The Influence of Financial Indicators and Underwriter Reputation on Depreciated Stock Prices

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ABSTRACT

This research aims to analyze the influence of financial indicators and underwriter reputation on the level of stock underpricing during Initial Public Offerings (IPOs) on the Indonesia Stock Exchange (IDX). The phenomenon of underpricing has gained attention in securities market research in various countries. This study adopts a conceptual analysis approach based on a review of existing literature. The theory of asymmetric information also serves as the foundation for explaining the underpricing phenomenon in IPOs. Factors include Return on Equity (RoE), Financial Leverage, Current Ratio, Earnings per Share (EPS), Size, Proceeds, Company Age, Auditor Reputation, Underwriter, and Industry Type. Therefore, this research aims to test the influence of financial indicators and underwriter reputation on the level of stock underpricing in IPOs on the IDX. Consequently, the findings from this research can be used as a basis for comparison with similar studies in other countries. This can help in understanding the differences and similarities in the phenomenon of stock valuation in various global capital markets.

Keywords: *IPO Underpricing, Financial indicators and Underwriter reputation*

INTRODUCTION

Underpricing in Initial Public Offerings (IPOs) refers to a situation where the offered price of shares to the public during an IPO tends to be lower than the market price on the first day of trading. This phenomenon has garnered attention in previous research in the securities markets of various countries. Some researchers who have observed and documented this underpricing phenomenon include González et al. (2019), Jamaani & Alidarous (2019), Dehghan et al. (2021), Krause et al. (2021), and Kang & Lam (2023). Underpricing in IPOs can have

significant consequences for various parties involved in the IPO process, including the issuing company, existing shareholders, and investors purchasing IPO shares. In this context, researchers have conducted studies to understand the causes and impacts of underpricing. One explanation proposed by researchers is the presence of asymmetric information between the issuer and investors. During an IPO, the issuing company is not yet listed on the stock exchange and has limited publicly available information. This creates uncertainty for investors, and as a result, they may demand a discounted price as compensation for higher risks.

The phenomenon of underpricing in Initial Public Offerings (IPOs) attracts investors' attention because it provides them with the opportunity to gain significant profits. Generally, the stock price during an IPO tends to be valued lower than its true value or intrinsic value. This means that investors have the chance to purchase shares at a lower price than their actual value. The expected benefits of buying underpriced IPO shares have been the focus of attention for researchers and investors. Several studies, such as Abdullah et al. (2019), Hartana (2019), and Yuliani et al. (2019), have observed this phenomenon and indicated that IPOs are considered profitable investments. Meanwhile, research conducted by Nadeem (2020) and Duong et al. (2022) has investigated the relationship between stock prices during IPOs and the amount of funds obtained by companies. Underpriced stock prices can trigger high interest and demand from investors, which, in turn, increases the amount of funds obtained by the company during the IPO. Therefore, underpriced IPO prices can benefit companies that aim to raise larger funds for their development and growth.

To explain the phenomenon of underpricing in Initial Public Offerings (IPOs), the theory of asymmetric information has been proposed by several experts. This theory highlights the imbalance of information between the issuing company and underwriters, as well as between informed investors and uninformed investors. Some experts who introduced this theory include Baron (1982), Rock (1986), and Beatty (1989). According to the theory of asymmetric information, when a company launches an IPO, they have better access to information about the company's performance and future prospects compared to investors. This information may include financial reports, business strategies, revenue projections, and other factors that affect the company's value. On the other hand, individual investors or the general public may have limited access to such information (Tian et al., 2019; Zhu et al., 2019; Lotito et al., 2020; Momtaz, 2021; Pavlov et al., 2022). They have to rely on the information presented in the IPO prospectus, which is a document containing details about the company and the share offering. In this regard, the IPO prospectus becomes a vital source of information for investors in making investment decisions.

Previous research has observed and identified several factors that are believed to influence the level of underpricing in Initial Public Offerings (IPOs). Financial information factors that have been the focus of research include Return on Equity (RoE), Financial Leverage, Current Ratio, Earnings per Share (EPS), Size, and Proceed. The research findings indicate that companies

with higher profitability, lower leverage, good liquidity, and larger size tend to experience lower underpricing during an IPO. This indicates that companies with strong financial performance and larger size have higher attractiveness to investors, resulting in their IPO stock prices tending to approach their true value (Daniswara & Daryanto, 2020; Ugwu et al., 2020; Lim & Rokhim, 2021; Basdekis et al., 2023; Jatoi & Rasheed, 2023; Karima & Ghazali, 2023; Will & Simorangkir, 2023). Additionally, research also shows that non-financial information factors such as Company Age, Auditor Reputation, Underwriter, and Industry Type also influence the level of underpricing. Companies that have been in existence for a longer period, have a good auditor reputation, are supported by experienced underwriters, and operate in specific industries, such as the growing technology sector, tend to experience lower underpricing.

Based on the background mentioned, the researchers are interested in conducting a study titled "Conceptual Analysis: how Financial Indicators and Underwriter Reputation Influence the Level of Stock Underpricing during Initial Public Offerings (IPOs) in the Indonesia Stock Exchange (IDX)". This study aims to examine the dominant influence of these factors on the level of stock underpricing during IPOs and is expected to contribute to the development of knowledge in the field of accounting. Through this research, a deeper understanding of the factors that influence underpricing in IPOs is expected to be obtained, providing valuable insights for investors, issuing companies, and other stakeholders in making investment decisions in the stock market. Overall, this research aims to provide a better understanding of the factors that influence underpricing in the context of IPOs. Therefore, it is described as follows.

LITERATURE REVIEW

To prove that Financial Leverage affects underpricing during Initial Public Offerings (IPOs), this study aims to examine the relationship between Financial Leverage and underpricing during IPOs. Underpricing refers to the difference between the IPO offer price and the market price when trading begins (Bertoni et al., 2023; and İlbasmış, 2023). The objective of this research is to determine whether companies with higher levels of Financial Leverage tend to experience lower or higher underpricing. In this regard, the study will test the hypothesis that Financial Leverage influences the level of underpricing during IPOs.

To prove that Return on Investment (ROI) affects underpricing during Initial Public Offerings (IPOs), this study aims to investigate the relationship between Return on Investment (ROI) and underpricing during IPOs. Return on Investment (ROI) is a ratio that measures the rate of return on an investment for a company (Thusini et al., 2022; and Fachrian & Hidayat, 2023). This research will test the hypothesis of whether companies with higher levels of Return on Investment (ROI) tend to experience lower or higher underpricing during Initial Public Offerings (IPOs). The main objective of this study is to determine whether a company's Return on Investment (ROI) can influence the level of underpricing during IPOs.

