

## Effect of Firm Size, Gearing Ratio, and Gender Diversity on Extent of Risk Disclosure

Thea Herawati Rahardjo<sup>1</sup>, Nurainun Bangun<sup>2</sup>, Tri Handayani Amalia<sup>3</sup>

<sup>1</sup>*Universitas Tarumanagara, Jakarta-Indonesia*

*E-mail: thearahardjo@outlook.co.id*

<sup>2</sup>*Universitas Tarumanagara, Jakarta-Indonesia*

<sup>3</sup>*Universitas Negeri Gorontalo-Indonesia*

### **Abstract**

*The purpose of this research is to investigate empirical evidence between firm size, gearing ratio, and gender diversity's impact on extent of risk disclosure in banking companies published on Indonesian Stock Exchange for the period 2016-2018, with a total of 36 sample banking companies that have been previously selected by purposive sampling method. This research uses secondary data taken from the website www.idx.co.id and is processed by panel data regression analysis using EViews 10.0 application. The results reveals that firm size has positive significant effect towards extent of risk disclosure, gearing ratio has negative and significant influence on the extent of risk disclosure, whereas gender diversity insignificantly affect extent of risk disclosure.*

**Keywords:** Firm Size, Gearing Ratio, Gender Diversity, Extent of Risk Disclosure.

### **1. Introduction**

Changes in the business environment have motivated bank regulators to rethink the rational basis of bank regulation. Global Financial Crisis that occurred in 2007-2008 resulted in the collapse of a number of large financial institutions and was considered by economists to be the worst financial crisis after the Great Depression, the fall of the stock market in 1929 to 1939. The Global Financial Crisis was still a concern until currently and is the topic of "International Financial Institutions, Governments, and Austerity: Banks, Bailouts, and Information on the Global Debt Crisis" in Athens, Greece in 2019.

The Global Financial Crisis began with the housing credit crisis in the United States. Ease of giving credit to debtors occurs when property prices in the United States are experiencing an increase. Problems arise when many US financial institutions extend property loans to people who are financially unable to meet these credit obligations. This situation triggered the occurrence of bad loans in the property sector which resulted in a domino effect that led to the bankruptcy of several financial institutions in United States (U.S.).

According to the U.S. Department of the Treasury, the Global Financial Crisis in 2007-2008 resulted in a loss of wealth of US \$ 19.2 trillion, loss of jobs, and a slowdown in the global economy so that stakeholder demand for risk disclosure of financial institutions increased, so regulations such as the International Financial Reporting Standard (IFRS) 7- Financial Instrument: Disclosures were published to regulate accounting practices and disclosure of financial statements. Corporate risk disclosure is the basis for business risk disclosure in providing transparent information and building stakeholder confidentiality.

Elliot and Elliot (2013) stated that a good governance system should ensure that the company's operational activities involve comprehensive risk management and transparent disclosure of information to shareholders and regulators about the nature of, broad, and this risk management [1].

Risk disclosures assist the board of directors in overseeing the company's material risks by providing up-to-date information, helping financial statement user in understanding and evaluating related risks, the impact of risks to the company's finances, and what risk management strategies that will be implemented (Caldwell, 2012) risk disclosures help stakeholders understand business operations and facilitate good decision making [2].

Risk disclosure has become important recently because of the increasing complexity of the business. This has changed the business context which creates uncertainty for the company in the future. This uncertainty makes the need for information about risk increases. Risk disclosure is listed in Notes to Financial Statement and one of qualitative disclosure information in the annual report. Risk disclosure is an important factor because in the company's financial reporting informs how the risk arises, the settlement made by the company when the risk arises, and the impact of the risk on the company. By disclosing more information, the company has tried to be more transparent to stakeholders.

Banking is a financial institution that faces a more complex risk in Indonesia. Banks as intermediary financial institutions have a very important role in collecting and distributing funds to the real sector that aims to encourage the economic growth of a country. Risks are generally characterized by adverse effects and have an impact on the bank's profitability. This makes the management conduct risk control that is used to maintain public confidence in investing in the hope of increasing Indonesia's economic growth.

The Financial Services Authority reported gross non-performing loans of banks in May 2019 reaching 2.61%, up from 2.57% the previous month. Non Performing Loans is a ratio of problem loans which is one indicator to see the performance of a bank [3]. The increase in Non Performing Loans if left unchecked will have a negative effect on banks. This affects the performance evaluation of a bank which causes investors and stakeholders to be skeptical of the bank. Therefore, managers must exercise risk control by disclosing more information to convince investors and stakeholders. (Source: <https://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Pages/Statistik-Perbankan-Indonesia-Mei-2019.aspx>.)

The uncertainty of the global economy also affected the performance of the banking industry, especially the risk of a trade war between the PRC (People's Republic of China) and the United States. Therefore, national banks will be more selective in lending in considering the tighter business prospects.

According to Beretta and Bozzolan (2004) and Abraham and Cox (2007) in [4], risk disclosure aims to meet the needs of investors, namely determining the company's risk profile, estimating market value, and predict the stock price of a company. However, differences in socioeconomic and institutional management between developed and developing countries can affect differences in the extent of corporate risk disclosure. Extent of risk disclosure can be influenced by various factors, including firm size (gear size), gearing ratio, and gender diversity.

