

Market Anomalies in Kompas100 Stock Returns and Trading Volume (2023–2024) Emphasizing Calendar Effects

Endang Ruhiyat^{1*}, Refina Tasari Samosir¹, Suripto¹, Holiawati¹, Aris Sanulika²

¹Master of Accounting, Universitas Pamulang, Indonesia

²Universiti Malaysia Terengganu, Malaysia

Corresponding author: ¹e-ruhiyat_00020@unpam.ac.id.

Abstract

Main Objectives: This study aims to examine the presence of market anomalies—specifically the Day-of-the-Week Effect, Turn-of-the-Month Effect, and Turn-of-the-Year Effect—on stock returns and trading volume in the Kompas100 Index during the 2023–2024 period. **Background Problems:** Financial markets are generally considered efficient in processing available information. However, the presence of anomalies, particularly those arising from irrational investor behavior, indicates deviations from market efficiency. **Novelty:** By integrating all three calendar anomalies, this study provides a more comprehensive analysis of their influence on the capital market. **Research Methods:** This study employs a quantitative associative approach using panel data regression analysis. The data are obtained from companies listed in the Kompas100 Index of the Indonesia Stock Exchange (IDX) during the 2023 to 2024 period. A non-probability sampling technique is applied, specifically purposive sampling. **Finding/Results:** The results reveal significant effects of several anomalies—particularly the Monday Effect, January Effect, and early-month periods—on both stock returns and trading volume. These findings support behavioral finance theory and challenge the Efficient Market Hypothesis. **Conclusion:** This study concludes that the Indonesian stock market exhibits behavior-driven anomalies that create short-term trading opportunities.

Keywords: Day of the Week Effect; Kompas100; Market Anomalies; Turn of the Month Effect; Turn of the Year Effect

JEL Classification: M40; M48

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INTRODUCTION

In the effort to shift Indonesia's consumption-oriented lifestyle toward a more frugal and financially conscious culture, the capital market emerges as a viable alternative for channeling public funds into productive investment. According to Collins et al. (2021), Indonesia's capital market holds strong potential to become more robust and stable, largely due to the growing investment capacity of the country's expanding middle class. In 2024, the Indonesia Stock Exchange (IDX) focuses on three key priorities: Market Deepening, Investor Protection, and Regional Synergy and Connectivity. The IDX remains cautiously optimistic, closely monitoring trading activity throughout 2023 as well as global economic conditions in the coming year to advance the domestic capital market strategically. With the increasing diversity of investment opportunities, the IDX maintains an optimistic outlook

for 2024 and reaffirms its commitment to being a competitive, reliable, and world-class financial institution.

During the 2023–2024 period, the Indonesian capital market experienced considerable fluctuations in stock returns and trading volume, particularly among stocks included in the Kompas100 Index. This period represents the post-pandemic recovery phase of Indonesia's capital market, characterized by changes in investor sentiment, trading activity, market liquidity, interest rate adjustments, and global economic uncertainty. These changing market conditions potentially influenced investor behavior and market reactions, thereby increasing the relevance of examining calendar anomalies in stock returns and trading volume patterns Sudaryanti & Bastomi (2023).

As one of the leading stock indices on the Indonesia Stock Exchange (IDX), the Kompas100 Index reflects the performance of companies with large market capitalization and high liquidity, making it more responsive to changes in investor sentiment and market dynamics (Nurrahmah & Nurdin, 2025). This characteristic distinguishes it from the Composite Stock Price Index (IHSG), which also includes many companies with relatively small market capitalization and lower liquidity levels. Stocks with lower liquidity tend to exhibit relatively stagnant price movements and generally attract less attention from foreign investors (Adithya, 2024). Therefore, the Kompas100 Index is considered more representative for analyzing market anomalies reflected in stock return and trading volume patterns.

One of the factors that can influence stock price movements is reflected in stock returns and trading volume, both of which are often associated with market anomalies. The concept of market anomalies, which challenges the Efficient Market Hypothesis (EMH), was first introduced by Eugene Fama in 1970 (Liani et al., 2024). Known as the father of this theory, Fama argued that markets are generally efficient in processing available information. However, he also acknowledged the existence of anomalies, particularly those arising from irrational investor behavior.