To prove that Return on Equity (RoE) affects underpricing during Initial Public Offerings (IPOs), this study aims to examine the relationship between Return on Equity (RoE) and underpricing during IPOs. Return on Equity (RoE) is a ratio that measures the rate of return on the company's equity (Li et al., 2023; and Nejjari & Aamoum, 2023). This research will test the hypothesis of whether companies with higher levels of Return on Equity (RoE) tend to experience lower or higher underpricing during Initial Public Offerings (IPOs). The objective of this study is to determine whether a company's Return on Equity (RoE) can influence the level of underpricing during IPOs.

To prove that Auditor Reputation affects underpricing during Initial Public Offerings (IPOs), this study aims to investigate the relationship between auditor reputation and underpricing during IPOs. Auditor reputation reflects the quality and integrity of the auditor who audits the company's financial statements (Hamza & Ayadi, 2023; and Khuong et al., 2023). This research will test the hypothesis of whether companies audited by auditors with higher reputations tend to experience lower or higher underpricing during Initial Public Offerings (IPOs). The main objective of this study is to determine whether auditor reputation can influence the level of underpricing during IPOs.

To prove that Underwriter Reputation affects underpricing during Initial Public Offerings (IPOs), this study aims to test the relationship between underwriter reputation and underpricing during IPOs. Underwriter reputation reflects the quality and expertise of the underwriter in facilitating the IPO process (Khatami et al., 2023; and Kirschbaum et al., 2023). This research will test the hypothesis of whether companies that use the services of underwriters with higher reputations tend to experience lower or higher underpricing during Initial Public Offerings (IPOs). The objective of this study is to determine whether underwriter reputation can influence the level of underpricing during IPOs. Therefore, it is formulated as follows.

    H1: Financial Leverage Significantly Influences the Level of Stock Underpricing
    H2: Return on Investment (RoI) Significantly Influences the Level of Stock Underpricing
    H3: Return on Equity (RoE) Significantly Influences the Level of Stock Underpricing
    H4: Auditor Reputation Significantly Influences the Level of Stock Underpricing
    H5: Underwriter Reputation Significantly Influences the Level of Stock Underpricing

METHODOLOGY

This study is an associative research that aims to identify the relationship between the variables under investigation. The population for this study consists of all companies that conducted Initial Public Offerings (IPOs) in the Indonesia Stock Exchange (IDX) from 2020 to 2022, which serves as the research sample. The sampling method used is purposive sampling, where

the sample is intentionally selected based on specific criteria relevant to the research objectives. Data for this study were collected through documentation from various sources, such as financial statements, Initial Public Offering (IPO) prospectuses, and historical stock market data. These data will then be used for statistical analysis. The data analysis technique employed in this research is parametric statistical testing using Statistical Product and Service Solution software version 23.0. Multiple linear regression analysis is used to test the relationship between the research variables. Multiple linear regression is chosen because there are more than one independent variables that will influence the dependent variable.

First, descriptive analysis will be used to provide an overview of the sample characteristics, such as the mean, median, and standard deviation of the variables under investigation. Then, a test of normality will be conducted to examine whether the data follows a normal distribution. Next, classical assumption tests will be performed, including autocorrelation test to assess the linear dependence among residuals, multicollinearity test to observe the interrelatedness of independent variables, and heteroscedasticity test to examine the non-uniformity of residual variances. Finally, multiple linear regression analysis will be conducted to test the relationship between the independent variables (Financial Leverage, Return on Investment (RoI), Return on Equity (RoE), Auditor Reputation, Underwriter Reputation) and the dependent variable (underpricing). Multiple linear regression will provide information on the extent to which the independent variables influence the dependent variable, as well as the statistical significance of the relationship. By using this method, this study aims to provide in-depth statistical analysis that supports the findings of the relationships between the variables under investigation in the context of Initial Public Offering (IPO) in the Indonesia Stock Exchange.

RESULT AND DISCUSSION

Table 1. Descriptive Statistics

Predictor	N	Min	Max	Mean	Std. Dev
Reputation_Underwriter	87	.01	2	.33	.471
Reputation_Auditors	87	.01	2	.33	.471
Level_Under Pricing	87	.0029	1.1251	.31 7476	.2601 951
sqrt_Debt to Equity Ratio	87	.04	3.09	1.4018	.67490
sqrt_Return on Equity	87	.04	.64	.3678	.14712
sqrt_Return on Investment	87	.03	.46	.2105	.1 0248
Valid N (*listwise*)	87				

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Based on the descriptive statistics above, the average level of underpricing in this research sample is 31.74%. This means that based on the descriptive statistical analysis, the average value of underpricing (the difference between the offering price and the closing price) in this research sample is 31.74%. The lowest level of underpricing is 0.29%. This indicates that in this research sample, there are companies with the lowest underpricing level of 0.29%, indicating a very small price difference between the offering price and the closing price. The highest level of underpricing is 112.51%. Conversely, in this research sample, there are also

companies with the highest level of underpricing of 112.51%. This indicates a significant price difference between the offering price and the closing price.

In terms of financial leverage, as formulated by the Debt to Equity Ratio (DER), the minimum Debt to Equity Ratio (DER) of companies is 4%. In the context of analyzing financial leverage through the Debt to Equity Ratio (DER), the company with the lowest Debt to Equity Ratio (DER) in this research sample is the company with a percentage of 4%. This indicates that the company has a lower proportion of debt compared to its equity. The average financial leverage, as measured by the Debt to Equity Ratio (DER), in this research sample is 140.18%. This indicates that the average Debt to Equity Ratio (DER) of all companies in this research sample is 140.18%. This figure suggests a tendency for the sampled companies to have a higher proportion of debt compared to their equity.

In terms of profitability, as formulated by the Return on Investment (ROI), the minimum Return on Investment (ROI) of companies is 2%. In terms of profitability analysis based on Return on Investment (ROI), the company with the lowest Return on Investment (ROI) in this research sample is 4%. This figure reflects a relatively low level of profit compared to the investment made by the company. The maximum Return on Investment (ROI) achieved by a company in this research sample is 46%. Conversely, there are companies in this research sample that achieved a maximum Return on Investment (RoI) of 46%. This indicates a high level of profit compared to the investment made by the company. Meanwhile, the average Return on Investment (ROI) of the sample in this research is 21.05%. This means that the average Return on Investment (ROI) of all companies in this research sample is 21.05%. This figure reflects the average level of profit obtained by the companies in this research as a percentage of their investment.

