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The Effect of Diversity of The Board of Commissioners on Bank Credit Risk in Indonesia

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ABSTRACT: This study aims to determine: (1) the effect of board age diversity on bank credit risk, (2) the effect of board education diversity on bank credit risk, (3) the effect of board gender diversity on bank credit risk, and (4) the effect of board nationality diversity on bank credit risk. The population in this study are banking sector companies listed on the Indonesia Stock Exchange (IDX) in the 2014-2018 period. The sampling technique in this study used census sampling with a total sample of 37 banks. Data is collected from the bank's annual report. Fixed effect period regression analysis was used to test the hypothesis of this study. The results of this study indicate that: (1) board age diversity has a significant negative effect on bank credit risk, (2) board education diversity has a significant negative effect on bank buying credit risk, (3) board gender diversity has no significant effect on risk bank credit, (4) board nationality diversity has no significant effect on bank credit risk.

KEYWORDS: Board diversity, age, education, gender, nationality, credit risk.

I. INTRODUCTION

Banking is one of the main pillars of the economy for a country, especially Indonesia. Therefore, the survival of the bank's business is very important to be maintained. One of the bank's efforts to maintain and maintain its business condition is to carry out risk management. Bank risk management is a method for management in a bank to find out all types of risks that may be faced by the bank it manages to anticipate so that the bank does not suffer losses due to unexpected losses. According to Fatemi and Fooladi (2006) the biggest risk faced by banks is credit risk, namely the risk of loss caused by the debtor's inability to fulfill his debt payment obligations, both principal and interest debt or both (default). The subprime mortgage crisis that hit the United States in 2007-2008 was a form of failure to manage credit risk. The magnitude of the impact of credit risk on banks encourages bank management to carry out risk management as well as possible.

The implementation of risk management in an organization is inseparable from the implementation of the principles of good corporate governance (GCG). Good corporate governance considers that it is very important for the board of commissioners to have a balance of diversity on the right skills, knowledge, and experience in order to improve the quality of decision-making and implementation of corporate GCG. The Board of Commissioners is the Company's organ that is responsible for supervising in accordance with the Articles of Association and providing advice to the Board of Directors and ensuring that the Company implements GCG at all levels of the Company's organization. Diversity is the diversity of people in a group or organization. This diversity can be in terms of demographics, such as their age, race, religion, citizenship, culture, or educational background. Diversity can help companies identify and capitalize on opportunities to improve production, provide services, attract, retain, motivate, and use human resources effectively, as well as improve decision-making processes at all levels in the organization, and many other advantages because organizations with diversity are perceived as organizations that have social and modern awareness (Wicaksana, 2010).

Boards that are more diverse tend to be more informative, have better information processing skills, and can potentially make better decisions (Tasheva and Hillman, 2018). In addition, diversity fosters the independence of the board's thought process and has the potential to result in better monitoring by the board (Adams et al., 2015). The diversity of the board of commissioners can be seen in terms of demographics such as gender, age, education, citizenship, which is the focus of this research.

The purpose of this study was to measure the effect of diversity in age, education, gender and citizenship of the board of commissioners on the credit risk of banks in Indonesia. This study makes three contributions to the existing literature. First, previous research on this topic has mostly been done in Europe and the US; Thus, this study will provide a new perspective on how the diversity of the board of commissioners affects credit risk in Indonesia. Second, most of the research was conducted in non-financial companies. Finally, most studies in Indonesia examine the relationship between board diversity and performance. However, little research has been done to examine its effect on bank credit risk.

II. LITERATURE RIEVEW

Credit Risk

Credit risk is the possible loss resulting from a borrower's failure to repay a loan or fulfill a contractual obligation. Traditionally, this refers to the risk that the lender may not receive the principal and interest owed, resulting in cash flow disruptions and increased collection costs. Credit risk is measured using the ratio of Non-Performing Loans (Mpofu and Nikolaidou, 2018).

Board age diversity

According to Dagsson and Larsson (2011), the advantages of a more diverse age of board members, among others, with the presence of a younger generation on board members allow more information and better experience in the company's online business. The age diversity of members of the board of directors is measured by the coefficient of variation in age, which is calculated using the ratio of the standard deviation of the age of the board of commissioners to the average age of the board of commissioners (Talavera et al., 2018). In this modern era, a group of young people who grow and develop with computers and the internet. Unlike the senior generation group, they have a lot of field work experience and all kinds of information both online and offline. Thus, many companies need both groups (young and senior generations). This argument is stated in the hypothesis below:

Hypothesis H1: There is an effect of board age diversity on bank credit risk.

Gender diversity board

Women bring professional experience and different perspectives compared to men, so the presence of female members on the board of commissioners will lead to more informative and strategic actions to identify better investment opportunities for the company (Hillman et al., 2007). The gender diversity of the members of the board of commissioners is measured by using the proportion of the number of female members to the total number of the board of commissioners. As such, we hypothesize the following:

Hypothesis H2: There is an effect of board gender diversity on bank credit risk.

