The Effect Of Gender Diversity And Profitability On Financial Distress

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ABSTRACT

The purpose of this study is to determine the effect of gender diversity and profitability on financial distress in the consumer goods industry sector listed on the Indonesian Stock Exchange (IDX) over the period 2018-2021 using the Altman Z-Score model. The samples used in this study consisted of 60 research samples. The data analysis method used is logistic regression analysis. The results of this study simultaneously show that gender diversity and profitability variables have a significant impact on financial distress. In some cases, gender diversity has no impact on financial distress, but profitability has a significant impact on financial distress.

Keywords: Gender Diversity; Profitability; Financial Distress

1. Introduction

Financial difficulties are a well-known problem for businesses. Financial problems that the company does not resolve quickly lead to bankruptcy of the company. The stage before the company went bankrupt was financial distress (Ratieh W, et al. 2019). beaver and others (2011) states that financial distress is the inability of a company to pay its debts when due. A financial destress can serve as a warning before a company eventually goes bankrupt. According to Gang et al. (2014), while management makes improvement efforts to avoid worsening financial distress, investors know the company's profitability and change investment strategies to reduce losses. can do. More about investing. Therefore, financial distress should be considered for businesses, especially those experiencing financial distress.

In recent years, there has been an increasing focus on women in role management. This is probably due to the fact that women have advanced significantly as they are born risk averse and prefer safer and less risky. Firms with female board members are very helpful in neutralizing the disposition of male board members who tend to take higher risks for the company (Adharani, 2015). In addition to improving firm performance, gender diversity within firms themselves also contributes to minimizing agency problems within firms (Luckerath, 2013). Gender diversity is the percentage of women on the board. The nature of women, who tend to be meticulous in their work, make prudent decisions, and avoid risks, adds value to the company. Thus, the more female directors work on the board, the better their performance in avoiding financial distress. (2015) As a result, gender diversity has a significant negative impact on economic hardship. Gender diversity is an important source of concern in how we do business. Carter et al. (2007) and Smith et al. (2006)

reached a different conclusion in his research that gender diversity has a positive effect on firm performance and also reduces the risk of financial distress.

Company performance, as measured by profitability (profit), is the focus of attention because it reflects high-quality earnings that reflect future sustainability (Mas'ud & Srengga, 2012). This is supported by a study conducted by Thuy (2019), which states that profitability has a significant impact on financial distress. On the other hand, a study by Vo, et al. (2019) found no impact between profitability and financial distress.

Building on the diversity of research findings from previous studies, this study provides additional evidence of how the presence of female directors on boards affects the financial structure of companies. If the presence of women on the company's board of directors is effective and behavioral differences between women and men do exist, then these factors should influence financial decisions. This study also adds to the literature in several ways. First, although the characteristics of the board and its impact on possible bankruptcy and capital structure decisions have been analyzed extensively, the role of women has not been discussed in sufficient detail, especially given the current interest in increasing women's participation in management. Second, the author provides an overview of the influence of women on financial decisions by analyzing the impact of their presence on the company's board on debt levels, debt costs, debt maturity, and the possibility of financial distress.

2. Literature Review

2.1 Definition of Variable

2.1.1 Agency Theory

In agency theory, it is stated that there are two individuals who are interrelated, namely the agent and the principal. This theory describes the relationship between shareholders as principals and management as agents. According to Jansen and Meckling (1976), agency relationship is a contract or agreement between manager as agent and investor as principal which sometimes causes information asymmetry from manager to investor, causing agency costs. Managers as agents have the responsibility to manage the owner`s capital and run the company, including making decisions for the company and being responsible for the managed capital by reporting every action that has been and will be taken to the principal on a regular and transparent basis. Meanwhile, investors as principals have the obligation to pay attention and give rewards, bonuses or rewards to managers, and have the right to supervise and control, request accountability reports, replace management with more capable people if management is judged to be unable to carry out their duties, and receive good returns worth the capital.

