Sinergi International Journal of Accounting and Taxation

OPEN ACCESS

RECEIVED 26 December 2025
ACCEPTED 10February 2026
PUBLISHED 28 February 2026

CITATION
Rahmawati D, Paramita VS, (2026).Market Response to the Opening of GIIAS 2025: Empirical Evidence from Electric Vehicle-Related Stocks on the Indonesia Stock Exchange (ISE). Sinergi International Journal of Accounting and Taxation. 4 (1), 39-47.
doi: 10.61194/ijat.v4i1.1007

TYPE Original Research
PUBLISHED 28 February 2026
DOI 10.61194/ijat.v4i1.1007
VOL 4 Issue 1 February 2026

Market Response to the Opening of GIIAS 2025: Empirical Evidence from Electric Vehicle-Related Stocks on the Indonesia Stock Exchange (ISE)

Dina Rahmawati[1]*, Veronika Santi Paramita[2]
[12]Universitas Jenderal Achmad Yani, Cimahi, Indonesia
Correspondence: dina.rahmawati07@gmail.com[1]

Abstract

The automotive industry is shifting toward electric vehicles, supported by Indonesian government policies and incentives. The opening of GIIAS 2025, which showcases electric vehicle innovations, may influence investor reactions in the Indonesia Stock Exchange. However, studies examining the impact of large-scale auto exhibitions such as GIIAS 2025 on abnormal returns and trading volume are still limited. Therefore, this study aims to fill this gap by analyzing how the capital market responds to the opening of GIIAS 2025, emphasizing its role as a multi-information event that may provide incremental insights beyond conventional event-study settings. This study employs a quantitative approach using the event study method to examine five automotive companies engaged in electric vehicle development. The observation period spans 10 days before the event, the event day, and 10 days after the event. The analysis applies descriptive statistics, normality tests, and one-sample t-tests to evaluate abnormal returns, while paired sample t-tests used to compare average abnormal returns and trading volume before and after the event. The findings indicate that only a few days surrounding the GIIAS 2025 opening show statistically significant abnormal returns. However, there are no significant differences in average abnormal returns trading volume when comparing the pre- and post-event periods overall. These results suggest that the information conveyed during the GIIAS 2025 opening did not generate a strong market reaction, supporting the semi-strong form of the efficient market hypothesis, which posits that markets quickly incorporate publicly available information into stock prices, even if the overall impact is not substantial.

KEYWORDS

Abnormal Return; Event Study; Trading Volume Activity; GIIAS 2025; Electric Vehicle.

Introduction

The worldwide car industry is now moving towards creating electric vehicles as a way to cut down on carbon emissions and help reach the Net Zero Emission goal. Indonesia is also taking part in this change by introducing several important policies to speed up the use of electric vehicles and support sustainable growth (Taba, 2026). With over 270 million people and being the second-largest car market in ASEAN, Indonesia shows its dedication to building an electric vehicle environment (Simply Wall St, 2025). The government offers a Value Added Tax discount of up to 10% for electric cars that have at least 40% domestic content (Putra & Indonesia, 2025). The national goal is to have 2 million electric vehicles in use by 2030 and to reach Net Zero Emission by 2060. Sales of electric vehicles have risen dramatically from 125 units in 2020 to 43,188 units in 2024, but they only make up about 4.98% of the total vehicle sales in the country, leaving many chances for growth in the future (Anggika et al., 2024).

The Gaikindo Indonesia International Auto Show (GIIAS) 2025, held at ICE BSD City on July 24, 2025, marked a significant milestone in supporting the growth of electric vehicles in Indonesia. As the world's second-largest automotive exhibition after the Shanghai Auto Show, the event featured 63 international automotive brands and over 40 new electric vehicle models (Albant et al., 2025). The presence of various models, such as the BYD Atto 1, Hyundai Ioniq 6 N, Suzuki e-Vitara, and MG4 EV Max, reflected

the intensifying competition in the domestic electric vehicle market. The introduction of these vehicles by companies listed on the Indonesia Stock Exchange could influence investor behavior, as event study theory suggests that new information can influence stock prices and trading volume (Pramana & Mawardi, 2012). Previous studies have shown that government support for electric vehicles tends to generate positive abnormal returns, suggesting that the market responds quickly to information related to desirability (Chatziantoniou et al., 2021; Pratiwi & Anggara, 2024). In line with the OJK's Sustainable Finance Roadmap 2025–2030, analyzing market reactions to GIIAS 2025 is crucial for understanding how investors view developments in the automotive sector. In the pre-event market context, several automotive companies, such as Astra International (ASII), Indomobil Sukses Internasional (IMAS), Astra Otoparts (AUTO), and Dharma Polimetal (DRMA), exhibited varying share price movements and trading volumes in the months leading up to the event. This variation reflects differing investor expectations regarding the future of the electric vehicle industry (Wang et al., 2025). Therefore, participation in GIIAS 2025 and involvement in electric vehicle development could be important signals for investors in illuminating these companies.

This study contributes to the event study literature in the emerging electric vehicle market by examining whether large-scale industry exhibitions provide relevant and valuable information that influences the stock prices of automotive companies on the Indonesia Stock Exchange (Zagloel & Maritza, 2025). The opening of GIIAS 2025 is considered a unique event, as it involves the simultaneous release of diverse information such as product launches, technological developments, and industry signals that can trigger more complex market reactions than policy announcements or earnings disclosures (Reski et al., 2021). However, studies on such events are still limited, as most previous research in event studies tends to focus on more structured and single information events, such as government policy announcements, earnings reports, or individual product launches, where the timing and content of information are relatively clear and easier to isolate (Setiawan et al., 2024). In contrast, large-scale industry exhibitions like GIIAS involve numerous companies and overlapping announcements within a short timeframe, making it more difficult to identify and quantify their specific impact on the market, which may explain the lack of empirical investigation in this area.