Table 2. Skewness Testing and Kurtosis

Predictor	Skewness		Kurtosis	
	Statistic	**Std. Error**	**Statistic**	**Std. Error**
Sqrt_Level Underpricing	0,085	0,283	-1,053	0,559
sqrt_Debt to Equity Ratio	0,228	0,283	-0,265	0,559
sqrt_Return on Equity	0,314	0,283	-0,491	0,559
sqrt_Return on Investment	-0,202	0,283	-0,157	0,559
Reputation Underwriter	0,793	0,283	-1,416	0,559
Reputation Auditors	0,793	0,283	-1,416	0,559

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Table 3. Skewness Testing and Kurtosis

Predictor	Skewness	Kurtosis
Sqrt_Tingkat Underpricing	0,294	-1,881
sqrt_Debt to Equity Ratio	0,799	-0,469
sqrt_Return on Equity	1,103	-0,875
sqrt_Return on Investment	-0,707	-0,278

Reputation Underwriter	0,225	-0,791
Reputation Auditors	0,225	-0,791

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

The conclusion that can be drawn based on the above data is as follows: If skewness approaches zero, the data distribution tends to be symmetric. On the other hand, if kurtosis has a positive value, the data distribution has a sharper peak (steeper) than the normal distribution. If kurtosis has a negative value, the data distribution has a flatter peak than the normal distribution. In the research, the calculation results of skewness and kurtosis indicate that their values are between -2 and 2. This indicates that the data distribution in the research is relatively symmetric and has a peak steepness similar to the normal distribution. Generally, when skewness and kurtosis have values between -2 and 2, it can be concluded that the research data has a distribution that approaches a normal indication.

Table 3. Autocorrelation Testing

	dL	dU	4 - dU	4 - dl	DW	Interpretation
Value	1,3820	1,5968	2,4030	2,6178	1,575	Happened Autocorrelation

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

The table above shows the results of data processing using SPSS. This table is used to examine the presence of autocorrelation in the data. Autocorrelation occurs when there is a correlation between values in a time series or sequence of observations. Based on the Durbin-Watson value, it can be concluded that there is autocorrelation in the data. The obtained Durbin-Watson value (1.3820 < 1.575 < 1.5968) indicates that the data is between the lower bound (dL) and upper bound (dU). Autocorrelation can be addressed by transforming the data and adding observation data. The observation data, originally only for 1 year, was increased to 2 years and the data was transformed into square root form. Data transformation is an action to change the scale or form of data to meet certain statistical assumptions. In this case, the transformation was done by taking the square root of each value in the data. After performing data transformation and adding observation data, the autocorrelation test was conducted again. The results of this autocorrelation test can be seen in the table below, which is used to determine whether the data transformation and addition of observations successfully reduced autocorrelation in the data or not.

Table 4. Durbin-Watson Testing

	dL	dU	4 - dU	4 - dl	DW	Interpretation
Value	1,5611	1,6751	2,3249	2,4389	1,685	Does Not Happen Autocorrelation

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

The Durbin-Watson test result in the regression model shows a value of 1.685. This value represents the result of the Durbin-Watson statistical calculation used to test the presence of

autocorrelation in the regression model. The Durbin-Watson value of 1.685 falls within the range between dU and 4-dU. In this context, the value of dU (upper bound) is 1.6751, and the value of 4-dU is 2.3249. The range between dU and 4-dU is the area where the Durbin-Watson value can fall without indicating significant autocorrelation in the regression model. The value of dL (lower bound) in this context is 1.5611. By comparing the Durbin-Watson value (1.685) with dL and dU, it can be concluded that the DW value is within the range indicating no autocorrelation. Therefore, based on the Durbin-Watson test result, there is not enough evidence to conclude the presence of autocorrelation in the regression model. The conclusion drawn is that based on the Durbin-Watson test result with a value of 1.685, the value falls within a range that does not indicate significant autocorrelation in the regression model.

Table 5. Multicollinearity Level Testing

Predictor	Variance Inflation Factor	Tolerance
Debt to Equity Ratio	1,705	0,589
Return on Equity	10,409	0,098
Return on Investment	10,012	0,102
Reputation Auditors	1,138	0,882
Reputation Underwriter	1,118	0,898

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

In the analysis results, it can be observed that the values for the Return on Investment (RoI) and Return on Equity (RoE) variables have Variance Inflation Factor (VIF) values greater than ten (> 10). Variance Inflation Factor (VIF) is used to measure the level of multicollinearity, which refers to high correlation among independent variables in a regression model. If the Variance Inflation Factor (VIF) exceeds 10, it indicates a significant indication of multicollinearity in the model. Additionally, it is noted that the Tolerance value for the Return on Investment (RoI) variable is less than 0.1, specifically 0.096. If the Tolerance value is very low, such as less than 0.1, it also indicates an indication of multicollinearity in the model.

In this case, the presence of multicollinearity issues in the regression model is detected based on the VIF values exceeding 10 and the very low tolerance value (0.098) for the Return on Investment (RoI) variable. To address the multicollinearity problem, several steps can be taken. One approach is to remove one of the variables that exhibit multicollinearity issues. Another approach is to perform data transformation. Data transformation in the form of square root is carried out as an effort to reduce multicollinearity. Data transformation is one strategy that can be used to mitigate multicollinearity by altering the scale or form of the data, thereby making the independent variables more independent from each other in the regression model.

Table 6. Multicollinearity Level Testing

Predictor	Variance Inflation Factor	Tolerance
Debt to Equity Ratio	1,820	0,547
Return on Equity	3,038	0,327
Return on Investment	3,017	0,329

Reputation Auditors	1,107	0,900
Reputation Underwriter	1,212	0,822

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Based on the results of the Tolerance and Variance Inflation Factor (VIF) tests in the regression model, it can be concluded that there is no issue of multicollinearity. This is because the Tolerance values of all independent variables are greater than 0.1, and the Variance Inflation Factor (VIF) values are less than 10. This conclusion indicates that the variables in the regression model are independent of each other, and there is no significant correlation among the independent variables in the model.

