least three people. Our data show that most of the samples have the same members board according to the regulations. Implementing the commissioners' board composition and directors in each Indonesians' conventional bank of 2014-2021 has referred to this rule.

Table 1. Descriptive Statistics Year by Years of ROA and Z-Score

Years	Banks	Statistics	ROA	Z-Score
2014	18	Mean	2.39	118.24
		St.dev	1.43	124.41
2015	18	Mean	1.97	265.91
		St.dev	4.10	433.99
2016	18	Mean	0.71	131.83
		St.dev	4.84	101.83
2017	18	Mean	1.61	161.99
		St.dev	1.87	159.00
2018	18	Mean	2.19	288.29
		St.dev	1.12	516.66
2019	18	Mean	1.91	180.24
		St.dev	1.23	171.42
2020	18	Mean	0.78	204.59
		St.dev	1.95	403.02
2021	18	Mean	0.53	286.87
		St.dev	2.93	307.77

This table presents the descriptive statistics of bank performance and risk, ROA is the return on assets (%), and Z score is bank insolvency risk.

The number of boards in conventional bank Indonesia has fluctuated every year, and the average boards size during the 2014-2021 period was 14 boards member in each bank. The governance analysis in terms of board age is closely related to one's performance, showing that the average age of directors of conventional banks in Indonesia during the 2014-2021 period is 46-63 years old. Moreover, although the average age of conventional bank directors each year is still in perspective productive age of Indonesia,

namely 15-64 years, it tends to be the last formative age. Generally, the sample of this study is dominated by private banks. Table 2. presents the descriptive statistical analysis of bank governance and bank risk.

Table 2. Descriptive Statistical Analysis of Bank Governance and Bank Risk

	RISK (LN Z-SCORE)	BOARD SIZE	DIRECTORS AGE
Mean	4.559944	13.67361	53.79458
Median	4.620532	14.00000	53.36000
Maximum	7.696170	25.00000	62.80000
Minimum	-0.214265	6.000000	46.25000
Std. Dev.	1.332544	4.182598	3.005006
Observations	144	144	144

Source: Authors data, 2022

The results of the complete statements of 144 showed the max value of the board size is 25 people, while the minimum amount is 6 people. The board age has a mean of 54 years old. The max value of average board age is 63 years, while the min value is 46 years. Our data shows that state-own banks have more boards than private banks and foreign banks. Then the private banks have the older boards than other banks and it could create more risk for they're operational. According to Hambrick & Mason (1984) is concerned with older executives that avoid risk more. Our descriptive analysis results that the average of capital adequacy ratio in Indonesians' conventional banking increase during pandemic crisis 2020-2021 and the state-own banks have higher assets also a better performance of ROA than other banks. The regressions result in Table 3 run the cross-section weight of common effect and fixed effect for the four equations of bank governance, bank risk, and bank performance.

Model (1) shows that board size as a governance proxy directly affects bank performance, so our hypothesis is accepted, which means the high number of boards leads to low bank performance. Guo & Kga (2012) that find a negative impact of boards size on performance. According to the agency theory argument, the conflict between shareholders and managers gives an idea of how to monitor the conflict and increase the firm's performance, which means good corporate governance increases banks' efficiency. Most researchers believe that large board size is increased the banks monitoring power. However, it is devalued by a lack of communication and decision-making inefficiency (Rahman & Islam, 2018) is relevant to our finding that board size in Indonesians' banking makes bank performance lower. It follows Adams & Mehran (2012), who stated that the larger the board size provides more supervision and control over management. The research results conducted by Bhatt & Bhatt (2017) explain that governance, which is proxied by board size, has a significant effect on performance, including the risk. Fernandes et al. (2021) conclude that different governance characteristics have different relevant for banks' risk-taking contingent on the economic environment being one of stability or crisis.

Table 3. Regression Result

Research Model				
	Model (1) regression X - Y	Model (2) regression X - Z	Model (3) regression Z - Y	Model (4) regression X-Z-Y
Dependent Variable <i>Bank Performance (ROA)</i>				
Mediation Variable <i>Bank Risk (BRISK)</i> Z-Score			0.5536* (0.0915)	0.4379* (0.0724)
Independent Variable <i>Governance</i>				
Boards Size <i>(BRDSZE)</i>	-0.1483* (0.0469)	0.0759* (0.0222)		-0.1347** (0.0565)
Directors' Age <i>(AGEBRD)</i>	0.1507* (0.0427)	0.0775* (0.0283)		-0.0745 (0.0735)
Control Variables <i>Bank Size(BSIZE)</i>	-0.1508 (0.0504)	0.0091** (0.0047)	0.0049 (0.0063)	-0.0429 (0.0473)
Year dummies	Not Included	Not Included	Not Included	Not Included
Constant	Included	Included	Included	Included
Method	FE GLS	CE GLS	CE GLS	FE GLS
Adjusted R-squared	0.5872*	0.1115*	0.2205*	0.6679*

This table presents the results of panel data regression of the research model. The dependent variable is bank performance proxied by return on asset (ROA); the independent variable is governance proxied by board size (BRDSZE) and age of directors AGE-BRD); BRISK is bank risk measured by Z-score as insolvency risk level. The control variables are bank size(BSIZE) measured by Ln asset. The values in parentheses are standard errors. *significant 1%; **significant 5%