This research seeks to analyze the capital market's reaction to information regarding the opening of GIIAS 2025, which is indicated by the abnormal returns of automotive companies listed on the ISE (Suherman et al., 2016). In addition, it evaluates whether significant differences in abnormal returns occur before and after the introduction of electric vehicles at the event's opening, while also assessing variations in the trading volume of listed automotive firms during the same period. Ultimately, the research evaluates the extent to which information disclosed at the opening of GIIAS 2025 influences investor behavior and market reactions within the Indonesian capital market (Amirudin et al., 2025).

Methods

This study uses an event study method to look at how the capital market reacts to the introduction of GIIAS 2025 (Wahyudi, 2024). It checks how stock prices and the number of trades change before and after an event to see which information investors care about the most. The first day of GIIAS 2025 is called the event date (t0), and the event lasts for 10 days before that (t−10) and 10 days after that (t+10), giving a long period to look at how the market reacts.

The method for estimating expected returns in this research employs a market-adjusted model, which relies on market returns to signify standard stock returns. All the stocks analyzed are on the ISE, with market performance indicated by the Jakarta Composite Index (JCI). Abnormal returns are determined by comparing the actual returns of the stocks with the market returns reflected by the JCI (Nurlaili & Prasojo, 2024). This model was chosen for its straightforwardness, as it does not require a lengthy estimation timeframe and is deemed appropriate for evaluating events over a brief period. Through this method, this research aims to determine if the launch of the 2025 GIIAStriggers a market reaction shown through abnormal returns and variations in the trading volume of stocks in electric vehicle technology companies.

Figure 1 illustrates the core framework of this study, which adopts an event study approach within the capital market context. The framework assumes that the market operates efficiently and can be categorized into three efficiency levels: weak, semi-strong, and strong. This research specifically emphasizes the semi-strong form, in which stock prices incorporate all publicly accessible information. The event study technique is employed to evaluate whether public occurrences, particularly the exhibition and unveiling of electric vehicles at GIIAS 2025, provide investors with significant information. The market responses are evaluated through two key measures: abnormal returns, which show stock profit changes outside typical situations, and trading volume activity, indicating the level of stock trading.

Research Type

This study uses a quantitative method known as event study to examine how the capital market responds to certain events, by analyzing the situation before and after each event takes place. The GIIAS 2025 is considered an event that potentially conveys significant information to investors, with market responses measured using two key indicators: Abnormal Return (AR), which captures stock price fluctuations, and Trading Volume Activity (TVA), which reflects trading intensity. The analysis looks at how these indicators changed before, during, and after the opening of GIIAS 2025 to see if the market reacts to the information that was released (Hasibuan et al., 2025).

The opening of GIIAS 2025 constitutes a major automotive event at both national and international levels, providing significant information to the public. Abnormal Return (AR) shows the gap between actual and expected returns, indicating stock price reactions, whereas TVA indicates the proportion of shares traded relative to the total shares outstanding, capturing investor responses through trading behavior (Sibarani et al., 2023). Instead of treating market reactions as direct causal effects, this study analyzes the fluctuations in AR and TVA throughout the event period. Consequently, these variations are to assess both the importance of the information disclosed and the extent of the market's response to the opening of GIIAS 2025, as illustrated in Figure 2.

Population and Sample/Informants

The sample in this study initially comprises 42 automotive companies listed on the Indonesia Stock Exchange (IDX) under the JASICA/IDX-IC classification, including manufacturers of vehicles, parts, and accessories. To ensure the validity of the analysis, a purposive sampling technique was applied with clearly defined and transparent criteria. First, companies must be actively listed on the IDX during the observation period.

Second, they must have direct and verifiable involvement in GIIAS 2025 (held on July 24, 2025), specifically related to electric vehicles, such as exhibiting EV models, key

Figure 1. Research Framework on Market Response Analysis to the Opening of the GIIAS 2025

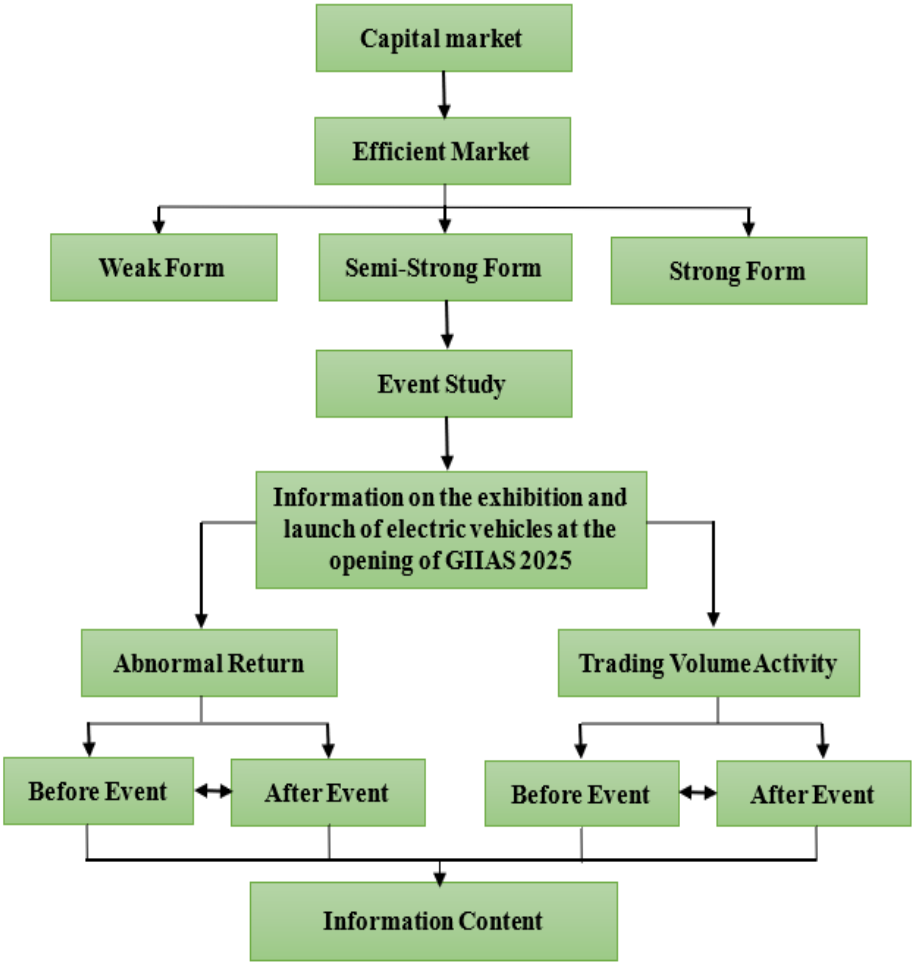

Figure 2. Research Framework for an Event Study on Market Responses to the Opening of GIIAS 2025

