

The Effect of Liability and ROE on Audit Delay in Listed Energy Sector Companies on the Indonesia Stock Exchange 2021-2023

Fista Lindu Aprilia¹⁾, Sherly Indah Kania²⁾, Echa Salsabilla³⁾, Marshanda⁴⁾, Meigia Nidya Sari^{5*)}

^{1,2,3,4,5)}Department of Accounting, Faculty of Social Sciences, Universitas Pembangunan Panca Budi, Indonesia

*Corresponding Author :

E-mail : meigia@dosen.pancabudi.ac.id

Abstract

This study examines the impact of capital structure components, namely liabilities and equity, on the duration of audit delay in energy sector entities listed on the IDX during 2021-2023. Using quantitative methodology with multiple linear regression techniques, this study sets DER as a proxy for liabilities and ROE as a proxy for equity, while audit delay is measured nominally as the dependent variable. The research findings revealed a positive and significant effect of equity on audit delay with a coefficient value of 0.127 (sig. 0.025), while liabilities showed a significant negative effect with a coefficient of -0.050 (sig. 0.004). Simultaneous testing resulted in an F count of 13,386 with a significance of 0.000, proving that the two independent variables jointly affect audit delay. The research model is able to explain 55.3% of the variation in audit delay, as indicated by the Adjusted R Square value, with the remaining 44.7% explained by variables outside the model. Based on these results, this study recommends the importance of optimizing the capital structure of energy companies through efficient equity management and appropriate liability control to optimize audit completion time in the context of dynamic economic development.

Keywords: *Liability, Equity, Audit delay, DER, ROE, , Energy Sector*

INTRODUCTION

The energy sector is an important pillar in Indonesia's economic development, supporting industry and national development. Audit delay is an indicator of company performance, reflecting its growth potential and stability. In 2021-2023, the sector faces major challenges due to the COVID-19 pandemic, including falling oil prices and supply chain disruptions that suppress contributions to the national economy (Nasution et al, 2021).

Liabilities and equity play a crucial role in influencing audit delay. Studies show a balanced capital structure can improve a company's efficiency and performance. However, data shows energy companies in Indonesia are facing difficulties, such as interest expense increasing 18.6% and imbalanced capital structure causing liquidity challenges .

Liability is an important concept in financial management that includes the company's obligations due to past transactions that must be resolved by the transfer of resources in the future (Harahap, 2015). Liabilities are divided into two types: short- term (accounts payable, operating expenses, taxes) with maturities of less than one year, and long-term (bonds, bank loans) with maturities of more than one year, which require more strategic management (Hery, 2017).

Factors that affect liabilities include internal aspects such as capital structure, risk, and debt repayment capacity (Sartono, 2016), as well as external aspects such as interest rates, inflation, and monetary policy (Sudibyoy, 2018). Liability measurement uses formulas such as Debt to Equity Ratio (DER), Debt to Asset Ratio (DAR), Long Term Debt to Equity Ratio, and Current Ratio to provide an overview of the proportion of debt and the ability to pay obligations (Murhadi, 2019).

The context of Indonesia's energy sector for the period 2020-2023 provides an empirical illustration of the complexity of liabilities (Nasution et al, 2024). Research by Donobrata (2021) from the Bandung Institute of Technology shows that energy companies with optimal liability ratios (DER between 0.5-1.5) display better financial stability, lower risk of bankruptcy, and superior adaptability to market changes. In the context of financial analysis, DER is not just a mathematical number, but a strategic reflection of a company's ability to manage its liabilities.

Debt to Equity Ratio (DER) is not just a number, it reflects a company's financial strategy, risk and growth potential (Nasution & Welly, 2023). Deep understanding and proper interpretation are key to making DER a strategic analysis tool. In the energy sector, liability management faces challenges such as price volatility, regulatory changes, technological transformation, and economic uncertainty (Nasution, 2023). Pardede (2022) emphasizes that liabilities should be seen as a strategic tool to drive growth and innovation, not just a financial burden (Nasution et al, 2024).

Equity is an important element in a company's financial structure, reflecting the owner's rights to assets after deducting liabilities. According to Harahap (2017), equity is the remaining ownership in the company's assets, which reflects the owner's invested capital and accumulated financial performance.

