“Re-Examining the January effect in IDX: Insights across small, medium, and large market capitalizations”

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RE-EXAMINING THE JANUARY EFFECT IN IDX: INSIGHTS ACROSS SMALL, MEDIUM, AND LARGE MARKET CAPITALIZATIONS

Abstract

The capital market is one of the investment venues that supports economic growth. Investors entering the capital market must take advantage of all issues to obtain returns on their investments. The January effect is a phenomenon related to the documentation of irrational behavior in global capital markets, but its exact nature remains uncertain. This study aims to test the existence of the January effect in the IDX by analyzing data on companies with small, medium, and large market capitalizations. The January effect was tested using the Mann-Whitney test on daily data, with a total of 17,760 observations during the 2023–2024 period, comprising 8,400 Small Market Capitalization (SMC), 7,920 Medium Market Capitalization (MMC), and 1,440 Large Market Capitalization (LMC) stocks, accessed via www.idx.co.id or www.yahoofinance.com. Findings reveal significant evidence of the January effect among small-cap firms, with returns showing positive anomalies in January. Conversely, no such evidence is found in medium or large-cap firms, suggesting that the anomaly is not universal. This study concludes that market anomalies may persist within certain segments, and, in practical terms, underscores the importance of investor caution when relying on seasonal anomalies in decision-making.

Keywords economic growth, global market, phenomenon, January effect, anomalies

JEL Classification G11, G14, G15, G17

INTRODUCTION

In the era of global markets, the capital market not only plays an important role in a country's economic growth but also serves as a reference for investors in making investments. For investors, the capital market becomes a benchmark for investment prospects in order to obtain returns. To achieve optimal returns, investors must make efforts and understand fundamental theoretical concepts. Among these fundamental concepts are the rational and irrational concepts. These two theoretical concepts are important because they relate to the investment decision-making process that investors undertake when transacting to gain returns.

The rational concept is a concept that formulates how investors make investment decisions based on all available information. With that information, investors can analyze logically and objectively to achieve better potential returns without disregarding the risk received, keeping it to a minimum. This rational concept is represented by efficient theory, portfolio theory, and arbitrage theory. Investors who support the above theories argue that investors behave rationally (Milos et al., 2024; Padmavathy, 2024).

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Meanwhile, the irrational concept formulates how investors make decisions by relying more on emotional attitudes, feelings, or socio-psychology. This irrational concept is explained in behavioral finance theory. This theory explains that stock price movements in the capital market are related to investor behavior. In other words, the rational concept is an approach to decision-making using objective and relevant data and information, whereas the irrational concept is an approach to decision-making in which investors rely more on their emotions and feelings to gain returns.

One of the phenomena in the capital market is related to the January Effect (JE). JE is a phenomenon perceived by some investors where the capital market has the potential to outperform and create opportunities to gain returns in January. This involves optimistically buying stocks at the end of the year and selling them in January at the beginning of the following year. This is considered an anomaly because investors believe January is an important month, as it has the potential to provide a level of returns for investors that varies compared to the other eleven months. However, the JE phenomenon does not always occur and cannot be relied upon as an investment strategy by investors without considering potential risks. Therefore, this study serves as a contribution to enriching the literature on studies of investor behavior in investing.

1. LITERATURE REVIEW AND HYPOTHESES

In the era of globalization and digitalization, the capital market has become a key indicator in a country's economy. This is because the capital market plays a crucial role in promoting economic growth, as it facilitates the mobilization of funds, supports business development, and enhances financial efficiency (Hasan & Al-Najjar, 2024; Kim et al., 2019). Economic growth with improving performance encourages investors to invest in the country's capital market as their choice (Pham et al., 2025). Therefore, the capital market must be prepared for technical improvements and has been modernized to make it easier for investors to access it.

