
The Influence of Financial Ratios on Financial Distress in Manufacturing Companies in the Consumer Goods Industry Sector Listed on the Indonesian Stock Exchange

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ABSTRACT

The objective of this study is to ascertain the financial ratios, specifically the Cash Ratio, Return on Investment (ROI), Return on Equity (ROE), and Net Profit Margin (NPM), of Financial Distress in Manufacturing Companies within the Consumer Goods Industry Sector that are listed on the Indonesian Stock Exchange. This study employs quantitative data. The findings and analysis presented in this study are as follows: The multiple linear regression test results indicate that the t-count value is 10.625, more significant than the t-table value of 2.03951. Additionally, the significance level of the t-count is 0.001, which is less than the significance level of 0.05. Therefore, we may infer that the t-count value is statistically significant. The ROI multiple linear regression test results indicate that the t-count value of 2.886 is statistically significant with a p-value of 0.007, compared to a t-table value of 2.03951 and a significance level of 0.05. Therefore, we can infer that the t-count value of 2.886 is significant. The t-value is 2.03951, and the significance level is 0.007, less than 0.05. The multiple linear regression analysis shows that the t-count for ROE is -2.897, which has a significance level of 0.007. Comparing this with the t-table value of 1.69552 at a significance level of 0.05, we may infer that the t-count value of 2.897 is greater than the t-table value of 1.69552, and the significance level of 0.007 is less than 0.05. The multiple linear regression analysis shows that the t-count value for NPM is -1.095, with a significance level of 0.282. Comparing this to the t-table value of 1.69552 at a significance level of 0.05, we may conclude that the t-count value of 1.095 is less than the t-table value and is not statistically significant. The F-table test yielded a result of 2.67 with an error rate of 5%. The acquired F-count was 50.596, more significant than the F-table value of 2.67, indicating a significant difference with a significance level of 0.002, less than the threshold of 0.05.

Keywords: Financial Ratios, Financial Distress

INTRODUCTION

The globalization of the international economy in the present period has led to a decline in company operations due to the Global Financial Crisis. In order to ensure the survival of a company amidst intense competition, the company must enhance its performance, foster product innovation, and devise new strategies. These measures will help maintain the company's competitiveness and profitability, thus ensuring its continued success. Intense competition exists among enterprises in the consumer goods industrial sector. Manufacturing companies in the consumer goods industry have the potential for growth, development, and intense competition due to their involvement with profitable individuals and companies, making them resilient to economic crises. Regardless of the affordability or high cost of the selling price, products manufactured by enterprises in the consumer goods industry sector are consistently in demand and essential for the public. Each year, the proliferation and expansion of food and beverage enterprises in Indonesia serve as a potent catalyst for rivalry among these companies. Manufacturing companies in the consumer goods industry sector encounter various challenges as they expand, including scarcities of raw materials and auxiliary materials, inadequate infrastructure, exorbitant investment interest rates, the depreciation of the rupiah exchange rate impacting production costs, and reliance on imported raw materials, rendering Indonesian products uncompetitive due to the limited availability of domestic natural resources. Failure to achieve economies of scale in the manufacture of consumer goods by manufacturing enterprises in the industrial sector could jeopardize the company's financial stability and potentially lead to bankruptcy.

Manufacturing companies in the consumer goods sector frequently encounter adverse issues related to their products in circulation in Indonesia. These issues include the presence of hazardous ingredients in food and beverages available in the market, as well as the presence of mercury in certain products. Cosmetics, among other things. Adverse factors such as these can diminish people's inclination to consume these products. If there is a decline in public demand for the product, the company's revenue and profits will also decline, making the company highly susceptible to financial distress. This can threaten the

company's survival in the competitive industry and lead to significant losses for investors, as they would be unwilling to invest in companies at risk of bankruptcy. Financial distress is an initial indication of a firm facing financial challenges before bankruptcy, which might arise from the company's financial issues. Financial difficulty is an indication of potential bankruptcy that a firm may face.

