

## **The Effect of Underwriter Reputation, Firm Size, Financial Leverage, and Profitability on IPO Underpricing in the Indonesian Stock Exchange during 2021–2024**

**Shelmara Nabila Zakiyyatunu Nafsi<sup>1\*</sup>, and Shinta Heru Satoto<sup>2</sup>**

<sup>1</sup>Affiliation: Management Department, Faculty of Economics and Business, UPN “Veteran” Yogyakarta, Indonesia

<sup>2</sup>Affiliation: Faculty of Economics and Business, UPN “Veteran” Yogyakarta, Indonesia

\*Corresponding author: [shelmara.bila@gmail.com](mailto:shelmara.bila@gmail.com)

**Received:** (19 December 2025); **Revised:** (4 April 2026); **Published online:** (17 April 2026)

**To cite this article:** Nafsi, Shelmara Nabila Zakiyyatunu<sup>1</sup>, and Satoto, Shinta Heru<sup>2</sup>. (2026). *The Effect of Underwriter Reputation, Firm Size, Financial Leverage, and Profitability on IPO Underpricing in the Indonesian Stock Exchange during 2021-2024*. *JAF (Journal of Accounting and Finance)*, vol.10(1), pp.50-60. <https://doi.org/10.25124/jaf.v10i1.10403>

**To link to this article:** <https://doi.org/10.25124/jaf.v10i1.10403>

### **Abstract**

*This study aims to analyze the effect of underwriter reputation, firm size, financial leverage, and profitability on the level of underpricing in companies conducting Initial Public Offerings (IPOs) on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. This research employs a quantitative approach using multiple linear regression analysis. The sample was selected through purposive sampling based on IPO firms with complete prospectus and financial data. The results indicate that underwriter reputation and financial leverage have a positive and significant effect on underpricing, while firm size has a negative and significant effect. Meanwhile, profitability does not have a significant effect on underpricing. These findings suggest that the reputation of underwriting institutions and the company’s capital structure play a more dominant role in determining IPO underpricing than profitability performance. This study provides insights for investors in assessing IPO stock prospects and contributes to the literature on IPO pricing behavior in emerging markets.*

**Keyword:** *Financial leverage; Firm size; IPO; Profitability; Underpricing; Underwriter reputation*

### **Abstrak**

*Penelitian ini bertujuan untuk menganalisis pengaruh reputasi underwriter, ukuran perusahaan, financial leverage, dan profitabilitas terhadap tingkat underpricing pada perusahaan yang melakukan Initial Public Offering (IPO) di Bursa Efek Indonesia (BEI) periode 2021–2024. Metode penelitian menggunakan pendekatan kuantitatif dengan analisis regresi linier berganda. Sampel ditentukan melalui teknik purposive sampling berdasarkan perusahaan yang melakukan IPO dan memiliki data prospektus lengkap. Hasil penelitian menunjukkan bahwa reputasi underwriter dan financial leverage berpengaruh positif*

*signifikan terhadap underpricing, sedangkan ukuran perusahaan berpengaruh negatif signifikan. Sementara itu, profitabilitas tidak berpengaruh signifikan terhadap underpricing. Temuan ini menunjukkan bahwa faktor reputasi lembaga penjamin emisi dan struktur pendanaan perusahaan lebih menentukan tingkat underpricing dibandingkan kinerja profitabilitas. Penelitian ini memberikan wawasan bagi investor dalam menilai prospek saham IPO.*

**Kata Kunci :** *Financial leverage; IPO; ; Profitabilitas; Reputasi Underwriter; Ukuran Perusahaan; Underpricing.*

## INTRODUCTION

The Indonesian capital market has experienced significant growth over the past four years, particularly following the Covid-19 pandemic. Despite global economic disruptions, the capital market in Indonesia demonstrated resilience, reflected in the substantial increase in the number of investors. The number of capital market investors rose sharply from approximately 4.5 million at the end of 2020 to more than 14.84 million by December 2024, indicating a shift in public financial behavior toward more inclusive and digital investment activities (KSEI, 2024). This development highlights the growing role of the capital market as a source of corporate financing and public investment participation.

