RISK MANAGEMENT DISCLOSURE AND THEIR EFFECT ON BANKING FIRMS VALUE IN INDONESIA

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ABSTRACT

Risk management is the effort done to minimize the possible risks that might occur in future. This study aimed to examine the influence of firm size, audit committee, and risk committee on risk management disclosure and to examine the influence of firm size, audit committee, risk committee, and risk management disclosure on firm banking value. The research sample comprised 40 banking firms listed on the Indonesia Stock Exchange (IDX) during 2016 to 2018. The hypothesis testing was done by using a regression data panel. The results revealed that the firm size and risk committee had a positive influence on the disclosure of risk management, and audit committee did not have a positive influence on the disclosure of risk management. This study also proved the positive influence of firm size, audit committee, and risk committee on firm banking value through risk management disclosure. The limitation of this study was the measurement of the risk management disclosure index which contained an element of subjectivity in understanding the index, so it had the opportunity to give different perceptions if research is carried out in the future. The implication of this study requires to consider the size of the company and that of the risk committee, so that it will minimize risk for investors in future.

Contribution/Originality: This study investigates the measurement of the risk management disclosure index on the Indonesia Stock Exchange (IDX) based on agency and stakeholder theory. The paper's primary contribution is the finding that large banks disclose risk management more broadly to minimize information asymmetry between management and stakeholders. In addition, the existence of a risk committee also encourages more disclosure of risk management so that it will minimize risk for investors.

1. INTRODUCTION

The regulation of The Finance Services Authority No. 18/POJK.03/2016 Article 30 on The Application of Risk Management for Commercial Banks, states that banks are required to disclose risk management in their annual published reports with minimum disclosures covering the performance of risk management and the direction of risk management policies (Financial Services Authority/OJK, 2016). The obligation to disclose risk management in banking is closely related to the nature of the banking industry which is full of activities that contain risks, including advancing funds to customers, collecting funds from customers, selling, buying, and quarantining the risk itself. A survey conducted by Center for Risk Management Studies (2018) revealed that there are a few risks a company encounters, one of which is the risk of changing company direction. Therefore,
banks should be able to handle risks by applying risk management. Such application is not merely for the management’s interest, but also for customers related to product information and the banks’ activities.

Prior studies have been found regarding the factors that influence the disclosure of risk management. Gunawan and Zakiyah (2017) and Elfeky (2017) found that firm size could be the factor affecting risk management disclosure. Khumairoh and Agustina (2017) and Muslih and Mulyaningtyas (2019) revealed that firm size did not have an effect, so that it could not be the factor affecting risk management disclosure. Onasis and Robin (2016) found that firm size did not influence firm value. Al-Maghzomi, Hussainey, and Aly (2016) stated that a number of audit committee meetings had an influence on risk management disclosure. Sellami and Fendri (2017) and Setiany, Hartoko, Suhardjanto, and Honggowati (2017) found that the frequency of audit committee meetings did not influence risk management disclosure, so that it could not be the factor affecting risk management disclosure. Elamer and Benyazid (2018) found a negative relationship between risk committee and financial performance. Abdullah and Ismail (2015) stated that a number of committee meetings, risk, and firm size had an influence on hedging disclosure which contains elements of mandatory and voluntary disclosure. This study used a sample of 300 companies listed on the Malaysian Stock Exchange in 2013. Al-Maghzomi et al. (2016) and Anton (2018) stated that risk management disclosure did not influence firm value. Given that prior research findings that were inconsistent, this current research aimed to reexamine risk management disclosure using the financial statements of banking industry as the research object. The companies being investigated were listed on the IDX during the period 2016 to 2018. The selection of the banking industry was based on the notion that it was one of finance industries which was growing fast in the digital era.

2. THEORETICAL BACKGROUND OF THE RESEARCH

2.1. Agency Theory

The separation of ownership and control may result in conflicts between principal and agent (Ghosh, 2018). In this case, the principal considers that the agent is unable to run a company by ignoring the principal’s interests (Zogning, 2017). In contrast, the agent thinks that the one who fully understands and can run a business is the agent himself. Agency theory comes into existence due to diverse individuals’ purposes to gain their best interests in an organization they are involved. Managers run a company in a sovereign way and are supported by their managerial competence. Nevertheless, they are the agents appointed by the principal to delegate the authority.

The disclosure of risk management is expected to minimize asymmetric information and provide good opportunities for investors in terms of the effectivity of decision-making and assessing a company’s viability in future. Risk information can help the principal monitor the management effectiveness in dealing with problems. The risk information revealed is more likely to decrease asymmetric information and build investors’ trust thus increasing market valuation (Bravo, 2017).

