

Analysis of the Effect of Financial Ratios on Stock Underpricing in Companies that do IPO on the Indonesia Stock Exchange

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Abstrak. This study aims to find the effect of independent variables consisting of financial leverage, return on assets, return on equity, earnings per share, and firm size on the dependent variable, namely the underpricing value of companies listed on the Indonesia Stock Exchange. This type of research is quantitative research that focuses on processing the statistical results of the data obtained. Determination of the company sample using purposive sampling and obtained data from 48 companies taken from 2019-2023. The hypothesis testing used is the T test. The test results state that financial leverage, return on equity, and earnings per share have a significant effect on underpricing. In contrast, the return on assets and firm size variables do not affect stock underpricing.

Keywords: Underpricing; Initial public offering (IPO); financial ratios

Introduction

Companies often choose to go public by issuing shares and selling them to the public, called an IPO (Initial Public Offering) to get more funds to run their business. According to Mutai (2020) investors invest their funds in the primary market in the hope of making an initial profit from the difference between the initial price and the secondary market price. A stock is said to be underpriced if its primary market price or listing price is lower than its secondary market price. However, if the share price at the time of the primary market or public listing is higher than the secondary market price, then the share is overvalued.

The level of underpricing varies significantly between companies between 2019 and 2023. PT Astra International Tbk is one example, which experienced an underpricing of 80% in 2019. In contrast to the predicted share price of IDR 1,400 per share, the actual share price was only IDR 280. In 2020, there was an underpricing of 84.31% on PT Bank Mandiri Tbk shares. The real share price was Rp 230 per share, compared to the projection of Rp 1,400 per share. (Source:(IDX Bursa Efek Indonesia, 2023)).

Nurmazatillah (2021) investigates how financial leverage and Return On Equity (ROE) impact the low share price of companies that IPO on the Indonesia Stock Exchange from 2014 to 2017. This study shows that financial leverage and ROE have a significant impact on underpricing. However, ROE has a limited impact on underpricing compared to other independent variables.

Lestari Research (2020) investigates the relationship between stock underpricing during initial public offerings in the primary market on the Indonesia Stock Exchange during the period 2012 to 2016. This interesting study examined various factors including company size, financial health, underwriter reputation, as well as return on equity (ROE) and return on assets (ROA). However, the results of this study reveal that the only variable that significantly affects underpricing is firm size.

In a study conducted by Abbas et al. (2022) which investigated the factors affecting underpricing in initial public offerings on the Indonesia Stock Exchange (IDX), it was found that company size, profit per share, and marker reputation had an effect on underpricing. In contrast, ROA (Return On Asset) and financial strength have no effect on underpricing.

Furthermore, Fadila & Utami (2020) examines the underpricing phenomenon that occurs in issuers conducting initial public offerings to find out the reasons why IPO shares are underpriced. The results showed that Return On Assets (ROA) has a negative and significant effect. In contrast, financial leverage, also known as debt-to-equity or DER, has a positive and significant effect on IPO underpricing. Nurcahyani & Harianti (2021) conducted research on how underwriter reputation, Return On Asset, debt-to-equity ratio, and company size affect underpricing. The results show that underwriter reputation, Return On Asset, and debt-to-equity ratio strongly influence underpricing. While company size does not affect underpricing.

And Tanoyo & Arfianti (2022) examined the factors that influence the level of underpricing in non-financial companies. Their research reveals that financial leverage has a remarkable and affirmative impact on the level of stock underpricing. In contrast, the variables of Return On Assets (ROA), company size, underwriter reputation, and auditor reputation were found to have a very large and negative influence on the level of stock underpricing.

The previously described studies produced different results from each researcher. For example, research by Abbas et al. (2022) revealed that stock underpricing is not influenced by Return On Asset, while Nurcahyani & Harianti's research (2021) indicates that Return On Asset significantly affects stock underpricing. In the research of Abbas et al. (2022) also concluded that financial leverage does not affect stock underpricing.

Even though underpricing has been the subject of several studies, this subject is still interesting to research because the results of previous studies regarding the variables that affect underpricing still show a lot of disparity. This is what motivates researchers to research and learn more about the factors that influence underpricing.