Market anomalies are closely tied to trading days. According to Woo et al. (2020) as cited in Setyaningrum & Rusmana (2025), there are identifiable patterns in trading behavior, including the Day of the Week Effect, where stock performance varies depending on the specific day of the week. Among the most discussed calendar anomalies are the Day of the Week Effect, Turn of the Month Effect, and Turn of the Year Effect. These phenomena demonstrate that stock returns and trading volume are not solely influenced by fundamental or technical factors, but also by temporal elements, namely specific points in the week, month, or year that can systematically affect investor behavior and market outcomes.

Market anomalies remain an important issue in capital market research because they challenge the assumptions of the Efficient Market Hypothesis (EMH) Eugene Fama. According to Woo et al. (2020), the EMH explains that stock prices should fully reflect all available information, implying that investors cannot consistently obtain abnormal returns through predictable trading patterns. However, the existence of recurring anomalies in stock markets suggests that markets may not always operate efficiently.

From a practical perspective, understanding calendar anomalies is important for investors, portfolio managers, and regulators because these patterns may affect investment strategies, market liquidity, and market stability (Chhabra & Gupta, 2020). In the context of

Indonesia's capital market, especially during the 2023–2024 period marked by global economic uncertainty, interest rate fluctuations, and changes in investor sentiment, examining market anomalies becomes increasingly relevant. The Kompas100 Index provides an appropriate setting for this analysis because it consists of highly liquid and large-capitalization companies that are more sensitive to market information and investor behavior (Nurrahmah & Nurdin, 2025).

This study aims to examine the effect of market anomalies specifically the Day-of-the-Week Effect (represented by the Monday Effect and Weekend Effect), the Turn-of-the-Month Effect (represented by the three trading days before the end of the month and the three trading days after the beginning of the month), and the Turn-of-the-Year Effect (represented by the January Effect, December Effect, seven trading days before year-end, and seven trading days after the beginning of the new year) on stock returns and trading volume within the Kompas100 Index during the 2023–2024 period. Unlike prior studies that generally investigate these anomalies separately or focus solely on stock returns, this study incorporates trading volume as an additional proxy for investor reaction and market activity. Furthermore, this research contributes empirically by providing updated evidence from Indonesia's post-pandemic capital market environment, where investor behavior and market dynamics may differ from those observed in earlier periods. Therefore, this study is expected to enrich the discussion on market efficiency and behavioral finance in emerging capital markets, particularly in Indonesia.

Previous studies on calendar anomalies have produced inconsistent findings. Suprayetno et al. (2023) found that the Monday Effect significantly influenced stock returns, while Suryanegara et al. (2024) reported no significant effect during the COVID-19 period. Similarly, studies related to the Turn-of-the-Month Effect and Turn-of-the-Year Effect also show mixed evidence across different countries, sectors, and observation periods. Most prior studies focused only on one specific anomaly or examined stock returns without incorporating trading volume as an indicator of market reaction. In addition, many previous studies concentrated on indices such as LQ45, DJIA, or sectoral indices, while limited research has comprehensively analyzed multiple calendar anomalies simultaneously within the Kompas100 Index, particularly during the post-pandemic recovery period of 2023–2024.

The novelty of this study lies in its integrated examination of three major calendar anomalies namely the Day-of-the-Week Effect, the Turn-of-the-Month Effect, and the Turn-of-the-Year Effect on stock returns and trading volume in the Kompas100 Index during the 2023–2024 period. Unlike previous studies that generally examine these anomalies separately or focus solely on stock returns, this study incorporates trading volume as an additional indicator of market reaction. This approach enables a more comprehensive analysis of investor behavior and market efficiency in the Indonesian capital market.

A market is considered efficient when the value of a given security accurately reflects all available information. The equal distribution of information among all investors is just as essential to market efficiency as information accessibility. According to Beaver (2022), a market is efficient if prices adjust as though all investors have accessed and are fully aware of the available information, as cited by Yenni et al. (2025). Capital market efficiency refers to a condition in which stock prices accurately reflect all forms of available information—this includes historical data, private information, and public disclosures. As new information

enters the market, stock prices adjust accordingly to reflect such information (Banan & Tristiarto, 2023).

In addition to the Efficient Market Hypothesis, this study also employs Behavioral the Finance Theory. Among the various definitions of behavioral finance, one of the most concise is provided by Sewell (2010). This theoretical perspective emphasizes that investor decisions are often shaped by psychological biases, which can lead to deviations from rational market behavior and contribute to anomalies in financial markets.

