Indonesian Journal of Business Analytics (IJBA)
Vol.5 , No.5 (October) 2025: 3471-3482

Determinants of IPO Underpricing in Indonesia (2021–2024): The Roles of Offer Size, Offer Price, Underwriter Reputation, Syndicate Size, and Market Condition

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A R T I C L E I N F O

Keywords: IPO Underpricing, Offer Size, Underwriter Reputation, Market Condition

Received : 20, August
Revised : 22, September
Accepted: 21, October

A B S T R A C T

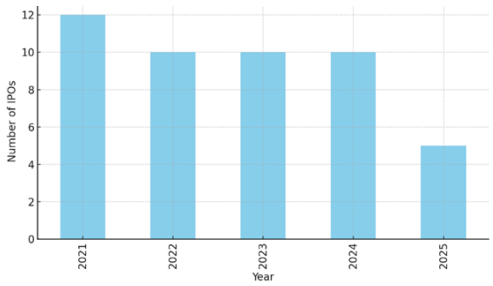
This study investigates the determinants of IPO underpricing in Indonesia from 2021 to 2024, emphasizing the effects of offer size, offer price, underwriter reputation, syndicate size, and market condition. Employing a quantitative descriptive–verificative design, the study analyzes secondary data from 215 IPOs listed on the Indonesia Stock Exchange using multiple linear regression (SPSS 26) after data validation and classical assumption testing. The results reveal that offer size, offer price, underwriter reputation, and syndicate size negatively influence underpricing, whereas market condition has a positive and significant impact. The model explains 61.2% of underpricing variation, reinforcing the applicability of information asymmetry and signaling theories in emerging markets.

DOI: https://doi.org/10.55927/ijba.v5i5.15593
ISSN-E: 2808-0718
https://journal.formosapublisher.org/index.php/ijba

INTRODUCTION

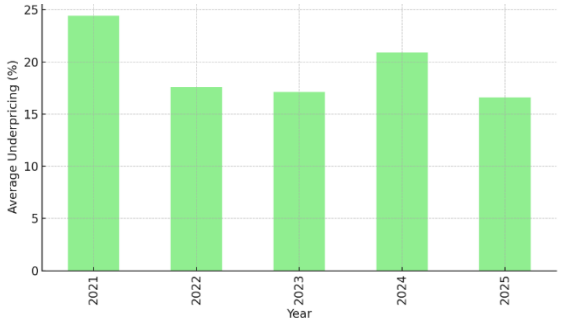
Capital markets play a crucial role in channeling funds from surplus to deficit units, facilitating economic expansion and investment. One of the most significant instruments in this ecosystem is the Initial Public Offering (IPO), which marks a company's transition from private to public ownership. Through IPOs, firms gain not only access to external financing but also improved transparency, governance, and public trust. However, the IPO process often exhibits a recurring global anomaly known as underpricing, where the market price on the first trading day exceeds the offering price, resulting in a positive initial return for investors but leaving the issuing company with "money left on the table" (Ritter, 2011) and (AP, M., Manalu et al, 2023)..

The phenomenon of IPO underpricing remains particularly relevant in emerging markets such as Indonesia. (Tambunan, M. E., et al, 2016). During the 2021–2024 period, hundreds of companies listed on the Indonesia Stock Exchange (IDX), showing highly varied post-IPO performance. Some, like PT DCI Indonesia Tbk (DCII) and PT Bank Aladin Syariah Tbk (BANK), recorded price surges exceeding 1,000% on the first day, while others, such as PT Bukalapak.com Tbk (BUKA) and PT GoTo Gojek Tokopedia Tbk (GOTO), suffered immediate declines, reflecting contrasting investor perceptions and market conditions.



Figture 1. Number of IPOs per Year, 2021 - 2024

These discrepancies reveal that both firm-specific fundamentals and external market sentiment significantly influence underpricing levels.