Firm size (company size) is one of important factor in predicting the extent of company's risk disclosure. Large companies are usually known by many people. Therefore, large companies tend to have a large dependency on stakeholders who

demand that they disclose more information (Vandemaele, 2009) in [5]. By disclosing more information, stakeholders will have a high level of trust in the company. Tauringana & Chithambo (2016) states that firm size has positive and significant effect on the extent of risk disclosure [5]. However, Serafimovska, Jovanovski, Jovevski, & Atanasovski found no evidence that firm size and extent of risk disclosure had a significant effect [6].

The gearing ratio measures the contribution of long-term lenders to the long-term capital structure of the business [7]. In running a business, companies need financing that can come from loans (liability) and the company's own capital (equity). Gearing ratios affect the level of risk disclosure because accountability in risk disclosure plays an important role in building creditor and stakeholder confidence. Tauringana & Chithambo and Muturi stated that the gearing ratio has positive and significant effect on the extent of risk disclosure [5].

Gender diversity can be said to be the most debated element of the composition of the board. Gender diversity in the board room refers to the presence of women commissioners or directors [4]. The level of gender diversity can also increase independence and managerial control in a company. In line with agency theory predictions, the characteristics of the board namely gender diversity has positive and significant effect on the extent of risk disclosure. However, Seta & Setyaningrum found no evidence of a significant relationship between gender diversity and the extent of risk disclosure [8].

Based on the background above, the main objective of this study is to investigate the effect of firm size, gearing ratio, and gender diversity on the extent of risk disclosure.

## 2. Theoretical Review

**Agency theory.** In a company, one party (principal) delegates tasks or activities to another party (agent). Agency theory explicitly discusses contractual arrangements and the relationship between principals and agents [9]. Agency theory states that there are differences in interests between managers (agents) and stakeholders (stakeholders).

According to agency theory, a public accounting theory that attempts to explain accounting practices and standards [10]. Agency theory is defined as the relationship between two parties, where one party (agent) agrees to act on behalf of the other's party interest (the principal). Agency relations can be found in shareholders and managers. Agents are asked to make the best decisions for shareholders. However, shareholders cannot observe all the decisions made by agents, so there is a threat that agents will maximize their own wealth rather than shareholders.

According to agency theory, risk disclosure is used to overcome agency problems between management (agents) and shareholders caused by conflicts of interest. If shareholders and creditors cannot directly observe the company's risk management activities, they tend to use a monitoring system to increase information transparency and reduce the risk of uncertainty [1].

**Signaling theory.** According to signaling theory, companies try to consider and determine private information that is useful for investors or shareholders. This signal makes managers interested in releasing and providing information that is not only mandatory for the company, but also provides other information that is not required. Investors and creditors will analyze and interpret this information in the form of negative signals (bad news) or positive signals (good news).

The signaling theory developed by Spencer states that reporting financial statements is a signal to reveal superior management's performance, namely good performance and reporting good financial statements that include risk disclosure will increase the reputation and position of management.

Signal is an action taken by a manager that gives instructions to investors or creditors about the way managers view the company's prospects [11]. Giving a signal to investors is done by disclosing the risk in the company's annual report, so asymmetric information does not occur. Disclosure of risk is done with the aim of improving the good image for the company. The more information disclosed in the annual report, the company can convey more specific signals to investors or creditors about the company's future. This can also be used to increase the credibility and trust of external parties to the company. Based on this theory, if management discloses more information, including company risk to investors in annual reports, then information asymmetry can be reduced [5].

Stakeholder theory is a theory of dynamic and complex relationships between an organization and its environment [5]. The company's main task is to balance the demands of conflicting company stakeholders. Stakeholders such as investors will put pressure on managers to gather as much corporate risk information as is needed to make the right decision.

Firm size can be seen as one important factor in predicting how much information will be disclosed by the company. A large company that has been known by external parties will reveal more information aimed at increasing their trust in the company. Firm size can be measured on the value of assets or the value of equity owned by a company [11]. The size of a company can be seen from the extent of the business run by the company. Total assets can be used as a measure in determining the size of a company. If the total assets owned by a company are large, this shows that the company is included in the grouping of large companies.

Agency theory also shows that large companies have higher information asymmetries compared to small companies. The asymmetry of information between managers and owners causes higher agency costs. Therefore, large companies should disclose more information than small companies to reduce agency costs [12] [5] states that a large size company will disclose more information because the larger the company, the greater the risk. With a large size company, the company must be responsible to many people. This causes the company to disclose more information.

Gearing ratios have several measurement variations that focus on the proportion of company debt to company equity, such as total liabilities to total assets, total liabilities to total owner's equity, and long-term liabilities to total owner's equity [7]. According to signaling theory, companies with high gearing ratios tend to reveal more risk information to send positive signals to stakeholders about the company's ability to meet its obligations [5]. The company is strongly directed to disclose more information (including risk disclosure) with the aim of meeting the creditor's information needs regarding the company's ability to pay off its obligations in the future. Thus, the more companies have a high dependency on loan capital, the more pressing they are to be accountable to creditors through risk disclosure.

