# An Exploratory Study On Risk Management Disclosure On Conventional Commercial Banks In Indonesia

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# Dewi Cahyani Pangestuti<sup>a\*</sup> Gitna Revania Hunah<sup>b</sup>

<sup>a,b</sup> Faculty of Economic and Business, University of Pembangunan Nasional Veteran Jakarta, Jakarta, Indonesia

#### Abstract

In the last few years of The Global Risks Report 2020 made Covid-19 ranked 10th as a risk that has a big influence on the world and it can be classified into the relevant type of risk management disclosure. This type of risk is very influential on operational risk because it can interfere with all aspects to the running of the company. Therefore the researchers interest in this phenomenon that related to conventional commercial banks on the Indonesia Stock Exchange (IDX) and reviewed on aspects of internal factors that are sensitive to the rise and fall of the company's risk management disclosure figures, such as company size, profitability, and leverage. The study examined the disclosure of conventional commercial bank risk management with saturated sampling methods and used data from forty-one companies during the period from 2017 to 2019. The results showed that the size of the company has an influence on the rise and fall of risk management disclosure. The study also concluded that profitability does not have enough influence on all aspects of risk management disclosure. Similarly, in terms of leverage, this study obtained results that had no effect on risk management disclosure.

#### Keywords

Company Size; Leverage; Profitability; Risk Management Disclosure Received: 15 September 2021; Accepted: 11 October 2021; Published Online: 31 December 2021 DOI: 10.21776/ub.apmba.2021.010.02.3

#### Introduction

The bank is an institution that has a function that is to intermediate wealth assets in the economy of a country and has a role in raising funds and then transferring assets in the real sector for monetary development or agent of development (Indonesia, 2016). At the time the bank conducts its operations, there are its own risks in it according to Bank Indonesia regulation number: 11/25/PBI/2009. Concerning the Implementation of Risk Management for Commercial Banks consisting of six major risk categories such as (1) operational risk,

(2) market risk, (3) liquidity risk, (4) credit risk, (5) legal risk, (6) compliance risk, (7) strategic risk, and (8) reputational risk.

Disclosure of risk as an effective communication tool from the company to stakeholders and the company can illustrate how much risk is being faced within the company (Grassa et al., 2021; Settembre-Blundo et al., 2021). Risk Management Disclosure (RMD) is a technique and cycle in a company to control risk and make it easier to take advantage of opportunities to achieve the goals of a company (Zamil et al., 2021). Improving Good Corporate Governance is an implementation of RMD because with this step, the quality of the company's annual report is more accurate in disclosing the risk information it has (Pangestuti et al., 2021).

In 2020, problems in the macroeconomic aspects of Indonesia will be greatly affected, namely in banking due to Coronavirus Disease, or what we commonly call COVID-19. This major event is due to infectious diseases that cannot be expected by all people, even experts in the field of risk management disclosure or Chief Risk Officer (CRO) in the Global Risks Report 2020. Covid-19 is included in the 10th position as a risk that has a major influence in the world. Companies that have implemented risk management before must have conducted activities to identify the type of risk and the form of risk management that applied. The impact of COVID-19 can be classified into the relevant type of risk management disclosure. The risks severely affected are operational risk because it can disrupt all aspects of the company's ability to maintain business operations amid current global economic uncertainty and result in 40% of bank branch offices closing temporarily during the pandemic (Baines & Hager, 2021).

An efficient bank is a bank that minimizes its operating costs so that losses can be minimized so that profits and profits increase (Grassa et al., 2021). The higher the operating expense of operating income (BOPO) shows, the higher the cost of operating expenses (Ramzan et al., 2021).



Source: <u>www.ojk.go.id</u>

Figure 1. Development of BOPO ratio in Conventional Commercial Banks

Figure 1., which is data that has been processed from financial services authority sources, shows the BOPO number of conventional commercial banks fluctuated from 2017 by 79.28% down to 2018 by 78.76% which if calculated decreased by 0.52%. Then experienced a constant increase from a more volatile rate starting from 2018

of 78.76% until March 2020 of 88.84% with an increase ratio of 10.08%. Operational risk indicates that the higher BOPO indicates that the operating performance of the bank is not good due to too much burden rather than revenue. Conversely, the lower the BOPO faced by banks, indicating that the banking is good (Athari, 2021; Ramzan et al., 2021). If the BOPO ratio is high, it illustrates the waste of operating costs of a company. In the event of a waste of the company's operations, the company will account for large costs to deal with risks and impact the decline in the company's profit or revenue (Athari, 2021).

Conventional commercial banks' risk management disclosure practices are regulated in Bank Indonesia (BI) Regulation No. 14/14/PBI/2012, namely that corporate finance must have more integrity and strict regulations related to risk disclosure compared to non-financial companies listed on the Indonesia Stock Exchange (IDX). Reviewed on internal factors that affect the level of risk management disclosure of companies, such as industry type, profitability. leverage, ownership concentration, and company size.(Abdi et al., 2021).

