

THE INFLUENCE OF LEVERAGE AND SALES GROWTH ON FINANCIAL DISTRESS

Elissa Fithri¹, Tamy Ali January^{*2}

Langlangbuana University, Indonesia^{1*2}

elissafithri69@gmail.com¹, tamy.january01@gmail.com^{*2}

Abstract: In a dynamic global business environment, companies face enormous challenges to remain competitive and relevant. To achieve the goals of profit maximization and stable growth, companies need to focus on innovation, customer satisfaction and efficient operational management. In this context, financial distress poses a serious threat to the company's continuity, which can lead to bankruptcy if not handled properly. This study aims to measure how much Leverage and Sales growth affect Financial Distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023. In this study, Leverage is proxied by the Debt to Equity Ratio, this research uses descriptive and verification data analysis methods with a quantitative research type. The population in this study amounted to 51 companies, using purposive sampling method and obtained a sample of 10 companies. The classic assumption analysis technique, the coefficient of determination, hypothesis testing using the t-test and F-test and processing tools using Eviews 12. Based on partial testing, it shows that Leverage has a negative effect on Financial Distress, and Sales Growth has no effect on Financial Distress, then for simultaneous testing it shows that Leverage and Sales Growth together have an effect on Financial Distress.

Keywords: Leverage, Sales Growth, Financial Distress, Debt to Equity Ratio.

INTRODUCTION

Companies face huge challenges in a dynamic global business environment to remain relevant and competitive. They must continuously innovate and pursue competitive advantage by emphasising customer satisfaction, competitive pricing, timeliness, and high product quality. While large companies may have more resources to respond quickly to environmental changes, they still face challenges such as low customer satisfaction, low productivity, and systematic failures. Maximizing profits and maintaining steady growth are the main goals for most companies. Achieving these goals requires optimal operational support and strong financial health. This means companies must have efficient and effective operational systems and manage their finances wisely to face the ever-changing challenges in the global business environment. Therefore, companies need to adapt quickly and continuously improve their performance in terms of customer satisfaction, productivity and financial stability to remain competitive in a highly dynamic market. (Khoirina et al., 2023).

This research refers to financial distress, financial distress is a condition in which a company experiences a serious decline in financial condition, which can be the initial stage before bankruptcy. When a company has difficulty in meeting its financial obligations, this can indicate that the company has entered the stage of financial distress. If these financial difficulties are not handled properly, it can lead to company bankruptcy. (Hutabarat, 2021). The model that will be used in this study will be measured by the

Altman Z-Score prediction model. To predict company bankruptcy, it uses various ratios as a tool to predict financial distress. (Irfani, 2020).

There are factors that affect financial distress. The first factor is leverage, according to Sutrisno (Purwanti dkk, 2022) the leverage ratio shows how much of the company's funding needs are spent with debt. Leverage is proxied into the debt to equity ratio (DER).

The second factor, namely sales growth, is an increase in the number of sales from year to year. (Dahmiri et al., 2023: 31).

Basically, when DER and sales growth increases, financial distress also increases and when DER and sales growth decreases, financial distress also decreases. This is inversely proportional to the phenomenon that occurred in food and beverage companies in 2019 and 2020, so this research needs to be carried out in this sector.

Hypothesis

Hypothesis 1: Leverage has a negative effect on financial distress
Hypothesis 2: Sales growth has no effect on financial distress
Hypothesis 3: Leverage and sales growth affect financial distress

LITERATURE REVIEW

Leverage

Leverage in this study is proxied by using the debt to equity ratio. According to Kasmis (Sa'adah and Nur'aini, 2020: 55) states that "Debt to equity ratio is a ratio used to assess debt with equity".

$$\text{Debt to Equity Ratio} = \frac{\text{Total hutang}}{\text{Total ekuitas}}$$

Sales Growth

According to Dahmiri et al (2023: 31), "sales growth is an increase in the number of sales from year to year".

$$\text{Pertumbuhan Penjualan} = \frac{\text{Sales} - \text{Sales-1}}{\text{Sales-1}} \times 100\%$$

Financial Distress

According to Irfani (2020: 247), "Financial distress refers to conditions in which the company has difficulty paying off its maturing debts and is often accompanied by the elimination or reduction of dividend payments. This condition usually starts when the company's profits continue to decline and tend to become negative".

