



Market Reaction to MSCI's Free Float Calculation Change: Evidence from LQ45 Companies

*Raden Hendri
Gusaptono

UPN Veteran Yogyakarta,
Indonesia

Ayesha Salsabila

UPN Veteran Yogyakarta,
Indonesia

***Corresponding author:**

Raden Hendri Gusaptono, UPN Veteran
Yogyakarta, Indonesia.

✉ hgusaptono@gmail.com

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Abstract

Background: The 2025 MSCI free float methodology change created observable pressure in the Indonesian stock market. This study examines reactions to this unique index methodology event using abnormal return, trading volume activity, and investor transaction patterns.

Objective: This study aims to examine the Indonesian stock market's reaction to the announcement of changes in MSCI's free float calculation methodology using stock data from companies included in the LQ45 index.

Methods: This study employed an event study design with a 21-day observation window. The research sample was selected using purposive sampling, resulting in 38 eligible companies. Hypothesis testing was conducted using the one-sample and paired-sample Wilcoxon signed-rank tests.

Results: The findings indicate a significant *abnormal return* around the event date (t_0), but no significant difference in *abnormal returns* before and after the event. A significant difference was observed in *trading volume activity*. Descriptive analysis revealed a shift in transaction patterns, with foreign investors exhibiting net selling activity and domestic investors demonstrating net buying activity around the event period, although the difference was not statistically significant.

Conclusion: These findings indicate that the free float methodology announcement was primarily reflected in market transaction dynamics rather than persistent *abnormal returns*. This study provides new empirical evidence for the *event study* literature and contributes to the understanding of *semi-strong form market efficiency* in emerging capital markets.

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INTRODUCTION

Policy changes introduced by global index agencies can trigger significant reactions in capital markets, particularly in developing countries that serve as destinations for international capital flows (Gyasi et al., 2025). This phenomenon was reflected in the movement of the Indonesian stock market on October 27, 2025, when the Jakarta Composite Index (JCI) weakened by 1.87% to 8,117.15 and the LQ45 index declined by 1.24% to 817.87, with 573 stocks declining, 164 stocks increasing, and 219 stocks remaining unchanged (SindoNews.com, 2025). The market pressure occurred alongside growing news regarding changes in the free float calculation methodology proposed by Morgan Stanley Capital International (MSCI). This empirical pressure raises an important scientific question: whether, and to what extent, an announced change in a global index provider's free float methodology constitutes price-sensitive information capable of generating measurable abnormal returns and shifts in trading activity within the Indonesian capital market.

This issue originated from an MSCI consultation document released in September 2025 entitled "Consultation on Certain Topics Related to Free Float," which proposed the use of data from the Indonesian Central Securities Depository (KSEI) as the primary source for free float calculations starting in May 2026. KSEI maintains detailed share ownership data, including information on investors with ownership below 5%, whereas the previous methodology relied on issuer reports that only disclosed ownership stakes greater than or equal to 5%. The adoption of KSEI data is expected to improve the accuracy of free float estimates but may potentially result in lower free float values for stocks with concentrated ownership structures.

The methodological change has raised concerns among market participants. The Head of Equity Research at Kiwoom Sekuritas, Liza Camelia Suryanata, stated that the proposed approach would make Indonesia's free float data stricter and more transparent. Investors have begun considering the implications for the weight of Indonesian stocks within MSCI indices, which may affect global passive fund flows. A decline in a stock's index weight may encourage institutional investors to rebalance their portfolios to maintain alignment with the index composition.

Although the consultation document was released in September 2025, a significant market reaction was only observed on October 27, 2025, when the issue received extensive attention from national media outlets. This indicates that market reactions do not necessarily occur immediately after an initial announcement but may emerge when information is perceived as relevant and widely incorporated into investors' decision-making processes.

The capital market functions as a mechanism for securities trading and stock price formation, while also serving as a platform connecting parties with excess funds and parties requiring funding. Stocks, as capital market instruments, provide relatively high return potential compared with other financial instruments (Prameswari, 2022). Stock price movements are influenced by various factors, including company performance, interest rates, inflation, exchange rates, and social and political conditions (Ali, 2018). Within the efficient market framework, stock prices are assumed to incorporate all available information; therefore, the arrival of new information has the potential to influence stock valuations.