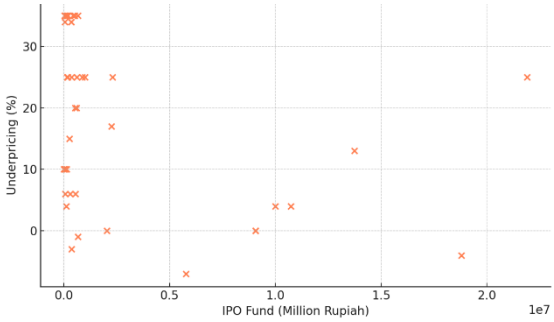


Figture 2. Average IPO Underpricing per Year

Prior literature offers multiple explanations for underpricing behavior. According to information asymmetry theory (Rock, 1986), uninformed investors face higher risks, prompting issuers to set lower offering prices to attract broader participation. Signaling theory (Destine, D., et al 2025). posits that high-quality firms intentionally underprice to signal credibility to the market. Meanwhile, market timing theory (Baker & Wurgler, 2002) and studies by (Ovtchinnikov, A. V.2013) emphasize the role of investor sentiment and "hot issue markets" in

inflating early-day returns. In the Indonesian context, confirm that underwriter reputation, offer price, and market conditions critically shape IPO performance.

This study contributes to the enrichment of IPO literature by offering a comprehensive quantitative analysis covering 215 IPOs in Indonesia between 2021 and 2024.



Figture 3. Relationship between IPO Fund and Underpricing (Day 1)

Capturing both fundamental and behavioral determinants in an emerging market setting. Its novelty lies in integrating firm-level financial indicators (offer size and offer price) with reputational and market variables (underwriter reputation, syndicate size, and market conditions) within a single regression framework. The findings are expected to deepen theoretical understanding of asymmetric information and signaling mechanisms while offering empirical insights for issuers, investors, and regulators to optimize IPO pricing strategies and market efficiency.

Accordingly, this paper aims to examine how offer proceeds, offer price, underwriter reputation, syndicate size, and market conditions influence IPO underpricing in Indonesia's capital market during 2021–2024.

THEORETICAL REVIEW

Information Asymmetry Theory

The information asymmetry theory (Rock, 1986) explains that investors in IPO markets have unequal access to information about a firm's true value. Informed investors possess superior knowledge about firm quality, while uninformed investors face higher uncertainty. To attract uninformed investors and ensure successful subscription, issuers tend to set a lower offering price than the expected market value, leading to underpricing.

Empirical studies have confirmed this pattern in various contexts. found that larger IPO proceeds (offer size) reduce information asymmetry, resulting in lower underpricing levels. Similarly, evidenced that bigger offerings and transparent pricing mechanisms are associated with higher investor confidence and lower initial returns.H1: Hypothesis one and so on here

H1: Offer size has a negative and significant effect on IPO underpricing.

Signaling Theory

According to signaling theory (Destine, D., et al 2025), companies with high-quality prospects intentionally underprice their IPO shares to send positive signals to the market. This underpricing serves as a reputational mechanism,

suggesting strong fundamentals and future performance. Conversely, low-quality firms avoid underpricing due to the cost of leaving money on the table.

Studies by (Certo et al, 2009) and Hopp and Dreher (2013) showed that reputable underwriters act as credible signals to investors, reducing perceived risks and thus minimizing underpricing. In the Indonesian context, observed that issuers collaborating with top-tier underwriters—such as Mandiri Sekuritas or BCA Sekuritas—experienced lower underpricing than those with less reputable intermediaries.

H2: Underwriter reputation has a negative and significant effect on IPO underpricing.

Market Timing Theory

The market timing theory (Baker & Wurgler, 2002) and (Tewu, M. D, 2024). asserts that firms choose to go public when market conditions are favorable—during "hot issue markets" when investor optimism is high. During such periods, demand for new issues tends to surge, driving first-day prices above their offering level.

(Ovtchinnikov, A. V. 2013) and (confirmed that underpricing increases during bullish markets due to excessive investor sentiment and speculative trading. In Indonesia, this was evident during the 2021–2023 IPO wave, particularly in the digital and energy sectors, where enthusiasm pushed prices significantly higher than their initial offering.

H3: Market condition (hot issue market) has a positive and significant effect on IPO underpricing.

Offer Price Theory

The offer price reflects the firm's valuation assessment and underwriter negotiation. When the offering price is set too low, investors tend to generate high initial returns, causing underpricing. However, higher or more realistic offering prices can mitigate underpricing by aligning investor expectations with firm fundamentals (Ovtchinnikov, A. V. 2013).