Next, when investing in the capital market, investors must understand at least two primary concepts: efficient market theory and behavioral finance. Market efficiency theory is a condition that occurs in the capital market, causing prices of securities in the market to reflect all publicly available information. In an efficient capital market, information flowing into the market is responded to thoroughly and quickly. Therefore, investors cannot beat the market to obtain abnormal returns (Kumar & Singh, 2024; Marisetty & Madasu, 2021). In other words, it is impossible to predict abnormal returns (Enow, 2024; Kenneth & Sumani, 2024; Mubaroq & Mugiadi, 2024). It can be said that according to the efficient market theory, investors in making investment decisions rely heavily on all available information.

Meanwhile, behavioral finance explains that investors, when making decisions, are influenced by behavioral psychology, emotions, and investor sentiment, and may act irrationally in the capital market (Akin & Akin, 2024; Goodell et al., 2023; Jannah & Hidayat, 2024; Li et al., 2023; Padmavathy, 2024; Rizal et al., 2025; Zhang et al., 2023). Thus, it can be concluded that behavioral finance theory is a concept that explains that investors, when investing, do not base their decisions solely on the information they possess, but rather on their attitudes, emotions, and feelings.

Based on both theoretical concepts, investors use them as a reference to obtain returns from information on stock price movement patterns. From the market efficiency perspective, it is very difficult to achieve this because price movement should be constant over time. Nevertheless, some investors argue that there are exceptions to this rule, as evidenced by the existence of market anomalies such as deviations in return patterns during certain periods.

One of the deviation phenomena connected to stock return anomalies in January is known as the January Effect (JE). This phenomenon, along with others such as holiday effects, Monday and weekend effects, dividend effects, reversal effects, and

more, all influence the market. When performing calculations, the use of historical data makes it challenging to avoid the presence of the JE, especially when distinguishing its occurrence between small-cap and large-cap firms (Patel, 2024; Plastun et al., 2024). The JE is a capital market behavior in which the stock prices of small-cap companies tend to rise during January compared to other months (Asbaruna et al., 2023; Jannah & Hidayat, 2024; Kozlowski & Lytle, 2023).

The anomalous became a phenomenon after widespread irregularities in returns emerged in the capital market. Sawitri and Astuty (2018) explain that market anomalies represent conditions contrary to the concept of an efficient market. An anomaly is a deviation in the capital market in which asset performance differs from the predictions of the efficient market hypothesis. Returns occurring months, for example, are considered by investors when conducting transactions in the capital market, thus opening the door for them to adopt various alternative investment strategies (Hijazi, 2020; Pandey et al., 2021).

Jannah and Hidayat (2024) identified four types of anomalies: seasonal or calendar, event-related, accounting, and corporate. They also described several anomaly categories, including calendar anomalies, company information announcements, and market irregularities. Calendar anomalies remain a topic of interest for investors, who seek to use them as a strategy to achieve returns (Tabash et al., 2025). Nevertheless, testing to predict returns in January remains important. The significance of conducting tests at the end and beginning of the year lies in the persistent ambiguity surrounding anomalies during year-end. Shust (2024) attributes year-end ambiguity and limited information processing capacity as possible explanations. Plastun et al. (2019) observed that while anomalies were evident in the 1980s, markets have since become more efficient. Kim and Shamsuddin (2023) revealed that current anomalies are fragile and inconsistent, posing challenges to the efficient market hypothesis (Enow, 2024; Shehadeh & Zheng, 2023). Meanwhile, Naz et al. (2023) stated that there was a tendency for positive returns in December compared to January. In addition, Fleming et al. (2024) emphasized the importance of such testing due to lower year-end trading volumes compared to regular holiday periods. Therefore, it can be concluded that the study of the January effect phenomenon remains a topic that needs to be re-examined.

Several recent empirical studies conducted in various developed and developing countries on investor behavior regarding the January effect phenomenon still show mixed results. Caporale and Plastun (2023) found similar evidence in the Nasdaq-American market, indicating that anomalous phenomena occur periodically and contradict the efficient market hypothesis. Furthermore, evidence from markets in China, Taiwan, Korea, Thailand, and Pakistan demonstrates inefficiency, as reflected in significant seasonal abnormal returns. Research by Gerry (2017) on the January effect in various countries revealed a reversed pattern, in which January stock returns were lower than those in other months. Stefanescu and Dumitriu (2023) showed that not all indices on the London Stock Exchange exhibit abnormal returns. Liu (2025) revealed investor behavior influenced by both the Chinese New Year and the January effect, particularly in stocks with low institutional ownership, small market capitalization, and a history of poor performance.

