

Vol. 4, No. 10, October 2024 *e*-ISSN: 2807-8691 | *p*-ISSN: 2807-839X

MARKET REACTIONS TO BOYCOTT ANNOUNCEMENTS: ANALYZING THE IMPACT ON TARGETED COMPANIES IN INDONESIA

Fanny Avianuari, Nur Dhani Hendranastiti

Universitas Indonesia, Indonesia *e-mail: fanny.avianuari@ui.ac.id nurdhani@ui.ac.id

| Keywords | ABSTRACT |
|-----------------------------------|---|
| Boycott, Abnormal Return, Trading | This research aims to examine the changes in abnormal returns |
| Volume Activity, Market Reactions | (AR) and trading volume activity (TVA) before and after the |
| | announcement of MUI Fatwa Number 83 of 2023, which targets |
| | companies for boycott due to their alleged affiliation with Israel. |
| | This study employed an event study approach, using a 5-day event |
| | window, 10-day event window, 20-day event window and 30-day |
| | event window before and after the <i>Fatwa</i> 's announcement to |
| | measure abnormal returns and trading volume activity. The analysis began by examining the normality of the data to |
| | determine whether it was normally distributed. For normally |
| | distributed data, a Paired Sample T-test was used, while the |
| | Wilcoxon Signed Rank test was applied to non-normally |
| | distributed data. The analysis reveals a significant difference in AR |
| | during the initial 5-day window, indicating a strong short-term |
| | market reaction driven by investor sentiment and uncertainty. |
| | However, for longer windows (10, 20, and 30 days), no significant |
| | differences in AR were found, suggesting that the market |
| | stabilized as new information was absorbed, consistent with the |
| | Efficient Market Hypothesis (EMH) by Eugene Fama (1970). |
| | Conversely, TVA showed significant increases across all event |
| | windows, indicating sustained investor interest and heightened |
| | trading activity. This suggests that while the impact on stock |
| | prices was short-lived, the boycott had a lasting influence on |
| | trading volume, reflecting continued portfolio adjustments. |

INTRODUCTION

IJSSR Page 1

The humanitarian crisis in Palestine has drawn significant global attention, particularly regarding its effects on financial markets, especially the stocks of companies linked to the conflict (Levesque & Nam, 2019). The role of finance in the context of Israel-Palestine conflict has been the subject of widespread debate and controversy. Investors and financial market participants are often faced with moral and ethical dilemmas regarding their investments (Asmara, 2023).

Based on this event, there were calls for a boycott of products from several companies indicated to be affiliated with the state of Israel, known as Boycott, Divestment and Sanctions (BDSMovement, 2005). Boycotts represent the inability to purchase, utilize, or interact with people, groups, or nations to voice disapproval or apply pressure (Samudra et al., 2024). The implementation of the boycott was motivated by the belief that the intended company had committed a violation, namely harming the moral order. The stronger this belief, the greater the negative influence on the boycotted product (LTIFI, 2021). Boycotts have many negative impacts on companies such as a decrease in the interest for purchasing the product and the downshift of market Fundamental of targetted companies (Ahsyam et al., 2024).

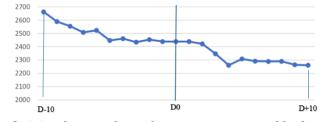




International Journal of Social Service and Research

From an economic perspective, the literature states that boycotts can have a significant impact on a company's reputation and financial performance and can harm the competitive advantage between companies and countries (King & Soule, 2007). Companies facing boycotts often experience negative publicity, damage to their brand image, and declining sales (Koku et al., 1997). The literature explores the long-term impact of the boycott on the value of the company and finds that continued boycott activity can result in substantial financial losses for the targeted company (Vasi & King, 2012).

Another issue faced by the company is the change in their stock return and its trading volume. A study by Farouh & Abdelrhim (2021) shows that there is a significant difference abnormal returns before and after the boycott of targeted companies on French Stock Market. Further, study by Jesus-Silva et al. (2023) and Villagra et al. (2021) show that a continued boycott activities can result in large financial losses for companies targeted by the Boycott. Meanwhile, another study by Chengying et al. (2022) presents that the boycott of Chinese products in the American market only has a short-term or temporary impact and the results are not significant for the long term. In addition, there was no significant difference in stock trading volume before and after the boycott event of Embargo Cases in Europe (Rahayu, 2023).