Literature Review

Signalling Theory

Signalling theory was proposed by Spence (1972). According to signal theory, a company's activities during an initial public offering (IPO) send signals to the market that can be beneficial or detrimental to investors. Grinblatt and Hwang (1989), as cited in Alteza (2010), state that most of the company's potential is known only to them. According to signalling theory, companies have the power to provide subtle signals to users of their financial statements. These signals, in effect, divulge important insights into the strategic manoeuvres undertaken by management to satisfy the wishes of the esteemed owners. Therefore, competent companies will use the underpricing phenomenon to try and send signals about their future prospects. It is expected that the underpricing issue will be a strong signal to investors and losses will eventually be offset by future success, despite the losses at the time of the IPO. Thus, only unsuccessful companies refuse to send out signals as they realise that they cannot make up for the losses caused by underpricing.

This study uses signal theory because it sees investors' purchasing decisions based on signals provided by issuers. Companies provide signals to potential investors by disclosing company information and publishing a prospectus. Companies that want to go public will include financial and non-financial details in their prospectus. Potential investors can use the information in the prospectus to help them decide on the type of investment to make.

Information Asymmetry Theory

Information asymmetry theory was proposed by George Akerlof in 1970. Akerlof (1970) found that information asymmetry can occur when one party has more or better information than the other party. This information asymmetry can occur between issuers and underwriters or between issuers and investors. Issuers have more information about the state of the company, while underwriters have information about market conditions. Therefore, managers have an obligation to provide information to interested parties through financial statements.

Research Model

The research model framework formed for this study is as follows:

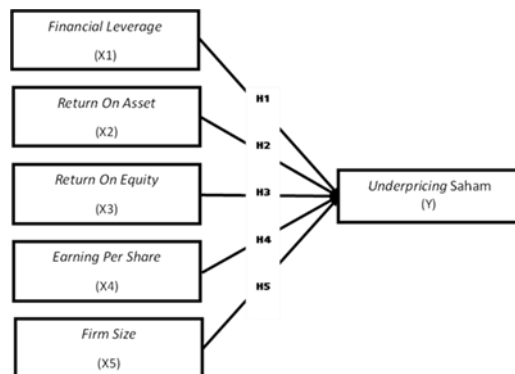


Figure 1. Research Model

Source: Processed by researchers, 2024

Hypothesis Development

H1: Financial Leverage affects stock underpricing

Signalling theory in the context of stock underpricing in Initial Public Offerings (IPOs) refers to how information conveyed by companies to the market can affect investors' perceptions of the value of these companies. One way firms send signals to the market is through their financial structure, including the level of leverage or debt ratio.

Financial leverage is the use of borrowed funds that can increase investment returns. A company's financial acceleration also indicates a high level of risk. Therefore, when making investment choices, investors will consider information about financial acceleration. The higher the level of the company's ability to pay off debt with its own funds, the smaller the proportion will be (Santoso, 2019). Companies that have a relatively low debt to equity ratio when going public will make investors compete to buy their shares, so that they will increase the share price and cause underpricing. Based on the findings of Abbas et al. (2022) stated that financial leverage has no effect on stock underpricing. Meanwhile, the results of research conducted by Tanoyo & Arfianti (2022) financial leverage has a positive influence on stock price underpricing.

H2: Return on Assets affects stock underpricing

An assessment of a company's ability to generate profit from its assets is given by its return on assets. Checking the company's ROA ratio is one of the factors that investors consider before making an investment. With the hope that the level of underpricing is also minimal because the company can use its assets to generate profits and investors will face less risk if the ROA ratio is higher. Research by Fadila & Utami (2020) stated that ROA (Return On Assets) has a negative and significant impact. However, other research by Nurcahyani & Harianti (2021) shows that ROA has a positive and significant effect on underpricing.

H3: Return on Equity affects stock underpricing

Signal theory explains how companies convey information that reflects favourable conditions to investors through signals. As is known, ROE is the company's ability to return

capital gains owned by the company. The high ROE value shows that the company generates higher profits and this can make investors interested in the company's shares and will have a positive impact on the company, of course, the share price in the secondary market will be higher. Investors tend to invest some of their funds when a company shows a good trend in increasing Return on Equity (ROE) every year. This is mainly due to the anticipation that the company's share price (Amelia et al., 2023). will rise as a result of its commendable performance. Conversely, a low ROE signals a reduced ability of the company to generate profits, thereby reducing the level of underpricing. Therefore, a higher ROE serves as a mitigating factor in this regard In Nurmazatillah's research (2021) the results showed that there was no significant effect of ROE on stock underpricing. Meanwhile, other researchers according to Dhea (2019) proves that ROE has a significant effect on underpricing.