One of the main drivers of this growth is digital transformation in the capital market, particularly through the implementation of the Electronic Initial Public Offering (e-IPO) system. Introduced by the Indonesia Stock Exchange (IDX) in August 2020 and fully implemented in 2021, the e-IPO system aims to enhance transparency, efficiency, and investor accessibility in the IPO process. This system is supported by Financial Services Authority Regulation (POJK) No. 41/POJK.04/2020, which mandates that all public offering processes be conducted electronically. The adoption of e-IPO has strengthened investor confidence and expanded retail investor participation in the primary market.

Along with increased investor participation, the number of companies conducting IPOs has also grown. During the 2021–2024 period, the average number of IPOs increased compared to the pre-pandemic period, although the total funds raised fluctuated annually. This fluctuation suggests differences in company size, valuation, and market conditions, indicating that IPO pricing remains a complex process influenced by multiple factors.

Despite improvements in transparency and access to information, the phenomenon of underpricing remains prevalent in the Indonesian IPO market. Underpricing occurs when the offering price in the primary market is lower than the closing price on the first trading day in the secondary market. Data from the Indonesia Stock Exchange show that approximately 79.8% of IPOs during the 2021–2024 period experienced underpricing, with the highest occurrence in 2024. While underpricing provides short-term gains for investors, it may result in implicit losses for issuing firms due to suboptimal capital raising.

According to signaling theory, underpricing can be interpreted as a strategic signal used by high-quality firms to convey credibility to investors under conditions of information asymmetry (Spence, 1973; Allen & Faulhaber, 1989). In the IPO context, companies may deliberately set lower offering prices to signal firm quality and reduce uncertainty. Consequently, firm characteristics and the reputation of external parties involved in the IPO process play a crucial role in shaping investor perceptions and IPO pricing decisions (Asri, 2013).

Internal firm characteristics such as firm size, financial leverage, and profitability are commonly used by investors to assess business stability, financial risk, and earnings potential

(Asri, 2013). Larger firms tend to have more transparent information and lower information asymmetry, which may reduce underpricing. Profitability, often measured by Return on Assets (ROA), signals operational efficiency and future prospects, although empirical findings regarding its effect on underpricing remain mixed. Financial leverage, measured by the Debt to Equity Ratio (DER), reflects financial risk and may increase underpricing as compensation for higher uncertainty.

In addition to internal factors, underwriter reputation serves as an important external signal in the IPO process. Reputable underwriters are expected to set offering prices closer to intrinsic value to maintain their credibility in the market. However, prior empirical studies report inconsistent results regarding the effects of underwriter reputation, firm size, profitability, and financial leverage on underpricing, indicating the existence of a research gap.

Given the inconsistent findings in previous studies and the unique dynamics of the Indonesian capital market during the 2021–2024 period—characterized by post-pandemic recovery and full implementation of the e-IPO system—further empirical investigation is necessary. Therefore, this study aims to examine the effect of underwriter reputation, firm size, profitability, and financial leverage on IPO underpricing in companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The findings are expected to contribute to the literature on IPO pricing and provide practical insights for issuers and investors in the primary market.

## LITERATURE REVIEW

### Signaling Theory, Agency Theory, and Information Asymmetry

The phenomenon of IPO underpricing is closely related to information asymmetry between issuers and investors. According to information asymmetry theory, managers possess superior information regarding firm quality and prospects compared to investors, which may lead to pricing inefficiencies in the primary market (Akerlof, 1970; Rock, 1986). To mitigate this asymmetry, firms send signals to the market to convey credibility and reduce uncertainty.

Signaling theory introduced by Spence (1973) explains that firms with higher quality are willing to incur certain costs to differentiate themselves from lower-quality firms. In the IPO context, Allen and Faulhaber (1989) argue that underpricing may function as a signaling mechanism, where high-quality firms deliberately set lower offering prices to gain investor confidence and future valuation benefits. Signals can take the form of transparent financial information, strong profitability, large firm size, or the involvement of reputable underwriters.