2.2. Stakeholder Theory

According to Freeman and David (1983) a company has a responsibility to its stakeholders, including shareholders, employees, customers, suppliers, lenders, and society. All stakeholders own the right to be informed about the company’s activities carried out by the executives. Disclosing risk management is one of corporate strategies to have a relationship with stakeholders. It is also a strategic management process in calculating business problems the company comes across. So, in this case, the company is encouraged by its stakeholders to disclose more information than needed to meet the information challenges nowadays (Elfeky, 2017). The more is its depth, the broader is the disclosure, so it shows that the company intends to meet the stakeholders’ information needs.
2.3. Risk Management Disclosure

Risk is a potential loss due to the occurrence of an event. The Financial Services Authority stated that there are eight (8) types of risks a company encounters – credit risk, market risk, liquidity risk, operational risk, compliance risk, legal risk, reputation risk, and strategic risk. Risk itself is closely related to uncertainty. Things that are uncertain will be more likely to cause risks. Therefore, it is important to manage risks in order that the expected results can be achieved. Risk management is a series of methodologies and procedures used to identify, measure, monitor, and control risks that possibly rise in the entire business activities of a bank.

Based on the National Survey of Risk Management conducted by Center for Risk Management Studies (2018) the implementation of risk management is useful for (1) improving employee performance, (2) improving job satisfaction, (3) efficiency of resource uses, (4) improving effectiveness and efficiency of supply chain, (5) improving customer satisfaction, and (6) improving service quality.

2.4. Research Hypotheses

Each firm has a different size. The larger the firm size, the broader the information is disclosed. This means a larger firm does more disclosure due to pressures from various parties. This statement is strengthened by studies of Elfeky (2017), Gunawan and Zakiyah (2017), Abdullah and Ismail (2015) and Yunifa and Juliarto (2017) revealing that the firm size has an influence on risk management disclosure. Based on the explanation, the first hypothesis is proposed as follows: H1: Firm size has a positive influence on risk management disclosure.

Based on the Regulation of Bank Indonesia No 14/14/PBI/2012 regarding Transparency and Publication of Bank Report in creating market discipline to be aligned with developments in international standards, it is necessary to increase the transparency of the financial condition and performance of banks by publishing reports to make it easy for public and market players to do assessments (PBI No. 14/14, 2012). To that end, audit committee serves to ensure that the financial statements prepared are presented fairly in accordance with accounting principles and are protected from possible risks. The frequency of audit committee meetings plays such an important role for the effectiveness of the audit committee. The more frequently the audit committee holds meetings, the better is the supervisions of the bank to provide good quality information. This statement has been proven by studies of Al-Maghzom et al. (2016) and Alkurdi, Hussainey, Tahat, and Aladwan (2019) revealing that audit committee meetings had an influence on risk management disclosure. The explanation leads to the second hypothesis as follows: H2: Audit committee has a positive influence on risk management disclosure.

Beside the audit committee, there is a risk committee too. It serves to provide the real description of risks and disclosing the risks faced by a company. The effectiveness of a risk committee in carrying out its functions is reflected in the number of meetings held. Through risk committee meetings, information disclosure can be deeper and wider. This statement is supported by studies of Abdallah, Hassan, and McClelland (2015), Abdullah et al. (2015) and Bello, Yusuf, and Nuhu (2019) revealing that the frequency of risk committee meetings had an influence on risk management disclosure. Hence, the third hypothesis is proposed as follows: H3: Risk committee has a positive influence on risk management disclosure.

Another aspect is total assets which can describe the size of a firm. The larger the total assets of a firm, the bigger is the firm size. Furthermore, the larger the firm size, the more interested are the investors in the firm (Raharja & Putra, 2016). Their interest in the firm will be more likely to affect the decision-making process in buying its stock. The more investors who are interested in the firm's stock, the firm value will rise higher. This elaboration leads to the proposal of fourth hypothesis: H4: Firm size has a positive influence on banking firm value.

Audit committee is created by an independent commissioner to supervise the company performance. Independent audit committee is expected to be able to provide transparency of management accountability of financial statements. Supervising the company by the audit committee is more likely to attract stakeholders to
invest in the company. To make an effective decision, a sufficient period of time and well-organized plan are required in a group, so that audit committee meetings can be a facility to achieve effective decision. The more frequently the audit committee holds meetings, the better the decisions will be made, thus increasing firm value. This statement has been proven by the study of Sarpal (2017). Based on this explanation, the fifth hypothesis is proposed as follows: H5: Audit committee has a positive influence on banking firm value.

