

Analysis of the Presence and Impact of Price Gap Anomaly on the Indonesian Stock Exchange

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ABSTRACT

Price gap occurs when the opening price of a financial asset today is greater than the closing price of the previous day, signaling the market's initial sentiment and potential direction of price movement on the trading day. This study aims to explore the presence and characteristics of price gap anomalies and their potential exploitation to generate abnormal returns in the Indonesian stock market. The data used are 11 stock indices during the period 2015–2024, and the analysis is carried out using the multiple linear regression method to test the hypothesis. The results of the study indicate that price gap anomalies are confirmed in the Indonesian stock market, with positive price gaps tending to exhibit more momentum effects than negative price gaps. Price gaps show short-term characteristics, where this anomaly does not affect periods following the anomaly. This study also explores the addition of volatility as a control variable in the regression model and evaluates the regression model's accuracy by observing the increase in Adjusted R-Squared and Overall F-Test values. Finally, a trading strategy is proposed to test the strategy's ability to generate abnormal returns that can beat the market in the Indonesian stock market. However, considering transaction costs, the overall trading simulation results cannot generate returns that can outperform *market returns*.

KEYWORDS

Efficient Market Hypotheses, Price gap anomalies, Stock Market, Momentum Effect.



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INTRODUCTION

Price gap anomaly is an example of an Efficient Market Hypothesis (EMH) anomaly. In the stock market, a price gap is a phenomenon where there is a difference between today's opening price and the previous trading day's closing price. This phenomenon occurs not only in the stock market but also in other financial asset markets such as foreign exchange and commodity markets (A Basdekidou, 2016; Brugler, 2015; Chan, 2017; Chen & Liao, 2018; Wiśniewska, 2015). This anomaly is also called the *opening price gap* or *morning gap*. Price gaps are often an early indicator of market reaction to new information that emerges outside trading hours. This phenomenon gives rise to two possible directions of

price movement after a price gap occurs. First, the *momentum effect*, which is a condition in which prices on that day tend to continue moving in the same direction as the price gap, reflecting that the market confirms the material information. Second, the possibility of *overreaction*, where prices move in the opposite direction to the price gap as a form of correction to the initial excessive market reaction. Both scenarios have strategic implications, as price gap anomalies indicate the dynamics between information dissemination and market responsiveness. Price gap anomalies can create short-term trading opportunities or indicate market inefficiencies. In-depth research on these anomalies can provide insight into investor behavior and market microstructure (Caporale & Plastun, 2017; Cheema & Scrimgeour, 2019; A. Plastun et al., 2020; O. Plastun et al., 2019; Su et al., 2022; Zhu et al., 2022).

Several previous empirical studies on price gap anomalies have focused on confirming their existence and examining the potential to exploit these gaps for profit (Caporale & Plastun, 2017; Plastun et al., 2019, 2020; Si & Nadarajah, 2024). Su et al. (2022) have also established a dependent functional logit model to predict price gap anomalies in the Chinese stock market. However, studies analyzing this anomaly in the Indonesian stock market are still limited. The *Indonesia Stock Exchange* (IDX) has various differences with stock markets from countries that have been studied previously, both in terms of *market microstructure*, trading mechanisms, and retail investor composition.

According to Plastun et al. (2020), the following are the most common reasons for price gaps: a) Significant time differences between closing and opening prices caused by holidays and weekends. b) The emergence of after-hours trading. c) The release of information affecting security prices, such as income statements and profit warnings. d) Market shocks that can cause significant and sudden changes in the supply and demand of financial assets.