Tabel 7. Glejser Test

Predictor	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std	Beta		
(Constant)	.196	.049		4.087	.000
Reputation_Underwriter	-.044	033	-.174	-1.348	.184
Reputation_Auditors	.027	.031	108	.875	.386
sqrt_Debt to Equity Ratio	-.045	.028	-.256	-1.628	.190
sqrt_Return on Equity	.368	.160	.466	2.303	.026
sqrt_Return on Investment	-.366	.231	-.323	-1.591	.118

a. Dependent Variable: glejser

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Based on the results of the heteroscedasticity test using the Glejser test, it was found that the Sig value is greater than 0.05. This indicates that statistically, there is not enough evidence to reject the null hypothesis, which suggests the absence of heteroscedasticity in the regression model. However, there is one variable, namely Return on Equity (RoE), whose significance is less than 0.05. This means that Return on Equity (RoE) has a significant influence on the independent variable in the regression model. Although Return on Equity (RoE) is statistically significant, it does not necessarily mean that there is heteroscedasticity in the overall model. In this context, the conclusion that can be drawn is that the occurrence of heteroscedasticity in the regression model is very small. The Return on Equity (RoE) variable has a significant influence on the dependent variable, but other independent variables also have a significant influence. Therefore, the assumption of homoscedasticity can still be justified, which means that the residual variance in the regression model remains constant.

Tabel 8. Square Root Regression Model Testing

Model Prediktor	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std	Beta		
(Constant)	.623	.095		6.518	.000
Reputation_Underwriter	-.150	.063	-.288	-2.364	.020
Reputation_Auditor	-.109	.060	-.209	-1.802	.075
sqrt_Debt to Equity Ratio	-.002	.053	-.006	-.043	.964
sqrt_Return on Equity	-.258	319	-.154	-.806	421
sqrt_Return on Investment	.311	.461	.130	.675	.500

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a. Dependent Variable: sqrt_Tingkatunderpricing
Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Sqrt_Level_Underpricing = **0,623** - **0,002** Sqrt_Debt to Equity Ratio + **0.311** Sqrt_Return on Investment - **0,258** Sqrt_Return on Equity - **0,109** Reputation_Auditors - **0,150** Reputation_Underwriter + e

The next step is to return the regression model from The Square Root to the initial form, while the regression equation as follows :

Level_Underpricing = **0,389** - **0,000002** Debt to Equity Ratio + **0,097** Return on Investment - **0,067** Return on Equity - **0,0121** Reputation_Auditors - **0,022** Reputation_Underwriter + e

The constant of 0.389 in this context represents the influence or change in the dependent variable (underpricing level) when all independent variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), auditor reputation, and underwriter reputation) have a value of 0 or no influence from the independent variables. In the results, it is stated that if all independent variables have a value of zero, the underpricing level will be 0.389%. This means that when there is no influence from the mentioned factors, the expected underpricing level will reach 0.389%. This indicates that there are other factors that affect the underpricing level besides the mentioned independent variables. The influence of these independent variables has not been accounted for in the constant value, and the value of 0.389% represents the underpricing level that can be directly attributed to other factors not included in the regression model. It is important to note that this interpretation is based on the assumption that the regression model used is adequate and relevant to depict the relationship between the independent and dependent variables.

The regression coefficient of Debt to Equity Ratio (DER) is -0.000002 with a significance of 96.5%, depicting the relationship between the independent variable DER and the dependent variable underpricing level in the regression model. In this context, it is stated that if Debt to Equity Ratio (DER) increases by 1%, the underpricing level will decrease by 0.0002%, assuming that all other independent variables remain stable or unchanged. In this case, the regression coefficient of Debt to Equity Ratio (DER) of -0.000002 indicates the expected change in the underpricing level when Debt to Equity Ratio (DER) changes by 1%. The negative sign on the coefficient indicates an inverse relationship between Debt to Equity Ratio (DER) and the underpricing level. This means that the higher the Debt to Equity Ratio (DER), the lower the expected underpricing level.

The regression coefficient of Return on Investment (RoI) is 0.097 with a significance of 50.1%, depicting the relationship between the independent variable Return on Investment (RoI) and the dependent variable (underpricing level) in the regression model. In this context, it is stated that if RoI increases by 1%, the underpricing level will increase by 9.7%, assuming that all other

independent variables remain stable or unchanged. The regression coefficient of Return on Investment (RoI) of 0.097 indicates the expected change in the underpricing level when Return on Investment (RoI) increases by 1%. The positive sign on the coefficient indicates a positive relationship between Return on Investment (RoI) and the underpricing level. This means that the higher the Return on Investment (RoI), the higher the expected underpricing level.

The regression coefficient of Return on Equity (RoE) is -0.067 with a significance of 42.2%, depicting the relationship between the independent variable Return on Equity (RoE) and the dependent variable (underpricing level) in the regression model. In this context, it is stated that if RoE increases by 1%, the underpricing level will decrease by 6.7%, assuming that all other independent variables remain stable or unchanged. The regression coefficient of Return on Equity (RoE) of -0.067 indicates the expected change in the underpricing level when Return on Equity (RoE) increases by 1%. The negative sign on the coefficient indicates an inverse relationship between Return on Equity (RoE) and the underpricing level. This means that the higher the Return on Equity (RoE), the lower the expected underpricing level.

The regression coefficient of auditor reputation is -0.0121 with a significance of 7.6%, depicting the relationship between the independent variable auditor reputation and the dependent variable underpricing level in the regression model. In this context, it is stated that if auditor reputation increases by 1 unit, the underpricing level will decrease by 1.21%, assuming that all other independent variables remain stable or unchanged. The regression coefficient of auditor reputation of -0.0121 indicates the expected change in the underpricing level when auditor reputation increases by 1 unit. The negative sign on the coefficient indicates an inverse relationship between auditor reputation and the underpricing level. This means that the higher the auditor reputation, the lower the expected underpricing level.

The regression coefficient of underwriter reputation is -0.022 with a significance of 2.1%, depicting the relationship between the independent variable underwriter reputation and the dependent variable (underpricing level) in the regression model. In this context, it is stated that if underwriter reputation increases by 1 unit, the underpricing level will decrease by 2.2%, assuming that all other independent variables remain stable or unchanged. The regression coefficient of underwriter reputation of -0.022 indicates the expected change in the underpricing level when underwriter reputation increases by 1 unit. The negative sign on the coefficient indicates an inverse relationship between underwriter reputation and the underpricing level. This means that the higher the underwriter reputation, the lower the expected underpricing level.