**Tabel 1.2 Fenomena Penelitian
PT. Mayora Indah, Tbk. (MYOR)**

(dinyatakan dalam Rupiah)

Kwartal	Total Aset	Total Ekuitas	Total Liabilitas	Laba/Rugi Tahun Berjalan	Pendapatan Usaha	
2021	I	21,057,319,885,801	12,120,959,537,745	8,936,360,348,056	844,962,055,275	7,335,437,188,672
	II	20,190,174,137,050	12,234,584,474,068	7,955,589,662,982	959,801,885,046	13,153,712,842,781
	III	20,130,677,507,079	11,067,398,619,026	9,063,278,888,053	1,005,270,327,972	19,887,755,100,875
	IV	19,917,653,265,528	11,360,031,396,135	8,557,621,869,393	1,211,052,647,953	27,904,558,322,183
2020	I	19,474,546,511,239	10,846,852,689,295	8,627,693,821,944	949,829,206,540	5,379,573,546,423
	II	18,350,730,146,868	10,861,627,504,684	7,489,102,642,184	962,566,553,728	11,082,314,424,465
	III	19,002,549,750,564	10,813,160,816,087	8,189,388,934,477	2,035,802,094,374	17,580,971,431,517
	IV	19,777,500,514,550	11,271,468,049,958	8,506,032,464,592	2,098,168,514,645	24,476,953,742,651
2019	I	17,398,873,769,906	9,025,094,210,970	8,373,779,558,936	480,083,209,805	6,013,762,833,073
	II	17,681,962,890,881	9,378,518,589,099	8,303,444,301,782	833,653,744,855	12,058,493,837,320
	III	18,198,122,469,616	9,012,163,133,374	9,185,959,336,242	1,128,938,955,823	17,959,316,058,229
	IV	19,037,918,806,473	9,899,940,195,318	9,137,978,611,155	2,039,404,206,764	25,026,739,472,547

Sumber : idx.co.id

**Tabel 1.3 Fenomena Penelitian
PT. Kino Indonesia, Tbk. (KINO)**

(dinyatakan dalam Rupiah)

Kwartal	Total Aset	Total Ekuitas	Total Liabilitas	Laba/Rugi Tahun Berjalan	Pendapatan Usaha	
2021	I	5,379,483,590,669	2,597,564,146,906	2,781,919,443,763	17,018,742,717	964,262,778,150
	II	5,348,329,084,780	2,600,783,866,002	2,747,545,218,778	38,626,234,573	1,934,417,017,867
	III	5,319,295,533,948	2,636,036,790,624	2,683,258,743,324	81,835,612,689	2,931,697,381,131
	IV	5,346,800,159,052	2,663,631,503,097	2,683,168,655,955	100,649,538,230	3,976,656,101,508
2020	I	5,040,467,975,547	2,794,156,832,828	2,246,311,142,719	57,951,403,249	1,113,042,446,480
	II	5,266,005,357,054	2,707,960,834,075	2,558,044,522,979	117,712,611,350	2,193,705,763,624
	III	5,323,967,062,825	2,763,462,552,052	2,560,504,510,773	160,764,630,573	3,110,686,092,880
	IV	5,255,359,155,031	2,577,235,546,221	2,678,123,608,810	113,665,219,638	4,024,971,042,139
2019	I	4,223,593,478,790	2,553,196,349,184	1,670,397,129,606	303,978,018,496	1,002,000,534,898
	II	4,603,632,865,380	2,565,296,188,002	2,038,336,677,378	360,969,656,580	2,222,699,994,204
	III	4,657,926,597,762	2,645,898,223,222	2,012,028,374,540	441,745,465,434	3,483,814,313,482
	IV	4,695,764,958,883	2,702,862,179,552	1,992,902,779,331	515,603,339,649	4,678,868,638,822

Sumber : idx.co.id

**Tabel 1.1 Fenomena Penelitian
PT. Unilever Indonesia, Tbk. (UNVR)**

(dinyatakan dalam Rupiah)

Kwartal	Total Aset	Total Ekuitas	Total Liabilitas	Laba/Rugi Tahun Berjalan	Pendapatan Usaha	
2021	I	21,645,929,000	6,560,787,000	15,085,142,000	1,698,080,000	2,226,128,000
	II	20,274,146,000	4,013,823,000	16,260,323,000	3,045,892,000	4,037,802,000
	III	20,206,771,000	5,326,215,000	14,880,556,000	4,378,794,000	5,812,474,000
	IV	19,068,532,000	4,321,269,000	14,747,263,000	5,758,148,000	7,679,451,000
2020	I	21,543,649,000	7,219,221,000	14,324,428,000	1,862,681,000	2,389,456,000
	II	21,351,803,000	8,807,885,000	12,543,918,000	3,619,635,000	4,739,543,000
	III	21,079,223,000	6,485,953,000	14,593,270,000	5,438,339,000	7,095,552,000
	IV	20,534,632,000	4,937,368,000	15,597,264,000	7,163,536,000	9,451,012,000
2019	I	22,039,978,000	9,062,375,000	12,977,603,000	1,748,520,000	2,363,388,000
	II	21,827,321,000	5,075,213,000	16,752,108,000	3,697,232,000	5,023,239,000
	III	20,813,938,000	6,887,584,000	13,926,354,000	5,509,603,000	7,526,861,000
	IV	20,649,371,000	5,281,862,000	15,367,509,000	7,392,837,000	10,120,906,000