Gender (gender) is one of the elements that is often debated by the composition of the board because gender diversity can lead to diversity of opinions, increase independence, influence decision making by company boards, improve monitoring, and as a signal to build public image and improve company performance. Gender diversity is gender diversity which refers to the presence of women as board

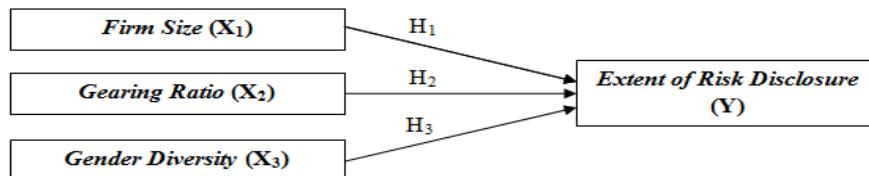
members in a company, both as members of the board of commissioners or board of directors. The gender diversity of a company refers to the presence of women commissioners or directors as board members [4]. The presence of women on company boards creates a diversity of opinions and prospects in board discussions because women tend to be innovative and have knowledge of the consumer and customer markets. Signaling theory agrees that companies use women's representation in the company as a signal to build public image and improve company performance. However, women's ability to contribute corporate value should also be considered. Cox and Blake (1991) argue that there are more costs to integrating diverse workforces. Gender diversity with a proxy for measuring the presence of women as company directors is gender diversity that causes diversity of opinions and can influence decision making by the company board, one of which is a decision in the disclosure of company risk [4].

**Extent of Risk Disclosure.** IFRS 7 aims to focus on disclosure of financial instruments and is based on the idea that entities must provide disclosures in their financial statements that allow users to evaluate the significance of the entity's financial instruments and performance. IFRS 7 requires two main categories of disclosures consisting of information about the importance of financial instruments and information about the nature and level of risk arising from financial instruments [1]. Risk is defined as a combination of the probability of an event and its consequences, which includes both positive and negative risk aspects [8]. The degree of compliance of risk (extent of risk disclosure) becomes an important topic in business and management communication policies because it shows the level of transparency and increases investor confidence in the value and activities of the company [13]. Risk information is one of the substantive components of management comments that help investors in making decisions [14].

Risk information helps investors to more accurately assess company profiles, measure management performance, and illustrate that companies have implemented systems to manage risk [14]. Higher risk usually reveal more information to avoid misunderstandings among investors [15]. Risk disclosure as information related to opportunities, prospects, hazards, threats or exposures that have an impact or may have an impact on the company in the future [16]. Risk information helps investors to measure management performance, reduce company capital costs, and illustrates that the company has implemented a system to manage this risk [14]. For this study, risk disclosures are categorized as market risk (interest rate risk, exchange rate risk, and other price risks), liquidity risk, and credit risk. Interest rate risk is the risk of financial loss due to changes in bank interest rates. Exchange rate risk is the risk due to variations in returns or costs arising from changes in foreign exchange rates [17]. Other price risk is the risk that the fair value or future cash flow of financial instruments will fluctuate due to changes in market prices (other than interest rate risk or currency risk).

Liquidity risk is the risk that a company cannot fulfill its financial obligations when due, either by increasing liabilities or by converting assets without causing significant losses [17]. Credit risk is the risk that the debtor or buyer on credit cannot pay or the quality of the debtor or buyer decreases so that the perception of the possibility of default is higher [18].

The framework of thought described in this study is as follows:



**Figure 1 Framework for Thinking and Hypothesis**

Research Hypothesis:

H1 : Firm Size has significant effect on the extent of risk disclosure.  
H2 : Gearing Ratio has significant effect on the extent of risk disclosure.  
H3 : Gender diversity has significant effect on the extent of risk disclosure.

### 3. Methodology

This study aims to examine the effect of independent variables on the dependent variable using panel data studies and descriptive research designs that do not have treatment variables (manipulated variables). The data used in this study are secondary data obtained from annual reports of banking companies listed on the Indonesia Stock Exchange (IDX) for the period of 2016 - 2018 taken through the website [www.idx.co.id](http://www.idx.co.id) [19].

The subjects of the study were banks listed on the Indonesia Stock Exchange in the 2016-2018 period. While the object of research is the extent of risk disclosure (Y), firm size (X1), gearing ratio (X2), and gender diversity (X3). The sampling technique used in this study is a nonprobability sampling technique with a purposive sampling method that uses a number of special considerations or criteria that are set so that an object is selected as a sample.

The sample selection technique used in this study is purposive sampling technique. Purposive sampling is a sampling that is limited to certain types of people who can provide the desired information, or according to some criteria established by researchers [20]. Purposive sampling is part of non-probability sampling. Non-probability sampling is a sample selection technique, where elements in the population do not have the opportunity to be selected in the study.

The sample selection criteria applied in this study are:

1. Banks listed on the IDX during the period 2016 - 2018,
2. The bank presents annual reports as of December 31,
3. Non-islamic banking company,
4. Banks that present annual reports using the rupiah currency for the period 2016-2018,
5. Banks that do not conduct an IPO (Initial Public Offering), i.e., the first public offering of shares, during the 2016-2018 period,
6. Banks that did not conduct mergers and acquisitions during the 2016-2018 period.
7. Banks yang tidak melakukan merger dan akuisisi selama periode 2016-2018.

**Table 1 The Results of the Research Sample Selection Process**

| Research Sample Selection Process  | Company | Data |
|--|---------|------|
| Banking companies listed on the Indonesia Stock Exchange for the period of 2016-2018         | 45      | 135  |
| Islamic banking companies listed on the Indonesia Stock Exchange for the period of 2016-2018 | (3)     | (9)  |

|   |     |     |
|---|-----|-----|
| Banking companies conducting IPOs during the 2016-2018 period                   | (3) | (9) |
| Banking companies that did mergers and acquisitions during the 2016-2018 period | (3) | (9) |
| Number of research samples  | 36  | 108 |

The total banking companies that listed on the Indonesia Stock Exchange (IDX) for the period 2016-2018 are amounted of forty-five companies. There are three Islamic banking companies, namely PT Bank BRI Syariah, Tbk., PT Bank Syariah National Pension Savings, Tbk., And PT Bank Panin Dubai Syariah, three banking companies that conducted an IPO (Initial Public Offering) in 2016, namely PT Bank Artos Indonesia , Tbk., PT Bank Pembangunan Daerah Banten, Tbk., and PT Bank Ganesha, Tbk., As well as three banking companies that made acquisitions and mergers during the 2016-2018 period, namely PT Bank Dinar Indonesia, Tbk., PT Bank China Construction Bank Indonesia , Tbk., And PT Bank Rakyat Indonesia (Persero), Tbk.