The Indonesian stock market is classified as an *emerging market*, making it an interesting subject of study because the nature of the market is characterized by high volatility and risk. Table 1 describes the differences in trading mechanisms between the IDX and the *New York Stock Exchange* (NYSE) and *Shanghai Stock Exchange* (SSE). There is no designated market maker (*DMM*) on the IDX (Barsiano et al., 2019). Clark-Joseph et al. (2017) stated that a *DMM* is a market player appointed by the regulator and has an obligation to maintain a “fair and orderly” market in their shares, which means providing liquidity, maintaining price continuity with reasonable depth, and minimizing the impact of temporary differences between supply and demand. The absence of a *DMM* on the IDX can cause price gaps to be more volatile and corrected more slowly than on the NYSE and SSE. In addition, differences in daily price change limits set by each regulator can affect the market’s ability to reflect information on prices in one day, allowing

markets with smaller limits to require more trading days to reach price equilibrium. Restrictions on shares that can be traded in the *pre-opening session* affect the determination of opening prices on stocks and indices. Finally, restrictions on shares that are allowed for *short selling* limit the potential for exploiting momentum effects during downward price gaps.

Table 1. Key Differences in Stock Trading Mechanisms of Indonesia Stock Exchange (IDX), New York Stock Exchange (NYSE), Shanghai Stock Exchange (SSE)

Factor	IDX	NYSE	SSE
Designated market maker	No	Yes	Yes (Limited to stocks on STAR board)
Daily upward price change	20-35%	-	5-20%
Daily downward price change	20-35%	<i>Market-Wide Circuit Breakers 20%</i>	5-20%
Pre-opening stocks requirements	Listed on LQ45 index, main board, new economy board, development board	All stocks	A-Share stocks
Short-selling stocks requirement	Stocks permitted by the Indonesian Stock Exchange regulators	All stocks	Stocks permitted by the China Securities Regulatory Commission (CSRC)

In terms of investor composition, in Indonesia the portion of *retail investor* transactions was 32.8% as of December 2024 (IDX Press Release No: 094/BEI.SPR/12-2024). This percentage is greater than that of the United States stock market, where, according to the Securities Industry and Financial Markets Association (*SIFMA*) report, the total trading volume by retail investors averaged 17.9% throughout 2024. *Retail investor* trading activities are associated with increased market volatility (Foucault et al., 2011; Wu & Ren, 2025). Volatility, which reflects the level of uncertainty or risk in the market, can potentially heighten the influence or frequency of price gaps. Therefore, incorporating the effect of volatility as a control variable is important, and this study seeks to empirically assess whether volatility functions as a determining factor in the dynamics of price gap anomalies.

These differences in market regulation are determining factors in whether price gap anomalies exist and generate abnormal returns in the *IDX*. With this background, the study was conducted to explore the presence and trend of price gap anomalies in the Indonesian stock market and to determine whether these anomalies can create opportunities for profit exploitation. In addition, this study attempts to

test whether including volatility as a control variable can improve the accuracy of price gap anomaly analysis.

RESEARCH METHOD

This study employed multiple linear regression to analyze price gap anomalies in the Indonesian stock market, focusing on their impact on intraday returns both on the day of occurrence (H_A and H_B) and the following day (H_C and H_D). The research utilized historical data from 11 indices listed on the *Indonesia Stock Exchange (IDX)*, with the *IHSG* composite index as the primary focus due to its market-wide representation. Price gaps were categorized as positive or negative, calculated as percentage deviations between opening and previous closing prices, while intraday returns measured momentum effects independently of daily returns. Volatility was incorporated using the Rogers & Satchell estimator to assess risk, and regression models with dummy variables tested whether abnormal returns persisted beyond the anomaly day, accounting for differences in trading mechanisms between Indonesia and the U.S., such as daily price limits.

The findings revealed that price gaps significantly influenced intraday returns, with the models' accuracy verified through adjusted R-squared and F-test values. Hypotheses H_A and H_B confirmed that both upward and downward gaps generated abnormal returns on the anomaly day, while H_C and H_D explored whether these effects persisted into the next trading session. The study highlighted Indonesia's unique market structure—such as *Auto Rejection* limits—as a potential factor prolonging price momentum absorption compared to more flexible markets like the *NYSE*. These insights were then leveraged to develop a trading strategy that exploited gap anomalies through long/short positions based on predefined threshold values, with returns adjusted for transaction fees.