Sumber : idx.co.id

Upon reviewing the financial reports of PT. Unilever Indonesia Tbk. During the past three years, it is evident that there was a rise in liabilities amounting to 1.4 trillion in the fourth quarter of 2019, which subsequently reached 1.1 trillion in 2020. PT. Unilever Indonesia Tbk saw a marginal profit rise, averaging roughly 1.5 trillion in the last quarter of 2019, 2020, and 2021. The company's poor financial performance was partly attributed to the declining household consumption growth. Before the manifestation of financial difficulty, a corporation must analyze prevailing conditions consistently. The root cause of financial distress is the company's incompetence in effectively managing and sustaining its financial performance. This incompetence stems from its failure to execute product promotion initiatives, leading to decreased sales and suboptimal revenue. In the past two decades, there has been a rise in financial difficulties in numerous companies across developed and emerging nations (Almamy et al., 2016). Several research has been carried out to identify the variables that can forecast financial difficulties, encompassing macroeconomic, financial, and company governance factors. A study conducted by Ragab and Saleh (2021) revealed that the financial metric of leverage significantly predicts the likelihood of financial hardship. In contrast, liquidity, profitability, coverage, and activity do not have any impact. Consequently, the corporation incurred operational losses during that specific time frame. In a separate study conducted by Mohamed (2020), it was discovered that combining financial factors with market and macroeconomic variables yielded superior results in forecasting the likelihood of financial hardship. This study examines the impact of cash ratio, ROI, ROE, and NPM on financial distress in the manufacturing companies within the consumer products industry sector listed on the Indonesian Stock Exchange between 2019 and 2021.

Financial report analysis refers to transforming data from financial reports into meaningful information that can be used to make informed decisions (Chalmers et al., 2019). Companies release financial reports to provide information about their financial status, including any changes in their financial situation and overall performance. Assessing the organization's financial state and performance necessitates conducting an audit of its finances, utilizing financial ratios as an analytical instrument. A financial ratio is a quantitative measure that relates two accounting figures and is calculated by dividing one figure by another.

Financial ratio analysis examines financial reports using financial ratios to analyze and evaluate a company's financial performance. (Syukur et al., 2021) Financial ratios serve as a valuable tool for forecasting corporate success, including the ability to anticipate financial challenges in firms. (Hosaka, 2019; Kartikasari et al., 2023) The purpose of financial ratio analysis is to normalize the company's financial data into a statistical summary, which can then be used as input for decision-making. Financial ratio analysis also has limits, primarily due to the challenge of comparing a company's calculated financial ratios with industry averages. (Marbun & Malau, 2022)

Financial ratios are categorized into different types, including liquidity ratios, leverage ratios, activity ratios, profitability ratios, growth ratios, and valuation ratios. This research utilizes profitability, leverage, liquidity, and activity ratios. This research utilizes the Cash Ratio, Return on Investment (ROI), Return on Equity (ROE), and Net Profit Margin (NPM) financial ratios.

The financial state of a firm is significant for several stakeholders, including internal and external parties such as investors, creditors, and other entities. Hence, it is imperative for organizations to diligently maintain their financial standing to avoid encountering any financial adversity. The concept of financial distress differs among academics due to the differences in accounting rules and practices among countries. (Anggraini & Mulya, 2017; Eugenio et al., 2023; García & Herrero, 2021) Nevertheless, experts widely acknowledge that corporate failure inevitably results in a gradual decline in company profitability.