Table 1. Profile Risk Management Disclosure (RMD), Company Size (LN Asset), Leverage (DER), and Profitability (NPM) at Conventional Commercial Banks in Indonesia

| No | Code | Year | RMD  | Up     | LN    | Up     | DER   | Up     | NPM   | Up   |
|----|------|------|------|--------|-------|--------|-------|--------|-------|--|
|    | Firm |      |      | (Down) | Asset | (Down) |       | (Down) | (%)   | (Down)   |
|    |      | 2017 | 0,74 | 0,09   | 34,25 | -0,06  | 4.68  | -0.06  | 0.43  | 0.07   |
| 1  | BBCA | 2018 | 0,72 | -0,03  | 34,35 | 0,02   | 4.40  | -0.06  | 0.36  | -0.16  |
|    |      | 2019 | 0,78 | 0,08   | 34,45 | 0,02   | 4.25  | -0.04  | 0.41  | 0.14   |
|    |      | 2017 | 0,77 | 0,18   | 34,66 | 0,03   | 5.73  | -0.02  | 0.28  | 0.00   |
| 2  | BBRI | 2018 | 0,79 | 0,03   | 34,80 | 0,04   | 5.89  | 0.03   | 0.27  | -0.04  |
|    |      | 2019 | 0,76 | -0,04  | 34,89 | 0,03   | 5.67  | -0.04  | 0.28  | 0.04   |
|    |      | 2017 | 0,65 | -0,14  | 34,20 | 0,09   | 5.79  | 0.05   | 0.28  | 0.08   |
| 3  | BBNI | 2018 | 0,69 | 0,06   | 34,33 | 0,04   | 6.08  | 0.05   | 0.27  | -0.04  |
|    |      | 2019 | 0,63 | -0,09  | 34,37 | 0,01   | 5.51  | -0.09  | 0.26  | -0.04  |
|    |      | 2017 | 0,72 | 0,06   | 33,22 | 0,03   | 6.21  | 0.02   | 0.14  | 0.56   |
| 4  | BNGA | 2018 | 0,75 | 0,04   | 33,22 | 0,00   | 5.74  | -0.08  | 0.17  | .26         -0.04           .14         0.56           .17         0.21           .19         0.12           .26         0.37           .28         0.08           .30         0.07  |
|    | BNGA | 2019 | 0,82 | 0,09   | 33,25 | 0,01   | 5.34  | -0.07  | 0.19  | 0.12   |
|    |      | 2017 | 0,49 | 0,07   | 34,66 | 0,04   | 5.22  | 0.03   | 0.26  | 0.37   |
| 5  | BMRI | 2018 | 0,85 | 0,73   | 34,58 | -0,02  | 5.09  | -0.02  | 0.28  | 0.08   |
|    |      | 2019 | 0,82 | -0,04  | 34,66 | 0,02   | 4.91  | -0.04  | 0.30  | 0.07   |
|    |      | 2017 | 0,74 | 0,23   | 33,20 | 0,06   | 10.34 | 0.08   | 0.15  | 0.00   |
| 6  | BBTN | 2018 | 0,78 | 0,05   | 33,36 | 0,05   | 11.85 | 0.15   | 0.14  | -0.07  |
|    |      | 2019 | 0,81 | 0,04   | 33,37 | 0,00   | 12.08 | 0.02   | 0.13  | -0.07  |
|    |      | 2017 | 0,81 | 0,09   | 32,19 | 0,01   | 4.25  | -0.02  | 0.1   | -0.23  |
| 7  | BTPN | 2018 | 0,82 | 0,01   | 32,25 | 0,01   | 4.08  | -0.04  | 0.15  | 0.50   |
|    |      | 2019 | 0,77 | -0,06  | 32,83 | 0,02   | 4.53  | 0.11   | 0.16  | 0.07   |
|    |      | 2017 | 0,81 | 0,08   | 31,95 | 0,30   | 7.75  | 0.02   | 0.09  | -0.31  |
| 8  | MAYA | 2018 | 0,74 | -0,09  | 25,19 | -0,21  | 7.06  | -0.09  | 0.13  | 0.44   |
|    |      | 2019 | 0,77 | 0,04   | 25,26 | 0,03   | 6.57  | -0.07  | 0.11  | -0.15  |
| 9  |      | 2017 | 0,74 | -0,01  | 32,67 | 0,03   | 6.06  | 0.00   | 0.19  | 0.12   |
|    | NISP | 2018 | 0,77 | 0,04   | 32,83 | 0,05   | 6.11  | 0.01   | 0.21  | 0.11   |
|    |      | 2019 | 0,69 | -0,10  | 32,83 | 0,00   | 5.53  | -0.09  | 0.20  | -0.05  |
| 10 | PCIC | 2017 | 0,60 | 0,03   | 30,47 | 0,02   | 10.35 | -0.05  | 0.08  | -1.15  |
| 10 | DUIC | 2018 | 0,69 | 0,15   | 30,51 | 0,01   | 12.56 | 0.21   | -0.22 | $\begin{array}{c} 0.14\\ 0.00\\ -0.04\\ 0.04\\ 0.08\\ -0.04\\ 0.56\\ 0.21\\ 0.12\\ 0.37\\ 0.08\\ 0.07\\ 0.08\\ 0.07\\ -0.07\\ -0.07\\ -0.07\\ -0.07\\ -0.07\\ -0.07\\ -0.07\\ -0.15\\ 0.12\\ 0.11\\ -0.05\\ -1.15\\ -3.75\\ -0.18\\ \end{array}$ |
|    |      | 2019 | 0,72 | 0,04   | 30,48 | -0,01  | 9.34  | -0.26  | -0.18 | -0.18  |