Agency theory further complements signaling theory by explaining conflicts of interest between managers (agents) and shareholders (principals) during the IPO process (Jensen & Meckling, 1976). Managers may have incentives to ensure IPO success even at the cost of underpricing. The presence of reputable underwriters serves as an external monitoring mechanism that reduces agency conflicts and enhances pricing credibility. Together, these theories provide a conceptual foundation for examining how underwriter reputation, firm size, financial leverage, and profitability influence IPO underpricing.

### Underwriter Reputation and Underpricing

Underwriter reputation refers to the credibility, experience, and market recognition of investment banks or securities firms involved in underwriting IPOs. Reputable underwriters are generally characterized by high underwriting volume, extensive market experience, and a strong track record in managing IPO pricing and distribution (Carter & Manaster, 1990; Sartika et al., 2022). In the Indonesian context, underwriter reputation is often proxied by underwriters ranked

among the top ten based on trading value or underwriting activity (Darmawan & Bustaman, 2024).

Underwriter reputation plays a critical role in reducing uncertainty in the IPO process. Reputable underwriters possess superior expertise in valuation, pricing, and market stabilization, enabling them to set offering prices closer to intrinsic value. As a result, higher underwriter reputation is expected to reduce underpricing. Empirical studies consistently report a negative relationship between underwriter reputation and underpricing (Apsari et al., 2022; Alfin & Dillak, 2021; Wijaya & Kufepaksi, 2023). From a signaling perspective, the involvement of a reputable underwriter sends a positive signal regarding issuer quality, thereby lowering investor-required discounts (Spence, 1973; Allen & Faulhaber, 1989).

### **H1. Underwriter reputation has a negative effect on IPO underpricing.**

#### **Firm Size on Underpricing**

Firm size reflects the scale of a company's operations and resources and is commonly measured by total assets or the natural logarithm of total assets (Beaver et al., 2012). Larger firms tend to have more stable operations, greater public visibility, and more comprehensive information disclosure, which reduces information asymmetry between issuers and investors.

Consequently, large firms are expected to experience lower underpricing. Previous studies document a negative relationship between firm size and underpricing (Syahwildan & Aminudin, 2021; Pradnyana & Erawati, 2024). However, some studies report insignificant effects, suggesting that investors may prioritize performance indicators over firm scale (Avrilia & Susanti, 2024). Nevertheless, signaling theory suggests that firm size serves as a credible signal of stability and transparency, thereby reducing pricing discounts in IPOs (Spence, 1973).

### **H2. Firm size has a negative effect on IPO underpricing.**

#### **Financial Leverage and Underpricing**

Financial leverage represents the extent to which a firm finances its assets through debt and is commonly measured using the Debt to Equity Ratio (DER), calculated as total liabilities divided by total equity (Brigham & Houston, 2019). A higher DER indicates greater financial risk, as firms with higher debt obligations face increased default risk and earnings volatility.

High financial leverage signals greater uncertainty to investors, prompting them to demand higher compensation for risk. Therefore, firms with higher leverage tend to set lower offering prices to attract investors, resulting in higher underpricing. Empirical evidence largely supports a positive relationship between financial leverage and underpricing (Rahman et al., 2021; Chen & Wang, 2022; Kumar & Singh, 2023; Li et al., 2024; Ahmed & Khan, 2025). This relationship is consistent with signaling and agency theories, which suggest that firms compensate higher perceived risk through pricing discounts (Jensen & Meckling, 1976).

### **H3. Financial leverage has a positive effect on IPO underpricing.**

#### **Profitability and Underpricing**

Profitability reflects a firm's ability to generate earnings from its assets and operations and is a key indicator of financial performance. One of the most commonly used measures of profitability is Return on Assets (ROA), which evaluates how efficiently a firm utilizes its assets to generate net income (Brigham & Houston, 2019).