Gadhavi (2024), examining currencies within BRICS nations, identifies potential opportunities for strategic trading at the beginning of the year, as evidenced by positive returns in the Indian rupee, whereas no such pattern is observed in China. In research focusing on ASEAN capital markets, Mubaroq et al. (2025) report no consistent evidence of the January Effect; consequently, they advise investors to take all available information into account. Meanwhile, Aggarwal and Jha (2023) note that such calendar anomalies remain prevalent in Asian markets. Khan et al. (2021) find that only Malaysia and India demonstrate weak-form market efficiency, with other markets exhibiting seasonal anomalies. In studies of Gulf Cooperation Council stock exchanges, Bahrain, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates, Adam et al. (2025) reveal the presence of calendar anomalies, including day-of-the-week, month-of-the-year, and holiday effects, thereby posing challenges to the theoretical notion of market efficiency.

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Meanwhile, research on the January effect phenomenon in emerging market exchanges has yet to reach a consensus. A similar finding was reported in Vietnam. Truong et al. (2025) explained that there was no statistically significant difference in returns around the Lunar New Year holiday in Vietnam. Ahmed (2025), in examining the Bangladesh capital market, found no significant returns in January, May, June, or August, despite the presence of positive abnormal returns – findings that support the efficient market hypothesis. Jeong et al. (2025), in their study of the Korean stock market, observed that investor behavior and sentiment were reflected in elevated returns during January.

In the Indonesian context, empirical studies yield mixed findings. Jannah and Hidayat (2024) and Latifa and Atikah (2024) report no abnormal returns associated with the January Effect (JE) in LQ45 firms. Similarly, Mubaroq and Mugiadi (2024) find no evidence of JE within the Jakarta Islamic Index. Meanwhile, research by Permatasari et al. (2025) on banking companies identifies the presence of a January Effect phenomenon. Conversely, Addinpujoartanto (2019) detects anomalies in large-cap firms, though the effect remains stronger among smaller firms. Kenneth and Sumani (2024) further confirm the existence of JE in 2021, albeit inconsistently across the 2018–2022 period in the banking sector.

Several previous studies on the January Effect in relation to corporate market capitalization categories have produced mixed findings. For instance, Patel (2024) observes that small-cap firms in India are more susceptible to anomalies than large-cap firms in Denmark, suggesting that small-cap stocks outperform their larger counterparts by as much as 30% in January. Anand and Kjellberg (2024) report that Sweden's property and real estate sector exhibits the January Effect across firms of all sizes, with the phenomenon being most pronounced within this sector. Other research highlights anomalies that are specific to certain markets and periods. Jirasakuldech and Knight (2005) indicate that efficiency is improving in real estate investment trusts (REITs), particularly among smaller firms. Sawitri and Astuty (2018) find that small firms display significant anomalies in February on the London Stock Exchange, and in January, April, and May on the Spanish Stock Exchange.

The existing body of literature indicates that the January Effect remains a contested phenomenon, with empirical findings varying across regions, sectors, and firm sizes. Therefore, this study aims to examine the January Effect in the Indonesian Stock Exchange by testing both the overall market and segmented groups of firms categorized by small, medium, and large market capitalization. Small-cap companies have market capitalizations of around 1 trillion IDR. Mid-cap companies range from 1 to 5 trillion IDR, while large-cap companies exceed 5 trillion IDR (Suharti et al., 2023).

Furthermore, based on this review, the research hypotheses are:

H1: There is a difference in abnormal returns between January and non-January months.

H1a: There is an abnormal stock return difference in small market capitalization between January and non-January months.

H1b: There is an abnormal stock return difference in medium market capitalization between January and non-January months.