H4: affects stock underpricing

Signalling theory refers to how firms communicate information to the market through certain actions, such as dividend policy, business expansion announcements, or changes in capital structure. In the context of EPS, companies can use EPS as one of the signals to the market about their financial performance. Too high earnings per share can hinder a company's ability to grow quickly as all profits are distributed to shareholders, leaving little funds left for expansion. This can lead to underpricing.

In the research of Abbas et al. (2022) resulted in the influence of EPS on stock underpricing, which the results of previous researchers support the information on these results. While other researchers according to Amelia et al. (2023) proves that EPS has no effect on underpricing.

H5: affects stock underpricing

Through the lens of information asymmetry, markets experience information gaps when one entity has a superior knowledge advantage. In contrast to large firms, small firms often lack transparency and readily available information. As a result, this gap may lead to unequal access to information for investors and company executives, potentially increasing underpricing rates. Investors may be less confident in the future performance of small companies due to limited information. Since the larger the firm, the more likely it is to be recognised by the public than smaller firms, firm size can be an indicator of the level of uncertainty about the firm. This indicator becomes a flat factor for investors to consider when making capital investments in the company because as the company grows, investors can more easily obtain information from it and can invest less in the company's growth. This is in accordance with the theory raised by the researcher that firm size can provide signals to investors to determine investment choices.

To characterise firm size, the size of the firm serves to indicate the variety of assets owned by the firm. When the company has more assets, the bigger the company. Based on the research findings of Fadila & Utami (2020), underpricing is negatively affected by company size. On the other hand, the research findings of Abbas et al. (2022) show that underpricing is significantly influenced by company size.

Research Methods

A quantitative strategy was used in the development of this research methodology. This research uses secondary data, which is collected from the company's official website and the page www.idx.co.id to determine the total number of issuers listed on the IDX. The researcher set criteria for the *Purposive Sampling* approach, which was used to select the sample. The sample criteria determined are:

1. Companies that experience *underpricing* or when the share price at the close of trading on the first day in the secondary market is lower than the IPO price.
2. Companies that provide complete financial records and/or data needed by researchers.

A total of 48 companies were selected from a total of 98 companies that experienced *underpricing* during the initial public offering on the Indonesia Stock Exchange, based on the criteria mentioned above.

Research Results and Discussion

Results

Normality Test

This study uses the Kolmogorov-Smirnov test to determine whether the independent and dependent variables have a normal distribution or not (Sugiyono, 2007).

**Table 1. Normality Test Results
One-Sample Kolmogorov-Smirnov Test**

		Unstandardised Residual
N		48
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,14551040
Most Extreme Differences	Absolute	,191
	Positive	,123
	Negative	-,191
Kolmogorov-Smirnov Z		1,327
Asymp. Sig. (2-tailed)		,059

a. Test distribution is Normal.

b. Calculated from data.

Source: Processed by researchers, 2024

Muicollinearity Test

Table 2. Multicollinearity Test Results

Collinearity Statistics		
Model	Tolerance	VIF
1	X1_FL	,944
	X2_ROA	,215
	X3_ROE	,209
	X4_EPS	,553
	X5_FS	,749

a. Dependent Variable: Y_UNDERPRICING

Source: Processed by researchers, 2024

The table above shows that the independent variables have VIF values greater than (<10.00) and tolerance values greater than (>0.100). So, it can be concluded that this regression form does not occur symptoms of multicollinearity.

Heteroscedasticity Test

Table 3. Glesjer Test Results
Coefficients^a

Model	Unstandardised Coefficients B	Std. Error	Standardised Coefficients		Sig.
			Beta	t	
1 (Constant)	-,339	,234		-	,155
				1,449	
X1_FL	-,017	,032	-,079	-,527	,601
X2_ROA	-,040	,112	-,060	-,362	,719
X3_ROE	,108	,088	1,907	1,230	,225
X4_EPS	-,002	,002	-	-	,188
			2,089	1,338	
X5_FS	,018	,009	,336	1,913	,063

a. Dependent Variable: ABRESID

Source: Processed by researchers, 2024

The heteroscedasticity test was used to assess the inconsistency of model variation in the study. The significance values of all the variables mentioned show that all values are greater than 0.05, which signifies the absence of heteroscedasticity problems (Sugiyono, 2007).