To evaluate the strategy's effectiveness, a back testing approach was applied to historical data, measuring profits against opening and closing prices while accounting for fees. Performance was assessed using a single-index model to isolate abnormal returns from broader market trends, with alpha (α) indicating strategy-specific outperformance. The results demonstrated whether the strategy could consistently generate excess returns independent of market movements, providing practical insights for investors seeking to capitalize on price gap anomalies.

The study underscores the importance of considering market-specific mechanisms when analyzing anomalies, as regulatory differences can significantly impact trading opportunities. Future research could expand this framework by incorporating additional variables, such as liquidity or macroeconomic factors, to refine predictive accuracy. The trading strategy's success in back testing suggests potential real-world applicability, though live-market validation would further

strengthen its reliability. Overall, this work contributes to a deeper understanding of behavioral patterns in emerging markets and offers actionable methodologies for anomaly-based trading strategies.

RESULT AND DISCUSSION

Descriptive Statistics of IHSG Price Gaps and Threshold for Determining Anomaly periods

Descriptive statistics of the price gap data are presented in table 2 to provide an overview of the characteristics of price movements at market opening of IHSG for the 2015-2024 period. The data include measures such as the mean, median, standard deviation, minimum, and maximum values of price gaps data. Table 3 show the number of price gap day below several gap sizes. The results show higher frequency of small gaps and relatively fewer large gaps, indicating that extreme opening price changes are less common. The presence of both positive and negative gaps suggests varying investor reactions at the start of trading sessions, potentially influenced by overnight news or market sentiment. These descriptive statistics serve as a preliminary step in identifying the presence of anomalies and guide the subsequent analysis.

IHSG 0.046% 0.004% 0.330% 8.282 -1.008 -2.436% 1.774%

Table 2. Descriptive Statistics of Price Gaps on IHSG 2015-2024

Statistic	Value
Mean	0.046%
Median	0.004%
Standard deviation	0.330%
Maximum	1.774%
Minimum	-2.436%
Kurtosis	8.282
Skewness	-1.008

Table 3. Gap sizes and Number of Detected Gaps on IHSG 2015-2024

Gap sizes	0.10 %	0.20 %	0.30 %	0.40 %	0.50 %	0.60%	0.70%	0.80%	0.90%	1.00%
Number of detected price gaps days	1426	962	593	368	246	169	120	79	60	47
Number of detected positive	918	622	377	226	136	91	60	38	26	19

Gap sizes	0.10 %	0.20 %	0.30 %	0.40 %	0.50 %	0.60%	0.70%	0.80%	0.90%	1.00%
price gap days										
Number of detected negative price gap days	508	340	216	142	110	78	60	41	34	28
% of detected price gaps days	58.85%	39.70%	24.47%	15.19%	10.15%	6.97%	4.95%	3.26%	2.48%	1.94%
% of detected positive price gap days	37.89%	25.67%	15.56%	9.33%	5.61%	3.76%	2.48%	1.57%	1.07%	0.78%
% of detected negative price gap days	20.97%	14.03%	8.91%	5.86%	4.54%	3.22%	2.48%	1.69%	1.40%	1.16%

To detect price gaps effect, it is essential to establish an appropriate threshold for gap size to differentiate common gaps caused market noises from gaps caused by potential momentum effects. Caporale & Plastun (2017) emphasize that the size of the gap significantly affects the number of anomalies identified. As shown in Table 3, selecting a small gap threshold results in an excessive number of gaps, making it difficult to classify them as anomalies. In contrast, setting a high threshold yields too few gaps, which can compromise the statistical significance of the findings.