Given the complexity of risks faced by banking sector, the role of risk committee is highly needed and separated from audit committee. The risk committee set up strategies upon the risks being faced and deliver them to the stakeholders. The risk committee meetings being held will boost the acts of monitoring and risk reporting, thus reducing the negative impacts on firm value. This statement has been researched by Kakanda, Salim, and Chandren (2018) who found that a number of risk committee meetings spurred better decision makings. This explanation leads to the sixth hypothesis as follows: H6: Risk committee has a positive influence on banking firm value.

Basically, risk disclosure can help investors make decisions related to a company’s future. When the risks are disclosed in details, it will enhance the investors’ interest which in turn rise the firm value in the market. Information disclosure can minimize information asymmetry and provide more complete information in order that investors can assess a firm well. This statement has been proven by studies of Abdullah, Ismail, and Isa (2015) and Bravo (2017) revealing that risk management disclosure had an influence on firm value. Thus, the seventh hypothesis is proposed as follows: H7: Risk management disclosure has a positive influence on banking firm value.

Based on the explanation above, all of the hypotheses can be summarized below:

- H1: Firm size has a positive influence on risk management disclosure.
- H2: Audit committee has a positive influence on risk management disclosure.
- H3: Risk committee has a positive influence on risk management disclosure.
- H4: Firm size has a positive influence on banking firm value.
- H5: Audit committee has a positive influence on banking firm value.
- H6: Risk committee has a positive influence on banking firm value.
- H7: Risk management disclosure has a positive influence on banking firm value.

3. METHODS OF THE RESEARCH

3.1. Research Sample

The population in this research comprised the banking industry’s firms listed on the IDX during the period 2016 to 2018. The purposive sampling method was used to select the research sample with a few criteria - the banking firms should publish annual financial statements, they are not delisted from the stock exchange during the research term, and have complete data related to the research variables. The number of research sample was restricted to 40 banking firms out of the total population of 120 banking firms observed during three years.

3.2. Research Variables

The dependent variable in this study was banking firm value; the independent variables were the firm size, audit committee, and risk committee; the intervening variable was risk management disclosure. The banking firm size was the scale of determining the size of the firm which was measured as the natural logarithm is measured from the book value of total assets in the given period. The banking firm value was measured by using Tobin’s Q based on the market value of equity added with the book value of liabilities, divided by the book value of total assets.

Audit committee was the committee created by and responsible to the commissioner board in assisting the board to carry out its duties and functions. Audit committee was measured by the number of meetings held during one effective period in the firm. Risk committee was the committee created by and responsible to the
commissioner board in assisting the board to monitor the implementation of risk management and assess the risk tolerance that might be taken by the firm. Risk committee was measured by the number of risk committee meetings held during one effective period in the firm.

Risk management disclosure was the disclosure of information by the management regarding the control of risks arising from the company’s activities. It was measured using content analysis techniques with coding indices. The coding unit used in this analysis was indicated by number 1 if the company disclosed risk management. The indices of risk management disclosure consisted of 45 disclosure items (Abdullah, Shukor, Mohamed, & Ahmad, 2015). The score of risk management was calculated from the amount of the disclosed and divided by the total indices of disclosure.

3.3. Data Analysis Method

This research study employed regression of panel data by selecting the right model to estimate the regression of panel data, namely Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Determining the most appropriate model was done by (1) Chow-Test to determine better estimation between common effect model or fixed effect model, (2) Hausman Test to determine if the model to be selected was random effect or fixed effect.

The hypothesis testing was conducted by using T test, with the regression model of panel data as follows:

Model 1
\[ VMRD = \beta_0 + \beta_1 SIZE + \beta_2 ACM + \beta_3 RCM + e_1 \]

Model 2
\[ FV = \beta_0 + \beta_1 SIZE + \beta_2 ACM + \beta_3 RCM + \beta_4 VMRD + e_2 \]

Notes:
- \( \beta_0 \) = Regression Coefficient of Constanta.
- \( \beta_{1,2,3,4} \) = Regression Coefficient of each Proxy.
- FV = Firm Value.
- SIZE = Firm Size.
- ACM = Amount of Audit Committee.
- RCM = Amount of Risk Committee.
- VMRD = Risk Management Disclosure.
- \( e_{1,2} \) = Error.

4. RESEARCH FINDINGS

4.1. Descriptive Statistics

The research sample comprising 40 banking firms with a sample size of 120 (N=120), was identified using the purposive sampling technique. The results of descriptive statistics can be seen in Table 1.