High profitability signals strong operational efficiency and favorable future prospects, thereby reducing uncertainty for investors. As a result, profitable firms are expected to experience lower underpricing. Several studies confirm a negative relationship between profitability and underpricing (Hanum & Desiyanti, 2023; Komariah & Sabrina, 2022). However, mixed empirical findings indicate that profitability does not always influence IPO pricing, suggesting that investors may rely more heavily on external signals, such as underwriter reputation, or risk-related factors when evaluating IPOs.

#### H4. Profitability has a negative effect on IPO underpricing.

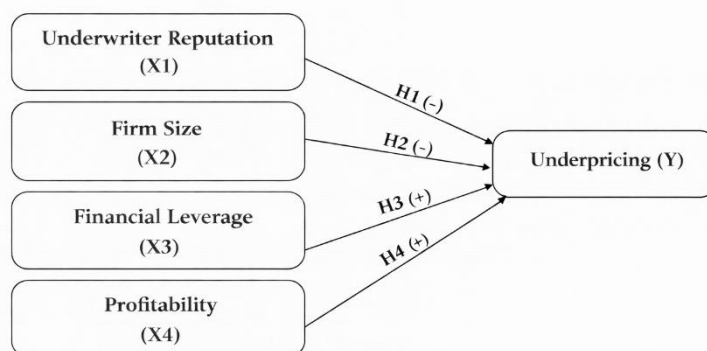


Figure 1. Conceptual Framework

## RESEARCH METHOD

### Sampling and Procedures

This study employs a quantitative research design with an explanatory approach to examine the determinants of IPO underpricing in the Indonesian Stock Exchange (IDX). The population consists of all companies that conducted Initial Public Offerings (IPOs) on the IDX during the 2021–2024 period, totaling 233 firms. The sample was selected using purposive sampling based on two criteria: (1) firms that experienced underpricing on the first trading day, and (2) firms with complete prospectus and financial data available at the time of the IPO. Based on these criteria, 186 IPO firms were included in the final sample.

The data were collected from IPO prospectuses, audited financial statements, and official publications issued by the Indonesian Stock Exchange and the e-IPO platform. Secondary data were systematically documented and compiled to ensure consistency and accuracy in the measurement of research variables.

### Measures

This study employs five variables consisting of one dependent variable and four independent variables. The dependent variable is IPO underpricing, while the independent variables include underwriter reputation, firm size, financial leverage, and profitability.

IPO underpricing is measured using the initial return, calculated as the difference between the first-day closing price in the secondary market and the offering price, divided by the offering price. This measure reflects the extent of price adjustment from the primary to the secondary market and is widely used in IPO studies.

Underwriter reputation is measured using a dummy variable. A value of 1 is assigned if the IPO is underwritten by a reputable underwriter classified among the top ten underwriters based on total trading value during the observation period, and 0 otherwise. This proxy captures

the credibility and experience of the underwriter involved in the IPO process.

Firm size is measured by the natural logarithm of total assets reported in the company's financial statements prior to the IPO. The logarithmic transformation is applied to reduce data dispersion and scale bias across firms.

Financial leverage is proxied by the Debt to Equity Ratio (DER), calculated as total liabilities divided by total equity. This ratio reflects the firm's capital structure and the degree of financial risk borne by the company.

Profitability is measured using Return on Assets (ROA), calculated as net income divided by total assets. ROA reflects the firm's efficiency in utilizing its assets to generate profits prior to the IPO.

### **Data Analysis**

The data were analyzed using quantitative statistical methods. Descriptive statistics were employed to describe the characteristics of each research variable by examining the mean, minimum, maximum, and standard deviation values. Descriptive analysis provides an initial overview of data distribution and variability prior to inferential testing (Ghozali, 2016).

To examine the influence of underwriter reputation, firm size, financial leverage, and profitability on IPO underpricing, multiple linear regression analysis was applied. This method is appropriate for analyzing the simultaneous and partial effects of several independent variables on a dependent variable (Ghozali, 2016).

