

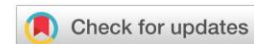
# The Influence of Gender Diversity, Intellectual Capital, Inventory Turnover and Profitability on Financial Distress

Daniel Rahandri<sup>1</sup>, Dirvi Surya Abbas<sup>2\*</sup>, Crhista Magdalena<sup>3</sup>, Dhesty Priadini<sup>4</sup>, Diva Silvia Anggraeni<sup>5</sup>

<sup>1,2,3,4,5</sup>) Faculty of Economic and Business, Universitas Muhammadiyah Tangerang, Indonesia

\*email: [abbas.dirvi@gmail.com](mailto:abbas.dirvi@gmail.com)

DOI: <https://doi.org/10.30651/blc.v22i2.24596>



## ABSTRACT

### Keywords:

*Financial distress;  
gender diversity;  
intellectual capital;  
inventory  
turnover;profitability*

### Article Info:

*Submitted:*

20/11/2024

*Revised:*

24/05/2025

*Published:*

05/07/2025

Examining how gender diversity, intellectual capital, inventory turnover, and profitability affect financial distress in mining companies listed on the Indonesia Stock Exchange (IDX) was the goal of this study. Data from 2017 to 2021, a span of five years, were examined in the study. All companies in the mining sector that were listed on the IDX during this period made up the research population. Purposive sampling, the sampling technique used, produced a sample of 13 businesses that satisfied the requirements. The official website of the Indonesia Stock Exchange provided secondary data for the study. Panel data was analyzed using logistic regression. The results show that inventory turnover, intellectual capital, and gender diversity have no bearing on financial distress. However, there was a strong inverse correlation between financial distress and profitability. Additionally, when considered collectively, gender diversity, intellectual capital, inventory turnover, and profitability were found to have a joint impact on financial distress.

## INTRODUCTION

The increasingly rapid development of the economy in the industrial world cannot be separated from the changes that occur in this era. Competition between companies is becoming increasingly fierce because the changes that occur do not always have a good impact on the company's condition. For example, what has happened in the last few years, where Covid-19 has become a phenomenon that has brought big changes and challenges that must be faced by the industrial world. Many companies have been forced to lay off workers (PHK) due to their inability to pay salaries due to declining company income levels due to reduced purchasing power. This research chose the mining sector because this sector is one of the main sectors affected by financial problems due to the pandemic. its negative growth reached a rate of -4.47% in 2020. Financial distress refers to a state of deteriorating financial health that precedes

bankruptcy. The beginning of the financial distress stage is when the company experiences continuous negative profits resulting in unavailability funds to pay off short-term obligations and obligations that have matured to creditors (Rusli & Bernadetta, 2020).

Another phenomenon is that many mining companies enter special notation on the official IDX website ([www.idx.co.id](http://www.idx.co.id), 20 April 2022) because their latest financial reports show a negative equity position, such as PT Golden Eagle Energy Tbk, PT Capitalinc Investment Tbk, PT Ratu Prabu Energy Tbk, PT Borneo Olah Sarana Sukses Tbk, and PT Eksploitasi Energi Indonesia Tbk (data as of 20 April 2022). Many projects were stalled which ultimately reduced production targets and resulted in many mining companies experiencing problems a decrease in income, and quite a few of them even experienced losses.



Source: OJK (2018) reprocessed

**Figure 1.** Mining Sector Company EPS Data

Women's participation in business is thought to improve overall performance, lower the risk of financial distress, and promote a balanced decision-making process (Salim & Dillak, 2021). This is consistent with research by (Anggriani & Rahim, 2021), who found that financial distress is influenced by gender diversity. However, a different study by Salim & Dillak (2021) also produced conflicting findings, suggesting that gender diversity has no discernible effect on financial distress.

Intellectual capital, an intangible asset derived from human resources that is dynamic and adaptable to different conditions and situations, is the second variable that the research looks at (Maest & Muslih, 2018). (Prasetya & Oktavianna, 2021) assert that financial distress is significantly impacted by intellectual capital. Yet, (Andriani & Sulistyowati, 2021) reported opposing results, concluding that financial distress is unaffected by intellectual capital.

Profitability is the last variable taken into account in this study. A company's ability to make money from its operations is evaluated using profitability ratios (Suryani, 2022). According to (Affiah & Muslih, 2018), financial distress is greatly influenced by profitability (Suryani, 2020) study, however, produced contradictory findings and came to the conclusion that financial distress is unaffected by profitability.