2.1.2 *Financial Distres*

Financial distress is defined as the stage of decline in the company`s financial condition that occurred before bankruptcy or liquidation (Platt and Platt, 2006). Financial distress occurs due to a series of errors, inappropriate decision making and related weaknesses that can contribute directly or indirectly to management and the lack of efforts to monitor the company's financial

condition so that its use is not in accordance with what is needed (Brigham and Daves, 2007). 2003). Lizal (2002) classifies the causes of financial distress into 3 groups, the first is the neoclassical model, this condition occurs if the allocation of resources is not right because it has the wrong mix of assets. Financial distress estimation is carried out using balance sheet and income statement data, for example profit/asset data (to measure profitability) and liabilities/assets. The second is the financial model, this condition occurs when there is a right mix of assets but the wrong financial structure with liquidity constraints. Financial distress estimation is done using financial indicators or performance indicators. The third is the corporate governance model, this condition occurs when the right mix of assets and financial structure is managed poorly. Estimates are made using proprietary information related to the corporate governance structure and the company's goodwill.

The financial distress variable is measured by the Altman Z-Score model. A higher Z-score indicates a healthier company financially. Altman's (1968) model formula is:

$$Z = 1{,}2X1 + 1{,}4X2 + 3{,}3X3 + 0{,}6\ X4 + 1{,}0X5$$

Description:
X1 = *Working Capital / Total Assets*
X2 = *Retained Earnings / Total Assets*
X3 = *Earning before Interest and Taxes / Total Assets*
X4 = *Market Value of Equity / Book Value of Total Liabilities*
X5 = *Sales / Total Assets*
Z = *Overall Index or Score*

The cut-off values are:
a. Z < 1,81 the company is classified as bankrupt.
b. 1,81 < Z-Score < 2,67 companies fall into the grey area. (*zone of ignorance*)
c. Z > 2,67 the company is not bankrupt.

2.1.3 *Gender Diversity*

Gender in general can be defined as a status constructed through social, cultural and psychological means based on individual characteristics (Fathonah, 2018). Gender diversity within an organization brings new perceptions to decision-making processes and fosters management effectiveness, creativity, and innovation to become a competitive advantage. Gender diversity on boards certainly creates a range of perspectives that enrich corporate decision-making. Differences in how men and women think and behave affect how they perceive risk. Chen et al., (2014) argue that men are relatively more aggressive and risk-taking than women. Shao and Liu (2014) found that women are more risk averse than men, firms with female managers are more likely to merge or acquire than firms with male managers, and are more likely to issue debt. It is described as high quality. The presence of female directors can be calculated using the following formula:

$$Gender\ Diversity = \frac{Number\ of\ Female\ Director}{Total\ Number\ of\ Directors}$$

2.1.4 Financial Ratio

According to Hery (2016), a financial ratio is a ratio calculation that uses financial statements as a measurement tool to assess a company's financial condition and performance. A ratio is calculated by comparing one balance sheet item to another that has a relevant and material relationship. Financial indicators are very important for analyzing a company's financial situation as they can be used to assess the company's financial condition and performance. Financial ratios are often used in analyses, then into bankruptcy prediction models. Financial ratios are very useful indicators that can be calculated from financial statements and can represent past, present and future conditions (Khaliq et.al., 2014).

2.1.5.1 Profitability Ratio

Profitability ratios are used to measure how effective the company`s management is to generate profits. One of the important financial indicators that has a significant effect on the company's financial difficulties is the profitability ratio (Inam, et al. 2019). According to Fahmi (2017:135) the better the profitability ratio, the better it describes the ability of the company to earn high profits. The purpose of using profitability for the company as well as for parties outside the company is to measure or calculate the profit earned by the company in a certain period, to assess the company's profit position in the previous year with the current year, to assess the progress of profits from time to time, to measure the productivity of all funds. companies that are used both from their own capital and loan capital and to measure the productivity of all company funds used (Kasmir, 2008). In this study, the profitability ratio used is the net profit margin ratio (NPM ratio). The NPM ratio describes the company's ability to generate net income, namely net income after tax (EAT). The NPM ratio measures the extent to which the difference between net profit and sales is generated. The higher the value of this ratio, the better the condition of the company. The net profit margin ratio formula is:

$$\textit{Net Profit Margin Ratio} = \frac{Earning\ After\ Tax\ (EAT)}{Sales} \text{ x } 100\%$$