Morgan Stanley Capital International (MSCI) is one of the world's leading index providers with substantial influence on international investment flows through indices such as the MSCI World Index, MSCI Emerging Markets Index, and MSCI Indonesia Index. These indices serve as benchmarks for global investors in determining cross-border investment allocations; consequently, methodological adjustments implemented by MSCI have the potential to influence global capital movements.

One of the primary determinants of stock weights in the MSCI index is free float, which refers to the proportion of shares available to public investors, excluding shares held by controlling shareholders and strategic investors (Viratama et al., 2022). Free float reflects stock liquidity, where higher free float generally indicates greater market liquidity, whereas lower free float may increase stock price volatility (Suwandi D, 2020). Therefore, changes in the free float calculation methodology may potentially affect stock weights and influence global investors' investment decisions.

Market reactions to specific events can be examined using an event study, a methodology designed to observe investors' responses to publicly available information (Sunardi et al., 2023). Events containing relevant information are expected to be reflected in stock price movements through abnormal returns, as well as changes in stock trading activity measured through Trading Volume Activity (TVA) (Alfalah et al., 2022).

Numerous event studies have been conducted to analyze market reactions to various events. Li (2024) found positive abnormal returns following stock inclusion events in the MSCI index. Bash (2023) demonstrated that political events influence cumulative abnormal returns. Sunardi (2023) found that coal price policies affected abnormal returns and Trading Volume Activity, although the significance was not consistent throughout the entire observation period. Furthermore, Birindelli (2023) identified market reactions to global environmental policy announcements. However, research examining changes in free float calculation methodologies introduced by global index providers, particularly MSCI in the Indonesian stock market, remains limited. Therefore, this research provides a relevant contribution to the existing literature. Collectively, previous studies demonstrate inconsistent findings regarding the direction and persistence of market reactions: some studies report positive and sustained abnormal returns

following index-related announcements, while others identify significant effects only within limited event windows. Nevertheless, none of these studies specifically investigates a free float methodology change, which represents a distinct type of event because it modifies the index weighting mechanism rather than affecting index membership through constituent additions or deletions.

Based on the phenomenon of MSCI's free float methodology change and previous empirical evidence, this study aims to examine the reaction of the Indonesian stock market to this issue using an event study approach. Market reactions are assessed through abnormal returns and Trading Volume Activity, supported by net foreign and net domestic transaction analyses to identify investor trading patterns. This research focuses on companies included in the LQ45 index because these stocks possess high liquidity characteristics and largely represent constituents of the MSCI Indonesia Index.

Despite the extensive event-study literature on MSCI-related events, no prior study has specifically examined market reactions to a change in the free float calculation methodology itself, distinct from index inclusion, exclusion, or rebalancing events. This gap represents the specific empirical space that this study addresses. This study provides new empirical evidence by being the first, to the authors' knowledge, to examine market reactions to the MSCI free float methodology change using Abnormal Return, Trading Volume Activity, and net foreign and net domestic transaction dynamics jointly, thereby extending the semi-strong form market efficiency literature to a previously unexplored type of index-related information event in an emerging market context.

October 27, 2025, is designated as the event date because significant market reactions began to emerge on that date. Therefore, this study is expected to provide empirical evidence regarding the information content of the issue concerning MSCI's free float methodology change in the Indonesian stock market.

Market efficiency theory explains that stock prices reflect all information available in the market. Rational investors utilize available information in their investment decision-making processes, causing stock prices to reflect their fair values. According to Jones (2013), an efficient market is a condition in which security prices quickly and accurately reflect all relevant information. Consequently, investors cannot consistently earn Abnormal Returns because available information has already been incorporated into stock prices.

Fama (1970) classified market efficiency into three forms: weak-form efficiency, semi-strong-form efficiency, and strong-form efficiency. Weak-form efficiency states that stock prices reflect all historical information, meaning investors cannot obtain Abnormal Returns by using past market data. Semi-strong-form efficiency indicates that stock prices reflect all publicly available information; therefore, prices adjust rapidly following the announcement of new information. Strong-form efficiency suggests that stock prices reflect all information, both public and private, meaning that no investor can consistently earn Abnormal Returns.