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV</td>
<td>120</td>
<td>0.188</td>
<td>2.118</td>
<td>130.708</td>
<td>1.089</td>
<td>0.246</td>
</tr>
<tr>
<td>VRMD</td>
<td>120</td>
<td>0.440</td>
<td>0.840</td>
<td>82.220</td>
<td>0.685</td>
<td>0.083</td>
</tr>
<tr>
<td>SIZE</td>
<td>120</td>
<td>27.223</td>
<td>34.799</td>
<td>3792.284</td>
<td>31.102</td>
<td>1.861</td>
</tr>
<tr>
<td>ACM</td>
<td>120</td>
<td>3.000</td>
<td>32.000</td>
<td>1318.000</td>
<td>10.983</td>
<td>6.293</td>
</tr>
<tr>
<td>RCM</td>
<td>120</td>
<td>2.000</td>
<td>34.000</td>
<td>967.000</td>
<td>8.058</td>
<td>5.114</td>
</tr>
</tbody>
</table>

4.2. Regression Analysis of Fixed Effect Model

The result of model testing using Chow test yielded 0.000 on Cross-section F, while the result of Hausman test for both models gained the probability < 5%. Thus, the model selected was the fixed effect.
The regression analysis of panel data of fixed effect model was conducted to find out the influence of independent variable on dependent variable. The results of this regression provide a constant value and probability value of each independent variable, as seen in Table 2 and Table 3.

### Table 2. Results of panel data regression (Fixed Effect Model) 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.675</td>
<td>0.007</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.076</td>
<td>0.000</td>
</tr>
<tr>
<td>ACM</td>
<td>-0.001</td>
<td>0.052</td>
</tr>
<tr>
<td>RCM</td>
<td>0.003</td>
<td>0.004</td>
</tr>
</tbody>
</table>

### Table 3. Results of panel data regression (Fixed Effect Model) 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>11.722</td>
<td>0.000</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.328</td>
<td>0.002</td>
</tr>
<tr>
<td>ACM</td>
<td>0.004</td>
<td>0.237</td>
</tr>
<tr>
<td>RCM</td>
<td>-0.010</td>
<td>0.071</td>
</tr>
<tr>
<td>VRMD</td>
<td>-0.584</td>
<td>0.281</td>
</tr>
</tbody>
</table>

#### 4.3. Model Testing

To test the feasibility of the regression model used, F test and determination test were conducted to examine the influence of independent variable on dependent variable. From the results test on model 1, it is known that the value of adjusted R-squared is 0.933455, while model 2 is adjusted R square 0.83048.

The F test on the regression of fixed effect model yielded a probability of 0.000000. Such value is smaller than $\alpha$ 5% (0.000000 < 0.05). Thus, the regression model used in this research study was fit to use.

#### 4.4. Results of Path Test

Path test aims to find out the direct and indirect effect of independent variable on dependent variable through intervening variable. The results are presented in Figure 2:

![Figure 2. Results of path test.](image)

Based on the results of the path test, the regression coefficient on the direct effect of size on firm value was found smaller than the effect of size on firm value through risk management disclosure. The regression coefficient on the direct effect of audit committee on firm value was larger than the effect of audit committee on firm value.
through risk management disclosure. In the meantime, the regression coefficient on the direct effect of risk committee on firm value was smaller than the effect of risk committee on firm value through risk management disclosure.

To prove the significance of the indirect effect of the independent variables on the dependent variable, the Sobel test was carried out. Table 4 shows that risk management disclosure as the indirect effect was insignificant.

Table 4. Results of sobel test.

<table>
<thead>
<tr>
<th>Information</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE→VMRD→FV</td>
<td>0.296</td>
</tr>
<tr>
<td>ACM→VMRD→FV</td>
<td>0.341</td>
</tr>
<tr>
<td>RCM→VMRD→FV</td>
<td>0.308</td>
</tr>
</tbody>
</table>

Source: Output data.

5. RESULTS AND DISCUSSIONS

The firm size measured by total assets showed a coefficient value of 0.075521 and probability value of 0.0002 < 0.05. It indicates that firm size has a positive significant influence on risk management disclosure, which means H1 is supported. This research finding explains that the larger the company, the broader is the disclosure of risk management. The positive relationship between firm size and VRMD might be caused by several things. First, larger-sized banks are able to disclose risk management broader compared with small-sized ones. Second, based on stakeholder theory, larger-sized banks have more stakeholders who are pressuring the management to make greater risk management disclosures so that the information disclosed is more complete and as a form of management accountability to the capital owners. Broader disclosures are more likely to boost investors’ trust, as it has such an important role in a firm. Larger-sized firms usually have good governance to support broader disclosures. This research finding – the supported hypothesis, is consistent with the research findings of Elfeky (2017); Gunawan and Zakiyah (2017) and Abdullah and Ismail (2015).