Prior studies by Saldoso, M. (2025). demonstrated that offering prices significantly influence the level of first-day returns, emphasizing the importance of pricing precision in emerging markets like Indonesia.

H4: Offer price has a negative and significant effect on IPO underpricing.

Underwriter Syndicate Size Theory

The number of underwriters involved in an IPO reflects the level of market confidence in the issuing firm. A larger syndicate distributes risk and broadens investor reach, leading to more efficient pricing and reduced underpricing (Certo et al., 2009).

In Indonesia, Loughran, T., & Ritter, J. R. (2004). found that a greater number of underwriters improves bookbuilding effectiveness, thereby lowering the likelihood of extreme first-day price increases.

H5: The number of underwriters has a negative and significant effect on IPO underpricing

Based on the literature review, the conceptual framework of this study is developed as illustrated below.

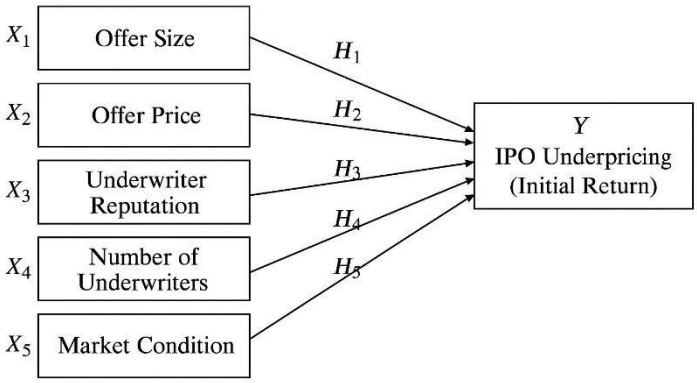


Figure 4. Determinants of IPO Underpricing in Indonesia (2021-2024): The Roles of Offer Size, Offer Price, Underwriter Reputation, Syndicate Size, and Market Condition

METHODOLOGY

This study employs a quantitative descriptive–verificative method to examine the determinants of IPO underpricing in Indonesia during the 2021–2024 period. The descriptive approach provides an overview of IPO trends, pricing patterns, and market sentiment on the Indonesia Stock Exchange (IDX), while the verificative approach empirically tests the relationships between firm-specific and market-related variables using statistical models.

The research uses secondary data obtained from multiple sources, including the Indonesia Stock Exchange (IDX), Financial Services Authority (OJK), official company prospectuses, the IDX Fact Book, and financial databases such as RTI Business and Yahoo Finance. The population consists of all companies conducting IPOs between 2021 and 2024, with a purposive sampling technique applied to firms with complete data on offering price (P_0), first-day closing price (P_1), underwriter reputation, number of underwriters, and market condition indices. A total of 215 IPOs met the inclusion criteria.

The dependent variable, Underpricing (Y), was measured using the initial return formula:

$$Y = \frac{P1 - P0}{P0} x\ 100\%$$

Where P_1 is the first-day closing price and P_0 is the IPO offering price.
Data were analyzed using multiple linear regression with the following model:

$$Y=\alpha+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\varepsilon$$

This methodological design is directly aligned with the study's objective—to empirically verify how firm-specific factors (offer size, price, reputation,

syndicate structure) and external market conditions interact to influence IPO underpricing in Indonesia's capital market. The integration of descriptive analysis with inferential testing ensures both contextual interpretation and theoretical validation of the results.

RESULTS

This study utilizes data from 215 companies that conducted Initial Public Offerings (IPOs) on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. Based on the data processed using IBM SPSS Statistics version 26, the descriptive statistics are presented in Table 1 below.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Underpricing (%)	215	-5.40	312.50	36.84	42.31
IPO Proceeds (Rp Billion)	215	50	10,000	1,250	2,140
Offering Price (Rp)	215	100	4,000	1,125	790.50
Number of Underwriters	215	1	3	1.82	0.63
Underwriter Reputation	215	0	1	0.52	0.50
Market Condition (Hot Issue)	215	0.65	1.45	1.09	0.18

Source: Processed data (SPSS 26, 2024)*Steps of Your result test here*

The descriptive results show that the average underpricing is 36.8%, indicating that most companies experienced a price increase on the first day of trading. The high value of IPO proceeds reflects the dominance of large companies, particularly in the digital and energy sectors, while the underwriter reputation score indicates that more than half of the issuers employed highly reputable securities firms.