Table 1. Sample of Market Response to the Opening of GIIAS 2025

No	Company	Stock Code	Details of Electric Vehicle Products
1	PT Astra International Tbk	ASII	Presenting a variety of electrified and hybrid vehicles, including the UX and RZ from Lexus, as well as the bZ4X, RAV4, Innova Zenix, and Yaris Cross from Toyota, including the RX model (Abueed et al., 2026).
2	PT Astra Otoparts Tbk	AUTO	Motorcycle racing components as well as various electric vehicle (EV) charging station devices, including ultra-fast charging technology.
3	PT Indomobil Sukses Internasional Tbk	IMAS	As a distributor, they market and showcase a wide range of products from various brands under their umbrella, especially electric vehicles for all segments, Such as hybrid models from Great Wall Motors, including the Haval H6 HEV and Tank 500 HEV.
4	PT Gajah Tunggal Tbk	GJTL	GT Radial tire manufacturer with its latest product range.
5	PT Dharma Polimetal Tbk	DRMA	The company provides integrated solutions including batteries, charging systems, electric motors, solar energy, and electric vehicle (EV) conversion services.

Table 2. Descriptive Statistics of Market Reaction to the Opening of GIIAS 2025

	N	Min	Max	Mean	Std. Deviation
TM10	5.00	**-0.017**	**0.003**	**-0.007**	**0.007**
TM9	5.00	**-0.012**	0.004	-0.002	0.007
TM8	5.00	**-0.021**	0.028	-0.005	0.019
TM7	5.00	**-0.006**	0.005	-0.001	0.005
TM6	5.00	**-0.024**	0.021	0.000	0.018
TM5	5.00	**-0.013**	0.010	-0.004	0.009
TM4	5.00	**-0.021**	0.002	-0.009	0.009
TM3	5.00	**-0.023**	-0.007	-0.016	0.007
TM2	5.00	**-0.008**	0.035	0.012	0.018
TM1	5.00	**-0.027**	0.233	0.044	0.109
TM0	5.00	**-0.095**	0.018	-0.017	0.045
TP1	5.00	**-0.027**	0.009	-0.009	0.013
TP2	5.00	**-0.014**	0.037	0.004	0.021
TP3	5.00	**-0.019**	0.000	-0.006	0.008
TP4	5.00	**-0.001**	0.052	0.022	0.021
TP5	5.00	**-0.050**	0.004	-0.012	0.022
TP6	5.00	**-0.027**	-0.007	-0.018	0.009
TP7	5.00	**-0.005**	0.015	0.007	0.009
TP8	5.00	**-0.007**	0.003	-0.001	0.004
TP9	5.00	**-0.023**	0.006	-0.004	0.012
TP10	5.00	**-0.003**	0.055	0.014	0.024
AAR Before	5.00	**-0.009**	0.020	0.001	0.011
AAR After	5.00	**-0.009**	0.009	0.000	0.006
ATVA Before	5.00	**0.000**	0.001	0.001	0.000
ATVA After	5.00	**0.000**	0.001	0.001	0.000
TM : TMIN					
TP : TPLUS					

components (e.g., batteries or charging systems), or EV-related technologies (Jolodoro & Perdana, 2025). Third, firms must demonstrate substantive engagement in the EV sector as part of their core or strategic business activities, rather than merely having indirect or minimal exposure (Heng & Soeprapto, 2025). Companies that only participated in GIIAS without clear EV-related activities, or whose business operations are not significantly linked to EV development, were excluded to avoid potential bias. This filtering ensures that the selected firms are genuinely relevant to the research context. The detailed inclusion and exclusion process, along with justification and supporting sources for each firm, is presented in Table 1 and the accompanying appendix. Based on this rigorous screening, the final sample consists of five automotive companies that meet all criteria and are considered representative of EV-related market participants.

Research Location

This research centers on the ISE and the launch of GIIAS 2025, with a particular emphasis on automotive firms that are publicly traded on the IDX by analyzing stock price and trading volume data from firms engaged in electric vehicle innovation (Srinivasan & others, 2009). The primary event under examination is the official opening on Thursday, July 24, 2025, designated as the event date (t=0), chosen due to the launch and exhibition of numerous major electric vehicle models that attract substantial media coverage and investor attention. The display is clutched at the Indonesia Convention Exhibition (ICE) BSD City, which is located in South Tangerang. Banten, from July 24 to August 3, 2025; however, in accordance with event study methodology, which requires a precise reference point, the analysis considers only the opening day as the event date to accurately capture market reactions.