Source: Indonesia Stock Exchange (IDX), processed

When viewed from table 1, a total of 10 companies' size data (LN Asset) as many as 7 banks, or 70%, experienced an increase in LNAsset but not followed by an increase in RMD. In 2019, BBRI, BBNI, BNGA, BMRI, BTPN, and NISP experienced an increase, but were not followed by an increase in RMD. This phenomenon shows that the increase in the size of the company is not in line with the increase in RMD. This is not in line with (Adam-Müller & Erkens, 2020), which states that the size of the company compared positively to the disclosure of risk because the company can make efforts to certify the form of the company's products so as to minimize risk.

There has been a lot of research done regarding the size of the company and RMD, but it still provides inconsistent results, namely (Adam-Müller & Erkens, 2020; Daniel Zeghal & Meriem El Aoun, 2016: Lechner & Gatzert, 2018: Tzouvanas et al., 2020) which shows that the size of the company affects RMD. But in research conducted by (Hain, 2011; Kamiya et al., 2021), they provided research results indicating that the size of the company has no influence or is not in line with RMD. Therefore, based on the theory and results of previous research, hypotheses can be derived that will be proven empirically. The size of the company affects risk management disclosure.

Based on table 1, when viewed from the phenomenon table, a total of 10 data leverage (DER) as many as 9 banks, or 90%, experienced a der increase followed by an increase in RMD. In 2019, BBTN experienced an increase followed by an increase in RMD. The same thing happened in 2018 in bank codes BBRI, BBNI, BBTN, NISP, BCIC, and in 2017, BNGA, BMRI, MAYA, and BTPN experienced an increase in DER followed by an increase in RMD. This phenomenon contradicts the notion (Indonesia, 2016), that disclosure of a company's risk profile is intended as a backstop or barrier to leverage ratios to prevent financial system breakdown and stakeholder misunderstandings.

Some studies have been conducted related management leverage and risk to disclosure (RMD) but still provide different results for each study, such as by (Rujiin research conducted & Sukirman, 2020) dan (Tzouvanas et al., 2020), which shows that the higher the leverage, the higher the RMD, but contrary to previous research bv (Puspitaningrum & Taswan, 2020), (Gunawan & Zakiyah, 2017), who stated that leveraged, leverage does not have (RMD). Therefore, based on the theory results of previous research. and hypotheses can be derived that will be proven empirically. Leverage affects risk management disclosure.

When viewed from the phenomenon of table 1, a total of 10 NPM data points, as many as 6 banks, or 60%, experienced an increase in profitability (NPM), but it was not followed by an increase in RMD. In 2019, bank codes BBRI, BMRI, and BTPN experienced an increase in NPM that was not followed by an increase in RMD. The same thing happened in 2018 in the MAYA bank code and in 2017 in the BBNI and NISP bank codes, which illustrated that the increase in NPM was not followed by an increase in RMD. The data has a gap with (Harahap, 2016) that profitability is where the company earns profit through all capacities or operational activities, and various resources are balanced with the disclosure of a company's risks.

This phenomenon contradicts previous research by (Tzouvanas et al., 2020), which stated that the high level of profitability of a company will affect or be in line with the high risk management disclosure. (Puspitaningrum & Taswan, 2020), (Zeghal & El Aoun, 2016), revealed that profitability had no effect on RMD. The purpose of this study was to analyze the effect of company size, leverage, and profitability on risk management disclosure on conventional commercial banks. The results of this research will be expected to be useful for banks in encouraging bank management to continue to improve its business processes or corporate governance so that it can provide returns and minimize the risks that it will face.

# Theoretical Foundation and Hypothesis Development

# Risk Management Disclosure

Risk management disclosure is a method of controlling risk for the company efficiently to build the company's value for the better (Zamil et al., 2021). Risk management is a strategy used by companies to supervise risk and seize opportunities identified for the achievement of the company's goals. A company's risk management disclosure is a system to manage risk used for the purpose of increasing value in a company, (Callahan, 2017).

Risk management disclosure can be categorized as a process in the management of risks disclosed by the company with its media, namely financial statements that are one of the effective risk management disclosure intermediaries. Stockholders can then consider deciding to invest their funds. Risk management disclosure is important because it can be used as a decision-making tool for users of financial statements. Measuring the company's ability to manage risk with risk management is expected to minimize the impact/effects of risk or even eliminate it totally (ERM, 2004).