Board education diversity

Educational diversity can spur innovation, provide much-needed creative approaches to problem solving and even reveal previously unseen opportunities. High levels of education of board members encourage improvement in credit risk assessment (Bao et al., 2020). The educational diversity of board members is measured by using the proportion of the number of board members with a minimum educational background of master's degree to the total number of board of commissioners. As such, we hypothesize the following:

Hypothesis H3: There is an effect of board education diversity on bank credit risk.

Nationality diversity board

There are many foreign banks in Indonesia, where there are board members who are foreign nationals. Therefore, it is necessary to take into account the diversity of nationalities of board members in making board decisions. However, board members from other countries do not have enough knowledge about the host environment (Tioumageng and Yota, 2018). Nationality diversity of board members is measured by using the proportion of the number of foreign board members to the total number of board of commissioners. As such, we hypothesize the following:

Hypothesis H4: There is an effect of board nationality diversity on bank credit.

III. RESEARCH METHODS

This study analyzes the effect of diversity in age, education, gender and nationality of the board of commissioners on bank credit risk in Indonesia. The population in this study are banking sector companies listed on the Indonesia Stock Exchange (IDX) for the period 2014-2018. The sampling technique in this study used census sampling where the entire population became the research sample. Thus, the number of samples obtained is 37 banks. Data is collected from the bank's annual report.

Credit risk is the possible loss resulting from a borrower's failure to repay a loan or fulfill a contractual obligation. Traditionally, this refers to the risk that the lender may not receive the principal and interest owed, resulting in cash flow disruptions and increased collection costs. Credit risk is measured using the ratio of Non-Performing Loans (NPL) (Mpofu and Nikolaidou, 2018). The board age diversity (BAD) is measured by the coefficient of variation in age which is calculated using the ratio of the standard deviation of the age of the board of commissioners to the average age of the board of commissioners (Talavera et al., 2018). The board gender diversity (BGD) is measured by using the proportion of the number of female members to the total number of the board of commissioners. The board educational diversity (BED) is measured by using the proportion of the number of board members with a minimum educational background of master's degree to the total number of board of commissioners. The board nationality diversity (BND) is measured by using the proportion of the number of foreign board members to the total number of board of commissioners.

Fixed effect period regression analysis was used to test the research hypothesis. The equation for panel regression equations in this study can be written as follows:

$$NPLit = \alpha 1 + \beta 1\ BADit + \beta 2\ BGDit + \beta 3\ BEDit + \beta 4\ BNDit + \varepsilon t \quad (1)$$

IV. RESULTS AND DISCUSSION

Description of Research Variables

Descriptive statistics in this study are described through the maximum value, minimum value, average value and standard deviation. The results of descriptive statistical analysis are presented in the Table 1.

Based on Table 1, it can be seen that the average NPL of banks is 3.21%. The average NPL value is lower than the limit set by the Indonesian Financial Services Authority/OJK of 5%. The average value of the BAD variable is 0.13 meaning the coefficient of variation of the age of the board of commissioners is 0.13. The average BGD variable is 0.11 meaning that the average proportion of female commissioners is 11% of the total number of commissioners, this indicates that there are far fewer female commissioners than male commissioners. The average BED variable is 0.55, meaning that the average board of commissioners with S2 education or more is 55% of the entire board of commissioners, this shows that the education level of banking commissioners in Indonesia is quite high. The average BND variable is 0.13 which means that the average proportion of the board of commissioners of foreign nationals is 13% of the total number of commissioners, this indicates that the number of commissioners who are Indonesian citizens is far more than that of foreign nationals.

Table 1. Description of Research Variables

variable	mean	stdev.	min.	max.
NPL	3,21	3,36	0,00	25,67
BAD	0,13	0,06	0,01	0,43
BGD	0,11	0,14	0,00	0,50
BED	0,55	0,29	0,00	1,00
BND	0,13	0,20	0,00	0,50

Regression Results

Table 2 shows a summary of the regression results. Of the four types of diversity tested, two showed a significant effect on bank credit risk, namely age diversity and education diversity, while gender diversity and nationality diversity had no effect on credit risk.

Board age diversity has a negative effect on credit risk; thus Hypothesis 1 (H1) is accepted. The more varied the age of the board of commissioners, the lower the credit risk. Banking requires commissioners from both the younger and more senior generations. Age diversity increases experience, resources, knowledge, and networks among the board of commissioners (Talavera et al., 2018).

Board education diversity has a negative effect on credit risk; thus Hypothesis 2 (H2) is accepted. The higher the proportion of the board of commissioners with a master's degree education or more, the lower the NPL of the bank, this result supports the findings of previous research (Bao et al., 2020).

Board gender diversity has no effect on bank credit risk; thus Hypothesis 3 (H3) is rejected. The presence of female commissioners has no impact on bank credit risk. Abou-El-Sood (2021) found that women on boards tend to make riskier (credit) investments when the bank's capital position and capitalization are strong, and take less risky positions during a financial crisis.