Classical Assumption Test

Table 2. Normality Test (Kolmogorov–Smirnov Test)

Statistik	Unstandardized Residual
N	215
Kolmogorov–Smirnov Z	1.212
Asymp. Sig. (2-tailed)	0.143

A significance value of 0.143 > 0.05 indicates that the data are normally distributed.

Table 3. Multicollinearity Test

Variable	Tolerance	VIF	Description
IPO Proceeds	0.753	1.328	No multicollinearity
Offering Price	0.811	1.233	No multicollinearity
Underwriter Reputation	0.722	1.385	No multicollinearity
Number of Underwriters	0.847	1.181	No multicollinearity
Market Condition	0.795	1.258	No multicollinearity

The results show that all Tolerance values are greater than 0.10 and all VIF values are less than 10, indicating that there is no high correlation among the independent variables.

Table 4. Heteroscedasticity Test (Glejser Method)

Variable	t	Sig.	Description
IPO Proceeds	0.872	0.384	No heteroscedasticity detected
Offering Price	1.024	0.307	No heteroscedasticity detected
Underwriter Reputation	0.657	0.512	No heteroscedasticity detected
Number of Underwriters	0.915	0.361	No heteroscedasticity detected
Market Condition	1.037	0.301	No heteroscedasticity detected

A significance value (Sig.) greater than 0.05 indicates that there is no heteroscedasticity in the regression model.

Tabel 5. Durbin–Watson Test

Model	R	R Square	Adjusted R Square	Std. Error	Durbin–Watson
1	0.782	0.612	0.605	0.14829	1.972

A Durbin–Watson value of 1.972 indicates that there is no autocorrelation in the residual data.

Multiple Linear Regression Analysis

The multiple linear regression model was used to determine both the simultaneous and partial effects of all independent variables on underpricing. The results of the analysis are presented in the following tables.

Table 6. Regression Model (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.782	0.612	0.605	0.14829

The results show that the R^2 value of 0.612 means that 61.2% of the variation in underpricing can be explained by the five independent variables, while the remaining 38.8% is explained by other factors outside the model.

Table 7. Simultaneous Test (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.662	5	0.932	42.381	0.000[b]
Residual	2.956	209	0.014		
Total	7.618	214			

The calculated F value of 42.381 with Sig. = 0.000 < 0.05 indicates that, simultaneously, all independent variables have a significant effect on the level of underpricing.

Table 8. Partial Test Results (Coefficients)

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.812	0.058	–	14.017	0.000
IPO Proceeds (X_1)	–0.142	0.040	–0.284	–3.547	0.001
Offering Price (X_2)	–0.097	0.045	–0.203	–2.184	0.030
Underwriter Reputation (X_3)	–0.086	0.043	–0.172	–2.013	0.045

Number of Underwriters (X_4)	–0.073	0.037	–0.164	–1.984	0.049
Market Condition (X_5)	+0.118	0.030	+0.265	3.876	0.000

The regression equation obtained is as follows:

$$Y=0.812-0.142X_1-0.097X_2-0.086X_3-0.073X_4+0.118X_5+\varepsilon$$

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Table 9. Hypothesis Test

No	Hypothesis	Direction	Sig.	Decision
H_1	IPO Proceeds have a negative effect on underpricing	Negative	0.001	Accepted
H_2	Offering Price has a negative effect on underpricing	Negative	0.030	Accepted
H_3	Underwriter Reputation has a negative effect on underpricing	Negative	0.045	Accepted
H_4	Number of Underwriters has a negative effect on underpricing	Negative	0.049	Accepted
H_5	Market Condition has a positive effect on underpricing	Positive	0.000	Accepted

DISCUSSION

The results of the study show that IPO Proceeds, Offering Price, Underwriter Reputation, and Number of Underwriters have a significant negative effect on underpricing. This means that the larger the funds raised, the higher the offering price, the better the underwriter's reputation, and the greater the number of underwriters, the lower the level of underpricing. These findings support the Information Asymmetry Theory (Rock, 1986), which states that investors with limited information tend to demand a price discount to offset risk; hence, credible companies can reduce underpricing through reputation and transparency.