Audit committee (ACM) measured by the amount of audit committee meetings each year has a coefficient value of -0.001478 and probability value of 0.0515 < 0.05. It indicates that audit committee does not affect risk management disclosure, which means H2 is not supported. This research finding has proven that the frequency of holding meetings by audit committee does not affect the extent of risk management disclosure. In this research study, the meeting activities do not show the effectiveness of monitoring process in banking. This might be due to ineffective quality of the meetings. This research finding – the rejected hypothesis, is in line with the research conducted by Sellami and Fendri (2017) and Setiany, Hartoko, Suhardjanto, and Honggowati (2017).

Risk committee (RCM) measured by the amount of risk committee meetings each year showed a coefficient value of 0.003408 and probability value of 0.0040 < 0.05. It indicates that risk committee has a positive significant influence on risk management disclosure, which means H3 is supported. This result explains that the more frequently the risk committee held meetings, it would affect the extent of risk management disclosure. The positive relationship between the risk committee and the risk management disclosure occurred due to a few things. First, the agenda of meetings held by the risk committee served as a forum for check-and-balance management activities and for reporting various problems and conflicts that arose. Second, the agenda of meetings by the risk committee served as the media to share information, knowledge, and expertise to provide quality information. As it is well-known that risk management disclosure functions to minimize the information asymmetry between the managers and investors, as well as to meet the information needs of the stakeholders. This research finding corroborates the research findings of Abdullah et al. (2015) and Bello et al. (2019).

The firm size measured by total assets showed a coefficient value of -0.327788 and probability value of 0.0016 < 0.05. It indicates that firm size has a negative significant influence on banking firm value, which means H4 is not supported. When the management implement transparent disclosure of complex problems, it may cause
misperceptions among shareholders. So, a firm chooses to restrict the scope of risk disclosure to avoid the decreasing investors' interests. This research finding supports the study of Onasis and Robin (2016).

Audit committee (ACM) measured by the amount of audit committee meetings each year showed a coefficient value of 0.004312 and probability value of 0.2371 < 0.05. It indicates that audit committee does not influence firm value, which means H₅ is not supported. This is probably because the more frequently meetings are held, the more they will cost and it will repeat to produce similar decisions or easily change decisions. Thus, the research finding that shows a positive but insignificant direction indicates that the amount of audit committee meetings is not the relevant factor to measure firm value. This hypothesis result is consistent with the study of Olayinka (2019).

Risk committee (RCM) measured by the amount of risk committee meetings each year has a coefficient value of -0.010489 and probability value of 0.0709 < 0.05. Thus, H₆ is not supported. It means the more frequently the risk committee holds meetings, it will not affect firm value. This is likely because the investors more consider the external factors of the company. This research finding – the unsupported hypothesis is in line with Elamer and Benyazid (2018). Risk management disclosure (VRMD) measured by the amount of indices of risk disclosure has a coefficient value of -0.584144 and probability value of 0.2812 < 0.05. This indicates that risk management disclosure does not affect firm value, which means H₇ is not supported. This result explains that broader disclosure of risk management does not affect firm value. This research finding is consistent with the studies of Al-Maghzom et al. (2016) and Anton (2018). The absence of influence of independent variables on firm value might be due to external factors that the investors more consider, such as interest rate, currency rate, political conditions.

6. CONCLUSION

Based on the research findings and discussions, a few conclusions can be drawn. First, firm size and risk committee have a positive influence on risk management disclosure. Second, all independent variables – firm size, audit committee, risk committee, and risk management disclosure do not influence the dependent variable, firm value. Third, risk management disclosure has been proven not to mediate firm size, audit committee, and risk committee on firm value.

This research study has succeeded in proving the stakeholder theory that a large number of stakeholders owned by larger-sized banks will encourage the banks to provide more information, including risk management disclosure. Larger banking firms that disclose risk management more broadly aim to avoid information asymmetry to occur.

In relation to limitations, there are few limitations in this study. The measurement of risk management disclosure indices contain subjectivity, so that people will possibly have different perceptions. Based on the research finding to minimize risks, investors may consider the banking firm size and risk committee, because the larger the banking firm, the more frequently the committee holds meetings to encourage more risk management disclosure, thus minimizing risks for investors.

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**Authors’ Contributions:** All authors contributed equally to the conception and design of the study.

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