

Short-Term Performance of IPO Stocks on the Indonesia Stock Exchange: Do Firm Sizes Matter?

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Abstract

This study examines the short-term performance of Initial Public Offering (IPO) stocks on the Indonesia Stock Exchange (IDX) by analyzing the role of firm size. A total of 60 IPO-listed companies between 2021 and 2024 were categorized into three groups—small, medium, and large—based on total assets at the time of listing. Using abnormal return as the performance metric, the study evaluates daily and cumulative returns over a 45-day period post-IPO. Findings reveal that small firms tend to experience higher abnormal returns on the first day of trading, consistent with the underpricing phenomenon often attributed to higher information asymmetry and investor speculation. However, in the longer short-term window, large firms accumulate significantly greater cumulative abnormal returns, reflecting stronger investor confidence and market stability. The Kruskal-Wallis test confirms a statistically significant difference in abnormal returns between small and large firms. These results indicate that firm size influences investor perception and post-listing price behavior. While smaller firms benefit from short-term speculative gains, larger firms offer more sustained performance. The study underscores the need for investors and regulators to account for firm size when evaluating IPO opportunities in emerging markets.

Keywords: Short-term Performance , IPO Stock, Firm Size, Abnormal Return, Indonesia Stock Exchange.

INTRODUCTION

Initial Public Offering (IPO) marks a critical milestone in the lifecycle of a company, particularly as a gateway to public capital for future expansion. In the dynamic environment of the Indonesia Stock Exchange (IDX), the phenomenon of significant price fluctuations in the early days of trading often draws the attention of both investors and scholars. One of the key issues that remains under scrutiny is how firm-specific characteristics, particularly firm size, influence the short-term performance of IPO stocks.

Previous studies in both developed and emerging markets have consistently shown that smaller firms tend to experience higher levels of underpricing and greater price volatility compared to their larger counterparts. (Zhai, 2019), for instance, documented that in the U.S. and Canadian markets, small firms recorded average underpricing levels of 13.87% and 19.32% respectively. These findings have been attributed to the higher levels of information asymmetry and perceived risk associated with smaller firms, which lead investors to demand higher discounts at the IPO. Conversely, larger firms, typically with more established reputations, tend to display lower volatility and more stable post-IPO stock performance.

A similar trend has been observed in emerging markets such as India and Pakistan. Studies by (Kundnani et al., 2024) and (Maheshwari & Kumar, 2022) found that during the COVID-19 pandemic, small firms in India experienced significant underpricing and heightened volatility, driven by increased retail investor participation and speculative behavior. These findings reinforce the notion that firm size plays a crucial role in shaping market perceptions of IPO risk, particularly in environments characterized by uncertainty and limited transparency.

Despite the wealth of international research, comprehensive studies examining the effect of firm size on the short-term performance of IPO stocks in Indonesia remain limited. This is noteworthy given the unique characteristics of the Indonesian capital market, including the dominance of retail investors and its sensitivity to market sentiment. To address this research gap, the present study investigates the short-term performance of IPO stocks on the IDX by categorizing firms into three size-based groups—small, middle, and large—based on total assets at the time of IPO. The study aims to determine whether firm size serves as a significant factor in explaining short-term abnormal returns.

Based on this rationale, the study formulates the following hypothesis to be tested: 1) H_0 (Null Hypothesis): There is no significant difference in short-term abnormal returns among IPO firms categorized by size (small, middle, large); 2) H_1 (Alternative Hypothesis): There is a significant difference in short-term abnormal returns among IPO firms categorized by size (small, middle, large).

RESEARCH METHODS

This study adopts a quantitative approach to analyze the short-term performance of Initial Public Offering (IPO) stocks on the Indonesia Stock Exchange (IDX), focusing on the impact of firm size. The scope of the research includes all IPO-listed firms on the IDX during the period 2021 to 2024.

The population of this study comprises all companies that conducted IPOs on the IDX between 2021 and 2024. A total of 60 companies were selected as the sample, stratified into three groups based on firm size, which is proxied by total assets at the time of the IPO:

- a. Firms with total assets less than IDR 250 billion are classified as small-sized firms.
- b. Firms with total assets between IDR 250 billion and IDR 1 trillion are classified as medium-sized firms.
- c. Firms with total assets exceeding IDR 1 trillion are classified as large-sized firms.

Each group consists of 20 firms, resulting in an equal distribution across firm size categories. The sampling technique used is stratified purposive sampling to ensure representation of each size group.

To measure short-term performance, the study calculates abnormal returns for each IPO stock during the first 45 trading days post-listing. The market-adjusted model is employed to calculate abnormal returns, where the expected return is adjusted based on the performance of the Jakarta Composite Index (IHSG) as the market benchmark.