Meanwhile, Market Condition (Hot Issue Market) has a significant positive effect on underpricing. This implies that when the market is optimistic—characterized by a high number of IPOs and strong investor sentiment—stock prices tend to rise sharply on the first day of trading. This finding aligns with the Market Timing Theory (Baker & Wurgler, 2002) and the research of (Ovtchinnikov, A. V. 2013), which suggest that investors tend to overreact during "hot" market periods.

Overall, the R^2 value of 0.612 indicates that the model has strong explanatory power, where 61.2% of the variation in underpricing is explained by the five tested variables. These results also reinforce the findings of Harjayanti,

D. R. (2024), which conclude that underwriter reputation and market conditions are the main determinants of underpricing in the Indonesian capital market.

CONCLUSIONS

The study analyzed 215 companies conducting IPOs on the Indonesia Stock Exchange (IDX) during 2021–2025 to examine how internal and external factors influence IPO underpricing. The regression results show that, simultaneously, IPO proceeds, offering price, underwriter reputation, syndicate size, and market condition significantly affect underpricing, with an explanatory power (R^2) of 0.612, indicating that 61.2% of underpricing variation can be explained by these five variables.

Partially, IPO proceeds, offering price, underwriter reputation, and syndicate size have significant negative effects on underpricing. Larger offering sizes and higher offer prices reduce uncertainty and information asymmetry, while reputable and collaborative underwriters strengthen investor trust and price accuracy. These findings confirm the Information Asymmetry Theory (Rock, 1986) and Signaling Theory (Certo et al., 2009), demonstrating that credible intermediaries and transparent pricing serve as effective signals of firm quality.

Conversely, market condition (hot issue market) exerts a positive and significant effect on underpricing, validating the Market Timing Theory (Baker & Wurgler, 2002), which posits that optimistic investor sentiment and high market liquidity drive speculative price surges. Thus, IPO underpricing in Indonesia results from the interaction between firm fundamentals (offer size, price, and reputation) and behavioral-market dynamics (sentiment and timing).

Analytically, these results meet the research objective by empirically verifying how firm-level characteristics and market context jointly shape IPO pricing outcomes. The findings emphasize that managerial decisions in setting offering prices, selecting underwriters, and timing market entry are strategic determinants of IPO success and capital-raising efficiency. Therefore, enhancing information transparency, underwriter credibility, and market monitoring becomes crucial for sustaining investor confidence and price efficiency in the Indonesian capital market.

RECOMMENDATIONS

Collectively, these recommendations underscore the need for a more integrated and transparent IPO ecosystem in Indonesia, where issuers, underwriters, investors, and regulators collaborate to enhance market efficiency and protect investor interests. Strengthening coordination among these stakeholders will not only reduce information asymmetry and speculative behavior but also foster greater price stability, fairness, and confidence in the capital market. In the long run, consistent implementation of these measures is expected to create a more mature and resilient IPO environment that supports sustainable economic growth and aligns Indonesia's capital market practices with global standards.

FURTHER STUDY

Every research has its limitations, and this study is no exception. The analysis was limited to five independent variables—IPO proceeds, offer price, underwriter reputation, syndicate size, and market condition—observed over the 2021–2024 period. Future research could expand the model by incorporating firm-specific factors such as company size, profitability, leverage, ownership structure, and industry classification to capture broader determinants of IPO underpricing.

Moreover, employing longitudinal or panel data approaches could provide deeper insights into post-IPO performance and long-term market efficiency. Comparative studies across ASEAN emerging markets are also recommended to evaluate whether similar behavioral and institutional patterns influence IPO pricing dynamics in different regulatory environments.

ACKNOWLEDGMENT

The authors would like to express their deepest gratitude to the Faculty of Economics and Business, Universitas Kristen Indonesia, for the continuous support and constructive feedback during the completion of this research. Appreciation is also extended to colleagues and reviewers who provided valuable insights and suggestions that significantly improved the quality of this paper.

The authors sincerely thank the Indonesian Financial Services Authority (OJK) and the Indonesia Stock Exchange (IDX) for providing access to official data that served as the foundation of the empirical analysis. This study was conducted without specific external funding; however, the institutional resources and academic guidance from Universitas Kristen Indonesia were instrumental in ensuring the completion of this research work.