H1c: There is an abnormal stock return difference in large market capitalization between January and non-January months.

2. DATA AND METHODOLOGY

The dataset utilized in this study comprises daily observations. The property and real estate sector include 93 companies listed on the Indonesia Stock Exchange. A purposive sampling method was employed, resulting in a final sample of 74 companies, as 19 firms had been delisted from the Exchange. The data encompass daily records from February to December 2023, designated as the "non-January" monthly variable, and daily records from January 2024, designated as the "January" variable. This temporal separation was implemented to avoid using data from the same calen-

dar year, thereby mitigating potential bias in the testing process. All daily data for each company in the sample were sourced from www.idx.co.id and www.yahoofinance.com.

The January effect was analyzed by classifying companies into three groups based on market capitalization: 35 companies with small market capitalization, 33 companies with medium market capitalization, and 6 companies with large market capitalization. The small market capitalization category refers to firms with a market capitalization of approximately 1 trillion IDR. The medium market capitalization category encompasses companies valued at between 1 and 5 trillion IDR. Finally, the large market capitalization category consists of corporate groups with market valuations exceeding 5 trillion IDR (Suharti et al., 2023).

After compiling the data, either in aggregate form or based on market capitalization groupings, it is then organized into a data structure aligned with the measurement of variables. The measurement of variables in this study can be seen in Table 1.

According to Table 1, the stock return is calculated as the difference between the current closing share price (Pt) and the closing share price on the previous day (Pt-1), divided by the previous day's closing share price (Pt-1). In contrast, the market return is computed based on the composite index (IDXC) as a proxy: the formula takes the composite index value on the current day (IDXCt), subtracts the composite index value of the preceding day (IDXCt-1), and divides by the preceding day's composite index value (IDXCt-1). The abnormal return is defined as the difference between the daily return of an individual stock and the corresponding daily market return. All returns and abnormal returns are expressed as unit ratios.

This study adopts a quantitative approach, necessitating a normality test of the data before further analysis in accordance with the results of that test. Normality testing was conducted using the Kolmogorov–Smirnov (KS) test. If the result is not significant at the 5% level, the data are considered to meet the assumption of normality, and the appropriate analytical method is the independent t-test. Conversely, if the result is significant at the 5% level, the data do not meet the normality assumption, and the Mann–Whitney test is applied. The Mann–Whitney test is also employed when the data represent substantially significant observations (MacFarland & Yates, 2016).

Subsequently, the acceptance or rejection of the January Effect (JE) is determined based on the significance level obtained from either the independent t-test or the Mann–Whitney test. If the Asymp. Sig. value is less than 10%, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted, indicating differences in abnormal returns and the presence of a statistically significant January Effect. Conversely, if the Asymp. Sig. value exceeds 10%, the January Effect is deemed absent.

3. RESULTS

The research findings begin with an explanation of the data description presented in Table 3. Based on Table 2, Panel 1 illustrates the descriptive statistics of all data used as samples. The total number of analyzed observations is 17,760, covering the period from February to December 2023 through January 2024, with January recording 1,628 observations. In contrast, the average number of observations for the months from February to December 2023 is 1,467. In other words, the average number of observations in January is slightly higher than the average for the non-January months overall.

Panel 2 presents descriptive statistics of abnormal return data for the group of firms with small mar-

Table 1. Variables measurement

Variables	Definition	Formulas	Scale
Stock return ($R_{i,t}$)	The return from calculating each stock's closing price daily during the sample period. (Addinpujoartanto, 2019)	$R_{i,t}=P_{i,t}-P_{i,t-1}:P_{i,t-1}$	Ratio
Return market ($R_{m,t}$)	Returns are based on developments in the IDX Composite (IDXC) (Jogiyanto, 2017)	$R_{m,t}=IDXC_t-IDXC_{t-1}:IDXC_{t-1}$	Ratio
Abnormal return ($AR_{i,t}$)	The return is obtained by subtracting the actual return from the market return during the sample period (Naibaho et al., 2022)	$AR_{i,t}=R_{i,t}-R_{m,t}$	Ratio