In this study firm size is formulated as follows:

$$Firm\ Size = \ln(TA)$$

Gearing ratios are calculated using the following formula (Tauringana & Chithambo, 2016, p. 120):

$$Gearing\ Ratio = \frac{Total\ Debt}{Total\ Debt + Total\ Equity}$$

Gender diversity is one component that affects risk disclosure. Gender diversity was measured using dummy variables based on Seta & Setyaningrum (2017, p. 40) and Saggar & Singh (2017, p. 394) [45] [46] research with the following provisions:

The presence of one female director or commissioner of a company will be given a score of '1', if not, then a score of '0' will be given

Measure risk disclosure by developing index of risk disclosure based on IFRS 7 requirements and using content analysis techniques to measure the extent of risk disclosure [5]. The index of risk disclosure compliance is then calculated by adding up all the risk disclosure scores divided by the maximum disclosure score for each company and expressed as a percentage. Mathematical risk disclosure index can be displayed as follows:

$$DS\ Score = \sum_{s=1}^N \frac{Ds}{N}$$

The data that has been obtained will be processed using the EViews version 10.0 program. Various tests were conducted in this study consisting of the Chow test and the Hausman test to determine the appropriate model in this study, whether the Common Effect Model, Fixed Effect Model, or Random Effect Model. Whereas in the hypothesis testing descriptive statistical tests, multiple linear regression tests, simultaneous significance tests (F test), individual parameter significance tests (t test), and the coefficient of determination test (Adjusted R2).

There are three models that can be used in the panel data model, namely the common effect model, the fixed effect model, and the random effect model. The common effect model is the simplest model because the approach ignores the time and space dimensions

that are owned by panel data. The method used in estimating this approach is pooled OLS [21].

Fixed effect model is an approach that is used by entering the "individuality" of each company or each cross-sectional unit by making intercepts vary for each company, but there is still an assumption that the slope coefficient is constant for each company. This model adds a dummy variable technique by processing data using Least-Squares Dummy Variable (LSDV) [21].

Random effect model is an approach used to improve the efficiency of the least square process because there are various deficiencies and problems. The method used in this approach is Generalized Least Square (GLS).

The selection of panel data model estimation aims to find out which is the best among common effect models, fixed effect models, and random effect models. The selection of panel data estimation can be done by conducting Likelihood test (Chow test), Hausman test, and Lagrange Multiplier test.

**Likelihood test (Chow test).** Likelihood test is used to determine the right model between the common effect model or fixed effect model. The study was conducted with a 95% confidence level. To conduct a Likelihood test (Chow test) with regard to the probability value of cross-section Chi-square. If the probability value of cross-section Chi-square is significant ( $< 0.05$ ), it uses the fixed effect model (FEM). Conversely, if the probability value of cross-section Chi-square is not significant ( $> 0.05$ ) then it uses the common effect model.

**Hausman Test.** The Hausman test is used to choose the right model between the fixed effect model and the random effect model (Ghozali & Ratmono, 2017, p. 247) [849]. This study is conducted with a 95% confidence level. In the Hausman test, what needs to be considered is the probability value of cross-section random. If the probability value of random cross-section is significant ( $< 0.05$ ), then use the fixed effect model. Conversely, if the probability value of cross-section random is not significant ( $> 0.05$ ) then use the random effect model.

**Lagrange Multiplier Test.** The Lagrange Multiplier test is used to determine whether the random effect model is better than the common effect model. This study is conducted with a 95% confidence level. In the Lagrange Multiplier test, what needs to be considered is probability value of cross-section Breusch-Pagan. If the probability value of cross-section Breusch-Pagan value is significant ( $< 0.05$ ), then the random effect model is better used in the study. Conversely, if probability value of cross-section Breusch-Pagan is not significant ( $> 0.05$ ), then the common effect model is the model that will be used in the study.

The multiple linear regression is used to test the effect of two or more independent variables on one dependent variable. This estimation model uses the ordinary least square (OLS) method because it uses one dependent variable and three independent variables. This is the multiple regression equation model in this study.

$$Y = \alpha + \beta_1 \text{FIRM} + \beta_2 \text{GEARING} + \beta_3 \text{GENDER} + \varepsilon$$

Legend:

|                             |                             |
|-----------------------------|-----------------------------|
| Y                           | = Extent of Risk Disclosure |
| $\alpha$                    | = Constant Coefficient      |
| $\beta_1, \beta_2, \beta_3$ | = Regression coefficient    |
| FIRM                        | = Firm size                 |
| GEAR                        | = Gearing ratio             |

$$\begin{array}{ll} \text{GENDER} & = \text{Gender diversity} \\ \epsilon & = \text{Error} \end{array}$$

#### 4. Result and Discussion

The output of the descriptive statistical test is the extent of risk disclosure (Y) as dependent variable and independent variable consisting of firm size (X1), gearing ratio (X2), and gender diversity (X3) of thirty-six banks listed on the Exchange The Indonesian effect for the period of 2016-2018 as a research sample.