Graph.1 Stock price data of companies targeted by boycotts Source : Yahoo Finance

Specific for Indonesian case, the Indonesian Ulama Council (Majelis Ulama Indonesia) declared a *Fatwa* following the Israel's attack on Palestine, that is MUI *Fatwa* Number 83 of 2023, explaining a boycott for products affiliated with Israel. Observing the stock price of those eight companies, namely PT MAP Boga Adiperkasa Tbk, PT Unilever Indonesia Tbk, PT Fast Food Indonesia Tbk, PT Mitra Adiperkasa Tbk, PT Akasha Wira International, PT Sarimelati Kencana Tbk, PT Erajaya Swasembada Tbk, PT Metrodata Electronics TBk. Graph 1 shows that there is a decline in stock price of those companies from D-10 until D+10 of the *Fatwa* announcement.

Considering the previous literature and the initial condition in Indonesia, this study aims to examine the effect of *Fatwa* stipulated by the Indonesian Ulama Council regarding boycott on products affiliated with Israel on the stock return and trading volume of targeted companies in Indonesia stock exchange.

An event that occurs has an impact or will react to other events depending on how quickly the information is obtained (Farouh & Abdelrhim, 2021). Several studies have explored the impact of boycotts on financial markets with varying results. Levesque & Nam (2019) analyzed stock market data using five primary indicators and nine sectoral indicators, focusing on a boycott event on September 15, 2020. They calculated the cumulative average of abnormal return values across different event windows (-20...+20, -10...+10, and -5...+5), but the study did not provide a clear conclusion on the significance of the results. Nair & Thankamony (2021) using a sample of 23 companies listed on the New York Stock Exchange, examined the effects of customer boycotts over a 30-day window before and after the event. Their findings showed that while boycotts had a short-term impact on stock prices, there was no substantial long-term effect. Similarly, Chengying et al., (2022) who studied the boycott of Chinese products in the American market, also found that the impact was short-term and not significant in the long run.

In contrast, Rahayu, (2023) focused on the stock trading volume related to Embargo Cases in Europe and found no significant difference in trading volume before and after the boycott, suggesting a minimal impact on market activity. These studies reveal mixed outcomes: while Nair & Thankamony (2021) and Chengying et al. (2022) observed short-lived effects, Rahayu (2023) reported no significant impact. Levesque & Nam (2019) provided a detailed approach to calculating abnormal returns but did not clearly state the impact of the boycott.

As a result, the following will be the hypothesis that is put forth:

IJSSR Page 2

H0: There is no difference in Abnormal Return before and after the boycott

H1: There is a difference in Abnormal Return before and after the boycott

Results from earlier research by Levesque & Nam (2019), Chengying et al., (2022), Nair & Thankamony (2021), Rahayu, (2023) reveal inconsistent patterns in trade volume activity. It is anticipated that the boycott will affect trade volume activity. This is because the company that is the subject of the boycott has a bad reputation, and the market's reaction has been mixed, resulting in a decline in the company's revenue and encouraging investors to purchase or sell additional shares of the boycotted company. Consequently, the following is the second hypothesis that will be put forth:

H0: There is no difference in Trading Volume Activity before and after the boycott

H2: There is a difference in Trading Volume Activity before and after the boycott

To conclude, this research aims to examine the changes in abnormal returns (AR) and trading volume activity (TVA) before and after the announcement of MUI *Fatwa* Number 83 of 2023, which targets companies for boycott due to their alleged affiliation with Israel. The significance of this research lies in its potential to provide valuable insights and considerations for market players, including investors, when they make investment decisions.

METHODS

This study employs event study method to examine the existence of abnormal return and trading volume anomaly after the *Fatwa* issued by Indonesian Ulema Council. This study used a 5-day event window, 10-day event window, 20-day event window and 30-day event window before and after the *Fatwa*'s announcement to measure abnormal returns and trading volume activity. The analysis began by examining the normality of the data to determine whether it was normally distributed. For normally distributed data, a Paired Sample T-test was used, while the Wilcoxon Signed Rank test was applied to non-normally distributed data.