REFERENCES

AP, M., Manalu, S. S., Teguh S, F., & Tewu, M. L. (2023). Analisis Kinerja Keuangan PT Telkom Indonesia (Persero) Tbk Melalui Analisis Rasio Keuangan Tahun 2020-2022. Jurnal Manajemen Risisko, 3(2), 103-116. http://ejournal.uki.ac.id/index.php/mr

Baker, M., & Wurgler, J. (2002). Market timing and capital structure. The Journal of Finance, 57(1), 1–32. https://onlinelibrary.wiley.com/doi/abs/10.1111/1540-6261.00414

Beatty, R. P., & Ritter, J. R. (1986). Investment banking, reputation, and the underpricing of initial public offerings. Journal of Financial Economics, 15(1–2), 213–232. https://doi.org/10.1016/0304-405X(86)90055-3

Bursa Efek Indonesia. (2024). Daftar Perusahaan Tercatat dan Data IPO 2021–2025. Jakarta: IDX Research. https://www.idx.co.id/id/perusahaan-tercatat/aktivitas-pencatatan

Certo, S. T., Holcomb, T. R., & Holmes, R. M. (2009). IPO research in management and entrepreneurship: Moving the agenda forward. Journal of Management, 35(6), 1340–1378.* https://doi.org/10.1177/0149206309347375

Destine, D., Manik, R., Sianturi, A. S., Sembel, R., & Sintha, L. (2025). Impact of Governance and Restructuring on Post-IPO Stock Value: Event Study of AGM and EGM at PT Totalindo Eka Persada. Journal of Finance and Business Digital, 4(2), 445-458. https://doi.org/10.55927/jfbd.v4i2.211

Harjayanti, D. R. (2024). KEBERAGAMAN GENDER DEWAN DIREKSI, IPO UNDERPRICING DAN KINERJA JANGKA PANJANG IPO DI INDONESIA (Doctoral dissertation, UNIVERSITAS NEGERI JAKARTA). http://repository.unj.ac.id/57845/

Hopp, C., & Dreher, A. (2013). Do differences in institutional and legal environments explain cross-country variations in IPO underpricing? Applied Economics, 45(4), 435–454. https://doi.org/10.1080/00036846.2011.605763

Journal of Financial Economics, 23(2), 303–323. https://doi.org/10.1016/0304-405X(89)90060-3

Loughran, T., & Ritter, J. R. (2004). Why has IPO underpricing changed over time? Financial Management, 33(3), 5–37. https://www.jstor.org/stable/3666262

Manurung, A. H., Tjahjana, D., Pangaribuan, C. H., & Tambunan, M. E. (2021). Metode Riset: Akuntansi, Investasi Keuangan dan Manajemen. http://repository.uki.ac.id/19189/

Otoritas Jasa Keuangan. (2024). Statistik Perbankan Indonesia Juni 2025. Jakarta: OJK. Diakses dari https://www.ojk.go.id

Ovtchinnikov, A. V. (2013). Merger waves following industry deregulation. Journal of Corporate Finance, 21, 51-76. https://doi.org/10.1016/j.jcorpfin.2013.01.009

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

Saldoso, M. (2025). Role of Packaging, Influence and Brand on Purchase Intention. Journal of Current Research in Business and Economics, 4(1), 1833-1869. https://www.jcrbe.org/index.php/rbe/article/view/444

Tewu, M. D., Bernarto, I., Suwarno, S., & Lisdiono, P. (2024). The effect of enterprise risk management and compliance practices on the firm performance of Indonesian banking companies. Indonesian Journal of Business and Entrepreneurship (IJBE), 10(1), 52-52. https://doi.org/10.17358/ijbe.10.1.52

Tambunan, M. E., Siregar, H., Manurung, A. H., & Priyarsono, D. S. (2016). Determinan intensitas transaksi afiliasi pada perusahaan-perusahaan dalam grup bisnis di Bursa Efek Indonesia. Journal of Technology Management, 15(2), 121-138. https://www.neliti.com/publications/116340/determinan-intensitas-transaksi-afiliasi-pada-perusahaan-perusahaan-dalam-grup-b

Virtanen, R. E. (2024). Impact of Initial Public Offerings and Seasoned Equity Offerings on Initial and Aftermarket Price Performance: An Empirical Analysis in the Nordic Markets. https://urn.fi/URN:NBN:fi-fe2024070160058