**Table 2 Descriptive Statistics Analysis Results**

|                 | Y_RISK   | X1_FIRM  | X2_GEARING | X3_GENDER |
|-----------------|----------|----------|------------|-----------|
| Mean            | 0.414272 | 31.01201 | 0.819409   | 0.796296  |
| Maximum         | 0.603448 | 34.72297 | 0.936502   | 1.000000  |
| Minimum         | 0.189655 | 22.74892 | 0.005090   | 0.000000  |
| Standar Deviasi | 0.088996 | 2.193791 | 0.148404   | 0.404629  |

Based on table 1, the variable extent of risk disclosure (Y\_RISK) has a mean value 0.414272, a maximum value 0.603448, a minimum value 0.189655, and a standard deviation value of 0.088996. Firm size variable (X1\_FIRM) has a mean (average) of 31.01201, a maximum value 34.72297, a minimum value of 22.74892, and a standard deviation of 2.193791. The variable gearing ratio (X2\_GEARING) has a mean value of 0.819409, a maximum value of 0.936502, a minimum value of 0.005090, and a standard deviation value of 0.148404. The variable gearing ratio (X3\_GENDER) has a mean value 0.796296, a maximum value 1.000000, a minimum value 0.000000, and a standard deviation value 0.404629.

Selection of the Best Model. In this study, a Chow test and Hausman test were used to determine the best model to be used in the study, namely between the Common Effect Model (CEM), Fixed Effect Model (FEM), or Random Effect Model (REM) using the EViews 10 application. The significance used is 0.05.

The Chow Test is used to choose between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) that is appropriate for the research model. If the value of Prob. Cross-section Chi-square is significant ( $<0.05$ ), so the fixed effect model is better (adds value) than the common effect model and Hausman test must be performed to choose between fixed effect or random effect models. If the value of Prob. Cross-section Chi-square is not significant ( $> 0.05$ ), the common effect model is more appropriate than the fixed effect model and a Multiplier Langrange Test (Breusch Pagan) must be performed.

**Table 3 Chow Test Results**

| Effects Test             | Statistic  | d.f.    | Prob.  |
|--------------------------|------------|---------|--------|
| Cross-section F          | 4.328335   | (35,69) | 0.0000 |
| Cross-section Chi-square | 125.469388 | 35      | 0.0000 |

Chow test results show the probability value of Cross-section Chi-square is 0.0000 (lower than 0.05) which means that the Fixed Effect Model is more appropriate than the Common Effect Model. Therefore, the Hausman test was conducted to determine whether the Fixed Effect Model or Random Effect Model will be used in this study.

The Hausman Test is a formal test to choose between the Fixed Effect Model (FEM) and the Random Effect Model (REM) for the research model. If the value of Prob. Cross-section random was significant ( $<0.05$ ), so the FEM model was more appropriate than the

REM model. If the value of Prob. Cross-section random was not significant ( $> 0.05$ ), so the REM model was more appropriate than the FEM model.

**Table 4 Hausman Test Results**

| Test Summary         | Statistic | d.f. | Prob.  |
|----------------------|-----------|------|--------|
| Cross-section random | 0.812905  | 3    | 0.8464 |

Hausman test results show the probability of Cross-section random is 0.8464 (greater than 0.05) which means that this study is better to use the Random Effect Model compared to the Fixed Effect Model.

Multiple Linear Regression Test. From the Random Effect Model estimation, we get the multiple linear regression equation model contained in this study as follows:

$$\text{DS Score} = -0.157880 + 0.023833 \text{ FIRM} - 0.203021 \text{ GEARING} - 0.000735 \text{ GENDER} + \varepsilon$$

Description:

|               |                             |
|---------------|-----------------------------|
| DS Score      | : Extent of Risk Disclosure |
| FIRM          | : Firm Size                 |
| GEARING       | : Gearing Ratio             |
| GENDER        | : Gender                    |
| $\varepsilon$ | : Error                     |

Based on the regression equation model above, it can be concluded that the constant value (C) is -0.157880, meaning that with the assumption that the independent variable firm size (FIRM), gearing ratio (GEARING), and gender diversity (GENDER) is equal to zero (0) or constant, the dependent variable, namely the extent of risk disclosure (DS Score) is -0.157880.

The coefficient for firm size variables (FIRM) is positive at 0.023833. This means that if the firm size value increases by one unit, then the value of extent of risk disclosure (RISK) will increase by 0.023833 units and vice versa, assuming the gearing ratio (GEARING) and gender diversity (GENDER) equal to zero or constant.

The coefficient for the variable gearing ratio (GEARING) is negative at 0.203021. This means that if the value of the gearing ratio increases by one unit, then the value of extent of risk disclosure (RISK) will decrease by 0.203021 units and vice versa, assuming firm size (FIRM) and gender diversity (GENDER) equal to zero or constant.

The coefficient for the gender diversity variable (GENDER) is negative at 0.000735. This means that if the value of gender diversity has increased by one unit, the value of extent of risk disclosure (RISK) will decrease by 0.000735 units and vice versa, assuming firm size (FIRM) and gearing ratio (GEARING) equal to zero or constant.

Simultaneous Significance Test (Test F). The statistical test F is used to indicate whether all independent variables entered in the model have a joint or simultaneous effect on the dependent variable. The criteria used for the F statistical test is to use a 95% confidence level. If the F statistical test is less than 5%, then all independent variables significantly influence the dependent variable.