Table 9. Multiple Linear Regression Model Testing

	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
Predictors	.436	.190	.291	.22858	1.685

a. Predictors: (Constant), sqrt_Return on Investment, Reputasi_auditor, sqrt_Debt to Equity Ratio, Reputasi_underwriter, sqrt_Return on Equity
b. Dependent Variable: sqrt_Level_Underpricing

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Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Based on the multiple regression analysis results, the coefficient of determination (R^2) value obtained from the Adjusted R^2 is 0.291 or 29.1%. This value indicates how much of the variability in the dependent variable (stock underpricing level) can be explained by the combination of independent variables in the regression model, namely Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), Auditor Reputation, and Underwriter Reputation. In this case, the value of 0.291 indicates that approximately 29.1% of the variability in the stock underpricing level can be explained by the included independent variables in the regression model. In other words, the variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), Auditor Reputation, and Underwriter Reputation collectively can explain about 29.1% of the variation in the underpricing level. However, the remaining variability of 70.9% suggests that there are other factors beyond the variables included in the regression analysis that affect the underpricing level. This indicates that there are other variables not included in the regression model that contribute to explaining the unexplained variation in the underpricing level by the used variables.

Table 10. ANOVA Testing

Predictors	Sum of Squares	df	Mean Square	F	Sig
Regression	.810	5	.162	3.100	.014
Residual	3.448	66	.052		
Total	4.258	71			

c. *Predictors: (Constant), sqrt_Return on Investment, Reputasi_auditor, sqrt_Debt to Equity Ratio, Reputasi_underwriter, sqrt_Return on Equity*
d. *Dependent Variable: sqrt_Level_Underpricing*
Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

From the ANOVA test results, an F-test value of 3.100 was obtained with a significance level of 0.014. In this context, a significance level smaller than 0.05 or 5% indicates that there is a significant relationship between the independent variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), Auditor Reputation, and Underwriter Reputation collectively with the dependent variable, Underpricing Level. Based on these results, it can be concluded that the regression model used is valid or reliable. The model can be used to predict the underpricing level by considering the included independent variables in the model.

Furthermore, since the significance level of 0.014 is smaller than the threshold of 0.05, it can be concluded that there is sufficient evidence to state that at least one independent variable has a significant influence on the underpricing level. In this case, the variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), Auditor Reputation, and Underwriter Reputation collectively have an influence on underpricing and possess predictive value in the regression model. In conclusion, the regression model used is valid, and the variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE),

Auditor Reputation, and Underwriter Reputation collectively have an influence on the Underpricing Level.

Table 11. ANOVA^ Testing

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std	Beta		
(Constant)	.623	.095		6.518	.000
Reputation_Underwriter	-.150	.063	-.288	-2.364	.020
Reputation_Auditors	-.109	.060	-.209	-1.802	.075
sqrt_Debt to Equity Ratio	-.002	.053	-.006	-.043	.964
sqrt_Return on Equity	-.258	319	-.154	-.806	421
sqrt_Return on Investment	.311	.461	.130	.675	.500

a. Dependent Variable: sqrt_Underpricing_Level

Sources: the data is processed, researchers from IBM SPSS Statistics version 25.0.

Based on the table of the analysis results of the influence of independent variables on the dependent variable, it can be seen that out of the 5 analyzed independent variables, 4 independent variables, namely Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), and Auditor Reputation, do not have a significant partial influence on the level of stock underpricing. Only the Underwriter Reputation variable shows a significant and negative partial influence on the level of stock underpricing. This means that in the regression model used, the variables Debt to Equity Ratio (DER), Return on Investment (RoI), Return on Equity (RoE), and Auditor Reputation do not individually contribute significantly to explaining the variation in stock underpricing. This indicates that in the context of the analyzed data, these variables do not have a strong partial influence on the level of underpricing. On the other hand, the Underwriter Reputation variable shows a significant and negative partial influence on the level of stock underpricing. This indicates that the underwriter's reputation has a strong influence in reducing the level of stock underpricing. For example, companies that use the services of underwriters with a good reputation or belonging to a certain category such as Top 5 Underwriters tend to have a lower level of underpricing.

In the context of investment decisions or stock valuation, financial leverage refers to the use of debt by companies to finance their operations and investments. This factor can affect the risks and returns associated with the company's stock. In the statement, although the analysis conducted using Debt to Equity Ratio (DER) does not show a significant influence on the level of stock underpricing, it is still important to consider this financial leverage factor in conjunction with other variables. The importance of considering financial leverage in the context of investment decisions or stock valuation can be seen from research conducted by Abbas et al. (2022), Castaño et al. (2022), Ehiedu et al. (2022), Isynuwardhana & Febryan (2022), and Salerno et al. (2019). This research indicates that financial leverage plays a significant role in a company's financial performance and can affect the risks and returns associated with stock investments.

However, in the context of stock underpricing analysis, despite the lack of significant influence from Debt to Equity Ratio (DER), as evidenced by research conducted by Harasheh & De Vincenzo (2023), Huang et al. (2023), Paeleman et al. (2023), Yan et al. (2023), and Yandes & Nugroho (2023), it is because financial leverage does not impact the company's capital structure, cost of capital, and financial risks associated with the company's stock. This means that if the capital structure of the company, which refers to the proportion between equity (stock) financing and debt financing, does not have a significant impact, and the absence of cost of capital as the expected rate of return by investors compensates for investment risks. Furthermore, the financial risks associated with the company's stock may not necessarily be influenced by financial leverage. This is because companies with high levels of debt may face greater bankruptcy risks, which can affect stock underpricing. Therefore, monitoring the use of debt by companies is crucial to obtaining a more comprehensive picture of the company's financial health and the potential risks associated with its stock investments.

The partial testing results indicate that Return on Investment (RoI) does not have a significant influence on stock underpricing. This is consistent with the findings of Capizzo & Harrison (2023), Ferri et al. (2023), Hubáček & Šír (2023), Peters et al. (2023), and Sadik et al. (2023). Return on Investment (RoI) may not fully reflect the intrinsic value of the company or its actual operational performance, thus diminishing its significance in relation to stock underpricing. Different interpretations of stock underpricing are often influenced by investors' perceptions and expectations of the company's prospects. Return on Investment (RoI) may not directly reflect future expectations or the growth potential of the company, which can affect investor assessment of stock prices. Additionally, there may be other factors that have a greater influence on stock underpricing than Return on Investment (RoI). For example, general market factors, investor sentiment, economic conditions, or specific industry factors may have a more significant impact on stock underpricing compared to a company's Return on Investment (RoI).