The declaration of risk management disclosure is divided into two: the first is mandatory disclosure based on Financial Accounting Standards Regulation (PSAK) No. 60 Revision 2010 and Government Regulation (PP) No. 60 of 2008, which mentions in paragraph one that the Head of Government Agency must provide an assessment of a risk and risk assessment measures, namely risk identification and risk analysis. Then the second voluntary disclosure, using the internal control rules framework Committee of Sponsoring Organizations the Treadway of Commission as a guideline Corporate risk management, or COSO framework, is the possibility of events that will occur that can affect the achievement of the company's strategy and objectives, including negative effects (such as decreased revenue targets or decreased reputation) as well as positive opportunities such impacts (i.e., as emerging markets for new products or costsaving initiatives). COSO ERM (Enterprise Risk Management) divides this category of risk management into 4 broad categories, namely, strategic, operational, reporting, and compliance. These four categories contribute significantly to risk management disclosure, (ERM, 2004).

Risk management is able to reduce and minimize adverse effects on the company, for example, losses due to risk. If risk management is carried out efficiently, it will result in large profits for the company, such as improved business implementation and the organization becoming more effective (Ping, 2015). Based on the explanation, it was concluded that risk management disclosure is the disclosure of the risks that will be experienced by the company through risk control in the future.

# **Company Size**

The size of a company illustrates the difference in risk from one large company to another small company. The size of the company is separated into three classes, namely large-scale companies, then scaled from the smallest size to medium size (Settembre-Blundo et al., 2021).

Larger companies are subject to greater political attention and greater public visibility, which puts them under pressure and makes them disclose more information, such as risk management disclosure. Large companies indirectly disclose more about their risks to meet the requirements of such analyses (Zeghal & El Aoun, 2016). The size of the company encourages the company to publish company reports to meet internal needs or agents' needs, with the aim of being used as material to provide information to external parties or principals in need, so as to minimize costs (Lechner & Gatzert, 2018).

The larger the scale of the company, the more tasks and activities of unexpected operations and investments are carried out by the company's management. This factor encourages companies to disclose risk management disclosures to show accountability and transparency of the company to the public (Hain, 2011).

Based on previous research conducted by, the size of the company has an impact on the transparency of managing institutional issues (Zeghal & El Aoun, 2016; Lechner & Gatzert, 2018). With large-scale companies allowing many of those problems to arise in the company, this will have an impact on the breadth of risk management disclosure implemented by managers. Banks with many assets have more stakeholders who are also more diverse, (Mukhibad et al., 2020; Restadila et al., 2020).. This larger number of stakeholders encourages banks to disclose greater risks. This is in accordance with several studies that state the size of the company has an effect on risk management disclosure, such as research by (Adam-Müller & Erkens, 2020; Daniel Zeghal & Meriem El Aoun, 2016; Lechner & Gatzert, 2018; Tzouvanas et al., 2020)

 $H_{1:}$  The size of the company affects risk management disclosure.

# Leverage

Banks are institutions that have highly geared institutions or have high leverage figures, and high lending will impact the rapid decline of capital and increase the risks that arise in the future. According to (Indonesia, 2015), measuring the level of bank/creditor risk, which is compared to investor risk, and describing how much asset protection the company provides to investors is estimated/measured using leverage. According to (Grassa et al., 2021) leverage describes the relationship between the company and the assets / equity in the company.

Companies with high leverage face higher capital costs. For example, if to reduce the risk premium associated with debt and thus reduce capital costs, managers will be motivated not to disclose information about their risks, and high-leverage banks lower their disclosure rates to avoid political costs (Baines & Hager, 2021).

Companies with high leverage are more reluctant write extensive to risk management disclosures, such as their vulnerability by communicating predictions of future risks and any positive risk information to the market, because their bankruptcy risk is greater than companies with small leverage values (Baines & Hager, 2021). This is in accordance with several studies with leverage results affecting risk management disclosure, such as, (Pangestuti, 2018), (Adam-Müller & Erkens, 2020), and (Tzouvanas et al., 2020).

H<sub>2:</sub> Leverage affects Risk Management Disclosure.

# Profitability

According to (Adam-Müller & Erkens, 2020), asserting profitability is to measure the capacity of the company in relation to earning profits in accordance with the capital, sales, and total assets of the company. Profit is the level of income that can be generated by the company as a business achievement of the company's activities. Because higher profits indicate that the institution has a good chance of succeeding in its operations.

Companies with large levels of profitability will implement high risk management disclosure because the company's processes can be well managed in managing risk, as well as expanding stakeholder confidence in the sustainability of the company in the long term. The company aims to increase profitability in line with providing detailed risk management disclosure, in addition to increasing investor confidence to increase the compensation that will be obtained by both parties. The higher the level of profitability, the more it encourages the interest of the principal to decide to invest in the company or buy shares in the company (Zeghal & El Aoun, 2016).