Stock price movements are inseparable from the levels of stock return and trading volume, as Anam et al. (2021) explain that stock return represents the anticipated rate of return on equity investments held in a portfolio. Without the expectation of profit or return, investors would have little incentive to purchase company shares.

Meanwhile, trading volume refers to the total number of shares exchanged within a specific time period. According to Nurmasari (2020), trading volume reflects the level of investor interest in conducting transactions, including the buying and selling of company shares. However, a high trading volume does not necessarily correlate with high stock prices, as this metric may fluctuate depending on internal corporate events and external market influences.

According to the study by Suprayetno et al. (2023), the Monday Effect-a form of the Day-of-the-Week Effect was found to significantly affect stock returns. Evidence of the Monday Effect suggests that the market is not fully efficient, as consistent return patterns contradict the assumptions of the Efficient Market Hypothesis. The presence of the Monday Effect even in developed markets may indicate unequal access to information among investors. However, Suryanegara et al. (2024) found no significant evidence of the Monday Effect in daily stock returns before and during the COVID-19 pandemic.

H₁: The-Day-of-the-Week Effect, proxied by the Monday Effect, is expected to influence stock returns.

According to the findings of Suryanegara et al. (2024), the Monday Effect was not evident in daily trading volume before or during the COVID-19 pandemic. The ANOVA test results showed no significant differences in trading volume across days of the week in either period.

H₂: The-Day-of-the-Week Effect, proxied by the Monday Effect, is expected to influence trading volume.

Agustin & Faisal (2023) found evidence of market anomalies in the LQ45 Index during the Januari-December 2021 period. However, they concluded that the Weekend Effect, a form of the Day-of-the-Week Effect, did not occur in LQ45 trading activity. Similarly, a study conducted by Stevie & Asnawi (2021) revealed that, across most industry categories and time periods, the impact of the Weekend Effect on stock returns was not statistically supported.

H₃: The Day-of-the-Week Effect, proxied by the Weekend Effect, is expected to influence stock returns.

The study conducted by Stevie & Asnawi (2021) also found that, across most categories and time periods, the Weekend Effect did not have a consistent impact on trading volume. The effect was observed to be industry-specific, varying according to the unique characteristics of each sector and time frame.

H₄: The Day-of-the-Week Effect, proxied by the Weekend Effect, is expected to influence trading volume.

The study conducted by Maudina & Komariah (2023) found no consistent evidence of the Turn of the Month Effect in the LQ45 Index during the 2019–2021 period. However, on March 27, 2020 which fell on a Friday the stock return recorded a significant increase of 0.0727.

H₅: The Turn-of-the-Month Effect, proxied by 3 days before the end of the month, is expected to influence stock returns.

According to Kim (2022), the Turn of the Month Effect includes the last trading day of the month, referred to as Day -1, and forms part of the TOM window [-1, +3]. For retail investors, trading volume on Day -1 was found to decrease compared to the rest of the month. There was no significant increase in buying activity, indicating that the Turn-of-the-Month Effect was not present in trading volume for retail investors on the final trading day of the month.

H₆: The Turn-of-the-Month Effect, proxied by 3 days before the end of the month, is expected to influence trading volume.

According to Maudina & Komariah (2023), there was no evidence of a Turn-of-the-Month Effect in the DJIA Index, as demonstrated by negative stock returns at the beginning of the month. On April 1, 2020, an anomaly day, the Japanese stock market recorded a return of -0.0450, attributed to significant selling pressure that pushed the Nikkei to its lowest level in a week. This occurred on the first day of Japan's fiscal year, during which both the Nikkei and the Japanese yen weakened. The stock sell-off reflected negative investor sentiment triggered by fears of a global recession, reduced corporate earnings, and lower dividend payouts.

H₇: The Turn-of-the-Month Effect, proxied by 3 days after the beginning of the month, is expected to influence stock returns.

According to Kim (2022), trading volume did not increase significantly during the 3 days following the beginning of the month. This was because trading activity remained either normal or declined compared to the rest of the month. The study found that retail investors did not contribute meaningfully to the Turn-of-the-Month (TOM) Effect during this period. Similarly, institutional investors also showed no significant increase in trading volume. There was no observable pattern of window dressing, portfolio rebalancing, or accumulation activities by institutional participants. These findings suggest that institutional investors did not play a role in generating the TOM Effect in the early days of the month on the Korean stock exchange (KOSDAQ).