In the context of event study research, semi-strong-form market efficiency is particularly relevant because it examines how markets respond to publicly released information through changes in stock prices and trading activity.

Abnormal Return is the difference between the actual return and the expected return of an investor. A positive Abnormal Return occurs when the actual return exceeds the expected return, whereas a negative Abnormal Return occurs when the actual return is lower than the expected return (Widyarti et al., 2021).

Abnormal Return is used as an indicator to measure market reactions to specific events or information (Daniel & Ratnasari, 2019). The existence of Abnormal Returns indicates that an event contains relevant information that influences investors' decisions.

Trading Volume Activity is an indicator used to measure market reactions through stock trading activities. Published information may influence investors' decisions and be reflected in changes in stock trading volume. According to Sukirno (2006), Trading Volume Activity is used to observe how investors respond to information and make trading decisions.

Investors in the capital market consist of foreign and domestic investors who possess different characteristics and respond differently to information. Koesrindartoto (2024) found that foreign investors exhibit different trading behaviors compared with domestic investors, indicating differences in information processing and investment decision-making.

In emerging markets, foreign investors tend to be more sensitive to global policy changes; therefore, changes in international index policies may affect investor transaction flows. Consequently, analyzing net foreign and net domestic transactions can provide insights into investor responses to specific events.

An Event Study is a method used to examine market reactions to a publicly announced event. According to (2010), an Event Study is used to test the information content of an event based on market reactions. Published information may originate from internal or external sources of a company (Sunardi et al., 2023). If an event contains relevant information, the market will react, which is reflected in changes in stock prices and trading activity.

MSCI proposed a change to the free float calculation methodology through the document titled "Consultation on Certain Topics Related to Free Float," utilizing Monthly Holding Composition Report data from KSEI to improve the accuracy of free float estimates. This change has the potential to reduce the free float levels of several Indonesian issuers and affect their stock weights in MSCI indexes. The implementation of this revised methodology is scheduled for the May 2026 Index Review.

Free Float refers to the number of shares available for public trading. According to Indonesia Stock Exchange, Free Float represents shares owned by investors with ownership below 5% and excludes shares held by management and treasury stock. MSCI defines Free Float as the proportion of shares available to international public investors.

METHOD

This study uses a quantitative approach, which is a method that draws conclusions based on statistical hypothesis testing using empirical data. The data used is secondary data, namely data that has been available and collected by other parties (Sekaran & Bougie, 2017). Research data was obtained from finance.yahoo.com and idx.co.id sites.

The method used was an Event Study, which is a method for analyzing market reactions to a publicly announced event. The event examined was the announcement of the change in the free float calculation methodology using data from the Indonesian Central Securities Depository (KSEI) by Morgan Stanley Capital International (MSCI).

The Event Study approach was adopted because it is uniquely capable of isolating the market's response to a specific, dateable information event. By comparing actual returns and trading activity around the event date with a benchmark derived from a pre-event estimation window, this design enabled the abnormal components of price and volume movements attributable to the free float methodology change to be identified and separated from normal market variations (Sunardi et al., 2023).

The research object consisted of stocks included in the LQ45 index around the event date of October 27, 2025. The observation period used an event window of 21 trading days, consisting of 10 trading days before the event, the event date, and 10 trading days after the event. This study aimed to examine market reactions measured using Abnormal Return and Trading Volume Activity.