In this study, financial distress was measured using the Altman z-score analysis model. The Altman discriminant analysis model or better known as the multivariate discriminant analysis (MDA) model or Altman z-score is a statistical tool used to group observations into several priority categories based on statistical techniques. (Yuniarto et al., 2022:217).

$$X1 = \frac{\text{working capital}}{\text{total asset}}$$

$$X2 = \frac{\text{Retained Earning}}{\text{total asset}}$$

$$X3 = \frac{\text{EBIT}}{\text{total asset}}$$

$$X4 = \frac{\text{book value of equity}}{\text{total liabilities}}$$

$$X5 = \frac{\text{net sales}}{\text{total asset}}$$

METHODS

This study uses descriptive and verification research methods with quantitative research types. Panel data regression method, classical assumption test, coefficient of determination and hypothesis testing with the Eviews 12 program. The total population was 51 companies and 189 financial reports, with sampling using purposive sampling method obtained 10 companies and 50 financial reports.

RESULTS AND DISCUSSION

Descriptive Test

According to Handayani (2023: 39), "descriptive data analysis is a process in which data is organized and analyzed in detail to provide a clear picture of the characteristics and patterns that exist in it".

Table 1 Descriptive Test

	X1	X2	Y
Mean	0.956700	0.097100	2.933260
Median	0.827500	0.095500	2.917000
Maximum	2.512000	0.470000	5.594000
Minimum	0.083000	-0.410000	0.658000
Std. Dev.	0.630212	0.159640	1.088234
Skewness	0.966963	-0.256535	0.218963
Kurtosis	3.291525	4.088865	2.663180
Jarque-Bera	7.968863	3.018475	0.635890
Probability	0.018603	0.221079	0.727643
Sum	47.83500	4.855000	146.6630
Sum Sq. Dev.	19.46116	1.248767	58.02838
Observations	50	50	50

Source: data processed with Eviews (2024)

The table above contains information about leverage (debt to equity ratio), sales growth and financial distress. It is known that the DER variable, the minimum value is 0.0830 belonging to the company PT (GOOD) in 2019. While the maximum value is 2.5100 belonging to the company PT (COCO) in 2023. Based on the results of descriptive research of 10 food and beverage sub-sector companies, the highest debt to

equity ratio value belongs to the company PT (COCO) in 2023, this is because in that year it experienced an increase in debt value when compared to the previous year, namely in 2022. Furthermore, the lowest debt to equity ratio value was obtained by the company PT (GOOD) in 2019. This is due to the decrease in the value of their debt compared to the previous year, namely in 2018 and has high capital so that it can fulfill its debt obligations.

Furthermore, information regarding sales growth, it is known that the minimum value is -0.4100 belonging to the company PT (COCO) in 2023. While the maximum value of 0.4700 belongs to PT (TBLA) in 2021. Based on the results of descriptive research on 10 food and beverage sub-sector companies, the highest sales growth value is the company PT (TBLA) in 2021. This is because in that year it experienced a high increase in sales compared to other years. Furthermore, the lowest sales growth value was obtained by the company PT (COCO) in 2023. This is due to the lowest sales value in that year compared to other years.

Furthermore, finally regarding financial distress, it is known that the minimum value is 0.6580 belonging to the company PT (COCO) in 2023. While the maximum value is 5.5940 belonging to the company PT (ADES) in 2023. Based on the results of descriptive research on 10 food and beverage sub-sector companies, the value of financial distress with the highest value was obtained by PT (ADES) in 2023. This is because in that year the company can fulfill its obligations so that the company can be said to be healthy. Furthermore, the financial distress value with the lowest value was obtained by the company PT (COCO) in 2023. This is because in that year the company could not fulfill its obligations so that the company could be said to be experiencing financial difficulties.

Verification Test

According to Sudaryana and Agusiady (2022: 275), "verification analysis is a research method that is shown to verify the truth of hypotheses, with existing theories through analysis of the proposed problem formulation".