Multiple Linear Regression Test

Table 4. Multiple Linear Regression Test Results

Coefficients ^a						
Model	Unstandardized Coefficients			Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.	
1	(Constant)	,126	,379		,332	,741
	X1	,099	,045	,310	2,213	,032
	X2	,257	,200	,229	1,286	,205
	X3	-,347	,152	-,4128	2,278	,028
	X4	,007	,003	4,231	2,321	,025
	X5	-,014	,015	-,163	-,923	,361

Source: Processed by researchers, 2024

Based on the results of multiple linear analysis tests in the table above, a linear regression equation is obtained, as follows:

$$Y = 0.126 + 0.099X_1 + 0.257X_2 - 0.347X_3 + 0.007X_4 - 0.014X_5$$

Description:

- Y= *Underpricing*
- X1= *Financial leverage*
- X2= *Return On Asset*
- X3= *Return On Equity*
- X4= *Earning per share*
- X5= *Firm size*

From the equation, it can be seen that

- The constant value of variable Y (*underpricing*) of 0.126 indicates that the average value of the dependent variable Y is predicted to be 0.126 when all independent variables are equal to zero.
- The coefficient of 0.099 states that, assuming the values of X2, X3, X4, and X5 are constant, the value of Y will increase by 0.099 on average for every one unit increase in X1.
- With the values of X1, X3, X4, and X5 held constant, the coefficient of 0.257 indicates that the value of Y will increase on average by 0.257 for each unit increase in X2.
- The coefficient of -0.347 means that, with constant values for X1, X2, X4, and X5, the value of Y will decrease on average by 0.347 for every one unit increase in X3.
- The coefficient of 0.007 implies that the average expected increase in the value of Y is 0,007 for every one-unit increase in X4, holding constant values for X1, X2, X3, and X5.
- The coefficient of -0.014 means that, assuming constant values for X1, X2, X3, and X4, the value of Y will decrease on average by 0.014 for every one unit increase in X5.

Determination Test

Table 5. Determinant Coefficient Test Results

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,389a	,151	,050	,153928	2,358

a. Predictors: (Constant), X5_FIRM SIZE, X2_ROA, X1_FL, X3_ROE, X4_EPS

b. Dependent Variable: Y_UNDERPRICING

Source: Processed by researchers, 2024

The R Square value in the statistical table is 15.1%. Thus, it can be said that the independent variables have an influence of 15.1% on stock underpricing, and the remaining 84.9% can be explained by variables not included in this analysis.

Discussion

H	Pernyataan Hipotesis	Coef.Value	P>[Z]
1	<i>Financial leverage</i> berpengaruh terhadap <i>underpricing</i> saham.	t-statistic 2,213 sig 0,032	diterima
2	<i>Return of Asset</i> berpengaruh terhadap <i>underpricing</i> saham.	t-statistic 1,286 sig 0,205	ditolak
3	<i>Return of Equity</i> berpengaruh terhadap <i>underpricing</i> saham.	t-statistic -2,278 sig 0,028	diterima
4	<i>Earning per share</i> berpengaruh terhadap <i>underpricing</i> saham.	t-statistic 2,321 sig 0,025	diterima
5	<i>Firm size</i> berpengaruh terhadap <i>underpricing</i> saham.	t-statistic -0,163 sig 0,361	ditolak

Figure 2. Summary of hypotheses

Source: Processed by researchers, 2024

The Effect of Financial leverage on Stock Underpricing

Financial leverage refers to the use of capital to increase investment returns. The regression analysis in Table 4 shows that the significance level of 0.03 is smaller than 0.05, which indicates that the effect of financial leverage on underpricing is statistically significant. The findings of this study indicate that financial leverage is an important factor for companies that use debt in their funding structure. It can be a positive or negative statement depending on the context. A high leverage ratio can be interpreted as a positive indication of management's confidence in the company's prospects, but more often it is interpreted as an indicator of risk that can increase underpricing. High leverage also hides information regarding financial risk, which may increase information asymmetry and encourage investors to ask for a lower IPO price, thus increasing underpricing. In other words, this hypothesis is accepted, indicating that high financial leverage has a significant influence on stock underpricing. These results are in line with research conducted by Tanoyo & Arfianti (2022) and Yuliani et al. (2019).