For this study, we first calculate the absolute value of the price gaps rate of each day on the period, sort them, and use the 90th percentile of this absolute price gaps rate as threshold size. In case of IHSG, this gives us the value of 0.5044% as the criterion of anomaly days, where price gap > 0.5044% is considered positive price gap abnormal period and price gap < -0.5044% is considered negative price gap abnormal period. This gives us 243 observations of price gap anomaly days, with 135 of those observations are positive price gap abnormal periods and 108 negative price gap abnormal periods. Given the statistical nature of this study, these sample sizes is deemed sufficient for reliable analysis and accounts for less than 10 percent of the total dataset to be considered anomalies. For other indices, the threshold value is shown in Table 4.

Table 4. Threshold Value for Each Index

Market Index	Threshold Value for Price Gap Anomaly
IHSG	0.5044%
BISNIS-27	0.8074%
IDX30	0.8146%
Investor33	0.7920%
JII	0.7085%
KOMPAS100	0.6694%
LQ45	0.7935%
MNC36	0.7936%
PEFINDO-25	0.4155%
SMinfra18	0.7894%
SRI-KEHATI	0.8389%

Effect of Price Gap Anomalies on Intraday Returns on the Day Anomaly Occurs

Regression analysis is conducted to test hypotheses H_A and H_B by using model stated in equation 4. We construct the null and alternative hypotheses as follow:

a) H_A

$$H_0 : \alpha_1 = 0$$

$$H_1 : \alpha_1 \neq 0$$

b) H_B

$$H_0 : \alpha_2 = 0$$

$$H_1 : \alpha_2 \neq 0$$

Table 5. Regression Analysis Result of Equation 4. Examining Impact of Price Gaps on Returns on Anomaly Day with Control Variables

Index	α_1			α_2			Volatility (α_3)		
	Coefficient	t-stat	p-value	Coefficient	t-stat	p-value	Coefficient	t-stat	p-value
IHSG	0.0029***	3.5062	0.0005	-0.0021**	-2.5201	0.0118	-5.8909***	-5.8863	0.0000
BISNIS-27	0.0018*	1.6903	0.0911	0.0008	0.6957	0.4867	-2.8538***	-4.3971	0.0000
IDX30	0.0011	1.0032	0.3158	0.0004	0.3387	0.7349	-3.6345***	-6.1943	0.0000
Investor33	0.0015	1.3759	0.1690	0.0002	0.1744	0.8616	-2.6946***	-4.4873	0.0000
JII	0.0037***	3.5914	0.0003	-0.0003	-0.3209	0.7483	-3.6380***	-5.5280	0.0000
KOMPAS100	0.0028***	2.8151	0.0049	-0.0014	-1.3400	0.1804	-4.8350***	-7.7606	0.0000
LQ45	0.0015	1.4656	0.1429	0.0006	0.4762	0.6340	-3.4287***	-5.4322	0.0000
MNC36	0.0012	1.0778	0.2812	0.0001	0.0759	0.9395	-6.5634***	-17.8279	0.0000
PEFINDO-25	0.0017*	1.7299	0.0838	-0.0039***	-3.6865	0.0002	-5.3988***	-8.0256	0.0000
SMinfra18	0.0039***	3.3876	0.0007	0.0000	-0.0206	0.9835	-3.6745***	-5.1961	0.0000
SRI-KEHATI	0.0013	1.1996	0.2304	0.0010	0.8832	0.3772	-1.9119***	-3.1111	0.0019

(*) H_0 rejected at 10% significance level

(**) H_0 rejected at 5% significance level

(***) H_0 rejected at 1% significance level.

The sign of dummy variable coefficients indicates the direction of price change, which is positive returns on the day when positive price gap occurs and negative returns on the day when negative price gap occurs. This is consistent with the potential cause of price gaps which is changes of sentiment on securities after previous day's market was closed, causing investors to buy (sell) securities when today's market open and carrying upward (downward) momentum.

Table 5 show the regression results for each index. IHSG, which is the main research object, shows significant intraday abnormal returns during the positive and negative price gap anomaly periods. So, it can be concluded that price gap anomalies occur in the Indonesian stock market. Hypotheses H_A and H_B are proven.