Determination of Panel Data Regression Estimation Method Common Effect Model

This approach uses the Ordinary Least Square (OLS) method by combining time series data and cross section data without looking at differences between time and individuals. The panel data regression results with the Common Effect Model are presented in the following table:

Table 2. Results Common Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.199087	0.188587	22.26603	0.0000
X1	-1.364734	0.152299	-8.960896	0.0000
X2	0.410031	0.601230	0.681987	0.4986
R-squared	0.639581 Mean dependent var			2.933260
Adjusted R-squared	0.624244 S.D. dependent var			1.088234
S.E. of regression	0.667075 Akaike info criterion			2.086297
Sum squared resid	20.91451 Schwarz criterion			2.201019
Log likelihood	-49.15743 Hannan-Quinn criter.			2.129984
F-statistic	41.70195 Durbin-Watson stat			0.497483

Prob(F-statistic) 0.000000

Source: data processed with Eviews (2024)

Fixed Effect Model

In panel data estimation using the fixed effect method, a dummy variable technique is used to capture intercept variations between objects. This difference in intercept values may be due to differences associated with the observed objects. The panel data regression results with the Fixed Effect Model are presented in the following table:

Table 3. Results Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C X1 X2	4.043338	0.293995	13.75310	0.0000
	-1.203711	0.278154	-4.327501	0.0001
	0.427516	0.482961	0.885198	0.3816
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.838666	Mean dependent var		2.933260
Adjusted R-squared	0.791964	S.D. dependent var		1.088234
S.E. of regression	0.496354	Akaike info criterion		1.642509
Sum squared resid	9.361966	Schwarz criterion		2.101395
Log likelihood	-29.06273	Hannan-Quinn criter.		1.817256
F-statistic	17.95780	Durbin-Watson stat		1.105012
Prob(F-statistic)	0.000000			

Source: data processed with Eview (2024)

Random Effect Model

REM allows for more efficient use of degrees of freedom, resulting in more efficient estimates. In REM, parameters are estimated using the generalized least square method.

The panel data regression results with the Random Effect Model are presented in the following table:

Table 4. Results Random Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C X1 X2	4.127165	0.280906	14.69231	0.0000
	-1.287415	0.209079	-6.157546	0.0000
	0.388927	0.468092	0.830878	0.4102
Effects Specification				
			S.D.	Rho
Cross-section random	0.522131			0.5253
Idiosyncratic random	0.496354			0.4747
Weighted Statistics				
R-squared	0.493090	Mean dependent var		1.147628
Adjusted R-squared	0.471519	S.D. dependent var		0.670526
S.E. of regression	0.487450	Sum squared resid		11.16756
F-statistic	22.85930	Durbin-Watson stat		0.917393
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.637534	Mean dependent var		2.933260
Sum squared resid	21.03333	Durbin-Watson stat		0.487086

Source: data processed with Eviews (2024)

Panel Data Regression Model Selection Chow Test

According to Nani (2022: 31) the chow test is used to choose between the CEM or FEM model that is suitable for use in research. The chow test hypothesis is as follows:

Submitted: October 22, 2024; Revised: December 25, 2024; Accepted: December 26, 2024;

Published: December 28, 2024; Website: <http://journalfeb.unla.ac.id/index.php/jasa>

Hypothesis 0: The CEM model is accepted if the chi-square profitability value is >0.05 .
Hypothesis 1: The FEM model is accepted if the chi-square profitability <0.05 .

Table 5. Result Chow Test

Redundant Fixed Effects Tests Equation: Untitled			
Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	5.210167	(9,38)	0.0001
Cross-section Chi-square	40.189394	9	0.0000

Source: data processed with Eviews (2024)

The chow test results in the table above show a probability of $0.0000 < 0.05$. according to the criteria, this model uses a fixed effect model. Because the chow test model chosen is the fixed effect model, it is necessary to test with the hausman test to determine which model is more suitable between the fixed effect model or the random effect model used.

Hausman test

According to Nani (2022: 32) after conducting the chow test by producing the selected FEM, the next test is the hausman test. This test is used to choose between FEM or REM which is suitable for use in research. The hausman hypothesis is as follows:
Hypothesis 0: The REM model is accepted if the chi-square profitability value is > 0.05 .
Hypothesis 1: The FEM model is accepted if the chi-square profitability <0.05 .
The results of the Hausman test from this study are as follows:

Table 6 Results Hausman Test

Correlated Random Effects - Hausman Test Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.328865	2	0.8484

Source: data processed with Eviews (2024)

The table above shows that the chi-square probability is $0.0848 > 0.05$. In accordance with the criteria, this model uses a random effect model. Then it is necessary to test with the Langrange multiplier test.