In addition, there are other indicators that can have a greater influence on stock underpricing. In some cases, Return on Investment (RoI) has a more significant and dominant impact on stock price movements, as found in research conducted by Almagsoosi et al. (2022), Gangadhar & Shaikh (2021), Mun (2022), Murimi & Mungai (2021), and Omran et al. (2021). The research findings indicate that Return on Investment (RoI) has a significant influence on stock underpricing in certain cases. This factor can be used by investors and analysts as an important financial performance indicator in assessing the intrinsic value of the company and predicting future stock price movements. Therefore, it should be considered in the analysis of stock underpricing, along with market factors, investor sentiment, economic conditions, and specific industry factors.

Although Return on Equity (RoE) has not been proven to have a partial influence on the level of stock underpricing in this analysis, this is consistent with the research findings of Astuti & Djamaluddin (2021), Barros et al. (2021), Hu et al. (2021), Kumar & Shaikh (2021), and Peng

et al. (2021). The factor of Return on Equity (RoE) does not help interpret its role in predicting stock underpricing. The research findings indicate that Return on Equity (RoE) does not have a direct relationship or significant influence on the level of stock underpricing. Stock underpricing refers to a situation where the offer price of shares in an initial public offering (IPO) is lower than the actual market price. This can occur because the issuing company wants to attract investor interest or due to weaknesses in the IPO share pricing process.

On the other hand, Ferri et al. (2023), Katti et al. (2023), Liu et al. (2023), Meng et al. (2023), and Wibowo et al. (2023) state that in predicting stock underpricing, Return on Equity (RoE) can provide useful information. Stock underpricing occurs when the offer price of shares in an Initial Public Offering (IPO) is lower than the actual market price. Investors are often attracted to IPOs that have the potential for long-term profitability. In this case, Return on Equity (RoE) can provide insights into how efficiently a company generates profits for its shareholders. If a company has a high Return on Equity (RoE), it indicates that the company is capable of generating significant earnings compared to the invested equity. This can be an indication that the company has strong performance and good growth potential.

In the conducted analysis, it has been found that the auditor's reputation does not have a significant partial influence on the level of stock underpricing. However, despite not being proven to have an influence in the analysis, the auditor's reputation still holds important value in the context of investor trust and the credibility of the company's financial reports. These findings support the research findings by Choi et al. (2023), Du et al. (2023), Jaffar et al. (2023), and Lee et al. (2023), indicating that the auditor's reputation remains important in providing confidence to investors regarding the integrity and quality of the company's financial reports. Although not significant in the regression model used in this analysis, the recognition of the value of the auditor's reputation by previous research indicates that the auditor's reputation is still considered a relevant factor in assessing a company's credibility.

Meanwhile, the variable of underwriter reputation has been proven to have a partial and significant effect on the level of stock underpricing. A good underwriter reputation, especially if included in the Top 5 Underwriters category, can help companies reduce the level of stock underpricing during IPO or stock offerings. This is in line with Jhawar & Seal (2023), Liao (2023), and Yandes & Nugroho (2023), who state that a good reputation demonstrates the credibility and reliability of underwriters in the market. Investors tend to have more trust in underwriters with a good reputation because they are considered to have the knowledge and expertise in evaluating and selecting stocks to be offered in IPOs.

SUMMARY

In the conducted analysis, it has been found that the auditor's reputation does not have a significant partial influence on the level of stock underpricing. However, despite not being

proven to have an influence in the analysis, the auditor's reputation still holds important value in the context of investor trust and the credibility of the company's financial reports.

The variable of underwriter reputation has been proven to have a partial and significant effect on the level of stock underpricing. A good underwriter reputation, especially if included in the Top 5 Underwriters category, can help companies reduce the level of stock underpricing during IPO or stock offerings.

For future research in the context of stock valuation, there are several important recommendations to consider. Firstly, further research should be conducted to analyze the impact of financial leverage. This may involve a more detailed study on how a company's capital structure and the types of debt used influence stock valuation. Additionally, research should also take into account industry-specific factors that can significantly affect stock valuation. Exploring the role of investor sentiment in stock valuation should also be delved into to understand how investor expectations and perceptions influence this process.

Furthermore, upcoming research can explore the relationship between financial leverage and Return on Investment (RoI) in the context of stock valuation. An analysis of how external factors such as global market events or regulatory changes affect stock valuation can also be a focus area. In an era increasingly focused on sustainability, research can delve into how financial factors interact with sustainability aspects and their impact on stock valuation. Utilizing more advanced research methods and complex analytical techniques can provide deeper insights. Additionally, comparing stock valuations across different countries with varying factors and considering data quality and robust methodologies will strengthen future research in comprehending the dynamics of stock valuation more comprehensively.

REFERENCES

Bertoni, F., Meoli, M., & Vismara, S. (2023). Too Much of A Good Thing? Board Independence and the Value of Initial Public Offerings. *British Journal of Management*, *34*(2), 942-972.

Castaño, L., Farinós, J. E., & Ibáñez, A. M. (2022). From an Emerging to a Consolidated European REIT Market. The Case of the Underpricing of Spanish Direct Listing REITs. *Emerging Markets Finance and Trade*, 1-16.

Choi, S. U., Na, H. J., & Lee, K. C. (2023). Does Explanatory Language Convey the Auditor's Perceived Audit Risk? A Study Using A Novel Big Data Analysis Metric. *Managerial Auditing Journal*.

Daniswara, H. P., & Daryanto, W. M. (2020). Earning Per Share (EPS), Price Book Value (PBV), Return on Asset (ROA), Return on Equity (ROE), and Indeks Harga Saham Gabungan (IHSG) Effect on Stock Return. *South East Asia Journal of Contemporary Business, Economics and Law*, *20*(1), 11-27.

Dehghan Khanghahi, B., Bahri Sales, J., Jabbarzadeh Kangarluei, S., & Ashtab, A. (2021). The Formulation of Effective Factors Pattern on Underpricing Phenomenon in Initial Public Offering. *Financial Management Strategy*, *9*(3), 177-202.