The Effect of Return On Asset on Stock Underpricing

The results of the Multiple Linear Regression Test are presented in Table 4. The X2 variable (ROA) has a coefficient of 0.257 and a standard error of 0.200. In addition, the t-statistic value for X2 is 1.286. The significance value (Sig.) for X2 is 0.205, which is above the widely recognised significance level of 0.05. This suggests that the hypothesis of ROA affecting underpricing in this regression model is not sufficiently confirmed by the statistical data. Underpricing in the context of an IPO can be seen, in line with signalling theory, as a means for the firm to signal to the market its underlying value. In this case, ROA serves as a financial performance metric that illustrates the quality and viability of the firm. It is thought that underpricing will be reduced for firms with greater ROA if higher ROA is viewed as a favourable indicator of the firm's success. In this case, the idea that ROA affects stock underpricing is rejected, which suggests that ROA may not be a reliable indicator of market-embedded firm value. Therefore, the findings of this study contradict signalling theory. This result is consistent with the research of Nurmazatillah (2021) and Isyuardhana & Febryan's research (2022).

The Effect of Return On Equity on Stock Underpricing

In the calculation of table 4, variable X3 has a significance value (Sig.) of 0.028 indicating that the effect of ROE on underpricing is statistically significant. Since this value is smaller than 0.05, it can be concluded that ROE has an influence on underpricing. This means that an increase in ROE (X3) leads to a decrease in the level of underpricing. This result is in accordance with signal theory where high ROE gives a positive signal to investors regarding the quality and profit potential of the company. By giving a positive signal through high ROE, the company can reduce uncertainty about the quality of the company. Investors may be more willing to buy shares at a higher price, which in turn can reduce the level of underpricing. The results of this study are in line with the research of Amelia et al. (2023) and Taslim & Lampung's research (2023).

The Effect of Earning Per Share on Stock Underpricing

Table 4 illustrates the impact of a company's Earnings Per Share (EPS) on the level of underpricing at the time of initial public offering (IPO). The statistical significance of 0.025 is below the generally accepted threshold of 0.05. According to Signalling theory, a high EPS indicates the company's ability to generate strong earnings per share. Investors often interpret this as a sign of profitability and strong financial performance in the business. When EPS is high, investors may see the company as a more favourable investment opportunity and reduce uncertainty regarding the quality of the company. The same results were shown in Isyuardhana & Febryan's research. (2022), Ripo et al. (2023) and Widiyanto & Khristiana's research (2021).

The Effect of Firm size on Stock Underpricing

Similar to Return On Asset, the hypothesis that "Firm size affects underpricing" is rejected. Related to signalling theory, firm size is often an indication of stability and quality. In this hypothesis, investors view large companies positively if they are seen to have greater resources, a better reputation, or access to a wider market. Thus, this supports the theory that large companies tend to have lower underpricing rates as investors perceive them to be more profitable. However, the fact that this hypothesis has been rejected implies that firm size has little or no influence on the level of underpricing observed in the parameterised data considered.

This may indicate that underpricing is more significantly influenced by other variables or that firm size is not a strong enough signal to the market regarding underpricing. This is consistent with the results of the research (2021).

Conclusion

The main objective of this study is to determine the effect of financial ratios on the occurrence of stock underpricing in companies conducting initial public offerings (IPOs) on the Indonesia Stock Exchange (IDX), which took place from 2019 to 2023. A total of 48 companies were selected from 98 companies that went public using purposive sampling. Based on the results of data testing, financial leverage affects underpricing, in contrast to ROA and firm size which are proven to have no effect on underpricing. Then, the test data also shows that ROE and EPS have a significant effect on underpricing.

Despite exploring more variables that may affect underpricing, further research is needed to understand the complex relationships that exist between leverage, financial performance and investor perceptions in diverse market environments. Thus, to optimise the returns from initial public offerings (IPOs), companies can better understand and control the variables that influence underpricing. At the very least, the results of this study should stimulate and encourage more research. It is believed that future study may address the existing constraints and improve variables such as: a) utilising data from the financial crisis; and b) the outstanding performance of firms during and before the SEO does not reflect the true state of the organization.