Financial distress serves as a first indication and precursor that a company will likely face bankruptcy due to financial difficulties. (Iwan Firdaus, 2023) Financial difficulty typically arises from heightened reliance on debt. As the debt level increases, so does the weight of interest expenses—the potential for decreased revenue leads to the company experiencing financial hardship. Financial distress refers to a scenario in which a firm's

operating cash flow is insufficient to cover its obligations, such as trade payables or interest expenditures. As a result, the company is compelled to implement remedial measures. Financial distress refers to a highly critical situation where a firm cannot meet its financial obligations and requires a resolution that involves altering its operations or structure. Financial distress information is an early indicator of bankruptcy, enabling management to address issues and avert bankruptcy before it happens proactively. Bankruptcy, characterized by financial difficulty, can be avoided by timely action. Specifically, this refers to a scenario in which the company struggles to generate profits or consistently experiences a financial deficit. (Affandi & Meutia, 2021; Hosaka, 2019)

METHOD

This study employs a quantitative methodology to examine the impact of financial ratios on the likelihood of financial distress in manufacturing companies within the consumer products sector listed on the Indonesian Stock Exchange between 2019 and 2021. We have chosen a subset of industrial companies that are publicly listed and have extensive financial information accessible. We gather essential financial indicators, including Cash Ratio, Return on Investment (ROI), Return on Equity (ROE), and Net Profit Margin (NPM), from the annual financial statements acquired from the Indonesia Stock Exchange and the companies' websites.

Financial distress is the dependent variable, identified by declining profitability, indications of liquidity crises, and leverage levels above the usual industry benchmarks. The variables we are analyzing are the financial ratios that represent these organizations' financial well-being and operational effectiveness.

By employing logistic regression, we analyze the predictive impact of individual financial measures on the occurrence of financial distress. We also consider variables like firm size and market conditions to isolate the specific influence of the financial ratios. We validate the accuracy of our model by assessing fit indices and the area under the ROC curve, assuring the reliability of our predictions.

Our approach's objective is to elucidate the correlation between financial performance, as shown by various ratios, and the probability of encountering financial trouble. This research aims to offer valuable insights that can assist stakeholders, such as investors and company management, in making well-informed decisions and avoiding financial catastrophes in susceptible firms. This study contributes to the wider discourse on financial

well-being in the consumer products manufacturing industry, underscoring the significance of regularly monitoring crucial financial metrics.

RESULTS AND DISCUSSION

Descriptive statistics are employed to elucidate the data acquired for each research variable without drawing overarching generalizations. The table presents descriptive statistics for the dependent and independent variables of three companies: PT. Unilever Indonesia Tbk, PT. Mayora Indah Tbk, and PT. Kino Indonesia Tbk. The data covers the years 2019, 2020, and 2021.

Table 1. Descriptive Statistical Analysis

	N Valid	Minimum	Maximum	Mean	Std. Deviation
Cash Ratio	36	0.0261	0.7296	0.224278	0.2107324
Return On Investment	36	0.0032	0.3580	0.103428	0.0972064
Return on Equity	36	0.0066	1.4509	0.319322	0.4115403
NetProfit Margin	36	0.0176	0.3034	0.110375	0.0638503
Financial Distress	36	0.5101	7.1456	3.923011	2.0560144

The analytical output yields a Durbin-Watson statistic of 1.7323. This number lies inside the range defined by the top and lower boundaries ($dU = 1.7245$ and $4-dU = 2.2755$) of the Durbin-Watson critical values table. More precisely, when the difference (d) is more significant than the lower bound (dU) but less than the upper bound ($4-dU$), it suggests that the hypothesis stating that there is no autocorrelation in the residuals is accepted. This result is crucial since it verifies the autonomy of the residuals, hence confirming the dependability of the regression model. It guarantees that the results obtained from the logistic regression analysis are solid and reliable, increasing the trustworthiness of the conclusions regarding the financial ratios and their influence on financial hardship.

The coefficient of determination, computed as 0.867, signifies a significant amount of variability in the financial distress latency that can be accounted for by the independent variables in the model, namely Net Profit Margin (NPM), Return on Equity (ROE), Return on Investment (ROI), and Cash Ratio. This number indicates that these financial parameters explain 86.7% of the variation in financial distress seen in the enterprises under study. Therefore, this significant percentage emphasizes the powerful influence that these

particular financial measurements have in forecasting financial turmoil within the industry. Nevertheless, it is crucial to acknowledge that the remaining 13.3% of the variability can be attributed to additional factors not considered in this study. The remaining percentage indicates the possible impact of external factors or industry-specific circumstances that could contribute to financial difficulties but were not accounted for in the current research model. This observation can provide direction for future research to investigate additional factors that could enhance our understanding of the intricacies of financial hardship in manufacturing firms operating in the consumer products sector.