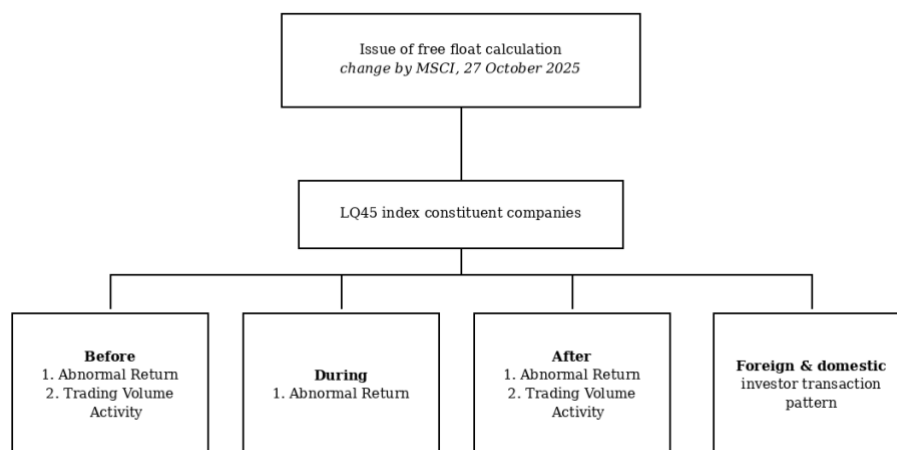


Figure 1. Conceptual Framework of the Study

Based on the theoretical concepts closely related to the research problem and supported by the findings of previous studies, the following hypotheses are formulated:

1. H1: There is a significant abnormal return on LQ45 stocks around the announcement of the change in MSCI's free float calculation methodology.
2. H2: There is a significant difference in the abnormal returns of LQ45 stocks before and after the announcement of the change in MSCI's free float calculation methodology.
3. H3: There is a significant difference in the Trading Volume Activity (TVA) of LQ45 stocks before and after the announcement of the change in MSCI's free float calculation methodology.
4. H4: There is a significant difference in the transaction movement patterns of foreign and domestic investors around the announcement of the change in MSCI's free float calculation methodology.

The research population is all stocks that are members of the LQ45 index. The research sample was selected using the purposive sampling technique with the following criteria: 1) Consistent stocks are listed in the LQ45 index and have complete historical price data for the period from October 13 to November 10, 2025. 2) No constituent changes are experienced during the event window period. 3) Do not take corporate actions such as stock splits, mergers, acquisitions, right issues, dividend announcements, and bonus shares during the observation period.

Firms undertaking corporate actions during the observation period were excluded to avoid confounding events, that is, to prevent price and volume movements caused by unrelated corporate announcements (stock splits, rights issues, and dividend announcements) from being misattributed to the free float methodology issue. This ensured that any observed abnormal return or volume change could be more confidently attributed to the event under study.

Based on the predetermined criteria, out of the total population of 45 stocks in the LQ45 index, 5 stocks experienced constituent changes and 2 stocks carried out corporate actions during the research period. Therefore, the final sample consisted of 38 stocks that met the criteria and were used in this study.

The observation period was set at 21 trading days for the data analysis stage, consisting of 10 days before and 10 days after the announcement of the change in MSCI's free float calculation methodology in Indonesia (October 13, 2025–November 10, 2025). This study employed the Market Model method with an estimation period of 40 trading days (August 14, 2025–October 10, 2025), beginning 50 trading days and ending 10 trading days before the event date, to avoid the possibility of price increases occurring before the event.

The 21-day event window (10 trading days before and after the event date) was used because it was sufficiently broad to capture both anticipatory market reactions and post-announcement price adjustments while remaining short enough to minimize contamination from unrelated events, consistent with standard event-study practices. The 40-day estimation period was designed to end 10 trading days before the event window to ensure that any pre-event price run-up was excluded from the estimation of normal (expected) returns. This period was also considered adequate to generate stable ordinary least squares (OLS) estimates of the Market Model parameters (α and β) without extending too far back and capturing a potentially different market regime.

Because the Shapiro-Wilk normality test indicated that the abnormal return and trading volume activity data were not normally distributed, non-parametric tests were used throughout – the one-sample Wilcoxon signed-rank test to examine whether AAR on each day within the event window differs significantly from zero (H1), and the paired-sample Wilcoxon signed-rank test to compare AAR and ATVA before and after the event (H2 and H3) as well as net foreign and net domestic transaction values before and after the event (H4). All statistical tests were processed using IBM SPSS Statistics.