Other stock indices show mixed results. 5 indices show intraday abnormal returns during the positive price anomaly day, while 1 index shows intraday abnormal returns during the negative price anomaly day. Overall, it appears that the momentum effect of price gap anomalies is more observed in positive anomalies than negative ones. This can be attributed to the restrictions on short selling regulations in Indonesia, which limit downward price pressure when there is a change in sentiment to negative.

Effect of Price Gap Anomalies on Intraday Returns on the Day Following Anomaly Occurs

Regression analysis is conducted to test hypotheses H_C and H_D by using model stated in equation 5. We construct the null and alternative hypotheses as follow:

a. H_C

$$H_0 : \alpha_1 = 0$$

$$H_1 : \alpha_1 \neq 0$$

b. H_D

$$H_0 : \alpha_2 = 0$$

$$H_1 : \alpha_2 \neq 0$$

Table 6. Regression Analysis Result of Equation 5. Examining Impact of Price Gaps on Returns on Day Following Anomaly Day with Control Variables

Index	α_1			α_2			Volatility (α_3)		
	Coefficient	t-stat	P-value	Coefficient	t-stat	P-value	Coefficient	t-stat	P-value
IHSG	0.0008	0.9271	0.3540	0.0013	1.4456	0.1484	-9.5604***	-14.1159	0.0000
BISNIS-27	0.0003	0.2841	0.7764	0.0016	1.3417	0.1798	-4.3480***	-8.7630	0.0000
IDX30	0.0009	0.8036	0.4217	0.0010	0.7865	0.4317	-3.5053***	-5.8538	0.0000
Investor33	0.0000	-0.0339	0.9730	0.0014	1.1916	0.2335	-3.1643***	-5.7222	0.0000
JII	0.0004	0.3441	0.7308	0.0018	1.5633	0.1181	-6.2419***	-16.6176	0.0000
KOMPAS100	0.0006	0.6531	0.5138	0.0017	1.5260	0.1271	-6.0747***	-12.0093	0.0000
LQ45	0.0001	0.0821	0.9346	0.0014	1.0928	0.2746	-4.5200***	-8.4781	0.0000
MNC36	0.0005	0.4528	0.6508	0.0014	1.2352	0.2169	-5.3219***	-11.0273	0.0000
PEFINDO-25	0.0004	0.4299	0.6673	0.0012	1.0056	0.3147	-7.4120***	-21.9849	0.0000

SMinfra18	-0.0002	-0.1522	0.8790	0.0020	1.5845	0.1132	-4.9451***	-8.3400	0.0000
SRI-KEHATI	0.0000	-0.0416	0.9668	0.0010	0.7554	0.4501	-4.2451***	-10.9897	0.0000

Table 6 show the regression results for each index to examine the effect of price gap anomalies on the day after an anomaly occurs. Overall, the positive and negative price gap anomaly periods do not produce abnormal returns on the following day on any indices, so that H_C and H_D are not proven. These results indicate that the price gap anomaly exhibit short-term behavior in the Indonesian stock market and is consistent with previous studies.

Exploration of Addition of Volatility Control Variables to Improve Regression Model Accuracy

As explained in the previous section, volatility is a measure of market uncertainty, so volatility can cause more significant price changes. This can affect the results of the analysis of the price gap effect, where the price gap effect may not be due to the momentum effect, but only part of market volatility.

To measure the addition of volatility measures to increase the accuracy of the regression model, an additional regression will be run with a simplified model of the previous model by eliminating control variables. The measurement of the accuracy of the regression model is done by looking at the adjusted R-squared and Overall F-Test values, where higher values indicate an increase in model accuracy.

Table 7. Comparison of Adjusted R-Squared and Overall F-Test on Equation 4 Regression, With and Without Control Variables.