Continuity with high profitability describes the company's giving a positive signal to management disclosure risk to shareholders, related to the steps the company takes to deal with the risks faced according to the company's annual report and financial statements (El-Bannany, 2008). Profit is the level of income that can be generated by the company as a business achievement of the company's activities. Because the greater the institution's profits, the better the institution's prospects for running its business. good conditions, the company makes use of transparency in risk management disclosure to increase the value of the company in the eyes of investors (Rujiin & Sukirman, 2020). This is in accordance with some previous research that suggests profitability affects risk management disclosure, (Daniel Zeghal & Meriem El Aoun, 2016), (Nahar et al., 2016), (Adam-Müller & Erkens, 2020), (Pangestuti, 2020) and (Tzouvanas et al., 2020).

H<sub>3:</sub> Profitability affects Risk Management Disclosure.

#### **Research Method**

The population in this study is the entirety of banking located on the Indonesia Stock Exchange (IDX) in the range of 2017 to 2019. The determination of samples in this study uses probability sampling or saturated samples due to the accuracy of the result to be released if all samples are considered for use in calculations in analyzing a study. Thus, the entire sample of research is as many as 41 conventional banking companies.

The variables in this study are categorized into two types, namely dependent variables and independent variables. Dependent variables, namely risk management disclosure, are independent variables, namely company size, leverage, and profitability.

### a. Risk Management disclosure

Risk management disclosure can be interpreted as disclosure of the risks that will be faced by the company in the form of controlling those risks in the future. Risk management disclosure is measured in decimal units expressed in the formula:

$$RMD = \frac{Total \ item \ disclosed}{108}$$

# b. Company size

A company's size is a scale by which a company groups or classifies the size, medium, and small size of a company based on the total assets owned by the company. The size of the company in this study was measured using LN Asset, which is done by looking at the total assets of the company and then calculating based on natural logarithms. LN Asset is measured in decimal units using the formula:

Company Size = Natural logarithm x Asset

c. Leverage

Leverage is a policy carried out by a company in terms of obtaining sources of funds or financing of assets sourced from debt. The leverage in this study was measured using the Debt to Equity Ratio (DER), which is the overall division of a company's debt versus total equity in the company. Leverage is measured using decimal units using the formula:

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}} \ge 100\%$$

d. Profitability

Profitability is the company's ability to earn profits derived from revenue. Profitability in this study was measured using Net Profit Margin (NPM) by comparing overall net income against the small net sales of the company. Profitability is measured in decimal units expressed in the formula:

$$NPM = \frac{Net Profit}{Net Sales} \ge 100\%$$

The process of collecting data for the needs of library research and documentation. The data source used in this study is obtained from the company's annual report that has been audited and published for conventional commercial bank companies for the period 2017–2019. The data is Indonesia obtained from the Stock Exchange (IDX) web. namely www.idx.co.id. This study also uses regulations or regulations regarding the disclosure of banking risks that can be accessed through the Bank Indonesia website, namely www.bi.go.id.

The data analysis technique in this study was implemented with the Microsoft Office Excel 2016 computer program and also with the E-views 10 program. According to (Basuki & Prawoto, 2016), there are three estimation methods that can be used in regression models using panel data. The first is the Common Effect Model or Pooled Least Square (PLS), the second is the Ordinary Least Square (OLS), and the third is random effect models (REM).

The process of determining the approach to be used includes several types of tests, including the F Restricted Test (Chow designation Test). whose is the determination of the method between PLS and FEM, while the Hausman Test is used to determine the use of REM or FEM models, and also the Lagrange Multiplier Test, which is intended to be a determinant between the REM and PLS methods. A hypothesis test is a method used to establish the basis for making decisions based on the results of data analysis (Arifin, 2017). It is a hypothesis test or method used by researchers, namely the significant test of partial individual parameters (statistical test) and the coefficient of determination  $(\mathbf{R}^2)$  test.

# **Descriptive Statistical Analysis**

Descriptive statistics aim to describe and describe the information contained in the data that has been processed, so that the variables used can provide a general picture. In the research being carried out, four (4) descriptive statistical measures are included, including "mean," which means the average value, "maximum," meaning the highest value, "minimum," meaning the lowest value, and the standard deviation, or intended deviation rate for each variable.

| Table 2. Descriptive Statistical Analysis |          |              |          |               |  |  |
|---|----------|--------------|----------|---------------|--|--|
|   | RMD      | Size Company | Leverage | Profitability |  |  |
| Mean                                      | 0.782520 | 30.95951     | 5.729593 | 0.107236      |  |  |
| Median                                    | 0.780000 | 30.84000     | 5.300000 | 0.130000      |  |  |
| Maximum                                   | 0.920000 | 34.89000     | 14.75000 | 1.490000      |  |  |
| Minimum                                   | 0.490000 | 25.19000     | 0.350000 | -0.670000     |  |  |
| Std. Dev.                                 | 0.069076 | 2.052769     | 2.828787 | 0.203685      |  |  |
| Observations                              | 123      | 123          | 123      | 123           |  |  |

**Table 2. Descriptive Statistical Analysis** 

Source: data processed

#### Panel Data Regression Analysis

In this study, in determining the right model to be used in the panel data regression analysis method, we previously carried out 3 types of tests. The first restricted test was carried out to determine the best model between the pooled least square model, or common effect model, and the fixed effect model.