This study employs public companies listed in the Indonesia Stock Exchange and subject to boycott, implying that this study uses purposive sampling. Two requirements must be met for the firm to be targeted by a boycott: 1) it must be listed on the Indonesia Stock Exchange prior to the boycott event; and 2) Compliance with regulations regarding the complete publication of financial reports is essential, ensuring that all relevant information is provided, includes having comprehensive data related to the measurement of variables used in the analysis. As a result, there are sixteen companies selected as the sample in this study, as follow:

| Tabl | e 1. List of Companies that meet the criteria |
|------|---|
| No | Companies |
| 1 | PT Map Boga Adiperkasa Tbk |
| 2 | PT MAP Aktif Adiperkasa Tbk |
| 3 | PT Unilever Indonesia Tbk |
| 4 | PT Fast Food Indonesia Tbk |
| 5 | PT Akasha Wira International Tbk |
| 6 | PT Erajaya Swasembada Tbk |
| 7 | PT Metrodata Electronics Tbk |
| 8 | PT Sarimelati Kencana Tbk |
| 9 | PT Tempo Scan Pacific Tbk |
| 10 | PT Indofood CBP Sukses Makmur Tbk |
| 11 | PT Sariguna Primatirta Tbk |
| 12 | PT Catur Sentosa Adiprana Tbk |
| 13 | PT Victoria Care Indonesia Tbk |
| 14 | PT Wicaksana Overseas International Tbk |
| 15 | PT Aspirasi Hidup Indonesia Tbk |
| 16 | PT Graha Prima Mentari Tbk |
| | |

Table 1. List of Companies that meet the criteria

To observe the difference, the researcher investigated abnormal returns and trading volume activity of companies that were the focus of boycotts. The first step is to examine the normality of data by stipulating the descriptive statistics of abnormal returns and trading volume activity before and after

International Journal of Social Service and Research

the boycott. The Wilcoxon Signed Rank test will be used on non-normal distributed datasets, and the Paired Sample T-test will be used on normally distributed datasets.

To examine the existence of abnormal return and trading volume activity as an effect of the boycott, event study is employed. The issuance of MUI *Fatwa* Number 83 2023 was the event that formed the subject of this study. November 8, 2023, the day of the event or D-0, is the basis for the boycott action as this is the release of MUI *Fatwa* No. 83 of 2023 regarding the prohibition of Israeli sponsorship. Except for weekends and holidays, observations are only made while the market is open. The event time window used in this study is 5-day event window (Levesque & Nam, 2019), 10-day event window (Levesque & Nam, 2019), 20-day event window (Levesque & Nam, 2019), and 30-day event window (Nair & Thankamony, 2021) before and after the *Fatwa*'s announcement.

The following formula is used to calculate abnormal returns:

 $AR_{i,t} = R_{i,t} - E(R_{i,t})$

 $AR_{i,t}$: Abnormal stock returns in the period t

Ri,t : Actual return of shares i in the period t

 $E(R_{i,t})$: Estimated return of shares i in the period t

The author uses the daily stock price obtained from secondary data to compute actual return using the following formula:

$$Ri, t = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$$

 $R_{i,t}$: Actual return of shares i period t

 $P_{i,t}$: Stock price i in the period t

 $P_{i,t-1}$: Stock price i in the period t-1

Since the expected return is a component of the calculation of abnormal returns, the calculation of the expected return using the market model is obtained as follows:

 $E(R_{i,t}) = \alpha_i + \beta_i(Rm_{i,t}) + \varepsilon_{i,t}$

 $E(R_{i,t})$: Estimated return on shares i in the period t

 α_i : Intercept stock i

 β_i : Slope coefficient, which is the beta of stock i

 $(Rm_{i,t})$: Market return of shares i in the period t

The authors calculate abnormal returns to determine whether or not significant abnormal returns are identified in this study to address research issues after receiving actual and abnormal return. Furthermore, by comparing the data using the Average Abnormal Return (AAR) before and after the announcement of the Boycott, this study examines any noteworthy variations. The following is the formula:

$$AAR_{iPrevious} = \frac{\sum_{t=-n}^{t=-1} ARt.i}{n}$$
$$AAR_{iAfter} = \frac{\sum_{t=+n}^{t=+1} ARt.i}{n}$$

AAR_i : Abnormal Return of all Shares

 $AR_{t,i}$: Abnormal Return of i shares on t date

N : Number of shares

Calculation of Trading Volume Activity

This study includes the calculation of trading volume activity to observe how the market reacts in relation to the number of traded equities. the following formula can be used to determine the trading volume of stocks:

 $TVA_{i,t} \frac{Stock \ Trading \ Volume \ i \ in \ the \ period \ t}{number \ of \ outstanding \ shares \ i \ in \ the \ period \ t}$