The following steps are used to determine the Abnormal Return and Total Volume Activity.

a. Abnormal Return

Abnormal Return (AR) can be interpreted as the difference between the actual return that occurs and the expected return (Hartono, 2022). Xi (2025) explain the steps in calculating

Abnormal Return are as follows:

1) Calculating Actual Return

$$R_{it} = \frac{R_{it} - R_{it-1}}{R_{it-1}}$$

Description:

R_{it} = the actual return that occurred in period t

P_{it} = share price i in period t

P_{it-1} = share price i in the T-1 period

2) Calculating Market Returns

$$R_{mt} = \frac{IHS_{Gt} - IHS_{Gt-1}}{IHS_{Gt-1}}$$

Description:

R_{mt} = JCI return in the t period

JCI = Composite stock price index in period t

JCI = Composite stock price index in the t-1 period

3) Calculating Expected Return with Market Model

$$E(R_{it}) = \alpha_i - \beta_i E(R_{mt})$$

Description:

$E(R_{it})$ = Expected return of shares I in period t

α_i = the share of stock return I that is not affected by market performance

β_i = Sensitivity of Stock Return I to Market Movements

$E(R_{mt})$ = expected market return in period t

4) Calculating Abnormal Returns

$$AR_{i,t} = R_{i,t} - E[R_{i,t}]$$

Description:

$AR_{i,t}$ = Abnormal Return Company I in the T period

$R_{i,t}$ = the actual return that occurred in period t

$E[R_{i,t}]$ = market return in period t

5) Calculating Average Abnormal Return

$$AAR_t = \sum_{t=i}^k \frac{AR_{i,t}}{n}$$

Description:

AAR_t = Average Abnormal Return in period t

$AR_{i,t}$ = Abnormal return of I shares in period t

n = number of companies used in the sample

b. Trading Volume Activity (VAT)

Total Volume Activity (TVA) stocks are used to see if individual investors can understand the information and make trading decisions (Sukirno, 2006). Sunardi (2023) explaining the steps in calculating Total Volume Activity are as follows:

1) Calculating Total Volume Activity

$$TV_{Ait} = \frac{\text{The volume of shares traded during period t}}{\text{The trading volume of stock i during period t}}$$

2) Calculating Average Total Volume Activity

$$ATV_{At} = \frac{\sum TV_{At}}{n}$$

Description:

ATV_{At} = average Total Volume Activity in period t

VAT = number of companies

n = number of observation periods

RESULTS AND DISCUSSION

Results

Abnormal Return of LQ45 Stocks Around the Issue of Changes in Free Float Calculation by MSCI

Table 1

AAR and significance

T	AAR	Sig.
T-10	-0,0037	0,286
T-9	-0,0014	0,712
T-8	0,00737	0,261
T-7	0,00568	0,519
T-6	0,0059	0,086
T-5	0,00498	0,215
T-4	0,00299	0,879
t-3	-0,006	0,057
T-2	0,01014	0,042
T-1	-0,0019	0,049
t0	0,01949	<0.001
t+1	0,00608	0,048
t+2	0,01033	0,045
t+3	0,00229	0,267
t+4	-0,0083	0,49
t+5	-0,0055	0,106
t+6	-0,0029	0,482
t+7	0,00289	0,438
t+8	-0,0022	0,413
t+9	-0,0035	0,199
t+10	0,00301	0,902

The average Abnormal Return (AAR) of LQ45 shares during the event window period exhibited a fluctuating pattern, with alternating positive and negative values. Before the event, AAR reached its highest value at t-2, with a value of 0.01014, before declining at t-1 to -0.0019. On the event date (t0), AAR increased sharply to 0.01949, representing the highest value recorded during the observation period. After the event, AAR remained positive from t+1 to t+3, before declining into negative territory from t+4 to t+6. Subsequently, AAR fluctuated again until the end of the observation period.

The results of the One-Sample Wilcoxon Signed-Rank Test indicated that significant abnormal returns occurred at t-2, t-1, t0, t+1, and t+2 (significance level < 0.05). However, the abnormal return at t+4 (Sig. = 0.49) was not statistically significant, while the remaining event window periods also did not demonstrate statistically significant abnormal returns.