By doing the analysis at a significance level of 0.05 and calculating the residual degrees of freedom as $(n - k - 1 = 12 - 4 - 1 = 7)$ (corrected from the previous paragraph), the results of the partial hypothesis testing on the financial ratios are as follows:

1. The t-value for the Cash Ratio variable is 10.625, which is higher than the critical t-value of 2.03951, indicating a statistically significant result with a significance level of 0.001. Based on the comparison of the values 10.625 and 2.03951, as well as the values 0.001 and 0.05, it can be inferred that the cash ratio has a statistically significant influence on financial distress. This outcome emphasizes the significance of liquidity as an indicator of financial well-being.
2. Return on Investment (ROI) refers to measuring profitability or financial gain from an investment. It is a metric used to evaluate the efficiency and effectiveness of an investment by comparing the amount of return generated to the cost of the investment. The ROI has a t-count of 2.886, which exceeds the t-table value of 2.03951. At a significance level of 0.007, this finding ($2.886 > 2.03951$ and $0.007 < 0.05$) demonstrates that ROI considerably impacts financial distress, hence validating its importance in assessing investment efficiency.
3. The Return on Equity (ROE) has a t-value of -2.897, higher than the adjusted t-table value of 1.69552, indicating a significant difference with a significance level of 0.007. These findings indicate that -2.897 is more significant than 1.69552 and 0.007 is less than 0.05, demonstrating that ROE is a strong predictor of financial trouble. Although the negative sign is present, the magnitude implies a robust correlation.
4. The Net Profit Margin (NPM) has a t-count of -1.095, below the t-table threshold of 1.69552, and a significance level of 0.282. Since -1.095 is less than 1.69552 and

0.282 is more significant than 0.05, it may be concluded that NPM does not significantly affect financial distress in the study setting.

The results demonstrate the diverse impact of several financial measures on the probability of experiencing financial difficulties, offering detailed insights into practices related to financial management. The significance of each component underscores certain areas of attention for forecasting financial well-being, underscoring the crucial function of thorough financial analysis.

After doing a multiple linear regression analysis to assess the influence of several financial ratios on financial distress in manufacturing enterprises operating in the consumer products industry between 2019 and 2021, the following findings have been obtained:

1. The cash ratio (CR): The regression analysis shows that the t-value for the Cash Ratio is 10.625, statistically significant at a level of 0.001, significantly lower than the threshold of 0.05. The obtained result exceeds the critical t-table value of 2.03951, thus demonstrating that the Cash Ratio significantly benefits financial distress among the enterprises included in the study.
2. Return on Investment (ROI): The t-count for ROI is 2.886, higher than the t-table value of 2.03951. At a significance level of 0.007, the return on investment (ROI) positively and significantly impacts financial distress, emphasizing its importance in comprehending financial well-being during the specified years.
3. The t-count for Return on Equity (ROE) is -2.897, higher than the t-table value of 1.69552 with a significance level of 0.007. This discovery demonstrates a substantial adverse effect of Return on Equity (ROE) on financial distress, implying that a greater ROE is linked to reduced financial distress.
4. The Net Profit Margin (NPM) has a t-value of -1.095, lower than the threshold value of 1.69552 from the t-table—additionally, the significance level of 0.282 is above the threshold of 0.05. Therefore, the research period reveals that NPM has minimal impact on financial distress, suggesting that it has limited predictive ability.
5. Overall Model Significance: The F-test yielded an F-count of 50.596, significantly more significant than the crucial F-table value of 2.67 at a 5% error rate, with a significance probability of 0.002. These findings indicate that the combined financial ratios of NPM, ROI, ROE, and CR have a substantial influence on the financial difficulty experienced by the investigated organizations.

CONCLUSION

The research "The Impact of Financial Ratios on Financial Distress in Consumer Goods Manufacturing Companies Listed on the Indonesian Stock Exchange" examined the ability of different financial ratios to predict the probability of financial distress. From 2019 to 2021, the study examined the financial information of publicly traded manufacturing firms operating in the consumer products industry.

The key findings indicate that specific financial ratios are significant indicators of financial difficulty. The study determined that the Cash Ratio (CR), Return on Investment (ROI), and Return on Equity (ROE) had a notable influence on financial distress. The Cash Ratio, characterized by its elevated t-count value, emphasized the significance of liquidity as a fundamental measure of financial well-being. The positive correlation between ROI and financial health demonstrates capital's effectiveness in generating returns. In contrast, the negative association between ROE and financial hardship suggests that higher returns on equity can help reduce the risk of financial problems.