Data Collection Procedures

This study uses secondary quantitative data obtained from capital market sources, including daily stock prices, trading volumes, and other variables required to calculate abnormal return (AR) and trading volume activity (TVA) for electric vehicle-related companies listed on the Indonesia Stock Exchange (IDX). The primary data source is the official IDX (BEI) database, while supporting data from platforms such as Yahoo Finance are used solely for cross checking and validation (Yahoo Finance, 2025). In cases of discrepancies, the IDX data are treated as the benchmark, and any differences are reconciled by referring to official trading records. The study uses adjusted closing prices to account for corporate actions such as stock splits and dividends, ensuring consistency in return calculations. Event-specific information, including the official start date of GIIAS 2025 (July 24, 2025), is used to define the event window. Additional information on company participation and electric vehicle-related announcements is collected from the official GAIKINDO website, company disclosures, and credible media sources. To ensure data consistency, non-trading days such as weekends and public holidays are excluded from the analysis, and any missing observations are handled by aligning the dataset to active trading days only. Policy and regulatory information is obtained from official government sources, including the Ministry of Finance, Ministry of Industry, and the Financial Services Authority (OJK).

Data Analysis

This study employs an event study approach to examine market reactions to the announcement of GIIAS 2025, focusing on electric vehicle-related companies listed on the Indonesia Stock Exchange (IDX). The analysis is structured into a clear testing protocol aligned with each hypothesis. First, abnormal return (AR) is calculated on a daily basis within the event window (t-10 to t+10). To test whether AR is statistically significant on each day (t1), a One-Sample t-Test is applied if the data are normally distributed; otherwise, the Wilcoxon

Table 3. Results of the Normality Test: Analysis of Market Responses to the Opening of GIIAS 2025

Descriptive Statistics				
	Statis	df	Sig.	Cons
TM10	0.97	5.00	0.87	N
TM9	0.89	5.00	0.33	N
TM8	0.81	5.00	0.10	N
TM7	0.86	5.00	0.24	N
TM6	0.97	5.00	0.85	N
TM5	0.92	5.00	0.50	N
TM4	0.99	5.00	0.97	N
TM3	0.89	5.00	0.37	N
TM2	0.94	5.00	0.67	N
TM1	0.73	5.00	0.02	AB
TM0	0.80	5.00	0.08	N
TP1	0.96	5.00	0.79	N
TP2	0.88	5.00	0.29	N
TP3	0.77	5.00	0.05	AB
TP4	0.98	5.00	0.91	N
TP5	0.78	5.00	0.05	N
TP6	0.92	5.00	0.53	N
TP7	0.87	5.00	0.28	N
TP8	0.91	5.00	0.44	N
TP9	0.82	5.00	0.11	N
TP10	0.79	5.00	0.07	N
AAR Before	0.81	5.00	0.09	N
AAR After	0.90	5.00	0.43	N
ATVA Before	0.89	5.00	0.35	N
ATVA After	0.85	5.00	0.19	N
N: Normal				
AB: Abnormal				

Signed Rank Test is used. The decision rule is to reject the null hypothesis if the p-value is less than $\alpha = 0.05$, indicating that AR differs significantly from zero. Second, to examine whether there are differences in average abnormal return before and after the event (t2), Average Abnormal Return (AAR) is computed for the pre-event and post-event periods. A Paired Sample t-Test is used for normally distributed data, while the Wilcoxon Signed Rank Test is applied otherwise. The null hypothesis is rejected if the p-value is below 0.05, indicating a significant difference in market reaction before and after the event. Third, to analyze changes in trading activity (t3), Average Trading Volume Activity (ATVA) is compared between the pre-event and post-event periods using the same paired testing procedure. A significant result (p-value < 0.05) indicates a change in investor trading behavior due to the event. Prior to hypothesis testing, the Shapiro–Wilk test is conducted to assess data normality and determine the appropriate statistical method. The results are then interpreted to evaluate whether the GIIAS 2025 opening contains value-relevant information, consistent with signaling theory and market efficiency principles.

Result and Discussion

This section reports the results of the PLS-SEM analysis, based on the conducted analysis, the researcher presents the results of descriptive statistics, normality tests, and hypothesis testing, each serving as a foundation for achieving the study's objectives, as shown in Table 2.

The descriptive statistics of AR for the periods before and after the launch of GIIAS 2025 are presented in Table 2. Showing how the stock prices of the chosen automotive companies have changed. Before the event happened, the abnormal returns ranged from -0.008 to 0.020. The average of these returns was 0.001, and the standard deviation was 0.010. This means the returns varied a lot, even though the average was still positive. After the event, the abnormal returns ranged from -0.008 to 0.009. On average, the return was -0.003, and the standard deviation was 0.006. This shows that the returns were usually smaller and didn't change as much as they did before the event. During the time before the event, the Trading Volume Activity (TVA) had a minimum value of 0.000, a maximum of 0.001, an average of 0.000, and a standard deviation of 0.000. After the event, the smallest value was 0.0009, the largest was 0.001, the average was 0.000, and the standard deviation was 0.000. Overall, these findings show that the number of shares traded from automotive companies didn't change much before and after the opening of GIIAS 2025. The usual levels of trading and how the data is spread out are very similar, which means the event didn't lead to a big change in how much trading was happening. Nevertheless, more statistical tests are needed to make sure these findings are accurate.

According to the information in Table 3, the findings from the normality assessment using the Shapiro-Wilk test indicate that the majority of the data falls within a normal distribution, since the significance figures exceed 0.05. The variables that satisfy this condition are TM10 (0.871), TM9 (0.330), TM8 (0.101), TM7 (0.244), TM6 (0.845), TM5 (0.496), TM4 (0.968), TM3 (0.374), TM2 (0.665), TM0 (0.079), TP1 (0.790), TP2 (0.292), TP4 (0.908), TP5 (0.053), TP6 (0.526), TP7 (0.280), TP8 (0.437), TP9 (0.106), and TP10 (0.068). Additionally, the data for AAR and trading volume activity (ATVA) also appears to be normally distributed, with AAR values recorded at 0.090 before and 0.431 after, while ATVA shows 0.350 before and 0.187 after. Thus, the null hypothesis is accepted, suggesting that the data is generally viewed as normally distributed. Nevertheless, there are two variables that do not conform to the normal distribution, as their significance values fall below 0.05, specifically TM1 (0.018) and TP3 (0.048), resulting in the rejection of the null hypothesis for these two sets of data. These findings imply that while a majority of the variables align with the idea of normality, not every piece of data in this research can be considered entirely normally distributed.