## 5 Simultaneous Significance Test Results (Test F)

| Weighted Statistics |          |
|---------------------|----------|
| Prob (F-statistic)  | 0.007503 |

Simultaneous significance test results (Test F) in this study indicate the value of prob. (F-statistic) of 0.007503 (smaller than the significance level  $\alpha = 0.05$ ), so it can be concluded that the independent variable firm size (FIRM), gearing ratio (GEARING), and gender diversity (GENDER) simultaneously or overall have a significant effect on the dependent variable extent of risk disclosure.

Determination Coefficient Test (Adjusted R2). The coefficient of determination aims to measure the ability of the model in explaining the variation of independent variables with the value of the coefficient of determination between zero (0) and one (1). A small R2 value means that the ability of independent variables to explain variable variations is very limited. A value close to one means that the independent variable provides almost all the information needed to predict variations in the independent variable. However, many researchers suggest using the Adjusted R2 value to evaluate the best regression model because the Adjusted R2 value can go up or down if the independent variables are added to the model (Ghozali & Ratmono, 2017, pp. 55–56).

**Table 6 Determination Coefficient Test (Adjusted R2)**

| Weighted Statistics |          |
|---------------------|----------|
| Adjusted R Squared  | 0.082471 |

From the results of the coefficient of determination test, the Adjusted R-Squared value of 0.082471 or 8.25% was obtained. This means that the independent variable firm size (FIRM), gearing ratio (GEARING), and gender diversity (GENDER) have a contribution of 8.25% to the dependent variable extent of risk disclosure (Y). The remaining 91.75% is explained by other factors or variables not included in this regression model.

Significance Test of Individual Parameters (t Test). The significance test of individual parameters (t test) is usually applied for testing to show whether the independent variable individually or partially influences the dependent variable. The criteria for a statistical test t use a 95% confidence level. If the results of the statistical t test are significant ( $< 0.05$ ), imply independent variables individually have a significant effect on the dependent variable.

**Table 7 t Test Results**

| Variable   | Coefficient | Std. Error | t-Statistic | Prob.  |
|------------|-------------|------------|-------------|--------|
| C          | -0.157880   | 0.173996   | -0.907374   | 0.3663 |
| X1_FIRM    | 0.023833    | 0.007188   | 3.315636    | 0.0013 |
| X2_GEARING | -0.203021   | 0.101240   | -2.005351   | 0.0475 |
| X3_GENDER  | -0.000735   | 0.028256   | -0.026006   | 0.9793 |

The results of the significance test of individual parameters (t test) showed that firm size and ownership structure (OWN) variables had a significant and positive effect on the extent of risk disclosure (DS Score). While the gender diversity (GENDER) variable does not significantly influence the extent of risk disclosure (DS Score).

The independent variable X1, namely firm size (FIRM) has a probability value of 0.0013 smaller than  $\alpha = 0.05$ , which means that individually firm size has positive and

significant effect on extent of risk disclosure (Y). The independent variable X2 gearing ratio (GEARING) has a probability value of 0.0475 smaller than  $\alpha = 0.05$ , which means that individually the gearing ratio has a negative and significant effect on the extent of risk disclosure (Y). However, the gender diversity variable (X3) has a probability value of 0.9793 greater than  $\alpha = 0.05$  which indicates that gender diversity does not have significant effect on extent of risk disclosure.

Based on hypothesis testing that has been tested previously, the results show that firm size variables have positive and significant effect on the extent of risk disclosure, gearing ratio variables have a negative and significant effect on the extent of risk disclosure, but gender diversity variable does not affect the extent of risk disclosure.

Firm size has positive and significant effect on the extent of risk disclosure compliance. The results of this study are in line with research by Tauringana & Chithambo (2016); Khalil & Maghraby (2017); Abid & Shaiq (2015); Dey et al. (2018), Hernández Madrigal, Aibar Guzmán, & Aibar Guzmán (2015) which shows that firm size has significant positive effect on the extent of risk disclosure. These results are also consistent with agency theory which explains that large companies have higher information asymmetries between managers and stakeholders which lead to higher agency costs. In order to reduce agency costs, large companies must disclose more information than small companies.

Positive and significant influence between firm size and extent of risk disclosure is an important factor for investors, shareholders, and the public. Companies that are larger in size will tend to be a concern for investors to invest shares in the company. The company will give a signal to investors by disclosing more information in the company's annual report so that investors increase their investment in the company.

Gearing ratio has negative and significant effect on the extent of risk disclosure. The results of this study is not in line with research conducted by Tauringana & Chithambo (2016) and Muturi (2018) which states that the gearing ratio has a positive and significant effect on the extent of risk disclosure. The results of this study are also not in line with the signaling theory which states that companies with high debt to equity ratios tend to have high levels of risk disclosure to provide information to shareholders and long-term creditors. Creditors need risk information as a consideration whether the company is able to pay off its obligations in the future. In addition, these results are also not in accordance with stakeholder theory. Stakeholder theory also states that companies with high gearing ratios reveal more information because of pressure from investors and as a tool for stakeholders and users of financial statements in making decisions.