Purpose and urgency the inconsistency of previous research results and the large number of companies affected by financial problems prompted researchers to research financial distress. The research title chosen by the researcher is "The Influence of Gender Diversity, Intellectual Capital, Inventory Turnover and Profitability on Financial Distress in Mining Sector Companies Listed on the Indonesian Stock Exchange for the 2017-2021 Period".

## LITERATURE REVIEW

### Financial distress

As in previous studies by Fadila et al., (2021), financial distress is assessed in this study using a dummy variable derived from the company's Earnings Per Share (EPS) value. The following formula is used to determine a company's EPS value:

$$EPS = \frac{\text{Net Income}}{\text{Outstanding Shares}}$$

Source: (Sukamulja, 2019)

With the following conditions:

1. If a company's EPS (Earnings Per Share) value is negative for two years, it is classified as financial distress and is assigned a score of 1.
2. Conversely, if the EPS value is negative for less than two consecutive years, the company is considered not to be in financial distress and is assigned a score of 0

### Gender diversity

Gender diversity is assessed using the gender diversity ratio as in research conducted by (Salim & Dillak, 2021). The following formula for the gender diversity variable is used:

$$GD = \frac{\text{Women on the board of Directors}}{\text{Total Boards of Directors}}$$

Source: (Kristanti, 2019)

### Intellectual capital

Intellectual capital is evaluated using the Value Added Intellectual Capital (VAIC) method, a widely recognized proxy for measuring intellectual capital, as

demonstrated in the study by (Mondayri & Tresnajaya, 2022). The following formula is used to determine the VAIC in this study:

$$VAIC = \frac{VA}{CE} + \frac{VA}{HC} + \frac{SC}{VA}$$

Source: (Ulum, 2017)

Information:

VA = Output – input (sales and other income – operating expenses)

CE = Capital employed (total equity)

HC = Employee expenses (salary costs and benefits)

SC = Structural capital (VA – HC)

### **Inventory turnover**

The inventory turnover in this study is assessed using the Inventory Turnover (ITO) formula. The following formula for the inventory turnover variable is used:

$$ITO = \frac{\text{Cost of Goods Sold (COGS)}}{\text{Average Inventory}}$$

Source: (Kasmir, 2019)

### **Profitability**

Return on Assets (ROA) is used in this study to evaluate profitability. The following formula was used to determine ROA in this study:

$$ROA = \frac{\text{Net Income After Tax}}{\text{Total Assets}}$$

Source: (Kasmir, 2018)

## **METHOD**

This research falls into the category of quantitative research, which is concerned with using statistical and measurable methods to analyze numerical data or quantitative information. Investigating how independent factors such as gender diversity, intellectual capital, inventory turnover, and profitability affect the dependent variable of financial distress in mining companies listed on the Indonesia Stock Exchange (IDX) is the main goal of this study.

46 mining companies listed on the IDX between 2017 and 2021 are the focus of the study. According to certain criteria, a purposive sampling technique was used: mining companies that maintained a consistent listing on the IDX between 2017 and 2021; companies that had complete financial reports for every year during this time period that were made public; reports that were denominated in Rupiah; and complete data for the variables under study. Thirteen companies were chosen based on these criteria, producing sixty-five data samples for analysis.

The analysis is quantitative, where the data used is expressed in numbers which are calculated using a statistical method assisted by a statistical data processing program. In this research, the data processing program used is Eviews 11.

## RESULT AND DISCUSSION

### Result

The following are the calculation results of the research variables, namely financial distress, gender diversity, intellectual capital, inventory turnover, and profitability. From 13 company samples used for research over a period of 5 years, namely the period 2017 - 2021 according to the research method used. The following are the results of the data calculations that will be used in this study:

#### 1. Financial Distress

Financial distress is proxied by a dummy variable of the company's EPS value. The following are the results of the EPS calculations of the companies used in the research:

**Table 2.** Calculation Results Earning Per Share (EPS)

No	Code	<i>Earning Per Share (EPS)</i>					
		2016	2017	2018	2019	2020	2021
1	ANTM	3.00	5.68	36.39	8.07	47.83	77.47
2	CITA	-79.00	14.09	196.20	195.13	164.11	143.51
3	CNKO	-63.00	-177.66	-111.29	10.46	-23.96	-6.75
4	CTTH	16.97	1.03	1.13	-5.56	-9.03	-4.77
5	DKFT	-14.24	-7.91	-16.59	-17.90	-48.93	-60.57
6	ELSA	42.60	34.36	37.86	48.84	34.13	14.91
7	FIRE	17.32	-0.81	-2.01	7.14	9.36	-31.11
8	PKPK	-25.00	-8.70	-3.19	-34.57	0.02	-0.73
9	PTBA	952.00	394.70	444.52	350.71	209.01	697.61
10	RUIS	33.86	27.17	35.14	42.97	35.77	23.81
11	SMMT	-5.22	10.18	21.48	1.58	-5.94	63.48
12	TINS	34.00	136.66	35.52	-164.15	-91.46	349.86
13	ZINC	-60.58	8.96	21.81	35.41	5.77	15.29