| Table 3. Test Results F Restricted (Uji Chow) |            |         |        |  |
|---|------------|---------|--------|--|
| Effects Test                                  | Statistic  | d.f.    | Prob.  |  |
| Cross-section F                               | 3.195266   | (40,79) | 0.0000 |  |
| Cross-section Chi-square                      | 118.369767 | 40      | 0.0000 |  |

Source: data processed

Referring to table 3 above, it can be stated that the probability of cross section Chisquare in the study is 0.0000 or smaller than 0.05. Therefore, it can be concluded that H0 is rejected, H1 is accepted, and the right model to be used is the Fixed Effect Model, namely the Fixed Effect Model. Further testing must be done.

The second Hausman Test is a test that is carried out to determine the best model to be used, between the Fixed Effect Model and the Random Effect Model.

| Table 4. Test Results Hausman |                   |             |        |  |  |  |  |
|-------------------------------|-------------------|-------------|--------|--|--|--|--|
| Test Summary                  | Chi-Sq. Statistic | Chi-Sq.d.f. | Prob.  |  |  |  |  |
| Cross-section random          | 6.474549          | 3           | 0.0907 |  |  |  |  |

Source: data processed

Based on table 4, the probability value of cross-section random in this study is 0.0907 more than 0.005 or 0.0907 > 0.05, so that H0 is accepted and H1 is rejected, which means the right model to be used in this study between the fixed effect model and the random effect model. So, further testing should be done.

Third, the Lagrange Multiplier Test itself is a test that is carried out with the aim of determining the best and right model among the pooled least square and random effect models.

| Table 5. Test Results Lagrange Multiplier                                    |                      |                      |                      |  |  |
|--|----------------------|----------------------|----------------------|--|--|
| Null (no rand. effect)Cross-section One-sidedPeriod One-sidedBothAlternative |                      |                      |                      |  |  |
| Breusch-Pagan  | 17.36645<br>(0.0000) | 6.563677<br>(0.0104) | 23.93012<br>(0.0000) |  |  |

Source: data processed

From the data stated in table 5, it is concluded that the probability value of the cross section in the study is 0.0000 or below 0.05, so it can be stated that H0 is rejected and H1 is accepted. Then the right model to be used between Pooled Least Square and the Random Effect Model in this study is the Random Effect Model. So the Random Effect Model (REM) was used in the Hypothesis Test in this study.

The following is the result of an estimated analysis of the influence between variables used in the study using the Random Effect Model (REM) method.

| Table 0. Kandom Effect Wodel. |             |            |             |        |  |  |
|-------------------------------|-------------|------------|-------------|--------|--|--|
| Variable                      | Coefficient | Std. Error | t-Statistic | Prob.  |  |  |
| C                             | 0.504053    | 0.117833   | 4.277679    | 0.0000 |  |  |
| Size of Company               | 0.009345    | 0.003836   | 2.436426    | 0.0163 |  |  |
| Leverage                      | -0.000996   | 0.002421   | -0.411279   | 0.6816 |  |  |
| Profitability                 | -0.048113   | 0.031536   | -1.525624   | 0.1298 |  |  |

# Table 6 Dandom Effect Model

Source: data processed

Based on table 6 above, it can be said that the panel data regression model that explains the influence of company size, leverage, profitability and on risk management disclosure of conventional commercial banks listed on the Indonesia Stock Exchange is as follows:

Risk Management Disclosure = 0.504053 +0.009345 size of company - 0.000996 Leverage - 0.048113 Profitability

#### Statistical Test t

The hypothesis testing in this study uses the t test. It aims to determine the influence of independent variables, namely company size  $(X_1)$ , leverage  $(X_2)$ , and profitability (X<sub>3</sub>), partially against dependent variables, namely Risk Management Disclosure (Y).

| Table 7. Test Results Statistics t. |             |            |             |        |  |  |
|-------------------------------------|-------------|------------|-------------|--------|--|--|
| Variable                            | Coefficient | Std. Error | t-Statistic | Prob.  |  |  |
| С                                   | 0.504053    | 0.117833   | 4.277679    | 0.0000 |  |  |
| Size of Company                     | 0.009345    | 0.003836   | 2.436426    | 0.0163 |  |  |
| Leverage                            | -0.000996   | 0.002421   | -0.411279   | 0.6816 |  |  |
| Profitability                       | -0.048113   | 0.031536   | -1.525624   | 0.1298 |  |  |

Source: data processed

The effect of each independent variable on the dependent variable can then be determined using the Statistics Test (partial) from the results of the statistics shown in table 7: The Effect of Company Size (LN Asset) on Risk Management Disclosure. The Company Size Variable (LN Asset) indicates the probability with a value of 0.0163 that the number is smaller than 0.05 or 0.0163 < 0.05 with a coefficient value of 0.009345, and has a t counted value of > t table which is 2.436426 >1.98010, then Ha is accepted and H0 is rejected. It is known that the size of the company has a positive and significant effect on risk management disclosure.