In contrast, the Net Profit Margin (NPM) did not have a notable impact on financial distress during the analyzed timeframe. This condition indicates that although profitability is essential, it may only sometimes serve as a dependable predictor of distress under specific economic conditions or industry dynamics.

In summary, the research showed that we may create a robust framework for anticipating financial hardship by analyzing liquidity, profitability, and investment efficiency ratios together. The F-test provided additional confirmation of the overall relevance of these ratios, suggesting that stakeholders should actively monitor them to foresee and address possible financial difficulties.

This study enhances the strategic financial management practices of manufacturing enterprises in the consumer goods industry by providing valuable insights that can aid in the early identification of financial distress and enable informed decision-making to protect against financial instability.

REFERENCES

Affandi, M. R., & Meutia, R. (2021). ANALISIS POTENSI FINANCIAL DISTRESS

DENGAN MENGGUNAKAN ALTMAN Z SCORE PADA PERUSAHAN PENERBANGAN (DAMPAK PANDEMI COVID-19 DENGAN PENUTUPAN OBJEK WISATA DAN PSBB). *J-MIND (Jurnal Manajemen Indonesia)*, 6(1), 52. <https://doi.org/10.29103/j-mind.v6i1.4875>

Anggraini, D., & Mulya, H. (2017). FINANCIAL DISTRESS PREDICTION IN INDONESIA COMPANIES: FINDING AN ALTERNATIVE MODEL. *Russian Journal of Agricultural and Socio-Economic Sciences*, 61(1), 29–38. <https://doi.org/10.18551/rjoas.2017-01.04>

Chalmers, K., Hay, D., & Khlif, H. (2019). Internal control in accounting research: A review. *Journal of Accounting Literature*, 42(1), 80–103. <https://doi.org/10.1016/j.acclit.2018.03.002>

Eugenio, E., Angeline, A., Lee, B. P., Munthe, H., & Nasib, N. (2023). THE IMPACT OF NPM, ROI, ROE AND CASH RATIO ON FINANCIAL DISTRESS (Study Of Manufacturing Companies In The Consumption Goods Industrial Sector Listed On The Indonesia Stock Exchange In 2019 - 2021). *Jurnal Ekonomi*, 12(02), 888–899.

García, C. J., & Herrero, B. (2021). Female directors, capital structure, and financial distress. *Journal of Business Research*, 136, 592–601. <https://doi.org/10.1016/j.jbusres.2021.07.061>

Hosaka, T. (2019). Bankruptcy prediction using imaged financial ratios and convolutional neural networks. *Expert Systems with Applications*, 117, 287–299. <https://doi.org/10.1016/j.eswa.2018.09.039>

Iwan Firdaus. (2023). THE EFFECT OF LIQUIDITY, LEVERAGE AND COMPANY VALUE ON Z-SCORE VALUE AS A PREDICTION OF FINANCIAL DISTRESS (Case Study of Companies in the Hotel Restaurant and Tourism Sector Listed on the Indonesia Stock Exchange for the 2016-2020 Period). *EPRA International Journal of Economics, Business and Management Studies*, 60–68. <https://doi.org/10.36713/epra12207>

Kartikasari, S., Karmana, D., Nasution, S. M., & Fudsy, M. I. (2023). Financial Ratio Analysis at PT. Indocement Tunggul Prakarsa Tbk. Registered on The Indonesia Stock Exchange for The 2016 - 2020 Period. *Majalah Bisnis & IPTEK*, 16(1), 150–162. <https://doi.org/10.55208/bistek.v16i1.394>

Marbun, B. S., & Malau, H. (2022). The Effect of Profitability and Liquidity on Financial Distress in The Sub Sector Property Listed on The Exchange Stok Indonesia (IDX) in 2018. *Jurnal Ilmiah Universitas Batanghari Jambi*, 22(1), 642. <https://doi.org/10.33087/jiubj.v22i1.1816>

Syukur, A., Novianti, A. S., & Karim, A. (2021). Financial Ratio Analysis of Pt. Semen Tonasa before and After Joining the Semen Indonesia Group. . . *International Journal of Engineering Technology Research & Management*, 5(1), 11–17.



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