Table 4 shows the results of a one-sample t-test with a test value of 0 for each time period surrounding the event (TM10 to TP10). The t column shows the test statistic value, df (degree of freedom) = 4 indicates a small sample size, while Sig. (2-tailed) is the significance value (p-value) used to determine whether there is a significant difference from zero. The Mean Difference column shows the average difference (e.g., abnormal return or the variable being tested), and the 95% Confidence Interval column provides the estimated range of that value (Kanrar et al., 2024). In general, most Sig. (2-tailed) values are above 0.05, meaning there is no significant difference from zero in almost all periods, both before (TM) and after (TP) the event. However, there are several exceptions, such as TM3 (p = 0.008) and TP5 (p = 0.009), which show significant results at the 5% level, thus indicating a significant market reaction during these periods. The Mean Difference values for these two periods are also negative, indicating a downward trend in the tested variables. Therefore, it can be concluded that market reactions to events are inconsistent throughout the observation window, as significance only occurs at certain points, while other periods show no significant differences. This indicates that information from the event may only have a momentary impact or may not be fully responded to by the broader market.

Referring to Table 5, the analysis of non-normally distributed data shows that TM1 did not exhibit a statistically significant abnormal return (Sig. 0.686 > 0.05), whereas TP3 demonstrated a significant abnormal return following the opening of GIIAS 2025 (Sig. 0.039 < 0.05). In general, the market reaction analysis using the One-Sample t-Test and the One-Sample Wilcoxon Signed-Rank Test indicates that most

Table 4. One-Sample t-Test Results

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
TM10	**-2.209**	**4**	**0.0920**	**-0.0073**	**-0.0164**	**0.0019**
TM9	**-0.679**	4	0.5340	-0.0020	-0.0104	0.0063
TM8	**-0.613**	4	0.5730	-0.0053	-0.0292	0.0186
TM7	**-0.368**	4	0.7320	-0.0009	-0.0074	0.0057
TM6	**0.012**	4	0.9910	0.0001	-0.0225	0.0227
TM5	**-1.048**	4	0.3540	-0.0040	-0.0146	0.0066
TM4	**-2.136**	4	0.1000	-0.0085	-0.0195	0.0025
TM3	**-4.933**	4	0.0080	-0.0157	-0.0246	-0.0069
TM2	**1.59**	4	0.1870	0.0124	-0.0093	0.0341
TM0	**-0.844**	4	0.4460	-0.0171	-0.0733	0.0391
TP1	**-1.645**	4	0.1750	-0.0093	-0.0249	0.0064
TP2	**0.413**	4	0.7010	0.0038	-0.0216	0.0292
TP3	**2.39**	4	0.0750	0.0222	-0.0036	0.0481
TP4	**-1.272**	4	0.2720	-0.0124	-0.0395	0.0147
TP5	**-4.677**	4	0.0090	-0.0177	-0.0283	-0.0072
TP6	**1.746**	4	0.1560	0.0068	-0.0040	0.0177
TP7	**-0.51**	4	0.6370	-0.0009	-0.0059	0.0040
TP8	**-0.679**	4	0.5340	-0.0035	-0.0180	0.0109
TP9	**1.31**	4	0.2600	0.0140	-0.0156	0.0436
TP10	**-2.209**	4	0.0920	-0.0073	-0.0164	0.0019

Table 5. Results of the One-Sample Wilcoxon Signed Rank Test

Summary of Hypothesis Testing				
No	**Null Hypothesis**	**Test**	**Sig.[a,b]**	**Decision**
1	TM1 has a median value of 0.000	Wilcoxon Signed-Rank Test (One-Sample)	0.686	The null hypothesis cannot be rejected.
2	TP3 has a median value of 0.000	Wilcoxon Signed-Rank Test (One-Sample)	0.039	The null hypothesis cannot be rejected.

Table 6. Paired Sample t-Test AAR results

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	**Std. Deviation**	**Std. Error Mean**	**Lower**	**Upper**	**t**	**df**	**Sig. (2-tailed)**
Pair 1	SSRSBLM-AARSSDH	0.001591271	0.007654282	0.003423099	-0.007912776	0.011095318	0.465	4	0.666

Table 7. ATVA Paired Sample Test Results

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	**Std. Deviation**	**Std. Error Mean**	**Lower**	**Upper**	**t**	**df**	**Sig. (2-tailed)**
Pair 1	ATVA Sebelum – ATVA Sesudah	0.000030614	0.00006614	0.000029567	-0.000051477	0.00112705	1.035	4	0.359

observation periods did not show statistically significant outcomes. Only a few specific days demonstrated significance, namely day −3 (p = 0.008), day +3 (p = 0.039), and day +6 (p = 0.009). These findings suggest that the market response tended to be weak, irregular, and not consistently observed, implying that the informational content of the event was relatively limited. Consequently, hypothesis $H1_1$ can only be partially accepted. In addition, because the AAR data were normally distributed, a Paired Sample t-Test was subsequently applied to compare returns before and after the event in order to assess whether a significant difference occurred in the stock performance of electric vehicle companies listed on the Indonesia Stock Exchange (ISE).

Table 6 presents the results of the Paired Sample t-Test conducted to evaluate the hypothesis. In this test, H0 states that there is no significant difference in the Average Abnormal Return (AAR) before and after the event, while H1 indicates that a significant difference exists. H0 is rejected if the two-tailed significance value is below 0.05. Based on the SPSS results, the significance value is 0.666, which exceeds the 0.05 threshold. Therefore, H0 cannot be rejected, indicating that there is no statistically significant difference in AAR before and after the opening of GIIAS 2025. Although the mean difference is slightly 0.00159, it is minimal, and the 95% confidence interval includes zero, confirming the absence of statistical

significance. This indicates that the market reaction during the event window was limited and short-lived, possibly because the information had already been anticipated by investors, and thus, the second hypothesis ($H1_2$) is not supported. Also, because the ATVA data follows a normal distribution, a Paired Sample t-Test was conducted to check if there were any differences in trading volume activity before and after the event.