H₈: The Turn-of-the-Month Effect, proxied by 3 days after the beginning of the month, is expected to influence trading volume.

Studies by Kartikasari (2017), Szymański & Wojtalik (2020), Putri & Prayogo (2023) confirmed the presence of a Turn-of-the-Year Effect in stock returns. This anomaly was also observed in the LQ45 Index during the Januari-December 2021 period (Agustin & Faisal, 2023). These findings indicate the presence of a calendar anomaly around the start of the year. However, contrasting evidence is presented by Alsubaie, (2023), who found that the January Effect had no significant impact on stock returns.

H₉: The Turn-of-the-Year Effect, proxied by the January Effect, is expected to influence stock returns.

According to Lutfia et al. (2021), the January Effect on trading volume activity (TVA) was observed between 2018 and 2020 in companies listed on the Kompas100 Index. The study found significant differences in TVA between January and the remaining eleven months (February to December). This suggests that the January Effect led to a measurable increase in trading volume, particularly among stocks included in the Kompas100 Index, indicating heightened investor activity during that month.

H₁₀: The Turn-of-the-Year Effect, proxied by the January Effect, is expected to influence trading volume.

According to Mehta & Chander (2020), the December Effect is a seasonal anomaly in the stock market, in which December consistently delivers higher returns for investors compared to other months of the year.

H₁₁: The Turn-of-the-Year-Effect, proxied by the December Effect, is expected to influence stock returns.

In the study by Graczyk & Queirós (2016), the December Effect is identified as a form of seasonal market anomaly, where both stock returns and trading volume tend to increase during the month of December. According to the Efficient Market Hypothesis (EMH), all available information is already reflected in prices and volume, implying that anomalies like the December Effect should not persist. However, Behavioral Finance acknowledges the role of psychological biases and social pressures such as window dressing by fund managers, year-end overoptimism, tax-loss selling strategies, and the Santa Claus Rally-as contributors to this seasonal pattern.

H₁₂: The Turn-of-the-Year-Effect, proxied by the December Effect, is expected to influence trading volume.

According to Marsella & Sugara (2024), there was no evidence of a January Effect in stock returns at the end of December for energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2023 period. Their findings support the semi-strong form of the Efficient Market Hypothesis (EMH), which suggests that all publicly available information is already reflected in stock prices.

H₁₃: The Turn-of-the-Year Effect, proxied by 7 days before year-end, is expected to influence stock returns.

According to the study by Fadillah et al. (2023), results from the Wilcoxon signed-rank test showed no evidence of a January Effect on trade volume activity (TVA) for companies listed on the Jakarta Islamic Index (JII) during the 2016-2020 period. This was indicated by the absence of statistically significant differences in average trading volume activity (TVA) at the end of December.

H₁₄: The Turn-of-the-Year Effect, proxied by 7 days before year-end, is expected to influence trading volume.

According to Marsella & Sugara (2024), there was no evidence of a January Effect in early January stock returns for energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2021-2023 period. These findings indicate that the first seven trading days of the year, which are often assumed to influence stock return patterns across sectors, did not exhibit abnormal return behavior in the energy sector during the observed timeframe.



H₁₅: The Turn-of-the-Year Effect, proxied by 7 days after the beginning of the year, is expected to influence stock returns.

According to Subhan et al. (2016), the Turn-of-the-Year Effect, proxied by the first 7 trading days of January, was observed to have a significant effect on trading volume in LQ45 stocks during the 2013-2015 period. In 2013, a notable increase in trading volume occurred during the first week of January, driven by intensified investor buying activity, which contributed to a stronger market condition. A similar pattern was observed in 2014, with statistically significant differences in trading volume during the first 7 days of the year. In contrast, the study by Fadillah et al. (2023) found no significant effect.

H₁₆: The Turn-of-the-Year Effect, proxied by 7 days after the beginning of the year, is expected to influence trading volume.

RESEARCH METHOD

The quantitative method was selected for this study to examine and analyze the effect of market anomalies, specifically the Day-of-the-Week Effect, Turn-of-the-Month Effect, and Turn-of-the-Year Effect, on stock returns and trading volume.