Leverage (DER) on Risk Management Disclosure. The leverage variable indicates the probability that the number is greater than 0.05 or 0.6816>0.05 with a coefficient value of -0.000996, and has a t counted value of t table which is -0.411279

<1.98010, then Ha is rejected and H0 is accepted. It is known that leverage has no significant effect on risk management disclosure.

The Effect of Profitability (NPM) on Risk Management Disclosure. The profitability variable shows the probability of a value of 0.1298 greater than 0.05 or 0.1298>0.05 with a coefficient value of -0.048113, and has a t counted value of is -1.525624 <1.98010, then Ha is rejected and H0 is accepted. It is known that profitability has no significant effect on risk management disclosure.

#### Coefficient Determination Test (Adjusted R<sup>2</sup>)

The coefficient of determination test, or adjusted R2 test, to measure the size or small influence/proportion of dependent namely management variables. risk

| Table              | 8. Determination Coefficient T | <b>Fest Results (Adjusted</b> | <b>R</b> <sup>2</sup> ). |
|--------------------|--------------------------------|-------------------------------|--------------------------|
| R-squared          | 0.072682                       | Mean dependent var            | 0.435830                 |
| Adjusted R-squared | 0.070800                       | S.D. dependent var            | 0.053974                 |
| S.E. of regression | 0.053192                       | Sum squared resid             | 0.336691                 |
| F-statistic        | 2.205921                       | Durbin-Watson stat            | 1.597911                 |
| Prob(F-statistic)  | 0.090967                       |                               |                          |

disclosure, can be explained by all the independent variables in the model,

namely, company size (LN Asset), leverage (DER), and profitability (NPM).

Source: data processed

From the determination coefficient test results described in table 8, adjusted Rsquared of 0.070800 or 7%, the dependent variable that is Risk Management Disclosure can be affected and explained by all the independent variables, namely Company Size, Leverage, and Profitability. The other 93% can be affected by a variety of external factors.

#### Effect of Corporate Size on Risk Management Disclosure

This study showed that the size of the company has a significant effect on risk management disclosure. The direction of the variable relationship between the company's size and risk management disclosure is positive. Specifically, when there is an increase in the size of the company reflected by the size of an asset owned by the company, it will have an impact on the increase in risk management disclosure on conventional commercial banks listed on the Indonesia Stock Exchange. Based on the results of the above test, the influence of the company's size on risk management disclosure, there are similarities with this research hypothesis and in line with (Adam-Müller & Erkens, 2020), which states that the size of the company is compared positively to the disclosure of risk because the company can make efforts to diversify the shape of the company's products so as to minimize risk.

In the research period from 2017 to 2019, 34 of the 41 conventional commercial banks in the IDX, or as much as 83%, experienced an increase in the size of the company, followed by an increase in risk management disclosure, and vice versa, because the larger a company is, the more complex its activities are, the greater the risk management disclosure. Companies with large sizes provide an opportunity for stakeholders to take an interest in working together in the intended company. This is in accordance with stakeholder theory. namely, the more stakeholders of a company, the wider the risk management the disclosure. to meet needs of stakeholders. This study has similar results the research conducted to by (Puspitaningrum & Taswan, 2020), (Arief et al., 2020), (Gunawan & Zakiyah, 2017), (Gouiaa et al., 2020), (Nahar et al., 2016), (Zeghal & El Aoun, 2016; Lechner & Gatzert, 2018), (Adam-Müller & Erkens, 2020) and (Tzouvanas et al., 2020).

# Effect of Leverage to Risk Management Disclosure

This study did not show the influence of leverage on risk management disclosure in the period 2017 to 2019, in which 25 of the 41 conventional commercial banks, or as many as 60% of conventional commercial banks, experienced a decrease in leverage, but this was not always followed by an increase in risk management disclosure and vice versa. It does not fit with the hypothesis that has been formulated previously in accordance with (Indonesia, 2016) that the disclosure of the company's risk profile is intended as a backstop or barrier to the leverage ratio to prevent financial system damage and stakeholder misunderstanding.

The results of this study show that although there is an increase in the level of company leverage, it does not automatically make the company disclose risk management disclosure in its annual report. This is because the higher the value of leverage in a company means the company is increasingly dependent on external parties, one of which is creditors, then the company is relatively riskier because it has a burden related to the responsibility to pay off its obligations. Under these circumstances, the company is less willing to disclose risk management disclosures. Because the amount of leverage in a company causes distrust the investor of long-term sustainability of a company and is related to the many risks faced by the company, On the one hand, before the creditors have decided to lend their funds to the company, they can access the risks in the lending procedure; therefore, the company is not required to explain risk management disclosure more broadly to creditors, (Hunah et al., 2021). In fact, banks with high leverage do not want to incur further costs or costs related to risk management disclosure regarding the risks that are being faced and how the company's managerial parties implement regulations that will be implemented later. This study has similar results to studies conducted by (Lechner & Gatzert, 2018), (Arief et al., 2020), (Daniel Zeghal & Meriem El Aoun, 2016), (Kamiya et al., 2021), (Puspitaningrum & Taswan, 2020).