 $ATVA_{iPrevious} = \frac{\sum_{t=-n}^{t=-1} TVA \ prev}{N}$ $ATVA_{iAfter} = \frac{\sum_{t=+n}^{t=+1} TVA \ after}{N}$

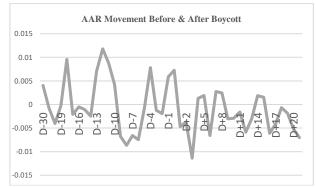
ATVAi: The average trading volume activity of all stocksTVAij: Trading volume of stock activity i for event jN: number of samples observed

RESULTS

According to the findings, the average AAR was 0.00067 before the boycott and -0.00063 after the boycott. This demonstrates that while the market is declining, investors' reactions tend to be negative.

| Table 2. AAR Before & After Boycott | | | | | | |
|-------------------------------------|----------|----------|---------|----------|--|--|
| | Std Dev | | | | | |
| AAR Before | -0,00864 | 0,011802 | 0,00067 | 0,005909 | | |
| AAR After | 0,004736 | | | | | |

This condition is supported by graph 2 which shows that the daily AAR in the event period tends to decline after surging.

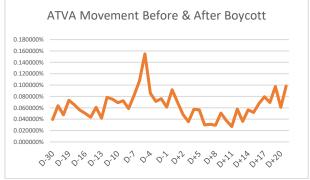


Graph 2: AAR Movement

The average ATVA prior to the boycott was 0,000697, with 0.000396 as the lowest number and 0.001549 as the highest. The average ATVA after the boycott was 0.000564, with 0.000271 as the low value and 0.000983 as the high value.

| Table 3. TVA Before & After Boycott | | | | | | | |
|---|----------|----------|----------|----------|--|--|--|
| Minimum Maximum Mean Std Deviatio | | | | | | | |
| TVA Before Boycott | 0,000396 | 0,001549 | 0,000697 | 0,000249 | | | |
| TVA After Boycott 0,000271 0,000983 0,000564 0,000218 | | | | | | | |

The daily data in Graph 3, which displays the average ATVA during the event window period, demonstrates the change of the average ATV value. Presenting the mean following the boycott, as opposed to the mean prior to it, typically provokes a negative response.



Graph 3. TVA Movement

5-Days Window Event

Based on the normality test using the Shapiro-Wilk test, the abnormal return data before and after the boycott is not normally distributed (the Prob>z value is below 0.05).

| Table 4. AAR 5-Days Window Normality Test | | | | | | |
|---|-----|---------|-------|-------|---------|--|
| Variable | Obs | W | V | Z | Prob>z | |
| BEFORE | 80 | 0.95899 | 2.815 | 2.267 | 0.01168 | |
| AFTER | 80 | 0.92795 | 4.946 | 3.502 | 0.00023 | |

Since the data is not normally distributed, the data analysis will use the Wilcoxon Signed-rank test.

| Wilcoxon Signed-rank test | | | | | |
|---------------------------|-------------------------|---|--|--|--|
| obs | Sum Ranks | Expected | | | |
| 57 | 2540 | 1620 | | | |
| 23 | 700 | 1620 | | | |
| 0 | 0 | 0 | | | |
| 80 | 3240 | 3240 | | | |
| = | 4.413 | | | | |
| = | 0.0000 | | | | |
| = | 0.0000 | | | | |
| | <i>obs</i> 57 23 0 80 = | obs Sum Ranks 57 2540 23 700 0 0 80 3240 = 4.413 = 0.0000 | | | |

Table 5. AAR 5-days Window Hypothesis Test

Based on the results, where the Prob > |z| value is below 0.05, it indicates that there is a significant difference between AAR before and after the boycott.

For the Trading Volume Activity (TVA) data, normality test was conducted using the Shapiro-Wilk test with the following results :

| Table | TCSC | | | | | |
|-------------------------------------|------|---------|--------|-------|--------|--|
| Shapiro-Wilk W test for normal data | | | | | | |
| Variable Obs W V z Pro | | | | | | |
| Before | 80 | 0.54020 | 31.561 | 7.563 | 0.0000 | |
| After | 80 | 0.59929 | 27.505 | 7.262 | 0.0000 | |

Table 6, TVA 5-Days Window Normality Test

Based on the test, the Prob>z value for the TVA data is below 0.05, indicating that the data is not normally distributed. Therefore, the hypothesis test will be conducted using the Wilcoxon Signed-rank test.