Banks listed on the IDX (Indonesia Stock Exchange) period 2016-2018 have a very high gearing ratio, with an average of 81.92%, while research by Tauringana & Chithambo (2016) shows the average gearing ratio of banks listed on Malta Stock Exchange (MSE) of 51.94%. This means that almost all banking sector financing in Indonesia is obtained from external loans. Therefore, the higher the gearing ratio, the lower the level of risk disclosure, because management is trying to hide the company's risk so that the company's finances look healthy so that creditors believe that company will be able to pay off its obligations. In addition, the high gearing ratio also causes a high rate of return, resulting in significant profits for creditors, investors and shareholders.

Gender diversity doesn't significantly influence the extent of risk disclosure. The results of this study are consistent with the research of Seta & Setyaningrum (2017) , but contrary to Saggar & Singh (2017) which states that gender diversity has a positive and significant effect on the level of disclosure. In addition, the results in this study also do

not support stakeholder theory, which asserts that board members with diverse backgrounds can promote opportunities for company growth.

The cause of gender diversity does not have a significant effect on the extent of risk disclosure is because the percentage of women attending board of directors and commissioners membership in a company in Indonesia is still relatively low due to the general stereotype that women are less suitable for corporate executive positions and the pressure of women as housewives. The reason the results in this study contradict the Saggar & Singh (2017) study is because the research conducted by Saggar & Singh (2017) only focuses on companies in India and according to Brinknews, India and Malaysia are countries with strong female representation on board.

**Table 8 Hypothesis Test Results**

| Hypothesis   | Coeff.    | Prob.  | Conclusion   |
|--|-----------|--------|--|
| H1 : Firm size has a significant effect on the extent of risk disclosure.        | 0.023833  | 0.0013 | H1 accepted.<br>Firm size has a positive and significant effect on the extent of risk disclosure.    |
| H2 : Gearing ratio has a significant effect on the extent of risk disclosure.    | -0.203021 | 0.0475 | H2 accepted.<br>Gearing ratio has a negative and significant effect on the extent of risk disclosure |
| H3 : Gender diversity has a significant effect on the extent of risk disclosure. | -0.000735 | 0.9793 | H3 rejected..<br>Gender diversity has no effect on the extent of risk disclosure.                    |

## 5. Conclusion

The purpose of this research is to obtain empirical evidence about the effect of firm size, gearing ratio, and gender diversity on the extent of risk disclosure in banking sector companies listed on the Indonesia Stock Exchange (IDX) in 2016 - 2018. Based on the results of hypothesis testing that has been conducted in this study, it was concluded that the firm size, gearing ratio, and gender diversity variables as a whole had a significant influence on the extent of risk disclosure.

Firm size variables have a positive and significant effect on the extent of risk disclosure, gearing ratio variables have a negative and significant effect on the extent of risk disclosure, but the gender diversity variable does not affect the extent of risk disclosure.

Firm size has a positive and significant effect on the extent of risk disclosure. Banking companies with large size are more visible and known by external parties such as investors, shareholders, and the public. With a large size company, the company must be responsible to many people to disclose more information that aims to increase customer confidence, increase the number of investors to invest and reduce costs, then the manager will disclose more information in the annual report with the aim to enhance the company's reputation. These results are consistent with agency theory which explains that large companies will have higher information asymmetries between managers and owners which will lead to higher agency costs. Large companies will try to reduce agency costs by disclosing more information than small companies.

Gearing ratio has a negative and significant effect on the extent of risk disclosure. Banks listed on the Indonesia Stock Exchange for the period of 2016-2018 have a very high gearing ratio, with an average of 81.92% which means that the financing facilities are almost entirely obtained from loans (liability). Therefore, the higher the gearing ratio, the lower the level of risk disclosure, because management tries to hide the company's risk so that the company's finances look healthy so that creditors believe that the company will try to pay off its obligations. In addition, the high gearing ratio also causes a high rate of return, resulting in significant profits for creditors, investors and shareholders.

The results showed that gender diversity did not significantly influence the extent of risk disclosure. The cause of gender diversity does not affect the extent of risk disclosure is because the percentage of the presence of women in the membership of the board of directors of companies in Indonesia is still relatively low. Research conducted in 2019 by the International Finance Corporation (IFC) which is part of the World Bank Group states that women's representation as board members in companies in Indonesia is equivalent to 14.9% [22].

The percentage of women attending board of directors and commissioners membership in a company in Indonesia is still relatively low due to the general stereotype that women are less suitable for corporate executive positions and the pressure of women as housewives. Members of the board of directors and commissioners in Indonesia are still largely dominated by men. However, most commercial directors in Indonesia are held by women because women are believed to be more innovative, have knowledge of the consumer and customer markets, and update on trends. The reason the results in this study contradict the Saggar & Singh (2017) study is because the research conducted by Saggar & Singh (2017) only focuses on companies in India and according to Brinknews, India and Malaysia are countries with strong female representation on board (female representatives as a board member of a strong company). Brinksnews is digital news from Marsh & McLennan Insights, managed by Atlantic 57, digital consultant The Atlantic [23].

Based on the research that has been done and the conclusions that have been drawn, this research is far from perfect because it has several limitations. These limitations include: 1) Banks in Indonesia rely more on loans (debt) rather than shares in corporate financing, 2) Appointment of boards of directors and commissioners in banking sector companies in Indonesia still tends to be dominated by men because of the stereotypical view that women more suitable to be in the position of a housewife, 3) The use of relatively few observational periods, where only in three years namely 2016, 2017 and 2018, 4) This study does not cover all variables that affect the extent of risk disclosure because it is only used three independent variables, namely firm size, gearing ratio, and gender diversity, and 5) Research subjects are limited to banking sector companies listed on the Indonesia Stock Exchange so that they do not reflect the majority of companies in Indonesia.