# Effect of Profitability on Risk Management Disclosure

This study showed that there was no influence between profitability variables and risk management disclosure. In the study period from 2017 to 2019, 23 out of 41 conventional commercial banks, or as many as 58% of conventional commercial banks, experienced an increase in profitability but were not followed by an increase in risk management disclosure, and vice versa. Not in accordance with the hypothesis that has been formulated previously, but in accordance with (Harahap, 2016), which reveals profitability is the ability of a company to profit from all activities, as well as various resources owned by the company, by being balanced by the disclosure of a company's risks. The results of this study show that profitability is a tool or medium to earn profits in a company. When the profitability of the company is high, it triggers the interest of external stakeholders, especially investors, to decide to invest in the short or long term in the sustainability of the company. When investors see that the profitability or profitability of the company is quite high, it increases investor confidence in the company, because high profitability, especially in the banking sector, indicates that the bank is sufficient to get high loyalty from its customers and also has good business prospects in the long run. Therefore, investors do not consider the small risk associated with risk management disclosure, if the company has high profitability. Conversely, if the company has a small number on its profitability, explaining that the company needs more costs to meet operational needs, the company will be more risky than companies that have high profitability. This study has similar results to studies that have been conducted by (Wicaksono & Adiwibowo, 2017), (Susanti et al., 2018), (Puspitaningrum & Taswan, 2020), (Gouiaa et al., 2020), dan (Lechner & Gatzert, 2018).

# Conclusions

Based on the results of research and hypothesis testing through regression analysis of panel data on 41 conventional commercial banks listed on the IDX Exchange for the period 2017 to 2019, a conclusion was obtained that the first variable test, namely company size (LN Asset), showed that there was a positive and significant influence on risk management disclosure, then the second variable test of leverage (DER) showed that leverage had no effect on risk management disclosure, and the third variable test of profitability (NPM), showed that profitability had no effect on risk management disclosure. Research limitations in the research that has been carried out only use 3 (three) periods or periods of research, namely in 2017, 2018 and 2019. Therefore, the next study will increase the length of the research period in order to directly increase the probability of the relationship between each variable and the other.

# Recommendations

As for the advice that can be given to investors as a consideration in deciding on investment activities, by looking at the value of risk management disclosure related to how much influence the size of the company, leverage, and profitability have on financial performance, it can certainly be seen whether the bank can be said to have good performance in the long term. The bank, in carrying out its operational activities, is expected increase returns by improving the quality of the company's managerial performance, in line with the strictness of the risk management regulations applied, in order to minimize the risks that will be faced someday.

community, for prospective For the customers and customers, before making the decision to place their funds in a conventional commercial bank, it is advisable to make considerations in advance by paying attention to the value of risk management disclosure and financial performance factors owned bv conventional commercial banks to find out whether the bank has good performance because it affects the bank's ability to manage or maintain third party funds owned by them.

# Limitation

This research is still limited to banking companies in Indonesia so that recommendations can be given and further research can be expanded to the scope of the sample to banking companies in countries. Why ASEAN ASEAN countries? Because, in recent years, ASEAN countries have had considerable economic growth, although they still lag behind developed countries. However, this economic expansion has the unintended consequence of worsening environmental issues like pollution, air pollution, and water contamination. Due to its fastgrowing economy and large population, ASEAN will play a significant role in future global energy consumption in the coming years. ASEAN countries have the greatest economic growth rates and provide significant investment opportunities. The ASEAN region's economic growth is expected to improve by 4.8 percent in 2020, according statistics to from the International Monetary Fund (IMF) published in an article in the World Economic Outlook 2020, compared to only 4.7 percent in 2019. However, ASEAN's rapid economic expansion comes with a number of risks and uncertainties that could jeopardize the region's growth aspirations. The political situations of each country (governance risk), droughts and floods wreaking havoc on agriculture (environmental risk), cheap energy costs (social risk), and China's delayed growth are just a few of the hazards (social risk). In financial management, Keynes' theory states that "high-risk, high return." As a result, ASEAN countries have stronger economic growth and, as a result, more risk. Investors, on the other hand, are looking for more than just a high return. The risk is also taken into account by the investor, as a bigger investment normally entails a higher risk.

Another limitation is that in this study, the results of adjusted R-squared are still very

low. The three variables account for 7% of the total, and the rest, as much as 93%, are influenced by various external factors that are not discussed in this study. Therefore, it is necessary to add variables for further research to increase the value of adjusted Rsquared, as well as provide the opportunity to increase the probability number on each selected variable. This provides an opportunity for further research.

# **Notes on Contributors**

**Dewi Cahyani Pangestuti** is a lecturer in the Management Program at Universitas Pembangunan Nasional Veteran. Her research interests are in financial management, risk management, budgeting, strategic management, and capital markets.

**Gitna Revania Hunah** is a student alumnus of the Faculty of Economics and Business Management study program of the Universitas Pembangunan Nasional Veteran. She is currently working on Jasa Marga.

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