Table 7. TVA 5-days Window Hypothesis Test

| Wilcoxon Signed-rank test | | | | | | |
|----------------------------|----|------|------|--|--|--|
| Sign obs Sum Ranks Expecte | | | | | | |
| Positive | 51 | 2143 | 1620 | | | |
| Negative | 29 | 1097 | 1620 | | | |

| Zero | 0 | 0 | 0 |
|------------|----|--------|------|
| All | 80 | 3240 | 3240 |
| Z | = | 2.508 | |
| Prob > z | = | 0.0121 | |
| Exact Prob | = | 0.0116 | |
| | | | |

Based on the above results, where the Prob > |z| value is below 0.05, it indicates that there is a significant difference in Trading Volume Activity (TVA) before and after the boycott.

10-Days Window Event

Based on the normality test using the Shapiro-Wilk test, the abnormal return data before and after the boycott is not normally distributed (the Prob>z value is below 0.05)

| Table 8. AAR 10-Days Window Normality Test | | | | | | |
|--|-------------------------------------|---------|-------|-------|---------|--|
| Sha | Shapiro-Wilk W test for normal data | | | | | |
| Variable Obs W V z Prob>z | | | | | | |
| BEFORE | 160 | 0.96021 | 4.894 | 3.612 | 0.00015 | |
| AFTER | 160 | 0.93178 | 8.389 | 4.838 | 0.00000 | |

Since the data is not normally distributed, the data analysis will use the Wilcoxon Signed-rank test.

| Table 9. | Table 9. AAR 10-Days Hypothesis Test | | | | | | | |
|-----------------------------|--------------------------------------|--------|-------|--|--|--|--|--|
| Wil | Wilcoxon Signed-rank test | | | | | | | |
| Sign obs Sum Ranks Expected | | | | | | | | |
| Positive | 80 | 6585 | 6440 | | | | | |
| Negative | 80 | 6295 | 6440 | | | | | |
| Zero | 0 | 0 | 0 | | | | | |
| All | 160 | 12880 | 12880 | | | | | |
| Z | = | 0.247 | | | | | | |
| Prob > z | = | 0.8049 | | | | | | |
| Exact Prob | = | 0.8061 | | | | | | |
| | | | | | | | | |

Based on the Wilcoxon Signed-rank test, where the Prob > |z| value is above 0.05, it indicates that there is no significant difference between AAR before and after the boycott.

For the Trading Volume Activity (TVA) data, normality test was conducted using the Shapiro-Wilk test with the following results :

| Table 10. TVA 10-Days Window Normality Test | | | | | | |
|--|-------------------------------------|---------|--------|-------|---------|--|
| Sh | Shapiro-Wilk W test for normal data | | | | | |
| Variable Obs W V z Prob>z | | | | | | |
| Before | 160 | 0.56849 | 53.069 | 9.034 | 0.00000 | |
| After | 160 | 0.58597 | 50.919 | 8.940 | 0.00000 | |

Based on the normality test, the Prob>z value for the TVA data is below 0.05, indicating that the data is not normally distributed. Therefore, the hypothesis test will be conducted using the Wilcoxon Signed-rank test.

| Wilcoxon Signed-rank test | | | | | | | |
|-----------------------------|-----|-------|--------|--|--|--|--|
| Sign obs Sum Ranks Expected | | | | | | | |
| Positive | 105 | 9083 | 6439,5 | | | | |
| Negative | 54 | 3796 | 6439,5 | | | | |
| Zero | 1 | 1 | 1 | | | | |
| All | 160 | 12880 | 12880 | | | | |
| Z | = | 4.504 | | | | | |

| Table 11. TVA 10-Days Window Hypothesis Tes | t |
|---|---|
|---|---|

=

0.0000

Prob > |z|

0.0000 Exact Prob =

Based on the Wilcoxon Signed-rank test results, where the Prob > |z| value is below 0.05, it indicates that there is a significant difference in Trading Volume Activity (TVA) before and after the boycott.