Table 7 presents the outcome of the paired comparison analysis. In this test, H0 assumes that the ATVA before the event is not significantly different from the ATVA after the event, while H1 proposes that a significant difference exists between the two periods. The decision rule states that H0 will be rejected if the two-tailed probability value is below 0.05. Based on the SPSS results, the obtained significance value is 0.359, which is above the 0.05 threshold. Therefore, H0 is accepted, indicating that no statistically meaningful difference in ATVA was found between the periods before and after the event. This suggests that there was no significant change in the average trading volume prior to and following the launch of GIIAS 2025. The smallest difference in average values is 0.000030614, and the 95% confidence interval around this difference includes zero, which means the observed change is not statistically significant. These findings indicate that information about GIIAS 2025 did not significantly influence how investors traded, leading to consistent trading levels, which means the third hypothesis ($H1_3$) is not supported (Palesta & Paramita, 2024).

The test results show that the abnormal return analysis, using both the One-Sample t-Test and the Wilcoxon Signed-Rank Test, identified statistical significance on only three out of the 21 observed trading days, namely day −3 (0.008), day +3 (0.039), and day +6 (0.009), while the remaining 18 days were not significant. This indicates that the market reaction to the opening of GIIAS 2025 was limited and not consistently observed across the event window. The significance on day −3 may reflect investor expectations prior to the event, whereas the significance on day +3 and day +6 may indicate delayed market responses following the event. The limited and short-lived significance does not necessarily confirm the semi-strong form of market efficiency, but rather suggests a possible alignment with it (Tharmizi & others, 2021). Alternative explanations may also account for the results, such as the relatively low salience of the information released during the event, the small sample size of firms analyzed, or the presence of other confounding market news occurring within the same period. In line with previous studies, market reactions to electric vehicle–related information tend to vary depending on how investors perceive their economic impact and may not always produce stable or sustained effects. Therefore, $H1_1$ is only partially supported, as significant abnormal returns were observed on a limited number of days.

The Paired Sample t-Test results for AAR showed a significance value of 0.666, which is greater than 0.05, indicating no statistically significant difference in average abnormal returns before and after the opening of GIIAS 2025. Although some individual days displayed unusually high or low returns, these fluctuations were temporary and did not affect the overall average, suggesting they did not reflect widespread investor expectations. This finding is consistent with the semi-strong form of market efficiency and Signaling Theory, which argue that anticipated information or news not directly tied to increased profitability is unlikely to trigger substantial stock price adjustments. The result also aligns with prior studies showing that routine or short-term events generally do not produce significant changes in abnormal returns; therefore, the second hypothesis ($H1_2$) is not supported.

The results of the Paired Sample t-Test for ATVA show a significance value of 0.359, which is greater than the 0.05 threshold. This indicates that no statistically significant difference was found in trading volume before and after the opening of the Gaikindo Indonesia International Auto Show 2025. Although some fluctuations occurred during the observation period, these variations were relatively small and did not substantially influence overall trading activity. As a result, investor behavior appeared relatively neutral, without strong buying or selling pressure. The stability in trading volume suggests that the event did not generate a strong signal capable of motivating investors to adjust their portfolios (Tandelilin, 2017). Many investors may prefer to wait for more concrete information that directly affects industry performance. Therefore, $H1_3$ is rejected because no significant change in trading volume activity was identified between the periods before and after the event.

A study about how the start of the 2025 GIASS affects the stock market shows that this event does provide information, but it's not very important. This is clear because there are noticeable unusual returns only on specific days, and the AAR and the ATVA do not show major differences. Therefore, investors' expectations stay mostly the same. This result supports the idea that the information given is selective and temporary, which aligns with Signaling Theory. This theory suggests that information that does not have a direct economic effect usually does not lead to a strong reaction from the market, and backs the idea of semi-strong market efficiency, where expected information does not lead to notable price changes.

The results align with earlier studies showing that not all events provide strong information, especially when the impact is temporary or already expected by investors, unlike economic policy events such as EV incentives that usually have greater effects. So, the fourth ($H1_4$) is only somewhat supported because the start of GIIAS 2025 gave some information, but it wasn't enough to reliably affect investment choices in the Indonesian stock market.

Recommendations for Future Research

According to the findings of the study, the market's response to the start of the GIASS 2025 was minimal and unstable. As a result, it is suggested that investors should not depend only on industry events when making investment choices. They should also take into account basic analysis, overall economic conditions, and laws that directly affect the value of companies. For car manufacturers, especially those dealing with electric vehicles, it is essential to share clearer and more quantifiable information that has genuine economic significance to make it meaningful for investors. Authorities like the FSA and the ISE are anticipated to promote better information sharing and educate investors. Additionally, further studies are advised to lengthen the observation time, include more market reaction factors, perform comparisons across different sectors, and apply more analytical techniques for a deeper insight into how the market reacts.

Comparison with Previous Studies

In this part, the researchers outline the outcomes of their comparisons in an attempt to assess the results of the methods used. These evaluations aim to measure the success of the research performed, and a concise overview of these evaluations is illustrated in Table 8.