Source: Data Processed (2022)

Next, the EPS value is compared with the previous year's EPS value, if the company's EPS value is negative for two consecutive years then it is given a value of 1 (categorized as financial distress), while if the EPS is negative for less than 2 consecutive years then the company is given a value of 0, or it can be said that it is not experiencing financial distress. The calculation results are as follows:

**Table 3.** Calculation Results Financial Distress

No	Emiten Code	Financial Distress				
		2017	2018	2019	2020	2021
1	ANTM	0.00	0.00	0.00	0.00	0.00
2	CITA	0.00	0.00	0.00	0.00	0.00
3	CNKO	1.00	1.00	0.00	0.00	1.00
4	CTTH	0.00	0.00	0.00	1.00	1.00
5	DKFT	1.00	1.00	1.00	1.00	1.00
6	ELSA	0.00	0.00	0.00	0.00	0.00
7	FIRE	0.00	1.00	0.00	0.00	0.00
8	PKPK	1.00	1.00	1.00	0.00	0.00
9	PTBA	0.00	0.00	0.00	0.00	0.00
10	RUIS	0.00	0.00	0.00	0.00	0.00
11	SMMT	0.00	0.00	0.00	0.00	0.00
12	TINS	0.00	0.00	0.00	1.00	0.00
13	ZINC	0.00	0.00	0.00	0.00	0.00

Source: Data Processed (2022)

## 2. Gender Diversity

Gender diversity is proxied by the ratio of the percentage of female board directors in the company. The calculation is by dividing the number of female board directors by the total number of boards of directors. The results of the gender diversity calculation are as follows:

**Table 4.** Calculation Results Gender Diversity

No	Emiten Code	<i>Gender Diversity Ratio</i>				
		2017	2018	2019	2020	2021
1	ANTM	0.00	0.00	0.00	0.00	0.20
2	CITA	0.00	0.00	0.00	0.00	0.00
3	CNKO	0.20	0.20	0.20	0.20	0.33
4	CTTH	0.50	0.50	0.50	0.50	0.50
5	DKFT	0.33	0.33	0.33	0.33	0.33
6	ELSA	0.00	0.00	0.00	0.25	0.40
7	FIRE	0.33	0.33	0.33	0.33	0.33
8	PKPK	0.00	0.00	0.00	0.00	0.00
9	PTBA	0.00	0.00	0.00	0.00	0.20
10	RUIS	0.33	0.33	0.33	0.25	0.25
11	SMMT	0.33	0.00	0.00	0.00	0.00
12	TINS	0.00	0.00	0.00	0.00	0.20
13	ZINC	0.00	0.00	0.25	0.25	0.25

### 3. Intellectual Capital

Intellectual capital is proxied by the VAIC (Value Added Intellectual Capital) ratio developed by Pulic. The calculation is by adding three main components, namely Value Added Capital Employed (VACA), Value Added Human Capital (VAHU) and Structural Capital Value Added (STVA). The following are the results of the calculation of the intellectual capital variable:

**Table 5.** Calculation Results Intellectual Capital

No	Emiten Code	Rasio <i>Intellectual Capital</i>				
		2017	2018	2019	2020	2021
1	ANTM	1.21	2.44	1.09	1.92	2.60
2	CITA	3.87	8.55	4.81	4.88	4.69
3	CNKO	-9.10	0.77	1.18	2.78	0.13
4	CTTH	1.41	1.38	-0.51	7.69	-1.19
5	DKFT	-8.48	-3.53	1.64	0.49	-0.77
6	ELSA	1.84	1.87	1.96	1.77	1.54
7	FIRE	1.19	1.05	1.80	1.58	-5.33
8	PKPK	1.00	6.02	-11.87	1.12	0.61
9	PTBA	3.24	5.40	3.60	2.95	3.96
10	RUIS	2.98	3.08	3.72	3.51	3.17
11	SMMT	3.35	6.19	0.75	-1.87	10.43
12	TINS	1.99	1.65	-0.30	1.19	2.77
13	ZINC	3.32	7.49	13.44	2.88	4.89