This study utilizes secondary data from companies listed on the Kompas100 Index of the Indonesia Stock Exchange (IDX). The Kompas100 Index was selected as the research object because it represents companies with high market capitalization and liquidity on the Indonesia Stock Exchange (IDX). Stocks included in the Kompas100 Index tend to be more actively traded and more responsive to information, investor sentiment, and market fluctuations compared to less liquid stocks. Therefore, the index provides a more appropriate and reliable representation for examining calendar anomalies related to stock returns and trading volume in the Indonesian capital market. A non-probability sampling technique was employed, specifically purposive sampling, was employed based on the following criteria: (1) Companies actively listed on the Kompas100 Index; (2) Companies included in the Effective Constituent Period from January to July 2023; (3) Companies that remained consistently listed and did not exit the index during the Effective Constituent Period from August 2023 to January 2024; (4) Companies that remained consistently listed and did not exit during the Effective Constituent Period from February 1 to July 31, 2024; (5) Companies that remained consistently listed and did not exit during the Effective Constituent Period from August 1 to December 31, 2024. The 2023–2024 observation period was selected because it represents the post-pandemic recovery phase of Indonesia's capital market, during which market conditions were characterized by fluctuations in investor sentiment, trading activity, interest rates, and global economic uncertainty. This period is considered particularly relevant for examining calendar anomalies, as changes in market behavior following the COVID-19 pandemic may influence stock return patterns and trading volume dynamics differently compared to previous periods. Furthermore, the use of recent data enables this study to provide updated empirical evidence regarding market efficiency and investor behavior within the Kompas100 Index, thereby offering a more relevant representation of current conditions in the Indonesian capital market.

Table 1 presents the operational definitions and measurements of each variable used in this study.

Table 1. Measurement of Variables

No	Variables and Prior Research	Calculation
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1.	Y1: Stock Return (Suprayetno et al., 2023)	Stock Return = $\frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$ $P_{i,t}$ = stock closing price at time t $P_{i,t-1}$ = stock closing price at time $t - 1$
2.	Y2: Trading Volume Activity (Praptiwi, 2021)	Trading Volume Activity = $\frac{\text{Number of Shares Traded}}{\text{Number of Outstanding Shares}}$
3.	X1: Day-of-the-week effect (Suryanegara et al., 2024)	Monday effect
4.	X2: Day of the week effect (Agustin & Faisal, 2023)	Weekend effect
5.	X3: Turn-of-the-Month Effect (Maudina & Komariah, 2023)	3 days before the end of the month
6.	X4: Turn-of-the-Month Effect (Kim, 2022)	3 days after the beginning of the month
7.	X5: Turn of the Year Effect (Szymański and Wojtalik, 2020)	January effect
8.	X6: Turn-of-the-Year Effect (Mehta & Chander, 2020)	December effect
9.	X7: Turn-of-the-Year Effect (Marsella & Sugara, 2024)	7 days before the end of the year
10.	X8: Turn-of-the-Year Effect (Marsella & Sugara, 2024)	7 days after the beginning of the year

Source: processed data, 2025

The regression model equation used in this study is as follows:

$$Y1 = \alpha + \beta_1 X1it + \beta_2 X2it + \beta_3 X3it + \beta_4 X4it + \beta_5 X5it + \beta_6 X6it + \beta_7 X7it + \beta_8 X8it + \varepsilon \quad (1)$$

$$Y2 = \alpha + \beta_1 X1it + \beta_2 X2it + \beta_3 X3it + \beta_4 X4it + \beta_5 X5it + \beta_6 X6it + \beta_7 X7it + \beta_8 X8it + \varepsilon \quad (2)$$

Where:

Y1	: Stock Return
Y2	: Trading Volume
α	: Constant
X1	: Day of the week effect proxy Monday Effect
X2	: Day of the week effect proxy Weekend Effect
X3	: Turn of the month effect proxy 3 before the end of the month
X4	: Turn of the month effect proxy 3 after the beginning of the month
X5	: Turn of the year effect proxy Januari Effect
X6	: Turn of the year effect proxy December Effect
X7	: Turn of the year effect proxy 7 before the end of the year
X8	: Turn of the year effect proxy 7 after the beginning of the year
$\beta(1,2,...)$	: Regression coefficients of each independent variable
ε	: Error term
t	: Time
i	: Company

The data analysis in this study employs panel data regression. The estimation of the panel data regression model is performed through three approaches: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Based on the results

of the Chow and Hausman tests, the selected panel data regression model utilized in this research is the Fixed Effect Model (FEM).