References

- [1] Abbas, D. S., Rauf, A., Hidayat, I., & Sasmita, D. (2022). Determinan on Underpricing at The Initial Public Offering: Evidence Indonesia Stock Exchange. *Quantitative Economics and Management Studies*, 3(2), 175–185. <https://doi.org/10.35877/454ri.qems852>
- [2] Akerlof, G. A. (1970). *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*. 84(3), 488–500.
- [3] Amelia, R., Mauluddi, H. A., & Purbayati, R. (2023). Pengaruh ROE, EPS, dan Reputasi Underwriter terhadap Tingkat Underpricing Stock pada Perusahaan IPO di ISSI. *Journal of Applied Islamic Economics and Finance*, 3(3), 640–650. <https://jurnal.polban.ac.id/ojs-3.1.2/jaief/article/view/5499>
- [4] Fadila, A., & Utami, K. (2020). IPO Underpricing di Bursa Efek Indonesia. *Inovasi*, 16(2), 214–222. <https://journal.feb.unmul.ac.id/index.php/INOVASI/article/view/7975>
- [5] IDX Bursa Efek Indonesia. (2023). *Daftar Perusahaan*. <https://www.idx.co.id/id>
- [6] 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. <https://doi.org/10.14414/tiar.v12i1.2660>
- [7] Lestari, yunifa sri, & Trihastuti, A. (2020). Pengaruh Ukuran Perusahaan, Reputasi Underwriter, Return On Asset, Return On Equity dan Financial Leverage Terhadap Underpricing Saham Initial Public Offering (IPO) pada Pasar Perdana di Bursa Efek Indonesia Periode 2012-2016. *Ekonomi Akuntansi*, 5(1), 39–52.
- [8] Mulyani, E., & Maulidya, R. (2021). Underpricing Saham pada Saat Initial Public Offering (IPO): Pengaruh Ukuran Perusahaan, Umur Perusahaan, Reputasi KAP dan Profitabilitas. *Wahana Riset Akuntansi*, 9(2), 139. <https://doi.org/10.24036/wra.v9i2.112970>

- [9] Mutai, J. K. (2020). Can a Company's Pre-IPO return on Assets (ROA), Return on Equity (ROA) and Initial Returns Predict Post-IPO Performance? *Journal of Finance and Economics*, 8(3), 93–99. <https://doi.org/10.12691/jfe-8-3-1>
- [10] Nurcahyani, J., & Harianti, A. (2021). Faktor Yang Mempengaruhi Underpricing Pada Perusahaan Sektor Non Keuangan. *Kompleksitas: Jurnal Ilmiah Manajemen, Organisasi Dan Bisnis*, 10(2), 70–78. <https://doi.org/10.56486/kompleksitas.vol10no2.143>
- [11] Nurmazatillah, R. (2021). Pengaruh Faktor Financial Leverage Dan Return on Equity (Roe) Terhadap Underpricing Saham Pada Perusahaan Yang Melakukan Ipo Di Bursa Efek Indonesia Periode 2014-2017. *Jurnal Ekobismen*, 1(1), 49–64. <https://doi.org/10.47647/jeko.v1i1.324>
- [12] Ripo, I., Tanor, L. A. O., & ... (2023). the Effect of Dividend Per Share and Earnings Per Share on Stock Prices in Manufacturing Companies Listed on the Indonesian *Manajemen, Dan ...*, 8(2), 179–194. <http://jekma.feb-unima.com/index.php/jekma/article/view/37%0Ahttps://jekma.feb-unima.com/index.php/jekma/article/download/37/37>
- [13] Spence, M. (1972). *I shall argue that the paradigm case of the market with this type of informational structure is the job market and will therefore focus upon it . By the end I hope it will be clear (although space limitations will not permit an extended argument) that a.* 355–374.
- [14] Sugiyono. (2007). *Dokupdf_com_ebook_statistik_untuk_peneli*. In *Statika Untuk Penelitian* (Vol. 12, pp. 1–415).
- [15] Tanoyo, D., & Arfianti, R. I. (2022). Factors Affecting the Level of Stock Underpricing in Non-Financial Companies. *Journal of Management and Leadership*, 5(1), 38–55. <https://doi.org/10.47970/jml.v5i1.301>
- [16] Taslim, A. A., & Lampung, U. B. (2023). *Pengaruh Return on Equity , Financial Leverage dan Ukuran Perusahaan Terhadap Underpricing Saham (IPO)*. *Penawaran umum saham perdana mengubah suatu organisasi swasta yang awalnya Underpricing lebih rendah dibandingkan harga saham saat terjual di pasar m.* 11(1).
- [17] Widiyanto, T., & Khristiana, Y. (2021). Analisis Underpricing Saham Pada Penawaran Pasar Perdana Di Bursa Efek Indonesia Sebelum Pandemi Covid-19 Di Dunia. *Excellent*, 8(1), 79–91. <https://doi.org/10.36587/exc.v8i1.889>