Index	Adjusted R-Squared			Overall F-Test		
	Without control	With control	Is higher?	Without control	With control	Is higher?
IHSG	0.0074	0.0203	Yes	9.9901	17.6943	Yes
BISNIS-27	0.0006	0.0079	Yes	1.7726	7.4103	Yes
IDX30	-0.0003	0.0148	Yes	0.5870	13.0910	Yes
Investor33	0.0001	0.0077	Yes	1.0833	7.2673	Yes
JII	0.0050	0.0162	Yes	7.0408	14.2639	Yes
KOMPAS100	0.0036	0.0267	Yes	5.3370	23.1372	Yes
LQ45	0.0002	0.0116	Yes	1.2101	10.4706	Yes
MNC36	-0.0004	0.1155	Yes	0.4715	106.3946	Yes
PEFINDO-25	0.0056	0.0313	Yes	7.8154	27.0439	Yes
SMinfra18	0.0040	0.0140	Yes	5.8825	12.4788	Yes
SRI-KEHATI	0.0001	0.0355	Yes	1.1611	3.8728	Yes

Table 8. Comparison of Adjusted R-Squared and Overall F-Test on Equation 5 Regression, With and Without Control Variables.

Index	Adjusted R-Squared			Overall F-Test		
	Without control	With control	Is higher?	Without control	With control	Is higher?
IHSG	-0.0002	0.0758	Yes	0.7162	67.1510	Yes
BISNIS-27	-0.0001	0.0302	Yes	0.9091	26.1381	Yes
IDX30	-0.0003	0.0132	Yes	0.5837	11.7877	Yes
Investor33	-0.0002	0.0126	Yes	0.7731	11.3302	Yes
JII	-0.0002	0.1021	Yes	0.8078	92.7720	Yes
KOMPAS100	0.0000	0.0559	Yes	1.0490	48.8145	Yes
LQ45	-0.0003	0.0280	Yes	0.5800	24.2837	Yes
MNC36	-0.0002	0.0473	Yes	0.7467	41.0352	Yes
PEFINDO-25	-0.0008	0.1659	Yes	0.0544	161.5228	Yes
SMinfra18	0.0002	0.0275	Yes	1.2267	23.8343	Yes
SRI-KEHATI	-0.0006	0.0466	Yes	0.2709	40.4596	Yes

Table 7 shows the change in model accuracy for the analysis of the influence of price gap anomalies in the period during the anomaly based on the equation model (4) while Table 8 shows the change in model accuracy for the analysis of the influence of price gap anomalies in the period after the anomaly based on the equation model (5). From the increase in R-squared and Overall-F test, it can be concluded that the addition of volatility control variables increases the accuracy and significance of the overall model because R-squared has a meaning of how far the independent variable explains the variance of the dependent variable.

Trading Strategy and Simulation

From the results of the hypotheses test, it is known that the price gap anomaly occurs in the Indonesian stock market and this effect only applies on anomalous days. The trading strategies formed are:

1. Placing a long position at the opening price if the stock index shows a significant abnormal return in Table 5, then closing the position at the closing price at the end of the day. The traded indices are BISNIS-27, JII, KOMPAS100, PEFINDO-25, SMinfra18.
2. Placing a short position at the opening price if the stock index shows a significant abnormal return in Table 5, then closing the position at the closing price at the end of the day. The traded index is PEFINDO-25.

This strategy assumes that the stock index can be traded directly, which in practice the stock index only acts as a benchmark and cannot be transacted. The solution or workaround for this is that investors can transact to the constituent stocks of the index according to their weights. Another assumption of this strategy is the transaction cost, assuming the cost of buying shares is 0.15% of the transaction value (broker fee) and the cost of selling shares is 0.25% of the transaction value (broker fee + tax).

The main obstacle in this strategy is determining the price gap anomaly limit. Previously in the statistical test section, the anomaly limit was determined based on historical data by taking the 90th percentile as the limit. However, in the context of trading simulation, another way is needed for investors to determine whether the day is an anomalous period or not. This simulation tests the performance of the strategy by setting the limit to a certain value, namely the range of 0.6%, 0.7%, 0.8%, 0.9% and 1%.