Difference in Average Abnormal Returns Before and After the Issue of Changes in Free Float Calculation by MSCI

Table 2

Wilcoxon Signed-Rank Test Results for Differences in Average Abnormal Returns Before and After the MSCI Free Float Methodology Announcement

	Z	Asymp. Sig. (2-tailed)	Remarks
AAR Before – AAR After	-0,761	0,446	Insignificant

The results of the Wilcoxon Signed-Rank Test showed a Z value of -0.761 with a significance level of 0.446 (>0.05), indicating that there was no significant difference in Abnormal Returns between the periods before and after the announcement of the change in MSCI's free-float calculation methodology in Indonesia. Therefore, the second hypothesis is rejected. For this test, the number of paired observations was N = 38 (sample companies), yielding an effect size of r =

$Z/\sqrt{N} = -0.761/\sqrt{38} = -0.123$, indicating a small effect size.

Average Difference in Total Activity Volume Before and After the Issue of Changes in Free Float Calculation by MSCI

Table 3

Wilcoxon Signed-Rank Test Results for Differences in Average Trading Volume Activity Before and After the MSCI Free Float Methodology Announcement

	Z	Asymp. Sig. (2-tailed)	Remarks
ATVA Before – ATVA After	-2,067	0,039	Significant

The results of the Wilcoxon Signed-Rank Test showed a Z value of -2.067 with a significance level of 0.039 (<0.05), indicating a significant difference in Trading Volume Activity (TVA) between the periods before and after the announcement of MSCI's free float calculation methodology change. Therefore, the third hypothesis is accepted.

For this test, the number of paired observations was $N = 38$ (sample companies), yielding an effect size of $r = Z/\sqrt{N} = -2.067/\sqrt{38} = -0.335$, indicating a medium effect size, which is consistent with the statistically significant result.

Foreign and Domestic Investor Transaction Patterns Around the Issue of Changes in the Free Float Calculation by MSCI on LQ45 Shares

Average Net Foreign and Net Domestic (in specific units):

Table 4

Average Net Foreign and Net Domestic Transactions During the Event Window

Period	Foreign	Domestic
T-10	-5,48	11,81
T-9	14,01	-14,00
T-8	-0,06	-1,61
T-7	8,25	-7,28
T-6	63,47	-7,06
T-5	6,85	-7,28
T-4	12,45	-11,20
t-3	-4,02	5,08
T-2	10,40	-10,10
T-1	13,03	-11,11
t0	-8,75	8,75
t+1	-27,13	27,05
t+2	1,45	-1,45
t+3	49,86	-49,85
t+4	24,70	-24,93
t+5	-8,94	2,57
t+6	-2,57	2,57
t+7	-51,38	51,41
t+8	0,73	-0,14
t+9	-19,22	-140,18
t+10	7,88	-7,88

Based on the calculation of the average net foreign and net domestic transactions of 38 LQ45 companies during the event window period, there were dynamics in fund flows. Before the event, foreign investor transactions exhibited a fluctuating pattern, with net buying and net selling positions occurring alternately. On the event day (t0), foreign investors were in a net selling position, while domestic investors were in a net buying position. After the event, transaction fluctuations increased, with movement patterns tending to move in opposite directions between foreign and domestic investors.

Difference in Net Foreign and Net Domestic Transactions Before and After the Issue (H4)

Table 5

Wilcoxon Signed-Rank Test Results for Differences in Net Foreign and Net Domestic Transactions Before and After the MSCI Free Float Methodology Announcement

	Z	Asymp. Sig. (2-tailed)	Remarks
Net Foreign – Net Domestic	-1.477	0.140	Insignificant

A paired-sample Wilcoxon signed-rank test was conducted on the net foreign and net domestic values reported in the table above ($Z = -1.477$, Asymp. Sig. (2-tailed) = 0.140). Because the significance value exceeds 0.05, the difference in transaction patterns between foreign and domestic investors around the event is not statistically significant at the aggregate level, although the two series consistently move in opposite directions on most trading days. Therefore, H4 is not statistically supported by the inferential test. However, the descriptive pattern, characterized by foreign net selling accompanied by domestic net buying, remains a notable feature of the data.