Langrange Multiplier Test

According to Nani 2022: 34) this test actually still has the same steps as the chow and hausman tests, only different from the initial output tested, namely starting from CEM - view - FEM - omitted random effect - lagrange multiplier. The lagrange multiplier test hypothesis is as follows:
Hypothesis 0: The REM model is accepted if the chi-square profitability value is > 0.05 .
Hypothesis 1: The CEM model is accepted if the chi-square profitability is <0.05 .
The langrange multiplier test results from this study are as follows:

Table 7 Result Langrange Multiplier Test

Cross-section	-lypohthesis Time		
			Both
Breusch-Pagan	18.93097 (0.0000)	0.089770 (0.7645)	19.02074 (0.0000)

Source: data processed with Eviews (2024)

Classical Assumption Test

Normality Test

The normality test aims to determine the distribution of data in the variables to be used in the study. If the probability value of the jarque-bera test > 0.05 is obtained, it can be concluded that the data in this study are normally distributed.

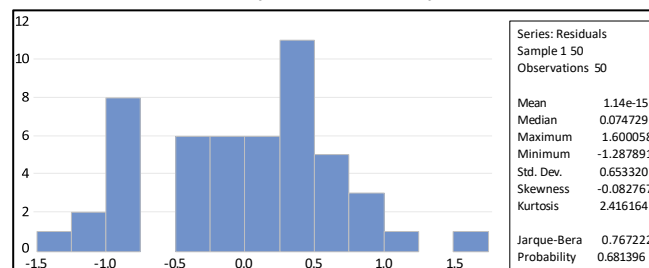


figure 1 Result Normality Test

Source: data processed with Eviews (2024)

In the figure above, it can be seen that the jarque-beranya value is 0.7672 with a probability value of 0.6813, so it can be concluded that this research model is normally distributed because the probability value is $0.6813 > 0.05$.

Multikolinearity

In the correlation output in the multicollinearity test, whether or not there are symptoms of multicollinearity, namely by looking at the variace inflation factor (VIF) value, tolerance value > 0.10 and if $VIF < 10$, it is said that there is no multicollinearity between the independent variables in the regression model.

Table 8. Result Multikolinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.035565	3.996173	NA
X1	0.023195	3.399828	1.014407
X2	0.361477	1.397355	1.014407

Source: data processed with Eviews (2024)

From the table above, it can be concluded that the criterion that the VIF value < 10 , namely $1.0144 < 10$, means that there are no symptoms of multicollinearity between the independent variables.

Analysys of Panel Data

Panel data analysis aims to determine whether there is a partial or simultaneous influence between one or more independent variables on one dependent variable. The following are the results of the panel data test in accordance with the Random Effect Model.

Table 9 Analisis of Panel Data

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.127165	0.280906	14.69231	0.0000
X1	-1.287415	0.209079	-6.157546	0.0000
X2	0.388927	0.468092	0.830878	0.4102

Source: data processed with Eviews (2024)

Based on the output table of the calculation results above, the regression equation is obtained as follows:

$$Y = \alpha + \beta X + \beta X + e$$

Financial Distress = 4.127 - 1.287DER + 0.388SS

1) The constant value of 4.127 is positive, indicating that the debt to equity ratio and sales growth are zero, the financial distress that will be obtained is 4.127.

2) The regression coefficient value of the debt to equity ratio variable of 1.287 with a negative sign indicates that if there is a one unit increase in the debt to equity ratio, financial distress will increase by 1.287. Conversely, if there is a decrease of one unit of debt to equity ratio value, financial distress will decrease by 1.287, assuming other variables are considered constant.

3) The sales growth regression coefficient value of 0.388 has a sign indicating that if there is a one unit increase in sales growth, financial distress will increase by 0.388. Conversely, if there is a decrease of one unit of sales growth value, financial distress will decrease by 0.388, assuming other variables are considered constant.

Coefficient of Determination

The coefficient of determination is a measure that shows how much variation in the dependent variable can be explained by variations in the independent variable. The following are the results of the coefficient of determination test:

Table 10. Result of the Coefisient of Determination

Weighted Statistics			
R-squared	0.493090	Mean dependent var	1.147628
Adjusted R-squared	0.471519	S.D. dependent var	0.670526
S.E. of regression	0.487450	Sum squared resid	11.16756
F-statistic	22.85930	Durbin-Watson stat	0.917393
Prob(F-statistic)	0.000000		

Source: data processed with Eviews (2024)

Based on the table above, the adjusted R-square coefficient of determination is 0.47 or 47%, this shows that the independent variables leverage (debt to equity ratio) and sales growth affect financial distress by 47%, while the remaining 53% (100%-47%) is influenced by other variables that are not in the regression model.