Equity consists of several main components, such as share capital, additional paid-in capital, retained earnings, and other reserves, each of which illustrates the financial strength and growth potential of the company (Sartono, 2018). Share capital reflects the owner's initial contribution, while retained earnings reflect reinvested profits. Factors that affect equity include:

- 1) Internal: Operational performance, earnings management strategies, dividend policy, and reinvestment decisions (Sudiby, 2019).
- 2) External: Macroeconomic conditions, government policies, capital markets, and regulations (Murhadi, 2020), such as interest rate fluctuations, inflation, and investor sentiment.

Interpretation: Measures the amount of profit generated for each share.

The context of Indonesia's energy sector for the 2020-2023 period provides an empirical illustration of equity complexity. Research by Donobrata (2022) shows that companies with optimal equity management display superior performance, with higher adaptability to changes in the business environment.

Audit delay is an important concept in assessing the health and sustainability of a company. Cashmere (2014) defines it as a ratio to assess the company's ability to generate profits in a certain period, focusing on the temporal aspect. Hery (2015) adds that audit delay reflects the profit generated from the main business activity, highlighting the importance of the quality of earnings from the company's operations.

Munawir (2014) expands this definition by linking audit delay with the efficient use of assets, while Sutrisno (2012) emphasizes the role of all capital, both own and foreign, in generating profits. Sartono (2015) adds another dimension, namely the relationship of audit delay with sales, total assets, and equity, providing a broader perspective on earnings analysis.

Synthesized, audit delay encompasses a company's ability to generate profits, operational efficiency, effective use of assets, and quality of earnings. These become key indicators in assessing the short-term operational success and long-term sustainability of the company, supporting better strategic decision-making. Factors of influence:

- 1) Internal (Bambang Riyanto, 2018): Capital structure and operational efficiency, including management of production costs and business processes.
- 2) External (Wibowo, 2019): Macroeconomic conditions such as inflation, interest rates,

government policies, the level of industry competition, and technological change.

Audit delay measurement involves metrics that reflect efficiency and earnings quality, providing a comprehensive guide for the evaluation of company performance.

This formula provides a comprehensive perspective on a company's ability to generate profits from its overall assets. The calculation allows investors and management to:

Second, comparing performance across periods and across industries provides an objective benchmark for assessing management's ability to manage company resources. This is particularly important in the context of making investment and strategic decisions.

Interpretation requires contextualization:

- > 5%: Excellent financial performance
- 2-5%: Fairly good financial performance
- < 2%: Poor financial performance

The independent variables in this study are liabilities and equity, which are seen as strategic instruments of financial management. Liabilities are represented through Debt to Equity Ratio (DER), while equity is measured using Return on Equity (ROE). The dependent variable is audit delay, which is measured through the nominal formula above.

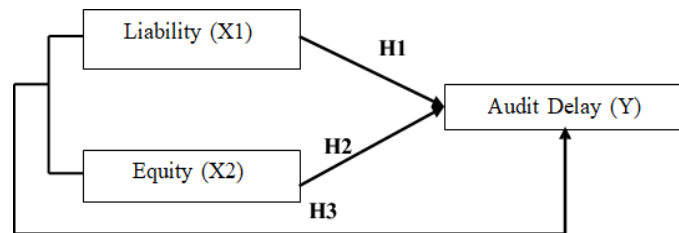


Figure 1. Conceptual Framework

RESEARCH METHODS

This study uses a quantitative approach with a descriptive correlational research method. This method was chosen to explore the causal relationship between the variables of liabilities, equity, and audit delay in energy sector companies. The descriptive correlational approach is more suitable for describing the characteristics of the relationship between variables without direct manipulation, allowing researchers to analyze patterns and relationships that exist between research variables.

The research population consists of 69 energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period. The sampling technique used a purposive sampling method with strict criteria that limited the number to 7 companies multiplied by the time period in this study 2021-2023, namely 3 years to a total of 21 samples. Sample selection criteria include consistency of registration on the IDX, completeness of financial report publication, and availability of data needed for analysis of research variables. This sample restriction is carried out to ensure the quality of the data and the representativeness of the samples used in the study.