Discussion

Market Reaction in the Form of Abnormal Return of LQ45 Shares

The sharply increased AAR pattern at t_0 indicates that the information related to the change in the free-float calculation methodology by MSCI contains information to which the market responds; therefore, H_0 is rejected and H_1 is accepted. Within the framework of the semi-strong form of market efficiency, these results show that stock prices reflect public information through adjustments in Abnormal Returns. Investors respond to the potential impact of methodological changes on stock weights and fund flows, thereby influencing investment decisions. The market reaction not only occurs on the event date but is also followed by a stock price adjustment process in the subsequent days.

The results of this study are consistent with the research of Sunardi (2023), which found significant Abnormal Returns around certain events, suggesting that the market reacts to relevant public information. Mechanistically, the sharp AAR spike at t_0 is consistent with investors rapidly repricing shares as they revise expectations regarding future MSCI index weights and anticipated passive fund rebalancing. A lower free-float estimate implies a smaller index weight and, consequently, lower expected passive inflows; therefore, investors update valuations and trading positions as soon as the implications of the methodology change are processed rather than waiting for the change to take effect.

Difference in Average Abnormal Returns Before and After the Event

The finding that there was no significant difference in Abnormal Returns between the periods before and after the event indicates that, although significant Abnormal Returns occurred during the days surrounding the event date, the market did not generate consistent abnormal gains before and after the event. Within the framework of the semi-strong form of market efficiency, these results reflect that stock prices adjusted rapidly to public information; thus, after the initial adjustment, prices returned to a new equilibrium without generating persistent Abnormal Returns. The market reaction to the announcement of MSCI's free-float calculation change was temporary and concentrated around the event date.

These results are consistent with research by Sunardi (2023), which shows that the market responds quickly to public information but does not produce a continuous difference in Abnormal Returns between the periods before and after the event. From an information-processing perspective, the absence of a persistent difference implies that the Indonesian market absorbed the free-float change information quickly enough that no exploitable, systematic mispricing remained beyond the event window. This behaviour is consistent with the prediction of a semi-strong-form efficient market, in which prices adjust rapidly and fully to newly available public information, leaving no opportunity for investors to earn abnormal profits by trading based on that information after the initial adjustment.

Average Difference in Total Activity Volume Before and After Events

The significant difference in Trading Volume Activity (TVA) between the periods before and after the event suggests that the market reacts to public information through changes in stock trading activity, although it is not always followed by persistent changes in Abnormal Returns. Within the framework of the semi-strong form of market efficiency, changes in trading volume reflect investors' responses to public information through adjustments in investment decisions and portfolio rebalancing. These results indicate that the announcement of MSCI's free-float calculation change contains information that affects investors' trading behaviour. These findings are consistent with the research of Sunardi (2023), which showed changes in Trading Volume Activity as a form of market reaction, as well as Tseng (2025), which found that policies implemented by index providers such as MSCI can increase trading activity due to adjustments in index composition by investors.

The increase in trading volume without a corresponding persistent Abnormal Return suggests that the reaction primarily occurred through portfolio rebalancing and liquidity-driven trading, with investors adjusting their position sizes to remain aligned with anticipated index weights rather than through a lasting reassessment of fundamental values. This pattern is also documented in other MSCI index-related events, where trading activity increases as index-tracking investors adjust their holdings around key dates.

Patterns of Foreign and Domestic Investor Transactions

The difference in transaction patterns between foreign and domestic investors indicates that the two groups responded differently to the change in MSCI's free float calculation methodology. Foreign investors tend to engage in net selling as a form of anticipation of potential changes in the weight of Indonesian stocks in the global index, which may affect international fund flows. In contrast, domestic investors tend to engage in net buying, reflecting an opportunistic response by taking advantage of foreign selling pressure as an opportunity to accumulate shares. Within the framework of semi-strong-form market efficiency, this condition indicates that public information regarding changes in MSCI's free float methodology is processed by the market and responded to through adjustments in investment decisions by different investor groups. The increase in trading activity intensity after the event further reinforces the finding that the information influenced investor behavior.