According to Sirait (2017:141), this ratio will provide guidance for management as the best measuring tool for determining company profitability, helping to measure overall operating efficiency in the company`s sustainability, and assisting in making decisions to buy or make.

2.2 Research Hypothesis

2.3.1 Effect of *Gender Diversity* on *Financial Distress*

Gender diversity is the proportion of women on the executive board. The nature of women who are detailed in their work, careful in deciding policies and tend to avoid risks, can be an added value for the company. This assessment will create a good image that can encourage external parties to invest so as to improve company performance. So the more female directors in the executive board will improve performance so as to avoid financial distress which is the result of previous research by Kristanti, et al. (2015) with the results that gender diversity has a positive effect on financial distress.

H1: Gender diversity has a positive effect on financial distress

2.3.2 Effect of Profitability on Financial Distress

With the effectiveness of the use of company assets, it will reduce costs incurred by the company, resulting in cost savings and the company has sufficient funds to run its business in the next period, so that the possibility of financial distress will be smaller. If the utilization of the company`s assets is managed properly, there will be an increase in income which results in the magnitude of profitability which has an impact on decreasing financial distress conditions (Andre, 2013). The above statement is supported by research conducted by Kamaluddin et.al. (2019), Thuy (2019) and Alifiah and Tahir (2018) which state that profitability has a positive effect on financial distress.
H2: Profitability has a positive effect on financial distress

3. Research Methodology

3.1 Population and Sampel

The population used in this study is the consumer goods industry sector companies listed on the Indonesia Stock Exchange for the 2018-2021 period. The sample used is 15 companies using purposive sampling method, which includes the sample criteria in this study, namely companies that publish complete annual reports during the study period and companies that experience a decline in profits for 2 consecutive years during the study period.

3.2 Data Analysis

The data analysis techniques used in this study are hypothesis testing using descriptive statistical analysis to account for variables in this study and logistic regression analysis using the SPSS 23.0 software application. The regression model for this study is:

$$FD = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Description:
FD :Financial Distress
β_0 :Constant
β :Regression Coefficient
X1 :Gender Diversity
X2 :Profitability
ε :Error Coefficient

4. Result

4.1 Data Analysis

4.1.1 Descriptive Statistics Analysis

Tabel 1. Descriptive Statistics of Variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Gender Diversity	60	.00	.44	.2043	.10060
Profitabilitas	60	.01	1.90	.2513	.36973
Financial Distress	60	0	1	.32	.469
Valid N (listwise)	60				

Table 1 shows the results of descriptive statistical analysis tests for all variables used in this study. This table shows the number of data samples (n) for this study. Maximum of 70 samples. We can see that the mean and standard deviation for the gender variable are 0,2043 and 0,1006. The mean and standard deviation of the profitability variable are 0,2513 and 0,3697.

4.1.2 Logistic Regression Analysis

4.1.2.1 Evaluate the feasibility of a regression model (Hosmer dan Lemeshow Test)

Tabel 2. Regression Model Feasibility Test Result

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	1.412	8	.994

From Table 2. From this study, we know that the Hosmer and Lemeshow test table significance value has a chi-square value of 1,412 with a significance of 0,994. From the table above, significance gives values of 0,994 > 0,05. This means that the data match observation.

4.1.2.2 Overall Model Fit

Tabel 3. Model Fit Test Result

Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	74.936	-.733
	2	74.920	-.769
	3	74.920	-.769

a. Constant is included in the model.

b. Initial -2 Log Likelihood: 74,920

c. Estimation terminated at iteration number 3 because parameter estimates changed by less than ,001.