The research variables consist of two independent variables and one dependent variable. The first independent variable is liabilities, measured using the Debt to Equity Ratio (DER) which describes the composition of the company's debt in its capital structure. The second independent variable is equity, measured through Return on Equity (ROE) to assess the

effectiveness of the use of own capital. The dependent variable is audit delay, represented by a nominal which measures by subtracting the date of the audit report from the closing date of the company's books.

Data collection is carried out through the documentation method, with secondary data sources coming from the company's annual financial statements, official publications of the Indonesia Stock Exchange, and other supporting documents. The data collection process involves a systematic search of archives and official publications, focusing on financial information relevant to the research variables during the 2021-2023 period.

Data analysis was carried out through a series of statistical stages. The initial stage begins with descriptive statistics to provide an overview of the characteristics of the research data. Next, a classical assumption test was carried out which included normality, multicollinearity, heteroscedasticity, and autocorrelation tests to ensure the regression model met the requirements of valid statistical analysis

RESULTS AND DISCUSSION

Table 1. Data Descriptive Test Results

	N	Minimu m	Maximu m	Mean	Std. Deviation
Equity	21	.04	.28	.1267	.07220
Audit delay	21	.00	.07	.0340	.02307
Liabilities	21	.07	.82	.3459	.24253
Valid N (listwise)	21				

Source: Author's Data Processing (2024)

Based on the descriptive test results of the data displayed in Table 1, the following interpretation can be made:

1) Liability:

The minimum value of liabilities (measured by Debt to Equity Ratio) of 0.07 is held by the company Adaro Energy Indonesia. The maximum value of liabilities of 82.0459 is held by Elnusa. This finding shows that there is considerable variation in the capital structure of energy sector companies, with Adaro Energy Indonesia having a relatively low proportion of liabilities compared to equity, while Elnusa has a very high liability ratio.

2) Equity:

The minimum value of equity (measured by Return on Equity) of 0.04 is held by the company AKR Corporindo. The maximum value of equity of 28.0220 is also held by the AKR Corporindo company. This finding indicates that AKR Corporindo has low efficiency in managing its own capital to generate profits, but on the other hand it also has the highest ability among the sample companies to utilize its equity.

3) Audit delay:

The minimum audit delay value (measured in nominal terms) of 0.00 is held by the company Elnusa. The maximum audit delay value of 0.0340 is held by AKR Corporindo and Adaro Energy Indonesia. These results indicate that Elnusa has the lowest ability to generate profits from its total assets, while AKR Corporindo and Adaro Energy Indonesia are the

companies with the highest audit delay among the samples analyzed.

Overall, the findings indicate considerable variation in capital structure, equity management efficiency, and audit delay among energy sector companies. This may provide a basis for further analysis of the factors underlying these differences in financial performance.

Table 2. Kolmogorov-Smirnov Test Results One-Sample Kolmogorov-Smirnov Test

N		21
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.01798371
Most Extreme Differences	Absolute	.102
	Positive	.102
	Negative	-.054
Test Statistic		.102
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source: Author's Data Processing (2024)

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance

The results of the data normality test using the Kolmogorov-Smirnov method, as shown in Table 2, indicate normal data distribution characteristics with a sample size

(N) of 21 observations. The normality parameter shows a mean value of 0.0000000 and a standard deviation of 0.01798371. Most Extreme Differences recorded consistent absolute, positive, and negative values of 0.102. The value of Asymp. Sig. (2 -tailed) value of 0.200, which is significantly greater than the 0.05 significance level, provides statistical confirmation that the data is normally distributed, thus meeting the basic assumptions for the use of parametric statistical analysis.

Overall, the Kolmogorov-Smirnov test results indicate that the research data used has a normal distribution. This is an important prerequisite in conducting multiple linear regression analysis, which will be carried out at a later stage. With the normality assumption fulfilled, hypothesis testing and interpretation of research results can be carried out with a higher level of accuracy and validity.