Table 2. Linear Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5,36	0,64	8,36	0,00
BAD	-7,26	3,54	-2,05	0,04

BED	-1,67	0,72	-2,32	0,02
BGD	-2,18	1,52	-1,43	0,15
BND	-0,48	1,04	-0,46	0,65
R-squared	0,12			
Adjusted R-squared	0,08			
F-statistic	3,26			
Prob(F-statistic)	0,00			

Board nationality diversity has no effect on bank credit risk; thus Hypothesis 4 (H4) is rejected. The internationalization of business requires the board of commissioners to have knowledge and contacts in foreign markets. This result is in accordance with Tioumageng and Yota (2018) that the chairman who is an expatriate, in the face of inadequate knowledge about the host country's environment. García-Meca et al. (2015) find that national diversity has a negative impact on bank performance in countries with high protection from the government. The protection provided to the bank in the form of a bailout reduces the incentives for supervision by bank commissioners.

CONCLUSIONS

This study aims to examine the effect of diversity in the bank's board of commissioners on credit risk. The test results found that age diversity and education diversity had a significant negative effect on credit risk, while gender diversity and nationality diversity had no effect on credit risk. Thus, it can be concluded that the diversity of age and education level on the board of commissioners of banks can reduce the credit risk of banks in Indonesia. These results support hypotheses related to the diversity of company managers, including the productivity-related human capital hypothesis, the knowledge-related earnings quality hypothesis, and the reputation-related organizational legitimacy hypothesis (Bao et al., 2020).

The findings of this study that gender diversity and nationality diversity are not significant can be an opportunity for further research by adding other variables in the research model. The risk-taking behavior of female commissioners can be influenced by bank conditions and economic conditions (Abou-El-Sood, 2021). Meanwhile, the supervisory function of the bank commissioner relates to regulation and protection from the government where the bank is located (García-Meca et al., 2015).

REFERENCES

1) Abou-El-Sood, H. 2021. Board gender diversity, power, and bank risk taking. International Review of Financial Analysis, 75, 101733. https://doi.org/https://doi.org/10.1016/j.irfa.2021.101733
2) Adams, R. B., de Haan, J., Terjesen, S., & van Ees, H. 2015. Board Diversity: Moving the Field Forward. Corporate Governance: An International Review, 23(2), 77–82. https://doi.org/10.1111/corg.12106
3) Bao, T., Nguyen, N., Lin, L., Su, X., & Yu, J. 2020. Does Managerial Education Matter for Credit Risk? Evidence from Taiwan. Finance Research Letters, 101812. https://doi.org/10.1016/j.frl.2020.101812
4) Dagsson, S., & Larsson, E. 2011. How age diversity on the Board of Directors affects Firm Performance TT - Hur åldersspridning i styrelsen påverkar firmans resultat (swe): Vol. Independen. http://bth.diva-portal.org/smash/get/diva2:831952/FULLTEXT01.pdf
5) Fatemi, A., & Fooladi, I. 2006. Credit risk management: a survey of practices. Managerial Finance, 32(3), 227–233. https://doi.org/10.1108/03074350610646735
6) García-Meca, E., García-Sánchez, I.-M., & Martínez-Ferrero, J. 2015. Board diversity and its effects on bank performance: An international analysis. Journal of Banking & Finance, 53, 202–214. https://doi.org/https://doi.org/10.1016/j.jbankfin.2014.12.002
7) Hillman, A. J., Shropshire, C., & Cannella, A. A. 2007. Organizational Predictors of Women on Corporate Boards. Academy of Management Journal, 50(4), 941–952. https://doi.org/10.5465/amj.2007.26279222
8) Mpofu, T. R., & Nikolaidou, E. 2018. Determinants of credit risk in the banking system in Sub-Saharan Africa. Journal of Advanced Research, 8(2), 141–153. https://doi.org/10.1016/j.rdf.2018.08.001
9) Talavera, O., Yin, S., & Zhang, M. 2018. Age diversity, directors' personal values, and bank performance. International Review of Financial Analysis, 55, 60–79. https://doi.org/https://doi.org/10.1016/j.irfa.2017.10.007
10) Tasheva, S., & Hillman, A. J. 2018. Integrating Diversity at Different Levels: Multilevel Human Capital, Social Capital, and Demographic Diversity and Their Implications for Team Effectiveness. Academy of Management Review, 44(4), 746–765. https://doi.org/10.5465/amr.2015.0396

11) Tioumagneng, A., & Yota, R. 2018. Credit Risk Control at Cameroonian Banks' Board of Directors: The Problems of the Presence of Directors Representing the State and the Nationality of Chairman. Asia-Pacific Journal of Management Research and Innovation, 14(3–4), 61–73. https://doi.org/10.1177/2319510x18817973
12) Wicaksana, K. A. B. 2010. Dampak Diversitas Kebangsaan Anggota Dewan Komisaris dan Direksi pada Kinerja Pasar Perusahaan. JDM (Jurnal Dinamika Manajemen), 1(1), 9–17. https://journal.unnes.ac.id/nju/index.php/jdm/article/view/2443