Source: Data Processed (2022)

### 4. Inventory Turnover

Inventory turnover is proxied by the inventory turnover ratio. The calculation is by dividing the company's cost of goods sold by the average inventory it has. The average inventory value is obtained by adding the inventory of the current sample year with the previous year, then divided by 2. The following are the results of the calculation of the inventory turnover variable:

**Table 6.** Calculation Results Inventory Turnover

No	Emiten Code	Rasio <i>Inventory Turnover</i>				
		2017	2018	2019	2020	2021
1	ANTM	8.32	13.25	14.79	10.36	11.19
2	CITA	0.86	2.53	4.89	3.81	4.00
3	CNKO	4.46	37.78	22.86	31.51	37.84
4	CTTH	0.56	0.65	0.38	0.27	0.22
5	DKFT	0.08	1.56	0.80	2.76	4.89
6	ELSA	38.76	45.32	39.51	28.70	25.13
7	FIRE	15.56	41.71	23.46	18.77	36.62
8	PKPK	0.95	0.61	2.06	154.58	0.00
9	PTBA	9.71	9.32	9.66	2.70	3.41
10	RUIS	138.71	171.27	107.61	78.07	84.72

11	SMMT	15.07	33.77	44.08	20.47	26.33
12	TINS	3.19	2.77	3.38	3.00	3.73
13	ZINC	3.28	4.93	5.52	6.46	4.60

Source: Data Processed (2022)

## 5. Profitability

Profitability is proxied by the return on assets ratio. This ratio is calculated by dividing net profit after tax by the total assets owned by the company. The results of the calculation of the profitability variable are as follows:

**Table 7.** Calculation Results Profitability

No	Emiten Code	Rasio Profitabilitas				
		2017	2018	2019	2020	2021
1	ANTM	0.00	0.03	0.01	0.04	0.06
2	CITA	0.02	0.20	0.17	0.16	0.13
3	CNKO	-0.53	-0.46	0.07	-0.24	-0.06
4	CTTH	0.01	0.01	-0.03	-0.06	-0.03
5	DKFT	-0.02	-0.04	-0.04	-0.11	-0.15
6	ELSA	0.05	0.05	0.05	0.03	0.02
7	FIRE	0.00	-0.01	0.02	0.03	-0.09
8	PKPK	-0.08	-0.03	-0.58	0.00	-0.01
9	PTBA	0.21	0.21	0.15	0.10	0.22
10	RUIS	0.02	0.03	0.03	0.02	0.01
11	SMMT	0.06	0.09	0.01	-0.03	0.24
12	TINS	0.04	0.01	-0.03	-0.02	0.09
13	ZINC	0.06	0.08	0.13	0.02	0.04

Source: Data Processed (2022)

The purpose of the descriptive statistical analysis employed in this study is to provide an overview of the data for each research variable. This summary is shown using the mean, standard deviation, minimum, and maximum data. Financial distress (Y) is the dependent variable in this study, while gender diversity (X1), intellectual capital (X2), inventory turnover (X3), and profitability (X4) are the independent variables. Below is a list of the results of descriptive statistical analyzes for each of these variables:

**Table 8.** Descriptive Statistical Analysis Results

Variabel	Min.	Max.	Mean	Std. Deviation
<i>Gender Diversity</i>	0,0000	0,5000	0,1661	0,1740
<i>Intellectual Capital</i>	-11,8743	13,4433	1,9981	3,9216
<i>Inventory Turnover</i>	0,0000	171,2661	22,8942	36,2583
<i>Profitabilitas</i>	-0,5790	0,2377	0,0055	0,1461
<i>Financial Distress</i>	0,0000	1,0000	0,2308	0,4246
<i>Observations</i>	65	65	65	65

Source: Data Processed (2022)



The following is a list of the results of the descriptive statistical analysis for each of these variables: As shown in the accompanying table, the study observed 65 data observations. The gender diversity variable, represented by the gender diversity ratio proxy, has values ranging from 0.0000 to 0.5000, with a mean of 0.1661 and a standard deviation of 0.1740. The intellectual capital variable, measured by the VAIC proxy, has a standard deviation of 3.9216 and a mean of 1.9981. Its values are between -11.8743 and 13.4433. The inventory turnover ratio, which is a measure of the inventory turnover variable, ranges from 0.0000 to 171.2661 with a mean of 22.8942 and a standard deviation of 36.2583.