Prior to hypothesis testing, classical assumption tests were conducted to ensure the reliability of the regression model. These tests included multicollinearity testing, heteroscedasticity testing, and autocorrelation testing to ensure that the regression model meets the classical assumptions (Ghozali, 2016).

Hypothesis testing was carried out using the t-test to evaluate the partial effect of each independent variable and the F-test to assess the simultaneous effect of all independent variables on IPO underpricing. The coefficient of determination ( $R^2$ ) was used to measure the explanatory power of the regression model (Ghozali, 2016). Statistical significance was determined at a 5 percent significance level. The regression model used in this study is expressed as follows:

$$\text{Underpricing} = \alpha + \beta_1 \text{UR} + \beta_2 \text{SIZE} + \beta_3 \text{DER} + \beta_4 \text{ROA} + \varepsilon$$

where Underpricing represents the initial return, UR denotes underwriter reputation, SIZE represents firm size, DER represents financial leverage, ROA represents profitability, and  $\varepsilon$  represents the error term.

## **RESULT AND DISCUSSION**

### **Result**

#### **Descriptive Statistics**

Table 1 presents the descriptive statistics of 186 IPO firms listed on the Indonesian Stock Exchange during the 2021–2024 period. The mean value of IPO underpricing is 23.18%, with a minimum of 1% and a maximum of 35%, indicating that underpricing remains prevalent with considerable variation among firms ( $SD = 11.799$ ).

Underwriter reputation has a mean value of 0.57, indicating that 57% of the IPOs were underwritten by reputable underwriters. Firm size, measured as the natural logarithm of total assets, has a mean value of 26.31, with values ranging from 18.42 to 34.36 ( $SD = 2.48$ ).

Financial leverage shows a mean value of 2.73, with substantial dispersion (SD = 10.89), reflecting heterogeneous capital structures among IPO firms. Profitability, measured by ROA, has a mean value of 8.61%, ranging from -136.00% to 70.20%, with a standard deviation of 16.96, indicating wide variation in firm performance prior to the IPO.

**Table 1. Descriptive Statistics**

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std Deviation</b>
Underpricing	1	35	23.18	11.799
Underwriter Reputation	0	1	0.57	0.496
Firm Size	18.42	34.36	26.31	2.483
Financial Leverage	0.02	111.08	2.73	10.893
Profitability	-136.00	70.20	8.61	16.962

### Regression Results

The results of the multiple linear regression analysis are presented in Table 2. The findings indicate that underwriter reputation has a positive and statistically significant effect on IPO underpricing, with a regression coefficient of 4.765 and a significance level of 0.001. This result suggests that IPOs underwritten by reputable underwriters tend to experience underpricing that is 4.765 percentage points higher than those underwritten by non-reputable underwriters, holding other variables constant.

**Table 2. The Effects of Underwriter Reputation, Firm Size, Financial Leverage, and Profitability on Underpricing, n=186**

<b>Independent Variables</b>	<b>Standardized Coefficients (Beta)</b>	<b>t</b>	<b>sig</b>
Underwriter Reputation	4.765	3.391	.001
Firm Size	-3.197	-10.955	.000
Financial Leverage	2.447	2.434	.016
Profitability	-.075	-1.844	.067
F = 30.391			.000
R <sup>2</sup> = 0.403			

$$\text{Adj } R^2 = 0.389$$

---

Dependent variable: underpricing

Firm size is found to have a negative and statistically significant effect on IPO underpricing, with a regression coefficient of  $-3.197$  and a significance level of  $0.000$ . This indicates that an increase in firm size is associated with a reduction in underpricing by  $3.197$  percentage points, implying that larger firms experience lower IPO underpricing.

Financial leverage also shows a positive and statistically significant effect on IPO underpricing, with a regression coefficient of  $2.447$  and a significance level of  $0.016$ . This finding indicates that firms with higher leverage tend to offer shares at greater price discounts, reflecting increased perceived financial risk.