Table 3. Multicollinearity Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	.035	.010		3.370	.003		
Equity	.127	.052	.397	2.450	.025	.851	1.175
Liabilities	-.050	.015	-.528	-	.004	.851	1.175
				3.258			

Source: Author's Data Processing (2024)

Dependent Variable: Audit delay

The multicollinearity analysis presented in Table 3 provides detailed information on the regression coefficients and collinearity diagnostics. In the Unstandardized Coefficients section, the equity variable shows a positive regression coefficient of 0.127 with a standard error of 0.052, while the liability variable has a negative regression coefficient of -0.050 with a standard error

of 0.015. The regression model has a constant value of 0.035 with a standard error of 0.010. Furthermore, the test results show a Tolerance value of 0.851 and a VIF of 1.175 for both independent variables, which are within the acceptable thresholds (Tolerance > 0.10 and VIF < 10), indicating the absence of multicollinearity problems in the regression model.

Overall, the results of this multicollinearity test show that the equity and liability variables have a not too strong relationship with each other, so they can be used together in a multiple linear regression model without any multicollinearity problems. This fulfills one of the important assumptions in regression analysis, so that further interpretation of the results can be done more validly and reliably.

Table 4. Glejser Test Results Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.013	.008		1.662	.114
Equity	.018	.038	.121	.481	.637
Liabilities	-.004	.011	-.085	-.339	.739

Source: Author's Data Processing (2024)

Dependent Variable: ABS_RES

Heteroscedasticity testing using the Glejser method, as seen in Table 4, provides detailed and comprehensive results. Unstandardized Coefficients show regression coefficients for the equity variable of 0.018 (standard error: 0.038) and the liability variable of -0.004 (standard error: 0.011), with a constant value of 0.013 (standard error: 0.008). In terms of Standardized Coefficients, the equity variable has a beta value of 0.121, while the liability variable records a beta value of -0.085.

The t-statistic for the equity variable is 0.481 with a significance of 0.637, while the liability variable shows a t-value of -0.339 with a significance of 0.739. The significance values exceeding the 0.05 threshold for both variables provide strong statistical evidence that the regression model is free from heteroscedasticity issues. Overall, the Glejser test results show that the residual variance in the regression model is constant or homogeneous. The absence of heteroscedasticity problems means that the classical assumptions related to the homogeneity of variance in the regression model have been met. Thus, further interpretation of the regression results can be done with a higher level of validity.

Table 5. Autocorrelation Test Results Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.773 ^a	.598	.553	.01542	1.100

Source: Author's Data Processing (2024)

e. Predictors: (Constant), Liabilities, Equity

f. Dependent Variable: Audit delay

Evaluation of autocorrelation in the regression model is carried out using the Durbin-Watson statistic, which has a range of values from 0 to 4. In this analysis, the Durbin-Watson value obtained of 1.100 indicates that there is no autocorrelation problem in the residual model. Although this value is below the ideal value of 2, it is still within the acceptable range, so the assumption of residual independence is met and the regression model can be used for further analysis.

Table 6. Test Results Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
1 (Constant)	.035	.010		3.370	.003
Equity	.127	.052	.397	2.450	.025
Liabilities	-.050	.015	-.528	-3.258	.004

Source: Author's Data Processing (2024)

a. Dependent Variable: Audit delay

The regression model used in this regression test results table is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Where:

Y = Dependent variable (Audit delay) α = Constant

β_1, β_2 = Regression coefficient for each independent variable X_1 = Equity independent variable

X_2 = Liability independent variable ε = Error term Based on the regression model, it can be seen that:

1. The constant value (α) is 0.035.
2. The regression coefficient for Equity (β_1) is 0.127.
3. The regression coefficient for Liability (β_2) is -0.050. So the regression model can be written as:

$$\text{Audit delay} = 0.035 + 0.127 (\text{Equity}) - 0.050 (\text{Liabilities}) + \varepsilon$$

The variable coefficient values in the regression test results show some interesting things. First, the Equity variable has an unstandardized regression coefficient of 0.127. This means that if Equity increases by 1 unit, then Audit delay will increase by 0.127 units, assuming other variables remain constant. Or in other words, every 1 unit increase in Equity will be followed by an increase in Audit delay of 0.127 units. On the other hand, the Liability variable has a negative unstandardized regression coefficient, which is -0.050.