According to Table 8, when compared to earlier studies, the reaction of the Indonesian capital market to events appears to be neither consistently strong nor uniform. The introduction of Danantara (Daya Anagata Nusantara) was met with a reserved reaction lacking notable effect, whereas the release of Minister of Finance Regulation No. 38 of 2023 sparked a significantly more favorable response. Conversely, the commencement of the Gaikindo Indonesia International Auto Show 2025 only resulted in a minor and fleeting influence. In summary, these

Table 8. Comparison with Prior Studies

No	Study	Contributions received	Research Deficiencies
1	Analysis of Indonesian Capital Market Reactions to the Launch of Danantara: An Event Study Approach (Yuliani, 2025)	The findings of the study indicate that the Danantara launch did not produce significant abnormal returns for state-owned enterprise stocks around the event date. However, the average return decreased significantly after the launch, while trading volume activity remained relatively unchanged. This indicates that market participants responded cautiously and tended to be skeptical in the short term.	One limitation of this study is the relatively brief observation window (around ±15 days), which may not adequately reflect medium- or long-term market reaction patterns and may also fail to fully consider the potential impact of other external factors occurring at the same time as the event.
2	Capital Market Reactions to Policy Announcements: A Study of the Impact of Battery-Based Electric Vehicle Incentives in Indonesia	The announcement of Minister of Finance Regulation No. 38 of 2023 triggered a strong reaction in the capital market, as evidenced by abnormal returns and shifts in trading volume activity around the time of the announcement. This indicates that the policy information was positively received by investors and influenced transaction patterns and decision-making in stocks in the automotive and components subsectors.	This study is constrained by its sample size, which included only 10 companies, and by the short observation period of 15 days. As a result, the findings may not fully represent the overall market response or long-term effects and could still be affected by external factors unrelated to the events analyzed.
3	Our Research	The findings of this study indicate that statistically significant abnormal returns occurred only on a few specific days around the opening of GIIAS 2025. Nevertheless, in general, no significant differences were identified in the average abnormal returns or in trading volume activity between the periods before and after the event. These results suggest that the information conveyed during the opening of GIIAS 2025 was not sufficiently strong or comprehensive to meaningfully influence investor decisions in the Indonesian capital market.	-

results validate that the market selectively responds to information based on its relevance, clarity of policy, and the anticipated economic effect on investors.

Conclusion

The study shows that when the 2025 Gaikindo Indonesia International Auto Show started, there was some reaction in the financial markets, but the impact wasn't very strong and wasn't the same every time. During the 21-day watch period, big unusual gains happened on just three days: three days before the event (t-3) with a gain of 0.008, three days after (t+3) with a gain of 0.039, and six days after (t+6) with a gain of 0.009. On all the other days, there was no big change. This uneven pattern shows that news about the start of GIIAS 2025 spread in the market and caused investor reactions, but these responses came in slowly instead of all happening at the same time. Therefore, the first hypothesis ($H1_1$) is only somewhat supported because the event did not clearly and consistently affect stock prices.

The Paired Sample t-Test analysis for AAR produced a significance value of 0.666, which is higher than the 0.05 criterion. This outcome indicates that the average abnormal returns before and after the opening of GIIAS 2025 are not significantly different from a statistical perspective. Even though some return movements were observed around the event date, these variations were relatively small and can be interpreted as normal market fluctuations. Therefore, $H1_2$ is not supported, as the opening of GIIAS 2025 did not result in a meaningful change in abnormal returns.

The ATVA analysis produced a significance value of 0.359, which is higher than the 0.05 threshold, indicating that there was no statistically significant difference in trading volume before and after the opening of GIIAS 2025. Although some fluctuations in trading activity were observed, these variations appear to be normal and were likely affected by other influences such as general market conditions and the broader economic situation. Consequently, $H1_3$ is not supported because the event did not significantly influence investor trading behavior.

The findings indicate that the opening of GIIAS 2025 provided some information signals to the market; however, its impact within this study remains limited. This is reflected in the presence of significant abnormal returns on only a few specific days, while no significant differences were found in average abnormal returns or trading volume before and after the event. Within the scope of the five sampled automotive firms and the event window of 10 days before to 10 days after the event, the market reaction appears relatively weak and inconsistent. This suggests that the information conveyed during the event may not have been sufficiently strong or uniform to influence broader investment decisions for these firms during the observation period. Nevertheless, this study offers an important contribution by examining a relatively underexplored event type, namely a large-scale automotive exhibition as a multi-information event (Habiburrahman et al., 2024). By focusing on GIIAS 2025, this research provides initial empirical evidence on how such events may generate short-term and selective market responses, particularly in the context of the emerging electric vehicle industry in Indonesia (Liu, 2024). Therefore, $H1_4$ is only partially supported, as the GIIAS 2025 opening generated some market reaction, but the effect remains limited to the sample and timeframe examined, and should not be generalized to the overall market.

References

Abueed, O., Yaeesh, O., Alalaween, W. H., Abueed, S., & Alalawin, A. H. (2026). A Systematic AI-Based Paradigm for Classifying Hybrid Electric Vehicle Spare Parts Using Their Price and Demand. *Journal of Engineering*. https://doi.org/10.1155/je/8469237

Albant, M. A. K., Ms, M., & Pandjaitan, D. R. H. (2025). Purchase Intention, Brand Image, Brand Identity, Perceived Risk, Electric Vehicles, and BYD. *Unknown Journal*, *7*(1).

Amirudin, M., Sugiat, M. A., Shinta, F., & Silalahi, M. (2025). Analysis of the Influence of Social Media Marketing Features on Consumer Purchase Decisions with Brand Trust as a Mediating Variable in the Electric Vehicle Industry. *Asian Journal of Entrepreneurship and Business Management*, *4*(5), 537–555. https://doi.org/10.58631/ajemb.v4i5.223

Anggika, D., Almaida, A., & Kadir, A. R. (2024). Analysis of Growth Strategy at Wuling Motors Makassar as a Response to Facing Economic Challenges. *Eduvest*, *4*(3), 1071–1087. https://doi.org/10.59188/eduvest.v4i3.1049

Chatziantoniou, I., Gabauer, D., & Visser, M. (2021). Market Efficiency and Response to Public Information on Sustainable Product Innovations Like Electric Vehicles. *Unknown Journal*.