Since the limitations of this study, suggestions that can be given are: 1) It is better for banks in Indonesia to increase company financing through shares in order to reduce the risk of company default, 2) In increasing the level of risk disclosure, companies should provide equal opportunity for each woman to be appointed as a member of the board because women are seen to be more adaptable and effectively increase the risk monitoring of a company, 3) The use of the observation period is more than three years, so the range of research becomes wider, 4) Addition of other independent variables which is expected to affect the extent of risk such as the company's size, industry type, return on equity, etc. 5) Expansion of research subjects covering most companies in Indonesia such as manufacturing companies and financial sector companies.

## References

- [1] Agyei-Mensah, B. K. The Relationship between Corporate Governance Mechanisms and IFRS 7 Compliance: Evidence from An Emerging Market. *Corporate Governance*, 17(3), (2017). 446–465.
- [2] Nahar, S., Azim, M., & Jubb, C. The Determinants of Risk Disclosure by Banking Institutions: Evidence from Bangladesh. *Asian Review of Accounting*, 24(4), (2016). 426–444.
- [3] OJK. Financial Services Authority. Indonesia. Jakarta (2019).
- [4] Saggar, R., & Singh, B. Corporate Governance and Risk Reporting: Indian Evidence. *Managerial Auditing Journal*, 32(4/5), (2017). 378–405.
- [5] Tauringana, V., & Chithambo, L. Determinants of Risk Disclosure Compliance in Malawi: A Mixed-method Approach. *Journal of Accounting in Emerging Economies*, 6(2), (2016). 111–137
- [6] Serafimosa, M., Jovanovski, K., Jovevski, D., & Atanasovski, A. Risk Disclosure Practices in Annual Reports of Listed Companies : Evidence from a Developing Country. *Research Journal of Finance and Accounting*, 6(1), (2015). 184–192.
- [7] Atrill, P., McLaney, E., & Harvey, D. *Accounting: An Introduction*. Australia: Pearson. (2015).
- [8] Seta, A. T., & Setyaningrum, D. Corporate Governance and Risk Disclosure: Indonesian Evidence. *Advances in Economics, Business and Management Research (AEBMR)*, 55(6), (2017). 37–41.
- [9] Delbufalo, E. *Agency Theory and Sustainability in the Global Supply Chain*. Cham: Springer International Publishing. (2018).
- [10] Schroeder, R. G., Clark, M. W., & Cathey, J. M. *Financial Accounting Theory and Analysis* (11th ed.). New Jersey: Wiley. (2014).
- [11] Brigham, E. F., & Houston, J. F. *Fundamental of Financial Management*. USA: Cengage Learning. (2015).
- [12] Dey, R. K., Hossain, S. Z., & Rezaee, Z. Financial Risk Disclosure and Financial Attributes among Publicly Traded Manufacturing Companies: Evidence from Bangladesh. *Journal of Risk Financial Management*, 11(3), (2018). 50.
- [13] Ahmadi, A., & Elbehi, S. Does Board Composition and Ownership Structure Matter in the Risk Disclosure Level? Evidence of Tunisian Firms. *International Journal of Accounting Research*, 6(2), (2018). 1–4.
- [14] Abid, A., & Shaiq, M. A Study of Risk Disclosures in the Annual Reports of Pakistani Companies: A Content Analysis. *Research Journal of Finance and Accounting*, 6(11), (2015). 14–24.
- [15] Elshandidy, T., Neri, L., & Guo, Y. Determinants and Impacts of Risk Disclosure Quality: Evidence from China. *Journal of Applied Accounting Research*, 19(4), (2018). 518–536.
- [16] Nahar, S., Azim, M., & Jubb, C. The Determinants of Risk Disclosure by Banking Institutions: Evidence from Bangladesh. *Asian Review of Accounting*, 24(4), (2016). 426–444.
- [17] Lam, J. *Enterprise Risk Management: From Incentives to Controls* (2nd ed.). Amerika Serikat: Wiley. (2014).
- [18] Djohanputro, B. *Manajemen Risiko Korporasi Terintegrasi: Panduan Penerapan dan Pengembangan* (7th ed.). Jakarta: PPM Manajemen. (2018).
- [19] Indonesia Stock Exchange. “Laporan Keuangan dan Tahunan”. 15 Oktober 2019. Available <<https://www.idx.co.id/perusahaan-tercatat/laporan-keuangan-dan-tahunan/>>.
- [20] Sekaran, U., & Bougie, R. *Research Methods for Business: A Skill-Building Approach* (7th ed.). Amerika Serikat: Wiley. (2016).
- [21] Ghozali, I., & Ratmono, D. *Analisis Multivariat dan Ekonometrika: Teori, Konsep, dan Aplikasi dengan EViews 10* (2nd ed.). Semarang: Badan Penerbit Universitas Diponegoro. (2017).
- [22] International Finance Corporation. “IFC Study: Asian Companies with Women on Boards Show Better Financial Performances”. 24 November 2019. Available <<https://ifcextapps.ifc.org/IFCExt/Pressroom/IFCPressRoom.nsf/0/7B96BA623F751DA08525842600328E7E>>
- [23] BRINK Asia Editorial Staff. “Many APAC Boards Have No Gender Diversity – and No Perceivable Plans to Change”. 24 November 2019. Available <<https://www.brinknews.com/dismal-representation-of-women-on-apac-company-boards/>>.