20-Days Window Event

Based on the normality test using the Shapiro-Wilk test, the abnormal return data before and after the boycott is not normally distributed (the Prob>z value is below 0.05)

| Table 1 | Table 12. AAR 20-Days Window Normality Test | | | | | |
|-------------------------------------|---|---------|-------|-------|---------|--|
| Shapiro-Wilk W test for normal data | | | | | | |
| Variable Obs W V z Prob>z | | | | | | |
| BEFORE | 240 | 0.97048 | 5.165 | 3.812 | 0.00007 | |
| AFTER | 240 | 0.95016 | 8.721 | 5.029 | 0.00000 | |

Since the data is not normally distributed, the data analysis will use the Wilcoxon Signed-rank test.

XAX: 1 XX

1. m. .

| Wilcoxon Signed-rank test | | | | | |
|---------------------------|---|--|--|--|--|
| Obs | Sum Ranks | Expected | | | |
| 120 | 14380 | 14460 | | | |
| 120 | 14540 | 14460 | | | |
| 0 | 0 | 0 | | | |
| 240 | 28920 | 28920 | | | |
| = | -0.074 | | | | |
| = | 0.9408 | | | | |
| | Obs 120 120 0 | Obs Sum Ranks 120 14380 120 14540 0 0 240 28920 = -0.074 | | | |

Table 13. AAR 20-Days Window Hypothesis Test

Based on the Wilcoxon Signed-rank test, where the Prob > |z| value is above 0.05, it indicates that there is no significant difference between AAR before and after the boycott.

For the Trading Volume Activity (TVA) data, normality test was conducted using the Shapiro-Wilk test with the following results :

..

| Table 14. TVA 20-Days Window Normality Test | | | | | | |
|---|-----|---------|--------|--------|---------|--|
| Shapiro-Wilk W test for normal data | | | | | | |
| Variable | Obs | W | V | Z | Prob>z | |
| Before | 240 | 0.53614 | 81.163 | 10.208 | 0.00000 | |
| After | 240 | 0.56124 | 76.771 | 10.079 | 0.00000 | |

Based on the normality test, the Prob>z value for the TVA data is below 0.05, indicating that the data is not normally distributed. Therefore, the hypothesis test will be conducted using the Wilcoxon Signed-rank test.

| Table 15. TV | Table 15. TVA 20-Days Window Hypothesis Test | | | | | | |
|---------------------------|--|-----------|----------|--|--|--|--|
| Wilcoxon Signed-rank test | | | | | | | |
| Sign | Obs | Sum Ranks | Expected | | | | |
| Positive | 151 | 19396 | 14459.5 | | | | |
| Negative | 88 | 9523 | 14459.5 | | | | |
| Zero | 1 | 1 | 1 | | | | |
| All | 240 | 28920 | 28920 | | | | |
| Z | = | 4.585 | | | | | |
| Prob > z | = | 0.0000 | | | | | |

| Table 15 | . TVA 2 | 20-Days | Window | Hypot | hesis ' | <u>Test</u> |
|----------|---------|---------|--------|-------|---------|-------------|
| | | | | | | |

Based on the Wilcoxon Signed-rank test results, where the Prob > |z| value is below 0.05, it indicates that there is a significant difference in Trading Volume Activity (TVA) before and after the boycott.

30-Days Window Event

Based on the normality test using the Shapiro-Wilk test, the abnormal return data before and after the boycott is not normally distributed (the Prob>z value is below 0.05)

| Table 16. AAR 30-Days Window Normality Test | |
|---|--|
|---|--|

| Shapiro-Wilk W test for normal data | | | | | | | |
|-------------------------------------|-----|---------|--------|-------|---------|--|--|
| Variable Obs W V z Prob | | | | | | | |
| BEFORE | 352 | 0.96464 | 8.684 | 5.112 | 0.00000 | | |
| AFTER | 352 | 0.94066 | 14.573 | 6.337 | 0.00000 | | |

Since the data is not normally distributed, the data analysis will use the Wilcoxon Signed-rank test.

| a | able 17. AAR 30-Days window Hypothesis Tes | | | | | | | | | |
|---|--|-----|-----------|----------|--|--|--|--|--|--|
| | Wilcoxon Signed-rank test | | | | | | | | | |
| | Sign | Obs | Sum Ranks | Expected | | | | | | |
| | Positive | 186 | 33410 | 31064 | | | | | | |
| | Negative | 166 | 28718 | 31064 | | | | | | |
| | Zero | 0 | 0 | 0 | | | | | | |
| - | All | 352 | 62128 | 62128 | | | | | | |
| | Z | = | 1.228 | | | | | | | |
| - | Prob > z | = | 0.2195 | | | | | | | |
| | | | | | | | | | | |

Table 17. AAR 30-Days Window Hypothesis Test

Based on the Wilcoxon Signed-rank test, where the Prob > |z| value is above 0.05, it indicates that there is no significant difference between AAR before and after the boycott.

