

CHAPTER V

CONCLUSION

5.1 Research Conclusion

Based on the panel data analysis and discussion presented in Chapter IV, the following conclusions are drawn. The regression coefficients are estimated using the Fixed Effects Model with firm-clustered robust standard errors, while the final acceptance or rejection of the research hypotheses is based on wild cluster bootstrap (boottest) inference clustered at the firm level with 9,999 replications and a five percent significance level.

1. Profitability has a positive but statistically insignificant impact on Financial Distress. Therefore, H1 is rejected.
2. Liquidity has a negative and statistically significant impact on Financial Distress. Therefore, H2 is accepted.
3. Leverage has a positive and statistically significant impact on Financial Distress. Therefore, H3 is accepted.
4. Economic Growth has a positive but statistically insignificant impact on Financial Distress. Therefore, H4 is rejected.
5. Profitability, Liquidity, Leverage, and Economic Growth simultaneously have a statistically significant impact on Financial Distress. Therefore, H5 is accepted.

Based on the wild cluster bootstrap hypothesis inference, liquidity and leverage are the independent variables that show statistically significant partial effects at the five percent level. Liquidity has a negative effect on financial distress because its positive coefficient in the Z-Score equation indicates that stronger short-term payment capacity improves financial health. Leverage has a positive effect on financial distress. The negative coefficient of leverage in the Z-Score equation implies that the higher the ratio of Total Debt to Total Assets, the lower the Modified Altman Z-Score. The model's within R-squared is 0.4531, meaning that 45.31 percent of the within-firm variance in the Modified Altman Z-Score between

2020 and 2025 is explained by changes in profitability, liquidity, leverage, and economic growth included in the model.

5.2 Research Limitations

The research was conducted using audited data and a structured panel-data procedure, but several limitations should be acknowledged when interpreting the findings.

1. The monitoring period is limited to 6 years from 2020 to 2025. This timeframe includes the COVID-19 shock and recovery but is very short to discover longer-term financial distress dynamics and structural changes in non-financial SOEs .
2. Economic growth is a national-level variable obtained from BPS reports. Although the panel contains 126 firm-year observations, GDPG has only six unique annual values because all 21 companies receive the same GDP growth rate in each year. Consequently, the statistical identification of the GDPG coefficient relies only on variation across six years, which limits the power of the model to detect a direct macroeconomic effect.
3. The sample was confined to 21 Indonesian non-financial State-Owned Enterprises which were listed on the Indonesia Stock Exchange. Thus, the results should be viewed in light of listed non-financial SOEs and may not be immediately extrapolated to unlisted SOEs, privately owned enterprises, financial institutions or firms operating under very different regulatory frameworks.
4. The Modified Altman Z-Score is used as a proxy for financial hardship and total debt to total assets ratio is used as a measure of leverage. These measurements give consistent quantitative measures, but they do not include other dimensions of financial hardship such as debt maturity structure, interest load, refinancing risk, government support, or qualitative restructuring conditions.

5.3 Research Implications

5.3.1 Theoretical Implications

The findings contribute to the financial distress literature by showing that the explanatory power of firm-level financial indicators differs after unobserved firm-specific characteristics are controlled through the Fixed Effects Model. The insignificant profitability result indicates that changes in ROA within the same SOE over time do not independently explain changes in financial distress after liquidity, leverage, economic growth, and firm fixed effects are controlled. This indicates that profitability should not be used in isolation to determine financial susceptibility of state-owned firms.

The leverage result has the most theoretical implication. The higher the Total Debt to Total Assets ratio, the more financial difficulty is indicated in the lower Modified Altman Z-Score. This is consistent with the financial instability view that higher debt dependence might exacerbate financial fragility when enterprises have fixed financing obligations and variable operating cash flows. In the context of SOEs, the result also shows that government ownership does not remove the financial consequences of an increasingly debt-dependent asset structure.

The direct effect of economic growth is insignificant. This means the national economic growth does not necessarily lead to the immediate improvement of the financial status of each SOE. Macro-economic factors may impact companies indirectly through firm-specific channels including revenue, project completion, liquidity, debt servicing capacity, etc. Future theoretical models of SOE financial distress may benefit from the interaction effects or transmission mechanisms between macroeconomic variables and firm-level financial structure.

5.3.2 Practical Implications

The leverage significance conclusion for SOE management reinforces the need of monitoring debt accumulation in relation to the asset base. Management should consider new borrowing not only in terms of availability of funds, but also

in terms of the potential of funded assets and projects to create sufficient operating cash flow to sustain principal and financing expenses. Debt-funded expansion without sustained asset productivity might result in worse financial distress even in the context of continued public assistance.

The large statistical result for liquidity underlines the need of having sufficient short-term financial capacity for management and creditors. Higher Modified Altman Z-Score means higher Current Ratio, and hence, lower level of financial distress. SOE management needs to tighten working-capital discipline, improve collectability and quality of current assets and match the maturity structure of current obligations with realistic cash inflows. Creditors should also examine the type of current assets rather than the headline ratio, as receivables or inventories that are not easily converted into cash may provide less protection than highly liquid current assets.

The findings show that it is especially important for the Government of Indonesia and organizations that have the responsibility of supervising SOEs to monitor the growth of debt relative to total assets and the sustainability of debt-financed projects. Financial support, restructuring, or capital injections should be accompanied by an assessment of the underlying financing structure and the potential of the assets to generate future cash flows, rather than on ephemeral improvements in accounting profitability.

The Modified Altman Z-Score and the Total Debt to Total Assets ratio can be utilized as complimentary indicators for investors and creditors. The Z-Score is a combination of numerous elements of financial health and leverage gives an immediate indication of how much a company is depending on debt. The empirical data show that an increase in leverage is the most consistent company level warning signal in the final regression model.

5.4 Research Recommendations

Given the above-mentioned limitations, the present study offers important

potential for future academic research. To allow for more comprehensive research on sustainable finance in Indonesia, the following strategic proposals are proposed for future researchers:

1. Future work should employ a longer observation horizon so that the model can catch whole economic cycles and provide greater time-series variance. A longer period would be particularly valuable to assess the influence of economic growth and to separate temporary crisis effects from permanent financial difficulties.
2. Subsequent macroeconomic factors such as inflation, policy interest rates, currency rates, or government capital support are proposed for subsequent investigations. GDP growth alone may not fully explain the external factors leading to SOE financial difficulty and these variables may provide a more complete explanation.
3. Future studies may consider loan maturity, interest coverage, short-term debt exposure or cost of financing other than Total Debt to Total Assets. These measures may help to identify if the financial distress is caused by the amount of debt, the timing of repayment obligations or the cost of financing.
4. Future research could compare the Modified Altman Z-Score to other financial distress indicators or prediction models. Alternative measurements can examine if the direction and magnitude of profitability, liquidity, leverage and macroeconomic factors are consistent across different definitions of financial distress.
5. Future research should explore the extent to which the drivers of financial distress vary among industries such as infrastructure, construction, mining, transportation, telecommunications, pharmaceuticals, and other non-financial SOEs. Business cycles, capital intensity and financing structures varied considerably among industries, which may permit more precise policy implications at the industry level.