The next test is the likelihood function, which assesses the overall validity of the regression model used in this study. The test results are determined by the Likelihood Ratio (LR) Statistics's probability value. If the probability value is less than 0.05, the model is statistically valid for regression analysis; if the probability value is greater than 0.05, the model is not suitable for regression analysis. The table below shows the results of the test.

**Table 9.** Likelihood Function Test Results

<i>LR Statistic</i>	33,6143
<i>Prob (LR Statistic)</i>	0,0000

Source: Data Processed (2022)

The results displayed in the above table indicate that the statistical LR probability value is 0.0000. Given that this figure is below 0.05, it can be concluded that the regression model is appropriate for use.

The Cox and Snell R-squared measures how well the independent variables account for the variance in the dependent variable. The McFadden R-squared, which has a range of 0 to 1, offers a more understandable measure of how well the model fits the data. A better model fit is indicated by a value closer to 1. The results are summarized in the table below.

**Table 10.** McFadden R-Squared Test Results

<i>McFadden R-Squared</i>
0,4787

Source: Data Processed (2022)

The McFadden R-Squared value is 0.4787. In conclusion, the independent variables in the study, namely gender diversity, intellectual capital, inventory turnover and profitability contribute 47.87% in explaining financial distress (dependent variable), which means that the regression model used in the study is fairly good and suitable for use.

The chi-square probability value of the HL statistic is used to evaluate the Hosmer and Lomeshow's model fit test; if the value is  $> 0.05$ , the model can be

accepted since it is thought to be able to predict the observed value. On the other hand, if the value is  $< 0.05$ , the model may be deemed unsuitable or poorly fitted. This discrepancy between the model's predictions and actual observations is evident from the Hosmer and Lemeshow goodness-of-fit test results, which are displayed in the table below.

**Table 11.** Results of Hosmer and Lemeshow's Goodness of Fit Test

<i>H-L statistic</i>	<i>Prob. Chi-Sq</i>
3,6677	0,8858

Source: Data Processed (2022)

According to the Hosmer-Lemeshow goodness-of-fit test, the regression model fits the data well, with a chi-square probability value of 0.8858 ( $p > 0.05$ ). This suggests that the model accurately predicts the observed classifications.

The McFadden R-squared, a measure of the coefficient of determination, evaluates how well the independent variable or variables account for the variability in the dependent variable. As the value increases and gets closer to 1, the model's explanatory power becomes more significant. The results of the test are summarized in the table below:

**Table 12.** Results of Determination Coefficient Test

<i>McFadden R-Squared</i>
0,4787

Source: Data Processed (2022)

For McFadden pseudo-R-squared's R-squared value of 0,4787 shows that the four independent variables of profitability, inventory turnover, intellectual capital, and gender diversity account for 47,87% of the variation in financial hardship, with other factors accounting for the remaining 52,13 %.

The F-test evaluates the independent factors' combined impact on the dependent variable. A p-value less than 0.05 indicates a statistically significant model, which suggests that all of the factors work together to explain the variation in the dependent variable. On the other hand, a p-value greater than 0.05 indicates that the model is generally insignificant. The F-test results are shown in the table below.

**Table 13.** F Test Results

<i>LR Statistic</i>	
33,6143	
<i>Prob (LR Statistic)</i>	
0,0000	

Source: Data Processed (2022)

The F-test results, which exceed the critical F-value of 2.523 with a p-value of 0.0000 and an LR statistic of 33.6143, demonstrate the statistical significance of the combined influence of gender diversity, intellectual capital, inventory turnover, and profitability in predicting financial distress. The model's suitability for the analysis is

confirmed by this outcome. The t-test is used to assess the distinct contribution of each independent variable to financial distress. When there is a significant influence and the p-value (significance level) is less than or equal to 0.05, the alternative hypothesis ( $H_a$ ) is accepted. However, when the p-value is greater than 0.05, which indicates that there is no significant effect, the null hypothesis ( $H_o$ ) is accepted. Details on the t-test results are given in the table below.

**Table 14.** z Test Results

Dependent Variable: FD				
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps) Date: 08/13/22 Time: 12:19				
Sample: 2017 2021				
Included observations: 65				
Convergence achieved after 7 iterations				
Coefficient covariance computed using observed Hessian				
Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-1.104367	0.755303	-1.462150	0.1437
GD	2.153284	2.180593	0.987476	0.3234
IC	-0.078863	0.132597	-0.594754	0.5520
ITO	-0.057482	0.034795	-1.652036	0.0985
ROA	-19.90139	7.847682	-2.535958	0.0112

Source: Output EViews 12 (2022)

The gender diversity and intellectual capital variables, with respective probability values of 0.3234 and 0.5520 and z-statistics of 0.9875 and 0.5948, exhibit no significant influence on financial distress. Similarly, the inventory turnover variable, characterized by a probability value of 0.0985 and a z-statistic of 1.6520, fails to demonstrate a significant impact. In contrast, the profitability variable, with a probability value of 0.0112 and a z-statistic of 2.5360, significantly affects financial distress.