For the Trading Volume Activity (TVA) data, normality test was conducted using the Shapiro-Wilk test with the following results :

| Table 18. TVA 30-Days Window Normality Test | | | | | | |
|---|-------------------------------------|---------|---------|--------|---------|--|
| S | Shapiro-Wilk W test for normal data | | | | | |
| Variable | Obs | W | V | Z | Prob>z | |
| Before | 352 | 0.53372 | 114.511 | 11.213 | 0.00000 | |
| After | 352 | 0.46185 | 132.160 | 11.552 | 0.00000 | |

Based on the normality test, the Prob>z value for the TVA data is below 0.05, indicating that the data is not normally distributed. Therefore, the hypothesis test will be conducted using the Wilcoxon Signed-rank test.

| Table 19. TVA 30-Days Window Hypothesis Test | | | | | | | |
|--|-----|-----------|----------|--|--|--|--|
| Wilcoxon Signed-rank test | | | | | | | |
| Sign | Obs | Sum Ranks | Expected | | | | |
| Positive | 198 | 36722.5 | 31061 | | | | |
| Negative | 151 | 25399.5 | 31061 | | | | |
| Zero | 3 | 6 | 6 | | | | |
| All | 352 | 62128 | 62128 | | | | |
| Z | = | 2.963 | | | | | |
| Prob > z | = | 0.0030 | | | | | |

Based on the Wilcoxon Signed-rank test results, where the Prob > |z| value is below 0.05, it indicates that there is a significant difference in Trading Volume Activity (TVA) before and after the boycott.

Discussion

The significant difference in abnormal return (AR) within the 5-day event window before and after the boycott can be attributed to the immediacy of market reactions. Short-term event windows, such as 5 days, tend to capture the initial investor sentiment and market response to sudden, impactful events like a boycott. Investors often react quickly to news, leading to a more pronounced fluctuation in stock prices, which is reflected in the abnormal returns during this short period (Raza et al., 2023). The market may be driven by uncertainty, speculation, and emotional responses, causing a significant difference in AR. In contrast, the 10-day, 20-day, and 30-day event windows may show no significant difference because, over longer periods, the market has time to stabilize. As new information is absorbed and analysed, investors may adjust their strategies, leading to a return to normal market conditions. The absence of significant differences in abnormal returns for these longer windows suggests that the initial impact of the boycott was short-lived, with the market correcting itself as more rational trading behaviours emerged and the effects of the boycott were factored into stock price. This is consistent with the Efficient Market Hypothesis (EMH) by Eugene Fama (1970), which posits that markets tend to adjust quickly to new information, making abnormal returns less significant over longer periods.

The significant differences in Trading Volume Activity (TVA) for the 5-day, 10-day, 20-day, and 30-day event windows before and after the boycott can be attributed to heightened investor interest and market volatility caused by the boycott event. A boycott, especially one that attracts media attention or public concern, can lead to uncertainty about a company's future performance. This uncertainty prompts both institutional and retail investors to adjust their portfolios by either buying or selling shares, resulting in a spike in trading volumes.

In the short-term (5-day window), the initial reaction to the boycott is likely marked by swift buying or selling decisions based on emotional responses or speculation about the boycott's impact. As the event window expands to 10, 20, and 30 days, sustained trading volume increases may indicate ongoing investor reassessment of the company's long-term outlook and the effect of the boycott on its financial health. This continued high trading volume reflects both the flow of new information related to the boycott and a period of price discovery, where investors try to determine the fair market value of the company post-boycott.

The fact that TVA remains significantly different across all event windows suggests that the boycott had a lasting effect on investor behaviour, leading to heightened market activity and trading volume well beyond the immediate days following the event. This pattern aligns with research showing that significant corporate events, such as public boycotts, tend to influence investor behaviour for an extended period, as market participants continue to react to the event and its potential ramifications.