RESULTS AND DISCUSSION

Table 2 presents the results of the fixed effects panel regression analysis used to test the proposed research hypotheses regarding the Day-of-the-Week, Turn-of-the-Month, and Turn-of-the-Year effects on stock returns.

Table 2. Panel Data Regression Analysis of Stock Return (Y1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000132	9.80E-05	1.346664	0.1781
Monday Effect (X1)	0.705179	0.008031	87.80916	0.0000
Weekend Effect (X2)	0.705063	0.008981	78.50593	0.0000
3 Days Before the End of the Month (X3)	0.620728	0.009028	68.75253	0.0000
3 Days After the Beginning of the Month (X4)	0.648087	0.008608	75.28889	0.0000
January Effect (X5)	0.597292	0.018706	31.93044	0.0000
December Effect (X6)	0.536132	0.015935	33.64518	0.0000
7 Days Before the End of the Year (X7)	-0.148533	0.029346	-5.061461	0.0000
7 Days After the Beginning of the Year (X8)	-0.034746	0.029241	-1.188245	0.2347

Source: processed data, 2025

The results presented in Table 2 indicate that hypotheses H₁, H₃, H₅, H₇, H₉, and H₁₁ have a significant positive effect on stock returns, as evidenced by their probability values of 0.0000, which are less than the significance level of 0.05. Therefore, these hypotheses are accepted. Furthermore, hypothesis H₁₃ shows a significant negative effect on stock returns, with a probability value of 0.0000 < 0.05 and a negative t-statistic, thus the hypothesis is also accepted. In contrast, hypothesis H₁₅ does not have a significant positive effect on stock returns, as the probability value is 0.2347 > 0.05, leading to the rejection of this hypothesis.

The results presented in Table 3 show that hypotheses H₂, H₄, H₆, H₈, and H₁₄ have a significant positive effect on trading volume, as indicated by their probability values of 0.0000 < 0.05. Therefore, these hypotheses are accepted. Additionally, hypothesis H₁₀ exhibits a significant negative effect on trading volume, supported by a probability value of 0.0000 < 0.05 and a negative t-statistic, leading to the acceptance of this hypothesis. Meanwhile, hypotheses H₁₂ and H₁₆ do not have a significant positive effect on trading volume, as their probability values are greater than 0.05, resulting in the rejection of these hypotheses.

Table 3. Panel Data Regression Analysis of Return Saham (Y2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001239	3.50E-06	354.2414	0.0000
Monday Effect (X1)	0.082753	0.003120	26.51950	0.0000
Weekend Effect (X2)	0.093273	0.003101	30.07437	0.0000
3 Days Before the End of the Month (X3)	0.076994	0.003301	23.32662	0.0000

3 Days After the Beginning of the Month (X4)	0.081890	0.003443	23.78404	0.0000
January Effect (X5)	-0.045290	0.005906	-7.668805	0.0000
December Effect (X6)	-0.009085	0.005958	-1.524823	0.1273
7 Days Before the End of the Year (X7)	0.031496	0.009331	3.375272	0.0007
7 Days After the Beginning of the Year (X8)	-0.000249	0.009716	-0.025586	0.9796

Source: processed data, 2025

Hypothesis H₁ supports the findings of Suprayetno et al. (2023), who stated that the Monday Effect occurs in stock returns. This result challenges the Efficient Market Hypothesis (EMH), particularly the weak-form, by indicating the existence of market inefficiency. From a Behavioral Finance perspective, this phenomenon may be explained by weekend-related anxiety, investor overreaction or underreaction, and institutional trading behavior, which together suggest the presence of short-term arbitrage opportunities arising from day-specific return patterns—especially the Monday Effect.

Hypothesis H₂, however, contradicts the findings of Suryanegara et al. (2024), who concluded that the Monday Effect did not occur in daily trading volume before and during the COVID-19 pandemic. In contrast, this study finds a significant effect, implying that the EMH is violated, as trading volume should be random in an efficient market. From the Behavioral Finance perspective, psychological effects after the weekend and common overreaction among investors indicate that the Monday Effect is relevant and that trading volume follows a predictable pattern in trading volume.