Habiburrahman, M., Nurcahyo, R., & Ma, A. (2024). Driving the Transport Electrification: Exploring Stakeholders' Perceptions and Actions in the Indonesian Automotive Industry Transition to Electric Mobility. *Sustainability*. https://doi.org/10.3390/su16145855

Hasibuan, P. A., Hardjomuljadi, S., & Teguh, D. (2025). Analysis of the Dynamics of the Global Business Environment on the Adaptation Strategies of Multinational Companies. *International Sustainable Science*, *5*(1), 387–400. https://doi.org/10.55324/iss.v5i1.1000

Heng, F., & Soeprapto, V. S. (2025). Case Study Analysis of Business Improvement Strategies in Talent Provision and Placement by "Banyak Jalan" Management in Meeting, Convention, Exhibition Events in Jakarta. *Injurity*, *4*(8), 695–712. https://doi.org/10.58631/injurity.v4i8.1469

Jolodoro, G., & Perdana, T. (2025). A Sustainability Assessment of Electric Vehicles for Enhancing Energy Security and Reducing Emissions in Indonesia. *Sustainability*, 1–23. https://doi.org/10.3390/su17104681

Kanrar, A., Kanrar, A., & Das, S. (2024). Government's Role in Shaping the Investors' Confidence on India's Green Transport Sector. *Unknown Journal*, *4*(1), 1–11.

Liu, Z. (2024). The Impact of Policy Thematic Differences on Industrial Development: An Empirical Study Based on China's Electric Vehicle Industry Policies at the Central and Local Levels. *Energies*, *17*(22). https://doi.org/10.3390/en17225805

Nurlaili, I., & Prasojo. (2024). Determinan Return Saham: Kajian Tentang Peran Analisis Fundamental. *Akurasi*, *7*(1), 90–106. https://doi.org/10.29303/akurasi.v7i1.515

Palesta, P. K., & Paramita, V. S. (2024). The Influence of Financial Technology, Financial Literacy, and Risk Perception on Mutual Fund Investment Decisions in Generation Z in Jawa Barat. *IJSTM*, *5*(1), 135–145. https://doi.org/10.46729/ijstm.v5i1.1038

Pramana, A., & Mawardi, W. (2012). *Analisis Perbandingan Trading Volume Activity dan Abnormal Return Saham Sebelum dan Sesudah Pemecahan Saham*.

Pratiwi, K. A. E., & Anggara, I. W. G. W. P. (2024). Market Response to Policy Announcements: An Analysis of Capital Market Reactions to the Introduction of Battery Electric Vehicle Incentives in Indonesia. *E-Jurnal Akuntansi*, *34*(8), 1929–1944. https://doi.org/10.24843/EJA.2024.v34.i08.p02

Putra, S. A., & Indonesia, U. (2025). The Effect of Government-Borne Value Added Tax (VAT) Incentives on Electric Car Sales in Indonesia. *JETBIS*, *4*(4), 138–153. https://doi.org/10.57185/jetbis.v4i4.180

Reski, M., Indriani, E., & Munandar, E. H. (2021). Reaksi Pasar Modal Indonesia terhadap Pemilihan Umum 2019. *Jurnal Riset Mahasiswa Akuntansi*, *1*(3), 95–106. https://doi.org/10.29303/risma.v1i3.102

Sibarani, B. B., Siswanti, T., & Setiadi, S. (2023). Abnormal Return Saham pada Masa Pandemi Covid-19 Menggunakan Market Adjusted Model (Event Study Saham LQ-45, 100 Hari Perdagangan). *Jurnal Disrupsi Bisnis*, *6*(1), 24–40. https://doi.org/10.32493/drb.v6i1.27066

Simply Wall St. (2025). *Largest Indonesian (IDX) Automobiles Stocks by Market Cap*. https://simplywall.st/stocks/id/automobiles/market-cap-large

Srinivasan, S., & others. (2009). Product Innovations, Advertising, and Stock Returns. *Journal of Marketing*, *73*(1), 24–43. https://doi.org/10.1509/jmkg.73.1.024

Suherman, S., Nuraisyah, R., & Ahmad, G. N. (2016). Abnormal Return dan Likuiditas Saham atas Pengumuman Akuisisi. *Jurnal Manajemen*, *20*(1), 151–168. https://doi.org/10.24912/jm.v20i1.71

Taba, N. H. (2026). Refuelling Behaviour and Electric Vehicle Uptake: Evidence From a Behavioural Transition Framework in Western Australia. *Advances in Transportation Research*. https://doi.org/10.1155/atr/2181776

Tandelilin, E. (2017). *Portofolio dan Investasi: Teori dan Aplikasi*. Kanisius.

Tharmizi, M. T. J., & others. (2021). Studi Efisiensi Pasar Modal Indonesia Bentuk Setengah Kuat Pada Masa Pandemi Covid-19. *Jurnal Akuntansi Keuangan Dan Bisnis*, *14*(2), 201–210. https://doi.org/10.35143/jakb.v14i2.4786

Wahyudi, R. (2024). Mempelajari Efisiensi Pasar Modal Melalui Teori Portofolio. *Circle Archive*, *1*(5).

Wang, M., Sangsongfa, A., & Amdee, N. (2025). Comparative Analysis of CVaR Newsvendor and Traditional Inventory Management Models: An Empirical Study in the Electric Vehicle Industry. *Engineering Journal*, *29*(12), 13–24. https://doi.org/10.4186/ej.2025.29.12.13

Yahoo Finance. (2025). *IHSG - Historical Data*. https://finance.yahoo.com

Yuliani, E. (2025). Analisis Reaksi Pasar Modal Sebelum dan Sesudah Pembentukan Danantara: Studi Pada Perusahaan BUMN Terindeks Kompas100 di Bursa Efek Indonesia. *Jurnal Penelitian Ilmiah Multidisipliner*, *2*(3), 2510–2524.

Zagloel, T. Y. M., & Maritza, R. (2025). Identifying the Determinant Factors of Customer Satisfaction in Automotive Technology Using the Kano Model Approach. *AU-GSB e-Journal*, 260–271. https://doi.org/10.46254/AU04.20250107