Meanwhile, we have substantial evidence that board age impacts performance, and the hypothesis for directors' age proxy of governance is accepted. This result is consistent with Arioglu (2021), that also found a positive impact of board age diversity and company performance. But, it is not in line with Goll & Rasheed (2005) that not find the impact of board age on performance. The data show that there is no fixed government regulation that stipulates the bank itself regulates an age limit for who occupies a position of directors and regulations regarding the age of a person at work according to the needs of the bank. However, most of the directors are still in the productive working age range in its implementation. Although it is dominated by directors aged <63 years, several directors are still over the productive age limit in Indonesia, namely > 63 years. The impact of people getting older also affects one's performance at work. However, the other side of the increasing age of directors indicates that their experience is getting better, a wiser attitude that helps make better decisions for the company. Malek et al. (2021) state that age diversity should be examined based on the inclusion of different generations to the board, and not just the average number of directors' age. Khidmat et al. (2020) state that the director's diversity reduces the managerial entrenchment on the one hand, while, through networking, increases the resources of the firms on the other side.

Table 3 shows that bank governance proxied by board size directly impacts bank risk positively, and our result is the same as the finding of Rahman & Islam (2018).

Our hypothesis accepts that a large board size increases the bank's monitoring power and makes decisions making efficiency, leading to lower costs, and bank could minimize the insolvency risk. The addition and reduction of the number of boards affect the insolvency risk index. Every time there is an addition of one board, it will increase the z-value. It means that each different number of boards will increase the insolvency risk index of the bank so that it will decrease the sustainability of the bank's performance and vice versa. Our findings show there is strong evidence board age positively impacts to bank risk. This result is in contrast with Berger et al. (2014) that conclude the increased board age makes a lower bank risk-taking. Increasing board size on the board's structure will increase the management, supervision, and control of the broader power, referring to the inefficiency of a large board in Indonesia's conventional banking.

As expectation, the age of directors also affect the insolvency risk index (z-score) of the bank. It is what makes the old or young director's age measure able to be used as an absolute measure to assess a person's good or bad performance at work. Even though the elderly directors experience a decline in physical skills, this will be replaced by the benefits of a more extended work experience compared to young workers who still need time to create a good track record to generate trust in the company.

Therefore, table 3 shows that our hypothesis about the effect of bank risk on bank performance found positive signs in our study according to model (3). According to Cihák and Hesse (2007), the greater the z-score of a bank leads to the healthier or avoid the risk of insolvency. Banks are expected to continue to perform well and be resistant to insolvency risks and avoid the risk of bankruptcy. The implementation of good governance can help companies minimize risks for the better. The Z-score is commonly used to assess the risk and stability as a whole and is better known as the time-varying Z-score method. Furthermore, we find an indirect relationship between bank governance, bank risk, and bank performance which bank risk and board size have a significant effect.

We do the Sobel test to test the mediating role of bank risk in governance and bank performance relationship and the result shows that bank risk as significant mediation in board size and bank performance which z-test value is 2,9763. The number of board increases the bank risk and will decrease the stability of bank performance because the lack of communication and decision-making inefficiency. We also find substantial evidence of bank risk as mediation in the relationship of board age and bank performance which z-test value is 2,4947. The old or young director will determine the level of bank risk liked to their innovation and experience in decision-making. Our findings show no strong evidence about the control effect of bank size in the relationship of bank governance, bank risk, and bank performance.

CONCLUSION

Good banking governance help banks move effectively and efficiently to create a good performance, especially in finance, and reduce the bank risk. Good governance could minimize banking risks, one of which is insolvency. The results show that board numbers

and board age affect the bank's performance and risk directly and indirectly. The banks must pay attention to the number of boards linked to the efficiency of communication and effective coordination that leads to lower costs. Then, a bank should consider the maximum age standards of directors. It is related to innovation-based work productivity needed in the competitive banking industry, especially during times of crisis. The study also finds the significant role of bank risk in bank governance and bank performance relationship. Unfortunately, we do not find strong evidence of a significant bank size role as a control variable. It explained the argument that bank size does not control the influence of governance on bank financial performance proxied by the risk of insolvency. The Government is advised further to emphasize implementing good governance for banks. More supervision and evaluation of the banking industry are carried out regularly, and the need to confirm sanctions for banks that do not implement good governance. So these banks will pay more attention to governance that later can maintain the stability of their performance and improve it.

This study is limited to testing governance proxied by board size and board age and its link to the bank performance measured by ROA and using insolvency risk as mediation. This study finds that board size and board age as a proxy for governance determines the magnitude of Indonesia's banking performance. Then, bank risk significantly mediates the relationship between board size as governance measurement and bank performance. However, this study's limitations on governance proxies should be noted. CEO duality, board meeting, risk management framework, and others are proxies for governance that should be combined with board size and director's age so that observations can be broader and research results can better cover all aspects of governance. Besides, the focus of this research, which is only on conventional banking, requires a more general exploration through further research on Islamic banking with adjustments to the governance structure to reflect the overall governance of Indonesian banking to obtain broader generalizable results. Subsequent research should explore the other proxy of bank risks, such as credit risk or market risk, for a clear explanation of the role of bank risk in governance and bank performance.

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