Du, X., Zhang, Y., Lai, S., & Tao, H. (2023). How do Auditors Value Hypocrisy? Evidence from China. *Journal of Business Ethics*, 1-33.

Duong, H. N., Goyal, A., Kallinterakis, V., & Veeraraghavan, M. (2022). Democracy and The Pricing of Initial Public Offerings Around the World. *Journal of Financial Economics*, *145*(1), 322-341.

Ehiedu, V. C., Onuorah, A. C., & Mbagwu, O. N. (2022). Financial Leverage and Performance of Listed Oil and Gas Firms in Nigeria. *International Journal of Management (IJM)*, *14*, 422-440.

Fachrian, Z., & Hidayat, W. W. (2023). The Influence of Liquidity Ratio as Current (CR),(DER) Rasio Leverage and Asset Structure to Return on Investment of Coal Companies. *International Journal of Accounting and Management Information Systems*, *1*(1), 17-31.

Ferri, S., Tron, A., Colantoni, F., & Savio, R. (2023). Sustainability Disclosure and IPO Performance: Exploring the Impact of ESG Reporting. *Sustainability*, *15*(6), 5144.

Ferri, S., Tron, A., Colantoni, F., & Savio, R. (2023). Sustainability Disclosure and IPO Performance: Exploring the Impact of ESG Reporting. *Sustainability*, *15*(6), 5144.

Gangadhar, V. R., & Shaikh, A. (2021). Cloud Technology and Return on Investment (ROI). *International Research Journal on Advanced Science Hub*, *3*, 73-79.

González, M., Guzmán, A., Téllez, D., & Trujillo, M. A. (2019). Governance, Sentiment Analysis, and Initial Public Offering Underpricing. *Corporate Governance: An International Review*, *27*(3), 226-244.

Hamza, M., & Damak-Ayadi, S. (2023). The Perception of Audit Quality Among Financial Statements Users, Preparers and Auditors, in Tunisia. *Accounting and Management Information Systems*, *22*(2), 202-224.

Harasheh, M., & De Vincenzo, F. (2023). Leverage-Value Nexus in Italian Small-Medium Enterprises: Further Evidence Using Dose-Response Function. *EuroMed Journal of Business*, *18*(2), 165-183.

Hartana, H. (2019). Initial Public Offering (IPO) of Capital Market and Capital Market Companies in Indonesia. *Ganesha Law Review*, *1*(1), 41-54.

Hu, Y., Dai, T., Li, Y., Mallick, S., Ning, L., & Zhu, B. (2021). Underwriter Reputation and IPO Underpricing: The Role of Institutional Investors in the Chinese Growth Enterprise Market. *International Review of Financial Analysis*, *78*, 101956.

Huang, G. C., Liano, K., & Pan, M. S. (2023). Open-Market Stock Repurchases, Insider Trading, and Price Informativeness. *Review of Quantitative Finance and Accounting*, *60*(4), 1495-1513.

Hubáček, O., & Šír, G. (2023). Beating the Market With A Bad Predictive Model. *International Journal of Forecasting*, *39*(2), 691-719.

İlbasmış, M. (2023). Underpricing and Aftermarket Performance of IPOs During the Covid-19 period: Evidence From Istanbul Stock Exchange. *Borsa Istanbul Review*, *23*(3), 662-673.

Isynuwardhana, D., & Febryan, F. V. (2022). Factors Affecting Underpricing Level during IPO in Indonesia Stock Exchange 2018-2019. *The Indonesian Accounting Review*, *12*(1), 87-98.

Jaffar, R., Abu, N. A., Hassan, M. S., & Rahmat, M. M. (2023). Value Relevance of Board Attributes: The Mediating Role of Key Audit Matter. *International Journal of Financial Studies*, *11*(1), 41.

Jamaani, F., & Alidarous, M. (2019). Review of Theoretical Explanations of IPO Underpricing. *Journal of Accounting, Business and Finance Research*, *6*(1), 1-18.

Jatoi, M. Z., & Rasheed, A. (2023). Impact of Dividend Policy on Firm Performance: Evidence from Non-Financial Firms of Pakistan. *Pakistan Journal of Humanities and Social Sciences*, *11*(2), 1252-1260.

Jhawar, P., & Seal, J. K. (2023). Political Uncertainty and Initial Public Offerings: A Literature Review. *International Journal of Financial Studies*, *11*(2), 74.

Kang, E., & Lam, N. B. (2023). The Impact of Environmental Disclosure on Initial Public Offering Underpricing: Sustainable Development in Singapore. *Corporate Social Responsibility and Environmental Management*, *30*(1), 119-133.

Karima, M., & Ghazali, M. (2023). The Effect of Leverage, Market Value, and Profitability on Share Prices. *Research of Finance and Banking*, *1*(1), 1-12.

Katti, S., Lawrence, E. R., & Raithatha, M. (2023). Risk Disclosure in IPO Advertisement and the Quality of the Firm. *Journal of Financial Markets*, *64*, 100789.

Khatami, S. H., Marchica, M. T., & Mura, R. (2023). The Effect of 'Underwriter–Issuer'personal Connections on IPO Underpricing. *The European Journal of Finance*, *29*(6), 638-668.

Khuong, N. V., Liem, N. T., & Tai, T. A. (2023). Can Audit Quality Predict Earnings Persistence. *Asian Academy of Management Journal*, *28*(1), 163-185.

Kirschbaum, C., Rossoni, L., Minardi, A., & da Silva, E. B. (2023). The Trade off Between Private Equity Sponsorship, Board Centrality, and Experience as Credible Signals for IPO Performance. *Management and Organization Review*, *19*(3), 462-497.

Krause, R., Chen, J., Bruton, G. D., & Filatotchev, I. (2021). Chief Executive Officer Power and Initial Public Offering Underpricing: Examining the Influence of Demand-Side Cultural Power Distance. *Global Strategy Journal*, *11*(4), 686-708.

Kumar Rai, S., & Shaikh, I. (2021). Does the Performance of Private Investment in Public Equity Firms Behave Differently in Different Life Cycles. *Applied Economics*, *53*(17), 1935-1951.

Lee, E. Y., Ha, W., & Park, S. (2023). Auditor Specialization in R&D and Clients' R&D Investment-q Sensitivity. *Journal of Contemporary Accounting & Economics*, 100360.

Li, W., Jingqi, Z., & Chen, L. (2023). Cash Dividends, Return on Equity and Earnings Persistence. *Economic Research-Ekonomska Istraživanja*, *36*(1), 2298-2319.