This shows that if Liability increases by 1 unit, then Audit delay will decrease by 0.050 units, assuming other variables remain constant. So, an increase in Liability has a decreasing impact on Audit delay. Furthermore, when viewed from the beta value or Standardized Coefficients, the Liability variable has a beta value of -0.528, while the Equity variable has a beta value of 0.397. This indicates that the Liability variable has a stronger influence on Audit delay than the Equity variable. In other words, changes in Liabilities will have a greater impact on changes in Audit delay than changes in Equity.

Partial effect analysis through t test reveals the dynamics of the relationship between independent variables and audit delay. The equity variable shows a significant positive effect with a t value of 2.450 (sig. 0.025), exceeding the t table value of 1.734. On the other hand, the liability variable shows a significant negative effect indicated by a calculated t value of 3.258 (sig. 0.004), with an absolute magnitude that also exceeds the t table value.

These findings lead to two important implications. First, an increase in equity tends to lengthen the audit delay, which may be due to the greater complexity of examining the equity component. Second, an increase in liabilities accelerates the audit process, possibly due to pressure from creditors for faster completion of financial statements. These results suggest that management needs to consider the trade-off between equity and liabilities in the capital structure to optimize audit turnaround time.

This conclusion provides an empirical basis for companies to manage their capital structure, taking into account its impact on the efficiency of the audit process. Optimizing the composition of equity and controlling liabilities are key factors in effective audit delay management.

Table 7. Simultaneous Test Results (F Test) ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.006	2	.003	13.386	.000 ^b
Residuals	.004	18	.000		
Total	.011	20			

Source: Author's Data Processing (2024)

- a. Dependent Variable: Audit delay
- b. Predictors: (Constant), Liabilities, Equity

Based on statistical analysis, testing the regression model through the F test shows the feasibility of the model to predict audit delay. This is reflected in the acquisition of F count 13.386 which exceeds F table 3.55, with a significance level of 0.000. This analysis confirms the significant effect of all independent variables (Constant, Liability, and Equity) on audit delay.

The significance level of 0.000 in the regression model indicates the reliability of the model at the 95% confidence level. This proves the ability of the independent variables to explain changes in audit delay. This model demonstrates that the combination of Constants, Liabilities, and Equity has a meaningful impact on audit delay.

CONCLUSION

The study on energy sector companies listed on the IDX for the period 2021-2023 reveals two important findings. On the one hand, proper equity management contributes positively and significantly to audit delay, reflecting the potential for increased corporate profitability. On the other hand, an increase in liabilities shows a significant negative impact on audit delay, signaling a potential decline in financial performance due to an uncontrolled debt burden. Simultaneously, liabilities and equity are shown to have a significant effect on audit delay, which emphasizes the importance of managing a balanced capital structure. The findings provide practical implications that companies in the energy sector need to maintain equity at an optimal level and control liabilities to maximize audit delay. With the right strategic approach, companies can improve competitiveness and sustainability amidst the changing dynamics of the global economy

REFERENCES

- Afrinda, N. (2013). Analysis of the Effect of Liquidity and Solvency on audit delay in food and beverage companies listed on the Indonesia Stock Exchange (IDX). Palembang. Faculty of Economics, Sriwijaya University.
- Almadany, K. (2012). The Effect of Loan To Deposit Ratio, Operating Costs Per Operating