The results of the logistic regression study examining the effects of inventory turnover (X3), profitability (X4), gender diversity (X1), and intellectual capital (X2) as independent factors on financial hardship (Y), the dependent variable, are shown in the table 14.

Given the outcomes of the preceding logistic regression analysis, the following equation encapsulates the model derived from investigating the impact of gender diversity, intellectual capital, inventory turnover, and profitability on financial distress:

$$\text{Ln} \frac{FD}{1-FD} = -1,104 + 2,153 \text{ GD} - 0,079 \text{ IC} - 0,058 \text{ ITO} - 19,901 \text{ ROA} + \varepsilon$$

From the equation above, several points can be explained as follows:

- a. The constant term, -1.104, represents the baseline level of financial distress when all independent variables gender diversity, intellectual capital, inventory turnover, and profitability are held at zero. In essence, it quantifies the expected level of financial distress in the absence of these factors.
- b. The positive regression coefficient of 2.153 for gender diversity indicates that a one-unit increase in gender diversity is linked to a 2.153-unit increase in financial distress. This implies that there may be a correlation between increased gender diversity and more financial difficulties.
- c. The negative regression coefficient of -0.079 for intellectual capital indicates that, *ceteris paribus*, a one unit increase in intellectual capital corresponds to a 0.079 unit reduction in financial distress. This demonstrates that higher levels of intellectual capital can be associated with lower levels of financial difficulty.
- d. The negative regression coefficient of -0.058 for inventory turnover indicates that, assuming all other variables stay constant, a one-unit increase in inventory turnover is associated with a 0.058-unit decrease in financial distress. This suggests that a higher inventory turnover rate may be associated with lower levels of financial distress.
- e. The negative regression coefficient of -19.901 for profitability indicates that a one-unit increase in profitability is associated with a 19.901-unit decrease in financial distress, all else being equal. This implies that lower levels of financial difficulty might be linked to higher levels of profitability.

The following explains each research hypothesis based on the statistical analysis of how profitability, inventory turnover, gender diversity, and intellectual capital affect financial distress:

**Table 15.** Summary of Panel Data Logistic Regression Analysis Results

Hipotesis	Statistical Value	Sign	Ket.
H1: Gender Diversity (X1)	0,9875	0,3234	Rejected
H2: Intellectual Capital (X2)	-0,5948	0,5520	Rejected
H3: Inventory Turnover (X3)	-1,6520	0,0985	Rejected
H4: Profitabilitas (X4)	-2,5360	0,0112	Accepted
H5: Simultan	33,6143	0,0000	Accepted

Source: Data Processed (2022)

## Discussion

### The effect of gender diversity on financial distress

With a probability value of 0.3234 and a z-statistic of 0.9875, the gender diversity variable (X1) is statistically significant above the significance level of 0.05. Since the z-statistic is below the critical value of 1.960, the null hypothesis ( $H_0$ ) is retained and the alternative hypothesis ( $H_a$ ) is rejected. This finding implies that gender diversity had no statistically significant effect on financial distress within the parameters

of this study. Therefore, there appears to be no relationship between a company's management's gender distribution and its likelihood of facing financial difficulties.

This result can be attributed to the dominance of male directors among the sample companies, with males accounting for 84.56% of the total sample. The low representation of women in leadership roles is highlighted by the fact that only 15.44% of the sample's companies had female directors. Due to the underrepresentation of female executives on the boards of the companies in the sample, there is not enough information available to evaluate how gender diversity affects financial distress. Therefore, statistical testing indicates that gender diversity has no significant impact on financial distress and that gender diversity does not significantly influence financial distress. Therefore, when considering financial distress, companies should prioritize the skills and qualifications of their leadership rather than gender diversity. The findings of this study contrast with those of Anggriani & Rahim (2021) and Samudra (2021), who found a significant correlation between financial distress and gender diversity. However, they are in line with studies by Mondayri & Tresnajaya (2022) and Maghfiroh & Isbanah (2020), which also found no connection between financial distress and gender diversity.