Following this, the Cumulative Average Abnormal Return (CAAR) is computed for each firm by summing the abnormal returns across the 45-day period. The CAAR is then aggregated by firm size category to analyze the short-term cumulative performance of IPO stocks in each group.

To test the research hypothesis regarding differences in short-term performance across firm sizes, the study applies analysis of variance (ANOVA) if the data meet normality assumptions. If normality cannot be assumed, a non-parametric Kruskal-Wallis test is used as an alternative to determine the statistical significance of differences in abnormal returns among the three firm size groups. Statistical significance was determined using a significance level (alpha) of 0.05. The decision rule is as follows:

Pvalue < 0.05 : Reject H₀

Pvalue > 0.05 : Reject H₁

RESULT AND DISCUSSION

Table 1 presents the results of the descriptive analysis illustrating the short-term performance of newly listed firms, classified into three groups based on total assets: Group 1 (assets below IDR 250 billion), Group 2 (assets between IDR 250 billion and IDR 1 trillion), and Group 3 (assets above IDR 1 trillion). The Average Abnormal Return (AAR), Cumulative Average Abnormal Return (CAAR), and volatility were calculated based on the average daily abnormal return over a 45-day period following the IPO.

Table 1. Descriptive Test

	AAR			CAAR			Volatilitas		
	1	2	3	1	2	3	1	2	3
Valid	45	45	45	45	45	45	45	45	45
Mean	0.002	0.007	0.018	0.114	0.276	0.666	0.082	0.071	0.070
Minimum	-0.051	-0.027	-0.022	0.004	0.193	0.178	0.024	0.027	0.029
Maximum	0.176	0.204	0.178	0.233	0.349	0.837	0.207	0.169	0.225

The results indicate that the highest mean AAR was recorded by Group 3 (firms with assets above IDR 1 trillion), with an average value of 0.018 and a range from -0.022 to 0.178. In comparison, Groups 1 and 2 exhibited mean AAR values of 0.002 and 0.007, respectively. Regarding cumulative performance, the mean CAAR values were 0.114 for Group 1, 0.276 for Group 2, and 0.666 for Group 3, suggesting that, on average, larger firms tend to achieve higher cumulative abnormal returns during the observation period.

In terms of volatility, the average daily abnormal return volatility was 0.082 for Group 1, 0.071 for Group 2, and 0.070 for Group 3. These figures suggest that firms with smaller asset sizes exhibit relatively higher fluctuations in abnormal returns compared to those with larger assets.

The differences in AAR, CAAR, and volatility across groups highlight the potential influence of firm characteristics—particularly asset size—on market reactions to IPOs. Despite having an equal number of firms and identical observation windows, the varying results suggest that investors may respond more positively and stably to firms with larger asset bases. Larger firms are generally perceived to be more financially and operationally sound, thus garnering greater investor confidence post-IPO.

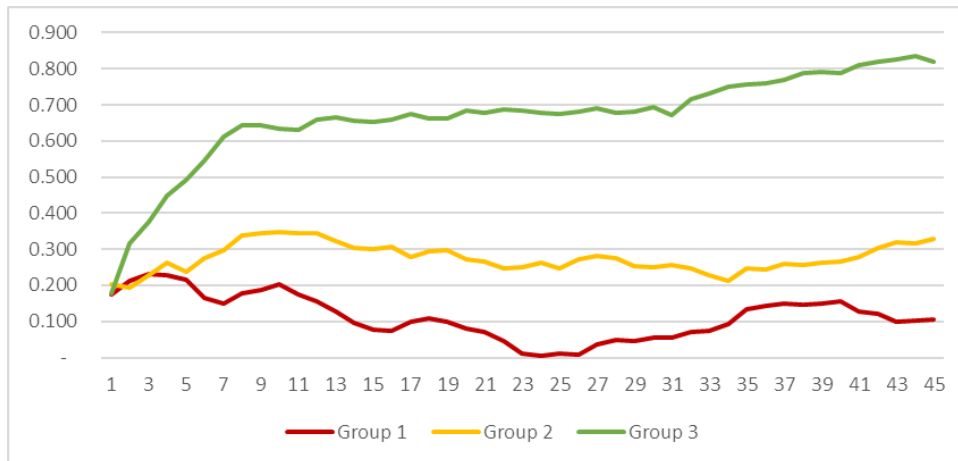


Figure 1: Cummulative Average Abnormal Return (CAAR) in 45 Days

Subsequently, a hypothesis test was conducted to examine the statistical significance of AAR differences across the groups. The Shapiro-Wilk normality test revealed that most of the AAR and volatility data were not normally distributed ($p < 0.05$), whereas the CAAR data approximated a normal distribution ($p > 0.05$). Accordingly, a non-parametric Kruskal-Wallis test was employed.