- Income and Net Interest Margin on Audit delay of Banking Companies Listed on the Indonesia Stock Exchange. *Journal of Accounting and Business Research*, 12 (2).
- Antis, Radia and Setiawan. (2020). The Effect of Debt to Equity Ratio and Return on Equity on Stock Prices in Food and Beverage Companies Listed on the Indonesia Stock Exchange. *Indonesian Journal Of Eonomis and Management*. Vol.1 No.1.
- Aziz, M. (2015). *Fundamental Investment Management, Techniques, Investor Behavior, and Stock Retrun*. Yogyakarta: Deepublish.
- AR, A. A., Musa, M. I., & Nurman, N. (2022). The Effect of Equity Liabilities and Company Size on Audit delay: Study of Banking Companies Listed on the Indonesia Stock Exchange 2018-2021. *Economics and Digital Business Review*, 3(2), 213-224.
- Basuki, S. (2015). *Research Methods*. Jakarta: Wedatama Widya Sastra Brigham and Heryawan, H. (2013). Analysis of the effect of Earning per Share (EPS), Net Profit Margin (NPM), and Return on Asset (), on Stock Returns of Insurance Sector Companies on the Indonesia Stock Exchange (Period 2007-2010). In Thesis. UIN Syarif Hidayatullah.
- Fadhilah, N., Khalik, A., & Abidin, Z. (2022). The Effect of Debt to Asset Ratio (DAR), Debt to Equity Ratio (DER) and Return on Assets () on Price to Book Value (PBV) in Islamic Banking Companies Listed on the Indonesia Stock Exchange. *The Manusagre Journal*, 1(1), 180-193.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference*. Routledge.
- Hamdani, H., Wahyuni, N., Amin, A., & Sulfitra, S. (2018). Analysis of Factors affecting the Financial Performance of Islamic Commercial Banks listed on the Indonesia Stock Exchange (BEI) (2014-2016 Period). *Emt Kita Journal*, 2(2), 62- 73.
- Harahap, M. G., Hidayat, A. D., Mutia, R., Roni, A., Jalil, F. Y., Anggraini, R., ... & Maulidizen, A. (2023). *Islamic Banking: Theory, Concept & Implementation*. Sada Kurnia Pustaka.
- Koerniawan, I. (2020). *Introduction to Accounting*. Prima Agus Teknik Foundation Publisher, 1-275.
- Masradin, M., Sutisna, E., Hermiyetti, H., Syaf, N., & Hasanah, M. (2023). *Islamic banking accounting*.
- Nasution, D. A. D. (2023). Navigating Public Sector Asset Management: A Study of the Government of the Republic of Indonesia. *Tec Empresarial*, 18(2), 1264-1281.
- Nasution, D. A. D., Muda, I., Sumekar, A., & Abubakar, E. (2021, March). Analysis of The Economic Behavior of Society E-Commerce as An Impact on The Development of The 4.0 Industrial Revolution and Society 5.0. In *BICED 2020: Proceedings of the 2nd EAI Bukittinggi International Conference on Education*, BICED 2020, 14 September, 2020, Bukititinggi, West Sumatera, Indonesia (Vol. 217). European Alliance for Innovation.
- Nasution, D. A. D., Erlina, E., Muda, I., & Yahya, I. (2024, February). Testing The Mediation Role of Public Service Quality in The Relationship Between Internal Control Implementation and Good Government Governance of The Regional Government of North Sumatra Using SEM-PLS. in *Proceeding of International Conference on Education, Society and Humanity* (Vol. 2, No. 1, pp. 1601-1609).
- Nasution, D. A. D., Mustafa, M., & Damanik, A. F. (2024). Detailed Exploration Of Feasibility Study Of Siskeudes Implementation In Pemasang Serai Village, Langkat

- District. International Journal of Economic Research and Financial Accounting, 3(1).
- Nasution, D. A. D., & Welly, Y. (2023). Community Perspective in Village Fund Management in Nagur Village, Serdang Bedagai Regency. *Basic and Applied Accounting Research Journal*, 3(2), 48-54.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.
- Sa'diyah, H., Oktaviani, M., & Setiawan, A. P. (2022). The Effect of Liability and Equity on the Profitability of National Islamic Banks in Indonesia. *Management Studies and Entrepreneurship Journal (MSEJ)*, 3(6), 3586-3592.
- Satria, C., & Putri, Y. S. (2021). The Effect of Financial Ratios on the Share Price of Islamic Banking Listed on the Indonesia Stock Exchange. *Islamic Banking: Journal of Islamic Banking Thought and Development*, 6(2), 299-320.
- Wulandari, N. K., Fahlevi, A. R., Adelia, C., Kusmayanti, D., & Sekariesta, N. (2023). The Effect of Liability and Equity on Audit delay (Study on Banking Companies Listed on the Indonesia Stock Exchange in 2019-2021). *Journal of Economics and Accounting Publications*, 3(3), 377-388.