CONCLUSION

The analysis shows a significant difference in abnormal returns within the 5-day event window before and after the boycott, indicating a strong initial market reaction. However, for longer event windows, the market stabilized over time, reflecting a more measured investor response. Trading Volume Activity (TVA) showed significant differences across all event windows, indicating heightened and prolonged investor interest. The boycott triggered enduring market activity, as evidenced by the consistent increase in trading volume. Future research should examine how different types of events, beyond boycotts, impact abnormal returns and trading volume over similar and extended event windows. Additionally, investigating investor sentiment, media coverage, and company responses could provide deeper insights into factors influencing immediate and sustained market reactions.

REFERENCES

- Ahsyam, F., Syaharana, S., Alfira, M., Suraya, A., & Muchran, M. (2024). The Impact Of The Pro-Israel Product Boycott On Stock Prices Companies Registered On Bei. In *International Social Sciences and Humanities* UMJember Proceeding Series (Vol. 3, Issue 1). http://proceeding.unmuhjember.ac.id/index.php/issh
- Asmara, R. W. (2023). Decision Making Process through Technical Analysis in New York Stock Exchange (NYSE) Stock Trading (Case Study: Shares of Companies Supporting the Genocide War in Palestine for the Period November 2022 – November 2023). *Formosa Journal of Applied Sciences*, 2(11), 2909–2922. https://doi.org/10.55927/fjas.v2i11.6939

- Chengying, H., Rui, C., & Ying, L. (2022). US-China trade war and China's stock market: an event-driven analysis. *Economic Research-Ekonomska Istraživanja*, 35(1), 3277–3290. https://doi.org/10.1080/1331677X.2021.1990781
- Farouh, M., & Abdelrhim, M. (2021). The Impact of the Muslim Boycott to Protest Against The Caricatures Of The Prophet Muhammad (PBUH) On The French Stock Market Sectors. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3776320
- Jesus-Silva, N., Baptista, N., Mata, F., & Dos-Santos, M. (2023). *Sustainable Consumption and the Drivers* of Product Boycott in Europe. https://doi.org/10.20944/preprints202307.1231.v1
- King, B. G., & Soule, S. A. (2007). Social movements as extra-institutional entrepreneurs: The effect of protests on stock price returns. *Administrative Science Quarterly*, *52*(3), 413–442. https://doi.org/10.2189/asqu.52.3.413
- Koku, P. S., Akhigbe, A., & Springer, T. M. (1997). *The Financial Impact of Boycotts and Threats of Boycott* (Vol. 40).
- Levesque, A., & Nam, J. (n.d.-a). *DigitalCommons@Pace The Effect of Consumer Boycotting on the Stock Market*. https://digitalcommons.pace.edu/honorscollege_theses
- Levesque, A., & Nam, J. (n.d.-b). *DigitalCommons@Pace The Effect of Consumer Boycotting on the Stock Market*. https://digitalcommons.pace.edu/honorscollege_theses
- LTIFI, M. (2021). From boycott to product judgment in the coronavirus era: Chinese products cases. *International Journal of Law and Management*, *63*(3), 357–368. https://doi.org/10.1108/IJLMA-04-2020-0086
- Nair, P. U., & Thankamony, P. (2021). Social Issues in Supply Chain Sustainability Focus Areas for Energy and Manufacturing sectors in India and USA. *European Journal of Sustainable Development*, 10(1), 495. https://doi.org/10.14207/ejsd.2021.v10n1p495
- Rahayu, N. (2023). Market Reaction To The Announcement Of The European Union Coal Embargo On Coal Import From Russia In Other Exporting Countries. *Journal Integration of Management Studies*, 1(1), 107–123. https://doi.org/10.58229/jims.v1i1.19
- Raza, S., Baiqing, S., Kay-Khine, P., & Ali Kemal, M. (2023). Uncovering the Effect of News Signals on Daily Stock Market Performance: An Econometric Analysis. *International Journal of Financial Studies*, 11(3). https://doi.org/10.3390/ijfs11030099
- Samudra, F., Zaman, A. R. B., & Mukti, D. A. (2024). Reviving the Essence of Jihad in the Contemporary Era: Advocating Struggle and Solidarity for Palestine Through Boycott of Pro-Israel Products. *MILRev : Metro Islamic Law Review*, *3*(1), 22. https://doi.org/10.32332/milrev.v3i1.8971
- Vasi, I. B., & King, B. G. (2012). Social Movements, Risk Perceptions, and Economic Outcomes. *American Sociological Review*, 77(4), 573–596. https://doi.org/10.1177/0003122412448796