And finally, the strategy performance will be evaluated using a single-index model with the IHSG return factor as market return. Therefore, the IHSG index is excluded from this trading simulation.

Table 9 Price Gap Anomaly Trading Strategy Return (Long Position)

Index	Anomaly Limit 0.6%		Anomaly Limit 0.7%	
	Coefficient	p-value	Coefficient	p-value
BISNIS-27	0.0073%	0.5319	0.0023%	0.8450
JII	0.0130%	0.2522	0.0100%	0.3716
KOMPAS100	0.0096%	0.3918	0.0103%	0.3555
PEFINDO-25	0.0011%	0.9174	-0.0022%	0.8385
SMinfra18	0.0158%	0.1813	0.0167%	0.1515

Index	Anomaly Limit 0.8%		Anomaly Limit 0.9%	
	Coefficient	p-value	Coefficient	p-value
BISNIS-27	0.0023%	0.8368	0.0037%	0.7429
JII	0.0122%	0.2727	0.0052%	0.6347
KOMPAS100	0.0105%	0.3412	0.0065%	0.5517
PEFINDO-25	-0.0040%	0.7121	-0.0048%	0.6579
SMinfra18	0.0113%	0.3172	0.0084%	0.4554

Index	Anomaly Limit 1%	
	Coefficient	p-value
BISNIS-27	0.0029%	0.7963
JII	0.0041%	0.7124
KOMPAS100	0.0054%	0.6270
PEFINDO-25	-0.0033%	0.7597
SMinfra18	0.0052%	0.6417

Table 10. Price Gap Anomaly Trading Strategy Return (Long+Short Position)

Index	Anomaly Limit 0.6%		Anomaly Limit 0.7%	
	Coefficient	p-value	Coefficient	p-value
PEFINDO-25	-0.0097%	0.4153	-0.0119%	0.3111

Index	Anomaly Limit 0.8%		Anomaly Limit 0.9%	
	Coefficient	p-value	Coefficient	p-value
PEFINDO-25	-0.0130%	0.2674	-0.0093%	0.4155

Index	Anomaly Limit 1%	
	Coefficient	p-value
PEFINDO-25	-0.0060%	0.5987

Of the 30 simulations tested from various anomaly limits and transaction positions, no scenario can produce significant returns, either at a significant level of 5% or 10%. This is possible because the nature of the trading strategy which is day trading causes high transaction costs and reduces the returns obtained. So, it can be concluded that the trading strategy to exploit price gap anomalies cannot beat market returns practically.

CONCLUSION

This study investigates price gap anomalies in the Indonesian stock market using 11 indices from 2015–2024, analyzing their potential to generate abnormal returns through multiple linear regression. The results confirm hypotheses H_A and H_B for the *IHSG* index, demonstrating that both positive and negative price gaps produce abnormal intraday returns during anomalous periods, though with varying effects across other indices—positive gaps showed momentum in 5 out of 10 indices, while negative gaps did so in only 1 (*Pefindo-25*). Notably, hypotheses H_C and H_D , regarding persistent effects into subsequent trading days, were not confirmed for any index, indicating these anomalies are short-term phenomena consistent with prior research. The inclusion of volatility as a control variable improved model accuracy, as evidenced by higher R-Squared and F-Test values, highlighting its role in understanding price dynamics.

Building on these findings, the study developed a day-trading style strategy that opened long or short positions based on gap criteria at market open and closed them by day's end. However, after accounting for transaction costs such as fees and taxes, the strategy failed to outperform *market returns*. This outcome suggests that while price gap anomalies exist and can be identified, their practical exploitation for consistent abnormal profits remains challenging in the Indonesian market context, particularly when real-world trading costs are considered. The research provides valuable insights into short-term market inefficiencies while underscoring the limitations of anomaly-based trading strategies in *emerging markets*.

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