The Kruskal-Wallis test yielded a test statistic of 6.730 with a p-value of 0.035 ($p < 0.05$), indicating significant differences in AAR across groups. A follow-up Dunn’s post-hoc test revealed that the significant difference occurred between Group 1 and Group 3 ($p = 0.011$; $p_{bonf} = 0.034$; $p_{holm} = 0.034$). Meanwhile, the comparisons between Group 1 and Group 2 as well as between Group 2 and Group 3 were not statistically significant ($p > 0.05$). These findings suggest that there is a statistically significant difference in daily abnormal returns between firms with small total assets (below IDR 250 billion) and those with large total assets (above IDR 1 trillion), while no significant differences were found between the other groups.

Table 2. Kruskal-Wallis Test

Factor	Statistic	df	p
Kategori	6.730	2	0.035

Table 3. Dunn’s Post-Hoc Test

Comparison	z	W_i	W_j	r_{tb}	p	P_{bonf}	P_{holm}
1 - 2	-0.779	58.900	65.322	0.101	0.436	1.000	0.436
1 - 3	-2.533	58.900	79.778	0.304	0.011	0.034	0.034
2 - 3	-1.754	65.322	79.778	0.220	0.080	0.239	0.159

The significant difference in short-term abnormal returns between small and large IPO firms observed in this study is consistent with the theoretical framework emphasizing the role of firm size in shaping investor expectations and market behavior. As evidenced by the post-hoc Dunn test, small firms experienced significantly higher abnormal returns in the immediate post-IPO period compared to large firms. This phenomenon is aligned with prior literature that attributes such outcomes to heightened information asymmetry, lower institutional quality, and investor speculation surrounding smaller, less-established companies (Alidarous & Jamaani, 2021; Barguelli, 2019)

Larger firms, despite showing weaker initial performance, tend to accumulate superior

cumulative abnormal returns over the 45-day period. This delayed outperformance can be explained by greater investor confidence in the operational stability and long-term prospects of larger issuers. (Pastusiak et al., 2016) and (Abraham et al., 2016) note that larger firms are often associated with more rigorous due diligence processes, more reputable underwriters, and stronger corporate governance, all of which contribute to increased valuation momentum in the secondary market. Moreover, their broader geographical reach and brand recognition help attract a more diverse and informed investor base (Özdemir, 2017).

The greater short-term volatility experienced by small firms also reflects the speculative behavior often found in emerging markets, particularly in IPO contexts. Small-cap stocks are typically subject to higher investor uncertainty and less analyst coverage, leading to amplified price movements post-listing (Brogi et al., 2020; Dang & Jolly, 2017). Additionally, smaller firms may use IPO proceeds more aggressively to establish market presence and fund early growth initiatives, increasing both their perceived risk and expected return potential (Mun & Jang, 2019; Soesetio, 2024).

Institutional quality and corporate maturity further differentiate post-IPO performance across firm sizes. In emerging economies like Indonesia, smaller firms often operate in environments with limited regulatory oversight and weaker disclosure practices, exacerbating the effects of information asymmetry (Gao et al., 2021). In contrast, larger firms are generally more transparent and better equipped to navigate post-IPO reporting requirements, which reinforces market trust and performance stability over time.

Taken together, these findings underscore that firm size not only affects initial pricing dynamics but also influences investor behavior, risk perception, and the trajectory of post-IPO performance. While small firms may benefit from short-lived speculative gains, large firms demonstrate more sustained returns, rooted in institutional strength and market positioning. These outcomes highlight the importance of considering firm size as a critical determinant in IPO performance evaluation and may inform investor strategies as well as regulatory perspectives in emerging capital markets.

CONCLUSIONS

This study concludes that firm size plays a significant role in shaping the short-term performance of IPO stocks in the Indonesian capital market. While smaller firms tend to exhibit higher initial abnormal returns, larger firms demonstrate superior cumulative performance over a longer post-listing period. These differences are influenced by various factors such as investor perception, information asymmetry, institutional quality, and market dynamics. The findings highlight the importance of considering firm size as a key variable in IPO valuation and investment decision-making. For investors, understanding the unique risk-return profiles of firms across size categories can support more informed investment strategies. Regulators and market participants should also recognize the structural differences between firm sizes to enhance transparency and efficiency in the IPO process.

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