In contrast, profitability has a negative but statistically insignificant effect on IPO underpricing, with a regression coefficient of  $-0.075$  and a significance level of  $0.067$ , which exceeds the  $5\%$  significance threshold. This result indicates that profitability does not significantly influence IPO underpricing during the observation period.

The overall regression model demonstrates strong explanatory power. The F-test result shows an F-statistic value of  $30.391$  with a significance level of  $0.000$ , indicating that the model is statistically significant. The  $R^2$  value of  $0.403$  suggests that  $40.3\%$  of the variation in IPO underpricing can be explained by underwriter reputation, firm size, financial leverage, and profitability, while the adjusted  $R^2$  of  $0.389$  indicates a good fit of the model after adjusting for the number of independent variables. The results of the study are not an event to display many tables or figures but limit them to only important tables and images. Each table/figure should be captioned concisely, straightforwardly and clearly in the form of a narrative. All data and other processing results that are not too substantive are simply attached as supplement files.

## **Discussions**

### **Effect of Underwriter Reputation on IPO Underpricing**

The results indicate that underwriter reputation has a positive and significant effect on IPO underpricing. Although signaling theory suggests that reputable underwriters should reduce underpricing by lowering information uncertainty, this finding reveals an opposite relationship. This result implies that IPOs handled by reputable underwriters tend to experience higher underpricing. One possible explanation is that reputable underwriters attract excessive investor attention, leading to short-term price momentum and higher initial returns. This finding is consistent with Yip (2009), who argues that high-reputation underwriters stimulate strong demand that increases first-day price jumps. Moreover, Loughran and Ritter (2004) suggest that reputable underwriters may engage in strategic underpricing to benefit institutional investors, aligning with agency theory, where underwriters prioritize their own interests over issuers. This behavior is also consistent with asymmetric information theory, as underwriters possess superior market information that enables strategic pricing decisions. These findings support prior studies by Rini and Damayanty (2024) and Darmawan and Bustaman (2024).

### **Effect of Firm Size on IPO Underpricing**

The findings show that firm size has a negative and significant effect on IPO underpricing, indicating that larger firms experience lower underpricing. According to signaling theory, firm size serves as a credible signal of stability and lower risk, as larger firms typically have greater

asset bases, higher transparency, and better information disclosure. These characteristics reduce information asymmetry and uncertainty during the IPO process, allowing firms to offer shares at prices closer to intrinsic value. Consequently, large firms do not need to provide substantial price discounts to attract investors. This result is consistent with prior studies by Apsari et al. (2021), Syahwildan et al. (2021), and Isynuwardhana et al. (2021), which document a negative relationship between firm size and IPO underpricing.

### **Effect of Financial Leverage on IPO Underpricing**

The empirical results indicate that financial leverage has a positive and significant effect on IPO underpricing. Firms with higher leverage levels tend to experience greater underpricing at the time of IPO. From a signaling perspective, high leverage signals higher financial risk to investors, particularly the risk of financial distress due to greater debt obligations. Jensen and Meckling (1976) argue that firms with high debt levels face increased agency costs and financial uncertainty. As a result, investors demand compensation in the form of lower offering prices, leading to higher underpricing. This finding is also supported by Beatty (1989), who states that financial risk increases valuation uncertainty in IPOs. The result is consistent with previous empirical studies by Andini (2020), Pramudita (2021), and Rizky (2017).

### **Effect of Profitability on IPO Underpricing**

The results show that profitability has a negative but insignificant effect on IPO underpricing. This finding suggests that higher profitability does not necessarily influence the level of underpricing in IPOs. Although signaling theory posits that high profitability should serve as a positive signal of firm quality and lower risk, the insignificant result indicates that investors may not prioritize profitability information disclosed in IPO prospectuses. This may occur because profitability ratios, such as ROA, reflect historical performance and may not accurately represent future prospects. Investors may instead rely more heavily on external signals and risk-related factors. This result is consistent with findings by Syahwildan et al. (2021) and Purwanto (2015), who report that profitability does not significantly affect IPO underpricing.