Hypothesis Testing Results

Partial Regression Coefficient Test Results (t Test)

Table 11. Result Partial Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.127165	0.280906	14.692310	0.0000
X1	-1.287415	0.209079	-6.157546	0.0000
X2	0.388927	0.468092	0.830878	0.4102

Source: data processed with Eviews (2024)

1) The t-count value for the *debt to equity ratio* variable is -6.157, which means ($6.157 > 2.012$) and the probability value of the *leverage* variable (*debt to equity ratio*) is $0.000 < 0.05$. This shows that H_0 is rejected and H_1 is accepted, meaning that partially *leverage (debt to equity ratio)* has a negative effect on *financial distress*. 2) The t-count value for the *sales growth* variable is 0.830, meaning ($0.830 < 2.012$) and the probability value of the *sales growth* variable is $0.410 > 0.05$. This shows that H_0 is accepted and H_1 is rejected, meaning that partially *sales growth* has no effect on *financial distress*.

Simultaneous Regression Coefficient Test Results (F Test)

Table 12. Result Simultaneous Test

R-squared	0.493090	Mean dependent var	1.147628
Adjusted R-squared	0.471519	S.D. dependent var	0.670526
S.E. of regression	0.487450	Sum squared resid	11.16756
F-statistic	22.85930	Durbin-Watson stat	0.917393
Prob(F-statistic)	0.000000		

Source: data processed with Eviews (2024)

Based on the table above, the F count is 22.859 with a probability of 0.000. This value will be compared with the F table and alpha ($\alpha = 0.05\%$). The value of F table ($k; n-k$) = $(3; 50-3) = (3; 47)$ then the value of F table is 2.802. So it can be concluded that the value of f-count is greater than F table ($22.859 > 2.802$) with a probability value of $0.000 < 0.05$. This shows that H_0 is rejected and H_1 is accepted, meaning that simultaneously *leverage (debt to equity ratio)* and *sales growth* affect *financial distress*.

DISCUSSION

Effect of Leverage on Financial Distress

Based on the results of the partial test (t test) conducted in this study, the debt to equity ratio states that it has an effect on financial distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023. This can be seen from the results of partial test testing (t test) obtained tcount $6.157 > t_{table} 2.012$ and a probability value of $0.000 < 0.05$. This higher debt to equity ratio value indicates that the amount of debt is greater than the amount of equity, meaning that debt cannot be managed properly which will cause the risk of financial distress. on the other hand, if the lower the debt to equity ratio value indicates that the amount of equity is greater than the amount of debt, then the debt can be managed properly and there is no risk of

financial distress so that the value of financial distress also increases. This is in line with research Fatimah et al (2021) which states that leverage shows an influence on financial distress.

Effect of Sales Growth on Financial Distress

Based on the results of the partial test (t test) that has been carried out in this study, *sales growth* states that it does not affect *financial distress* in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023. This can be seen from the results of partial test testing (t test) obtained tcount $0.830 < t$ table 2.012 and the probability value of the *sales growth* variable is $0.410 > 0.05$. This means that the higher the *sales growth value* shows that the percentage of net sales in the current year is higher than the percentage of net sales last year, meaning that the company can increase its ability to provide profits for investors and for company investment. on the other hand, if the lower the *sales growth value* shows that the lower the percentage of net sales in the current year compared to last year, then the company cannot provide profits and is at risk of *financial distress* so that the value of *financial distress* is said to be unhealthy. This is in line with research Agustina and Mranani (2020) which states that sales growth has no effect on *financial distress*.

The lack of an observed relationship between Sales Growth and Financial Distress in food and beverage companies suggests that the industry dynamics and business models are different from the assumptions typically used in financial distress models. Factors like stable demand, operational efficiency, brand strength, and favorable access to financing may allow food and beverage companies to sustain growth without facing the financial distress risks that other industries might experience.