Liao, X. (2023). Registration System and IPO Pricing Efficiency: Evidence from China. *Applied Economics*, 1-14.

Lim, H., & Rokhim, R. (2021). Factors Affecting Profitability of Pharmaceutical Company: An Indonesian Evidence. *Journal of Economic Studies*, *48*(5), 981-995.

Liu, D., Qiu, Q., & Chen, S. (2023). Timeliness of Technological Innovation and Decisions of IPO Timing and Pricing. *International Review of Economics & Finance*, *86*, 498-519.

Lotito, G., Migheli, M., & Ortona, G. (2020). Transparency, Asymmetric Information And Cooperation. *European Journal of Law and Economics*, *50*, 267-294.

Meng, Q., Huang, H., Li, X., & Wang, S. (2023). Short-Selling and Corporate Default Risk: Evidence from China. *International Review of Economics & Finance*, *87*, 398-417.

Momtaz, P. P. (2021). Initial Coin Offerings, Asymmetric Information, and Loyal CEOs. *Small business economics*, *57*(2), 975-997.

Mun, J. (2022). Optimizing Warfighters 'Intellectual Capability: Return on Investment of Military Education and Research. *Defense AR Journal*, *29*(3), 192-245.

Murimi, K. V., & Mungai, J. (2021). Dividend Policy And Financial Performance of Insurance Companies Listed in Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance, 3(6), 405*, *422*.

Nadeem, M. (2020). Does Board Gender Diversity Influence Voluntary Disclosure of Intellectual Capital in Initial Public Offering Prospectuses? Evidence From China. *Corporate Governance: An International Review*, *28*(2), 100-118.

Nejjari, Z., & Aamoum, H. (2023). The Impact of Intellectual Capital on Profitability, Market Value, Productivity, and Return on Equity: Empirical Evidence from Moroccan ICT Firms. *Journal of the Knowledge Economy*, *14*(2), 1734-1748.

Omran, M., Khallaf, A., Gleason, K., & Tahat, Y. (2021). Non-Financial Performance Measures Disclosure, Quality Strategy, and Organizational Financial Performance: A Mediating Model. *Total Quality Management & Business Excellence*, *32*(5-6), 652-675.

Paeleman, I., Guenster, N., Vanacker, T., & Siqueira, A. C. O. (2023). The Consequences of Financial Leverage: Certified B Corporations' Advantages Compared to Common Commercial Firms. *Journal of Business Ethics*, 1-17.

Pavlov, V., Katok, E., & Zhang, W. (2022). Optimal Contract Under Asymmetric Information About Fairness. *Manufacturing & Service Operations Management*, *24*(1), 305-314.

Peng, X., Jia, Y., Chan, K. C., & Wang, X. (2021). Let us Work Together: The Impact of Customer Strategic Alliances on IPO Underpricing and Post-IPO Performance. *Journal of Corporate Finance*, *67*, 101899.

Peters, G. W., Chudtong, M., & De Gaetano, A. (2023). Analysis of Option-Like Fund Performance Fees in Asset Management via Monte Carlo Actuarial Distortion Pricing. *Annals of Actuarial Science*, 1-43.

Sadik, S., Et-tolba, M., & Nsiri, B. (2023). A Novel Regularization-Based Optimization Approach to Sparse Mean-Reverting Portfolios Selection. *Optimization and Engineering*, 1-29.

Salerno, D., Sampagnaro, G., & Verdoliva, V. (2022). Fintech and IPO underpricing: An explorative study. *Finance Research Letters*, *44*, 102071.

Thusini, S. T., Milenova, M., Nahabedian, N., Grey, B., Soukup, T., Chua, K. C., & Henderson, C. (2022). The Development of the Concept of Return-On-Investment From Large-Scale Quality Improvement Programmes in Healthcare: An Integrative Systematic Literature Review. *BMC Health Services Research*, *22*(1), 1492.

Tian, C., Sun, H., & Chen, J. (2019). Capacity-Achieving Private Information Retrieval Codes with Optimal Message Size and Upload Cost. *IEEE Transactions on Information Theory*, *65*(11), 7613-7627.

Ugwu, C. C., Onyeka, V. N., & Okwa, I. E. (2020). Dividend Policy and Corporate Financial Performance: Evidence From Selected Listed Consumer Goods Firms in Nigeria. *Journal of Economics and Business*, *3*(3).

Wibowo, R. S., Alamsyah, A. R., & Rachmawati, I. K. (2023). The Effect of Fundamental Factors and Systematic Risk on the Return of LQ45 Shares Listed on the Indonesia Stock Exchange. *Quantitative Economics and Management Studies*, *4*(2), 195-210.

Will, A., & Simorangkir, E. N. (2023). The Effect of Current Ratio, return on Equity, and Earning Per Share, Toward Price to Book Value on Palm Oil Agriculture Sector Companies Registered in Indonesia Stock Exchange with Debt to Equity Ratio as Moderating Variable for the Period 2016-2020. *International Journal of Social Science Research and Review*, *6*(4), 370-380.

Yan, C., Li, Z., & Wang, J. (2023). Do Anti-Corruption Campaigns Affect IPO underpricing? Evidence From A Central Discipline Inspection of the CSRC in China. *China Journal of Accounting Research*, *16*(1), 100281.

Yandes, J., & Nugroho, S. S. (2023). Reviewing Internal Variables on the Level of Underpricing of IPO Shares (Observation of the Company Go Public on IDX 2021-2022). *Ilomata International Journal of Tax and Accounting*, *4*(2), 311-323.

Yandes, J., & Nugroho, S. S. (2023). Reviewing Internal Variables on the Level of Underpricing of IPO Shares (Observation of the Company Go Public on IDX 2021-2022). *Ilomata International Journal of Tax and Accounting*, *4*(2), 311-323.

Yuliani, Y., Wahyuni, D., & Bakar, S. W. (2019). The Influence of Financial and Non-Financial Information to Underpricing of Stock Prices in Companies That Conduct Initial Public Offering. Ekspektra. *Jurnal Bisnis Dan Manajemen*, *3*(1), 39.

Zhu, K., Shen, J., & Yao, X. (2019). A Three-Echelon Supply Chain with Asymmetric Information Under Uncertainty. *Journal of Ambient Intelligence and Humanized Computing*, *10*, 579-591.