Tabel 4. Model Fit Test Result

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	60.925[a]	.208	.292

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

From the table above, it can be seen that the value of -2 Log Likelihood has decreased from step 0, which is 74,920 to step 1, which is 60,925, meaning that the logistic regression model formed is better. It is also seen that the Negelkerke R value is 0,292, which means that the magnitude of the influence of the independent variables (gender diversity and profitability) on the dependent variable (financial distress) is 2,9%.

4.1.2.3 Coefficient of Determination

Tabel 5. Coefficient of Determination Test Result

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	60.925[a]	.208	.292

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than ,001.

Table 6 shows the Nagelkerke R Square value of 0,292. This means that the combination of gender diversity and profitability factors in the sample in this study is able to explain the financial distress variable of 29,2%, while 70,8% is explained by other factors not included in the research model.

4.1.2.4 Simultanoeus Test

Tabel 6. Simultanoeus Test Result

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	13.995	2	.001
	Block	13.995	2	.001
	Model	13.995	2	.001

Table 6 shows that the chi-square value = 13,995 with a degree of freedom = 2 and a significance level of 0,001 (0,001 < 0,05), then $H0_1$ must be rejected or in other words Ha_1 can be accepted. This means that the variables of gender diversity and profitability simultaneously have a significant effect on financial distress.

4.1.2.5 Partial Test

Tabel 7. Partial Test Result

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	GD_X1	5.434	3.317	2.683	1	.101	229.034	.344	152559.231
	NPM_X2	8.405	4.052	4.302	1	.038	.000	.000	.629
	Constant	-.814	.764	1.137	1	.286	.443		

a. Variable(s) entered on step 1: GD_X1, NPM_X2.

From the table above, the regression equation can be constructed as follows:
$FD = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$
FD = -0,814 + 5,434GD + 0,8405NPM

Below is an analysis of the results of statistical calculations and logistic regression equations:

a. Constant (α) = -0,814 with level sign. 0,286 > α 0,05. This means that if the gender diversity and profitability variables are zero or constant, the financial distress variable is not significant and cannot be interpreted.
b. Gender diversity regression coefficient (β1) = 5,434 and sig 0,101 > α 0,05, which means that the variable gender diversity does not significantly affect financial distress.
c. Profitability Regression Coefficient (β2) = 8,405 and sig 0,038 < α 0,05 This means that the impact on the income variable is significant in financial distress.

5. Discussion

5.1 The Effect of Gender Diversity on Financial distress

The regression coefficient for gender diversity is 5,434 with a significance level of 0,101 greater than α = 0,05 implying that gender diversity does not affect the financial difficulties of IDX-listed consumer goods companies. The results of this study are not consistent with the research hypothesis that gender diversity has a positive impact on financial distress. In other words, this study does not support the results of Kristanti et al. (2016) show that gender diversity has a significant impact on financial distress.

5.2 The Effect of Profitability on Financial Distress

The regression coefficient for profitability is 8,405 and the significance level is 0,038 less than α = 0,05. This means that profitability will have a positive impact on his IDX-listed consumer goods company's financial distress. The results of this study are consistent with the research hypothesis that profitability has a large impact on financial distress. In short, this study supports the findings of Thuy (2019) showing that profitability influences financial distress.

6. Conclusion

Based on the results of the analysis and discussion, it is concluded that gender diversity has no effect on financial distress in consumer goods industrial sector companies listed on the IDX. This means that the higher the gender diversity of the directors in a company, the lower the probability that the company will experience financial distress. In addition, the results of the analysis also prove that profitability has a significant effect on financial distress in the consumer goods industry sector companies listed on the IDX. If the utilization of the company`s assets is managed properly, there will be an increase in income which results in the magnitude of profitability which has an impact on decreasing financial distress conditions.

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