Economically, this asymmetry is consistent with foreign investors' greater sensitivity to global benchmarks and passive fund considerations, a lower anticipated MSCI weight reduces the attractiveness of a stock to benchmark-tracking foreign capital, while domestic investors, who are less directly exposed to passive index mandates, appear to perceive the resulting price pressure as a buying opportunity. This interpretation is consistent with evidence that passive, benchmark-driven ownership shapes cross-border trading behavior around index-related news.

Integrative Synthesis, Contribution, and Policy Implications

Taken together, the AAR, TVA, and net foreign/net domestic transaction findings form a coherent picture: the free float methodology issue contained information content that generated an immediate, short-lived price reaction (AAR) and a longer-term, statistically significant shift in trading intensity (TVA), accompanied by a directional reallocation of holdings between foreign and domestic investors, although the reallocation was not statistically significant in aggregate (H4). This pattern extends the event study literature by demonstrating that an index methodology change, as opposed to a constituent addition or deletion, can generate trading volume and ownership reallocation patterns typically associated with index-related events without producing persistent abnormal returns.

These findings provide additional evidence supporting semi-strong-form market efficiency in an emerging market context. For regulators and market participants, the findings suggest that changes in index provider methodologies should be treated as material, price-sensitive information requiring timely and transparent disclosure. Furthermore, domestic investors may potentially utilize short-term foreign selling pressure resulting from such changes as a tactical entry opportunity.

CONCLUSION

This study aims to analyze the reaction of the Indonesian capital market to the issue of changes in MSCI's free-float calculation methodology for LQ45 index stocks using abnormal return, Trading Volume Activity (TVA) indicators, and the dynamics of net foreign and domestic transactions. The results show that significant abnormal returns occurred on several days surrounding the event date, indicating that the information contained in the announcement was recognized and responded to by the market. However, in aggregate, there was no significant difference in the average abnormal return between the pre-event and post-event periods, suggesting that the stock price reaction was temporary and that the market was relatively quick to reach a new equilibrium.

In contrast, the Trading Volume Activity (TVA) test revealed a significant difference between the periods before and after the event, reflecting changes in investors' trading behavior in response to the information. The analysis of net foreign and domestic transactions also indicates differences in responses among investor groups, with foreign investors tending to conduct net selling, while domestic investors tended to conduct net buying during the event period. Overall, these findings suggest that the issue of changes in MSCI's free-float methodology was incorporated into the Indonesian capital market through adjustments in trading activity and shifts in fund flows, supporting the characteristics of semi-strong-form market efficiency.

Beyond summarizing these results, this study contributes to Market Efficiency Theory and the Event Study literature by providing, to the authors' knowledge, the first empirical evidence on market reactions to an index provider's free-float methodology change, distinct from constituent addition or deletion events, demonstrating that such changes can generate significant shifts in trading activity and investor transaction patterns consistent with semi-strong-form efficiency, even in the absence of persistent abnormal returns. Practically, the findings suggest that regulators and index-tracking market participants should consider free-float methodology consultations as material, price-sensitive disclosures, and that domestic investors may capitalize on short-term foreign selling pressure surrounding such events.

This study is limited by its focus on a single event and a 21-day event window, which restricts the ability to generalize the findings to other index methodology changes or longer-term effects. Furthermore, its reliance on the Market Model with a fixed 40-day estimation window may not fully capture firm-specific risk dynamics. The analysis of net foreign and domestic transactions is also aggregated at the market level and does not account for cross-sectional heterogeneity among firms or differences across investor categories. Future research is encouraged to extend the observation period, apply firm-level cross-sectional regression models to identify characteristics associated with stronger market reactions (ownership concentration and liquidity), and compare responses across multiple free-float or index methodology changes and different markets to evaluate the robustness and generalizability of these findings.

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AUTHOR CONTRIBUTION STATEMENT

Author 1: conceptualization, methodology, data curation, formal analysis, writing – original draft. Author 2: supervision, validation, writing – review and editing. All authors have read and approved the final manuscript.

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