### **The influence of intellectual capital on financial distress**

The z-statistic for the intellectual capital variable (X2) is 0.5948, and its probability value is 0.5520, which is higher than 0.05. The alternative hypothesis (Ha) is rejected and the null hypothesis (Ho) is accepted since -0.5948 is less than the critical z-value of -1.960. This implies that there was no discernible relationship between intellectual capital and financial distress in this study. The limited use of intellectual capital in businesses today may be the cause of this lack of visible impact. Additionally, Indonesian companies often prioritize tangible assets, particularly those in industries with a high proportion of fixed assets. As a result, the value generated by these companies tends to be dominated by tangible assets, while intellectual capital plays a less prominent role. Furthermore, the measurement of intellectual capital using the VAIC model may not be applicable across all industries, as the components related to human resource costs vary between sectors. Consequently, even if a company exhibits low intellectual capital, it may not necessarily affect its ability to generate profits or create value in a competitive market.

The findings of this research indicate that the level of intellectual capital, regardless of its magnitude, is not a reliable predictor of a company's financial health or quality. This finding aligns with the research of Mondayri & Tresnajaya (2022) and Andriani & Sulistyowati (2021), both of which concluded that intellectual capital does not significantly affect financial distress. However, this contradicts studies by Mustika

et al. (2018) and Prasetya & Oktavianna (2021), where intellectual capital was found to have an impact on financial distress.

### **The Impact of Inventory Turnover on Financial Distress**

With a probability value of 0.0985 and a z-statistic value of 1.6520, the inventory turnover variable (X3) is greater than the significance level of 0.05. The alternative hypothesis (Ha) is rejected and the null hypothesis (Ho) is accepted since -1.6520 is less than the critical z-value of -1.960. This implies that inventory turnover had no appreciable effect on financial distress during the course of this investigation.

The absence of significance suggests that fluctuations in the company's inventory turnover, whether upward or downward, do not materially impact the likelihood of financial distress. According to the study, inventory turnover is not a good indicator of financial distress, possibly because high operating costs cancel out the gains from higher sales. This could lead to a situation where a rise in sales does not translate into a corresponding rise in profitability. These findings align with those of (Ulinuha et al., 2020) and (Maulana et al., 2021), who also found no evidence of a significant correlation between financial distress and inventory turnover. These results contrast with those of (Rusli & Bernadetta, 2020) and (Permadi & Isywardhana, 2020) who discovered a strong relationship between inventory turnover and financial distress.

### **The Effect of Profitability on Financial Distress**

The p-value of 0.0112, which is below the 0.05 significance threshold, signifies that the profitability variable (X4) exerts a statistically significant influence on financial distress. The null hypothesis (Ho) is dismissed in favor of the alternative hypothesis (Ha) as the z-statistic of -2.5360 exceeds the critical z-value of -1.960. The coefficient of -19.901 signifies a significant negative correlation between financial distress and profitability. An increased likelihood of financial distress is associated with a decrease in profitability. This result emphasizes how important profitability is in reducing the danger of financial distress. This result emphasizes how important profitability is in reducing the danger of financial distress. Declining profitability and increased susceptibility to financial trouble can be caused by poor net profit margins, inefficient asset utilization, and ineffective management.

Based on the results of this test, companies with low profitability are seen as having weak performance, which signals a higher likelihood of financial distress. These findings differ from those of Fatmawati & Wahyuningtyas (2021) and Suryani (2020), whose studies concluded that profitability does not significantly impact risk of distressed financial. However, the results of Azzahra et al. (2021) and Sutra & Mais (2019) align with this study, as they found a negative and significant effect of profitability on financial distress.

### **The Interaction of Intellectual Capital, Inventory Turnover, Gender Diversity, and Profitability on Financial Distress.**

The LR statistic value is 33.6143 and the probability value is 0.0000, both of which are below the 0.05 cutoff, according to the F-test (simultaneous) results. Because 33.6143 is higher than the crucial F-value of 2.523, it can be said that the independent factors taken into account in this study gender diversity, intellectual capital, inventory turnover, and profitability collectively have an impact on financial distress. These findings are consistent with research by (Mondayri & Tresnajaya, 2022) and (Ramly et al., 2019), which found that a combination of profitability, inventory turnover, gender diversity, and intellectual capital influences financial distress.

### **CONCLUSION**

The characteristics (factors) that may lead to financial difficulties for mining companies listed on the Indonesia Stock Exchange (IDX) between 2017 and 2021 are examined in this study. This study looks at intellectual capital, gender diversity, inventory turnover, and profitability. Based on the findings described in the previous section, the researchers have drawn several conclusions, which are listed below.