Hypothesis H₃ contradicts the findings of Agustin & Faisal (2023), who reported no evidence of the Weekend Effect in the LQ45 Index. However, it supports the results of Wulan & Amalia (2023), who found evidence of a Weekend Effect on daily returns. This implies that stock returns tend to increase on Fridays ahead of the weekend. Such findings contradict the semi-strong and strong forms of the EMH. From both EMH and Behavioral Finance viewpoints, investor optimism and psychological biases before the weekend appear to influence returns, indicating that stock returns are not entirely random and that time-based trading strategies may be feasible.

Hypothesis H₄ does not support the findings of Stevie & Asnawi (2021), who observed no difference in trading volume between Fridays and Mondays indicating the absence of a Weekend Effect. In contrast, this study finds increased trading volume, which may result from investors closing or opening positions before the weekend. According to the EMH, trading volume should not follow any predictable pattern, and thus, this result reflects market inefficiency. From a Behavioral Finance perspective, positive sentiment, herding behavior, and window dressing activities before Fridays contribute to the observed trading pattern.

Hypothesis H₅ contradicts the findings of Maudina & Komariah (2023), who reported that the Turn-of-the Month (TOM) Effect—specifically 3 days before the end of the month—did not occur. In this study, however, stock prices tend to increase prior to the turn of the month. Theoretically, this finding is inconsistent with the Efficient Market Hypothesis (EMH), as returns appear to be predictable based on calendar timing. From a Behavioral Finance perspective, this anomaly may be driven by end-of-month optimism, portfolio rebalancing, and mental accounting.



Hypothesis H₆ does not support the study by Kim (2022), which found no significant increase in buying activity, suggesting that the Turn-of-the Month Effect was not present in trading volume among retail investors at the end of the month. In contrast, this study observes increased trading activity, likely due to portfolio adjustments at the end of the month. According to EMH, this pattern reflects a violation of weak-form efficiency, while from a Behavioral Finance standpoint, the rise in volume can be attributed to monthly evaluation bias and institutional herding.

Hypothesis H₇ also contradicts Maudina & Komariah (2023), who found no evidence of TOM anomalies. In this study, however, returns increase at the beginning of the month, potentially due to new fund allocations or systematic purchases. This finding again indicates market inefficiency under the EMH, while Behavioral Finance explanations include herd behavior and salary-based fund allocation.

Hypothesis H₈ contradicts the findings of Kim (2022), who reported no significant increase in trading volume during the three days following the beginning of the month and found no evidence of the Turn of the Month (TOM) Effect. In contrast, this study finds a significant increase in trading volume in the early days of the month. This increase may be attributed to the inflow of fresh capital, such as salaries and pension fund contributions, institutional portfolio rebalancing, and early-month investor optimism. From the Efficient Market Hypothesis (EMH) perspective, this predictable trading volume pattern indicates a violation of weak-form efficiency. Meanwhile, Behavioral Finance theory explains the phenomenon through monthly cycles, anchoring effects, early-month optimism, and herding behavior.

Hypothesis H₉ supports the findings of Kartikasari (2017), Szymański & Wojtalik (2020) and Putri & Prayogo (2023), who identified seasonal patterns in the buy-sell ratio of individual investors, with ratios being lower than usual at the end of December and higher than usual at the beginning of January. In the current study, stock returns are found to be higher in January, likely due to window dressing strategies, repurchases, year-end bonuses, and additional liquidity. From the Efficient Market Hypothesis (EMH) perspective, this contradicts both weak-form and semi-strong form efficiency, as returns appear to be predictable based on the calendar month. From a Behavioral Finance standpoint, this is influenced by tax-loss selling effects, investor overreaction, and early-year optimism.

Hypothesis H₁₀ aligns with the research of Lutfia et al. (2021), which found evidence of the January Effect on trade volume activity (TVA) between 2018 and 2020 for companies listed in the Kompas100 index, with significant differences in TVA between January and the other eleven months. In this study, trading activity increases due to portfolio rebalancing, new capital inflows, and the “fresh start” effect among investors. From an EMH perspective, particularly weak-form efficiency, this result contradicts the theory, as volume shows consistent and time-bound patterns. Behavioral Finance attributes this anomaly to investor overconfidence, new year resolutions, and institutional “window opening” behavior.