Effect of Leverage and Sales Growth on Financial Distress

Based on the results of simultaneous test research (F test) that has been carried out in this study, it shows that *leverage (debt to equity ratio)* (X1) and *sales growth* (X2) simultaneously affect *financial distress* (Y) in the food and beverage sub-sector listed on the Indonesia Stock Exchange in 2019-2023. This can be seen from the results of simultaneous testing (F test) obtained Fcount value $22,859 > F$ table $2,802$ with a significant value of $0.000 < 0.05$, therefore, the test means that H3 is accepted. The higher the *debt to equity ratio* value indicates that the total debt is higher than the total equity. So that the greater the risk of *financial distress* occurs. While *sales growth* if the higher the higher the value of *financial distress*, it can be said that the company is healthy, and the company can provide benefits for investors and company investment. This is in line with Wangsih et al (2021), Friska & Pudjolaksono (2023) and Subagyo et al (2022) that *leverage*, and *sales growth* simultaneously affect *financial distress*.

CONCLUSION

Based on the findings of the research that has been conducted on the effect of leverage and sales growth on financial distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023, it can be concluded as follows: Leverage partially has a negative effect on financial distress in food and

beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023, Sales growth partially has no effect on financial distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019-2023, and Leverage and sales growth simultaneously affect financial distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange in 2019- 2023.

REFERENCES

- Agustina, S., dan Mranani, M. (2020). "Pengaruh Profitabilitas dan Pertumbuhan Penjualan Terhadap Financial Distress dengan Struktur Modal Sebagai Variabel Moderasi (Studi Empiris Pada Perusahaan BUMN yang Terdaftar di Bursa Efek Indonesia Periode 2015-2019)". *Business and Economics Conference in Utilization of Modern Technology*. 534–549.
- Dahmiri dkk. 2023. *Tata Kelola Manajemen Bisnis Industri Kecil Menengah*. Indramayu: CV. Adanu Abimata.
- Fatimah, Toha, A., dan Prakoso, A. (2021). "The Influence of Liquidity, Leverage, Company Size and Profitability on Financial Distress". *International Journal of Business and Social Science Research*. 3, 11–17.
- Friska, G., dan Pudjolaksono, D. E. (2023). "The Effect of Profitability, Liquidity, Leverage, Sales Growth on Financial Distress in Consumer and Non-Consumer Cyclical Companies Listed on the Idx During the 2019-2021". *Journal of Entrepreneurship*. 2(July), 93–106.
- Handayani, L. T. 2023. *Buku Ajar Implementasi Teknik Analisis Data Kuantitatif (Penelitian Kesehatan)*. Jakarta Selatan: PT. Scinfintech Andrew Wijaya.
- Hutabarat, F. 2021. *Analisis Kinerja Keuangan Perusahaan*. Serang: Desanta Publisher.
- Irfani, A. s. 2020. *Manajemen Keuangan Dan Bisnis; Teori dan Aplikasi*. Jakarta: PT. Gramedia Pustaka Utama.
- Khoirina dkk. 2023. *Pengantar Ilmu Ekonomi*. Malang: Pustaka Peradaban.
- Nani. 2022. *Analisis Regresi Data Panel Menggunakan Eviews*. Serang: CV. Visi Intelengensi.
- Sa'adah, L., dan Nur'ainui, T. 2020. *Implementasi Pengukuran Current Ratio, Debt to Equity Ratio dan Return on Equity serta Pengaruhnya terhadap Return*. Jombang: LPPM Universitas KH. A. Wahab. Hasbullah.
- Subagyo, Pakpahan, Y., Budiman, F., dan Prasetya, W. (2022). "Pengaruh Likuiditas, Leverage dan Sales growth terhadap Financial Distress Perusahaan Manufaktur di BEI Sebelum dan Sesudah Covid". *Jurnal Pendidikan Dan Konseling*. 4(4), 3663 - 3674.
- Sudaryana, B., dan Agusiady, R. 2022. *Metodologi Penelitian Kuantitatif*. Yogyakarta: Deepublish.
- Purwanti, E., Sarsiti, ., & Rahayu, E. S. (2024). *Pengaruh Faktor Eksternal terhadap Kinerja Keuangan Perusahaan*. *Jurnal Ekonomi dan Bisnis*, 35(2), 123-145
- Wangsih, I. C., Yanti, D. R., Yohana, Kalbuana, N., dan Cahyadi, C. I. (2021). "Influence of Leverage, Firm Size, And Sales Growth on Financial Distress (Empirical Study on Retail Trade Sub-Sector Companies Listed in Indonesia Stock Exchange Period 2016-2020)". *International Journal of Economics, Business and Accounting Research (IJEBAR)*. 5(4), 180–194.