## **CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS**

### **Conclusion**

This study examines the determinants of IPO underpricing in the Indonesian Stock Exchange during the 2021–2024 period by focusing on underwriter reputation, firm size, financial leverage, and profitability. The empirical findings show that underwriter reputation and financial leverage have a positive and significant effect on IPO underpricing, while firm size has a negative and significant effect. In contrast, profitability does not significantly influence underpricing. These results indicate that external credibility mechanisms and corporate financial risk play a more decisive role in IPO pricing than accounting-based performance measures. Overall, this study provides updated evidence that IPO underpricing in Indonesia remains influenced by both firm characteristics and intermediary behavior, particularly in the post-pandemic and digital IPO environment.

### **Limitation**

This study has several limitations that should be considered when interpreting the results.

First, the sample is limited to IPO firms listed on the Indonesian Stock Exchange during the 2021–2024 period, which may restrict the generalizability of the findings to other periods or markets. Second, the study focuses on a limited set of firm-specific and external variables; other factors such as auditor reputation, market conditions, investor sentiment, and macroeconomic variables were not included. Third, this study employs a cross-sectional approach and does not capture dynamic changes in IPO pricing behavior over time.

### **Suggestions**

Future research is encouraged to include additional variables that may influence IPO underpricing, such as auditor reputation, firm age, ownership structure, market sentiment, and macroeconomic factors. Further studies may also extend the observation period or apply alternative analytical methods, such as panel data or non-linear models, to provide more robust and comprehensive insights into IPO pricing behavior.

### **REFERENCES**

- Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500. <https://doi.org/10.2307/1879431>
- Allen, F., & Faulhaber, G. R. (1989). Signalling by underpricing in the IPO market. *Journal of Financial Economics*, 23(2), 303–323. [https://doi.org/10.1016/0304-405X\(89\)90060-3](https://doi.org/10.1016/0304-405X(89)90060-3)
- Apsari, N. P., Putra, I. M. P. D., & Dewi, A. A. (2022). Determinants of IPO underpricing in Indonesia. *Jurnal Ilmiah Akuntansi dan Bisnis*, 17(1), 45–58.
- Beatty, R. P. (1989). Auditor reputation and the pricing of initial public offerings. *The Accounting Review*, 64(4), 693–709.
- Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.
- Carter, R. B., & Manaster, S. (1990). Initial public offerings and underwriter reputation. *The Journal of Finance*, 45(4), 1045–1067. <https://doi.org/10.1111/j.1540-6261.1990.tb02426.x>
- Darmawan, R., & Bustaman, U. (2024). Underwriter reputation and IPO underpricing in Indonesia. *Jurnal Pasar Modal Indonesia*, 16(1), 33–47.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Loughran, T., & Ritter, J. R. (2004). Why has IPO underpricing changed over time? *Financial Management*, 33(3), 5–37.
- Purwanto, A. (2015). Pengaruh profitabilitas terhadap underpricing saham IPO. *Jurnal*

Akuntansi dan Auditing, 12(2), 112–124.

Rini, S., & Damayanty, P. (2024). Strategic underpricing and underwriter reputation in Indonesian IPOs. *Jurnal Keuangan dan Perbankan*, 28(1), 67–81.

Rock, K. (1986). Why new issues are underpriced. *Journal of Financial Economics*, 15(1–2), 187–212. [https://doi.org/10.1016/0304-405X\(86\)90054-1](https://doi.org/10.1016/0304-405X(86)90054-1)

Syahnildan, M., & Aminudin, A. (2021). Firm size and IPO underpricing: Evidence from Indonesia. *Jurnal Akuntansi Multiparadigma*, 12(3), 421–435.

Yip, Y. M. (2009). Underwriter reputation and IPO performance. *International Journal of Business and Finance Research*, 3(1), 17–28