Hypothesis H₁₁ supports the findings of Mehta & Chander, (2020), who observed the December Effect as a seasonal anomaly where stock returns in December are significantly higher compared to other months. In the present study, high December returns are attributed to window dressing, the Santa Claus Rally, and year-end optimism. From an EMH perspective (weak and semi-strong forms), this contradicts the notion of market efficiency due to predictable return patterns in December. Meanwhile, Behavioral Finance explains the

phenomenon through investor overconfidence, year-end anchoring, and institutional herding behavior.

Hypothesis H_{12} contradicts the findings of Graczyk & Queirós, (2016), who described the “December Effect” as a seasonal market anomaly involving both increased returns and trading volumes during December. However, in this study, no significant volume spike was observed in December. This may be due to extended year-end holidays, gradual position closures, and investor focus on prices rather than volume. From an EMH standpoint, particularly weak-form efficiency, this supports the assumption that trading volume does not always follow a pattern. From the Behavioral Finance perspective, this could be influenced by risk aversion, market fatigue, and postponement of activity until January.

Hypothesis H_{13} contradicts the findings of Marsella & Sugara, (2024), who found no evidence of a January Effect at the end of December on stock returns. In the present study, returns increased toward year-end, potentially due to window dressing by fund managers, closing of speculative positions, and institutional purchases aimed at enhancing portfolio performance. According to the Efficient Market Hypothesis (EMH), particularly the weak form, this indicates a contradiction, as returns appear predictable. From a Behavioral Finance perspective, this anomaly can be explained by year-end optimism, investor overreaction, and emotional responses to the fiscal year closing.

Hypothesis H_{14} is also inconsistent with Fadillah et al. (2023), who, based on Wilcoxon signed-rank test results, found no evidence of a January Effect on trade volume activity. However, in this study, trading volume increased due to year-end window dressing and portfolio rebalancing, retail investor position closures, the “fiscal year-end” psychological effect, and herding behavior. From an EMH viewpoint (weak-form), this contradicts the principle of random volume movements, since calendar-based predictability is observed. Behavioral Finance supports this result through behavioral biases and institutional strategy effects.

Hypothesis H_{15} aligns with the findings of Marsella & Sugara (2024), who found no evidence of a January Effect at the beginning of January on stock returns. This implies that stock returns did not exhibit any distinct pattern immediately after the new year. Several plausible reasons include a decline in emotional sentiment following the December peak, and the market still being in a phase of consolidation and observation. The findings support EMH weak-form efficiency, and from a Behavioral Finance standpoint, emotional bias tends to diminish, and no strong catalysts are present.

Hypothesis H_{16} contradict the findings of Subhan (2016) but supports the findings of the study Fadillah et al. (2023), which reported no January Effect within the first 7 trading days of January on trading volume activity. In this study, market activity remained low during the first week of January, potentially due to investors not fully returning, financial institutions not being fully operational, and a lack of economic catalysts. This is in line with EMH weak-form efficiency, which assumes random trading activity, and from the Behavioral Finance view, the market is in a “passive” post-holiday phase.

CONCLUSION

This study examined the presence of calendar anomalies namely the Day-of-the-Week Effect, Turn-of-the-Month Effect, and Turn-of-the-Year Effect on stock returns and trading



volume in the Kompas100 Index during 2023–2024. The results reveal that several calendar-based patterns significantly influence stock returns and trading volume, indicating the existence of market inefficiencies, particularly during specific periods such as Mondays, month-ends, and year-ends. These findings challenge the assumptions of the Efficient Market Hypothesis (EMH), especially its weak and semi-strong forms, by demonstrating that market behavior is not entirely random. Instead, investor decisions are often influenced by psychological biases such as overreaction, optimism, herding behavior, and institutional practices including window dressing and portfolio rebalancing.

However, this study is limited to companies included in the Kompas100 Index and only covers the 2023–2024 observation period, representing the post-pandemic recovery phase of Indonesia's capital market, which may limit the generalizability of the findings to other market conditions or broader indices. In addition, this study focuses solely on calendar anomalies without incorporating macroeconomic variables such as inflation, interest rates, exchange rates, or geopolitical factors that may also influence stock returns and trading volume. Nevertheless, this study provides important implications for investors, portfolio managers, and market regulators by highlighting the existence of behavior-driven market anomalies that may create short-term trading opportunities and reflect the importance of behavioral factors in investment decision-making. The findings also suggest that improving market transparency, investor education, and information dissemination may contribute to enhancing market efficiency in the Indonesian capital market.

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