The gender diversity variable has no discernible effect on financial hardship in mining companies listed on the Indonesia Stock Exchange between 2017 and 2021. The financial difficulties of these companies were unaffected by the intellectual capital variable during the same period. The inventory turnover variable has no bearing on financial difficulties in mining companies listed on the Indonesia Stock Exchange between 2017 and 2021. However, during the 2017–2021 period, the profitability variable exhibits a significant negative impact on these organizations' financial difficulties. Additionally, the combined effects of gender diversity, intellectual capital, inventory turnover, and profitability have a significant impact on financial distress in mining sector companies listed on the Indonesia Stock Exchange between 2017 and 2021.

### **REFERENCES**

- Affiah, A., & Muslih, M. (2018). *The Effect of Leverage, Profitability, and Good Corporate Governance on Financial Distress (Case Study of Mining Companies Listed on the Indonesia Stock Exchange in 2012-2016)*. 10(2).
- Andriani, L., & Sulistyowati, E. (2021). *The Effect of Leverage, Sales Growth, and Intellectual Capital on Financial Distress*.
- Anggriani, P., & Rahim, R. (2021). Pengaruh Mekanisme Tata Kelola Perusahaan Dan Political Connection Terhadap Financial Distress (The Influence Of Corpor Governance Mechanism And Political Connection On Financial Distress). *Jurnal Penelitian Ilmu Manajemen*, 6(1), 64–77.



- Fadila, A. , Nugraheni, & Utami, K. (2021). *Financial Distress In Mining Industry In Indonesia*. 9(1).
- Kasmir, S. M. (2018). *Analisis Laporan Keuangan* (1st ed.). PT.Rajawali Pers.
- Kristanti, F. T. (2019). Financial Distress Theory and Its Development in the Indonesian Context (I). *Media Intelligence*.
- Maest, I. S. P. , & Muslih, M. (2018). *The Effect of Institutional Ownership, Intellectual Capital, and Leverage on Financial Distress (Case Study of Manufacturing Companies Listed on the Indonesia Stock Exchange in 2014-2017)*. 2, 27–40.
- Maulana, F. , Wijaya, S. Y., & Sumilir. (2021). ). *The Effect of Activity, Profitability, and Company Size on Financial Distress*. 2(7).
- Mondayri, S., & Tresnajaya, R. T. J. (2022). *Analysis of the Effect of Good Corporate Governance, Intellectual Capital, and Operating Cash Flow on Financial Distress*. 2(1), 25–43.
- Permadi, M. C. J., & Isyнуwardhana, D. (2020). *Analysis of the Influence of Leverage Ratio, Inventory Turnover, and Gender Diversity on Financial Distress (Study on Mining Companies Listed on the Indonesia Stock Exchange for the Period 2014-2018)*. 7(1), 663–670.
- Prasetya, E. R., & Oktavianna, R. (2021). *Financial Distress Influenced by Sales Growth and Intellectual Capital*. 4(2), 170–182.
- Ramly, R., L. A., S. S., & Hasan, A. (2019). *Predicting Financial Distress Using Fundamental Information (A Study of Property and Real Estate Companies Listed on the Indonesia Stock Exchange)*. 4(2), 312–327.
- Rusli, D., & Bernadetta, D. (2020). The Effect of Working Capital Management on Financial Distress with Company Size as a Control Variable in Mining Sector Companies. . *Journal of Accounting and Management*, 2, 17.
- Salim, S. N., & Dillak, V. J. (2021). *The Effect of Company Size, Managerial Agency Costs, Capital Structure and Gender Diversity on Financial Distress*. 5(3), 182–198.
- Sukamulja, S. (2019). Financial Statement Analysis as a Basis for Investment Decision Making. *Yogyakarta: Andi*.
- Suryani. (2020). *The Effect of Profitability, Leverage, Sales Growth and Company Size on Financial Distress*. 5(2), 229–244.
- Ulinuha, H. H. , Mawardi, M. C., & Mahsuni, A. W. (2020). *The Influence of Activity Ratio, Leverage Ratio, and Company Growth Ratio in Predicting Financial Distress (Study of Manufacturing Companies Listed on the Indonesia Stock Exchange for the Period 2016-2018)*. 09(03), 100–110.
- Ulum, I. (2017). Intellectual Capital: Measurement Model, Disclosure Framework, & Organizational Performance. Malang: *University of Muhammadiyah Malang*.