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Table 2. Descriptive data

Month on Years	Panel 1. Abnormal Return All					Panel 2. Abnormal Return SMC					Panel 3. Abnormal Return MMC					Panel D. Abnormal Return LMC				
	Obs.	Min	Max	Mean	SD	Obs.	Min	Max	Mean	SD	Obs.	Min	Max	Mean	SD	Obs.	Min	Max	Mean	SD
February'23	1480	–0.079	0.314	–0.001	0.033	700	–0.077	0.314	(0.002)	0.033	660	–0.077	0.253	–0.001	0.035	120	–0.079	0.066	–0.001	0.020
March'23	1554	–0.087	0.343	–0.001	0.037	735	–0.087	0.343	(0.001)	0.042	693	–0.087	0.250	0.000	0.033	126	–0.071	0.059	–0.001	0.017
April'23	1036	–0.081	0.249	0.000	0.031	490	–0.081	0.249	(0.001)	0.038	462	–0.07	0.147	0.001	0.023	84	–0.039	0.043	0.000	0.014
May'23	1554	–0.086	0.346	0.003	0.034	735	–0.072	0.346	0.004	0.039	693	–0.086	0.340	0.001	0.031	126	–0.054	0.081	0.004	0.017
June'23	1258	–0.153	0.346	0.001	0.040	595	–0.153	0.346	(0.002)	0.049	561	–0.149	0.245	0.003	0.032	102	–0.035	0.052	0.002	0.016
July'23	1480	–0.152	0.312	–0.001	0.032	700	–0.152	0.312	(0.002)	0.034	660	–0.151	0.192	–0.002	0.029	120	–0.105	0.198	0.006	0.038
August'23	1628	–0.146	0.339	0.001	0.031	770	–0.146	0.339	0.000	0.036	726	–0.119	0.254	0.001	0.027	132	–0.084	0.108	0.000	0.018
September'23	1480	–0.234	0.347	0.000	0.034	700	–0.202	0.347	0.001	0.035	660	–0.23	0.254	0.000	0.028	120	–0.234	0.247	–0.006	0.050
October'23	1628	–0.25	0.357	0.001	0.043	770	–0.25	0.357	0.001	0.052	726	–0.176	0.330	0.000	0.029	132	–0.24	0.258	0.001	0.051
November'23	1628	–0.248	0.354	–0.001	0.045	770	–0.248	0.354	(0.002)	0.048	726	–0.246	0.354	0.000	0.043	132	–0.144	0.264	0.000	0.040
December'23	1406	–0.244	0.352	–0.007	0.038	665	–0.244	0.352	(0.012)	0.047	627	–0.102	0.195	–0.002	0.024	114	–0.149	0.242	0.000	0.040
January'24	1628	–0.225	0.355	0.001	0.036	770	–0.225	0.355	0.00	0.046	726	–0.144	0.250	–0.0004	0.026	132	–0.035	0.096	0.000	0.017
Total	17760	–1.985	4.014	–0.005	0.434	8400	–1,937	4.014	–0.013	0.4981	7920	–1.637	3,064	0.0014	0.36013	1440	–1.269	1,714	0.0047	0.3374
Ave. non–January	1467	–0.160	0.333	–0.001	0.036	694	–0.156	0.333	–0.001	0.041	654	–0.136	0.256	0.0002	0.030	118.9	–0.112	0.147	0.000	0.029

Note: SMC: Small market capitalization; MMC: Medium market capitalization, and LMC: Large market capitalization.

ket capitalization, comprising a total of 33 companies. The total number of observations amounts to 8,400, spanning February to December 2023 through January 2024, with 770 observations recorded in January 2024. Meanwhile, the average number of observations from February to December 2023 is 694. In other words, the average number of observations in January is slightly higher than the average for the non-January months within the small-capitalization firm group.

Panel 3 presents data on companies with medium market capitalization. The dataset comprises 7,920 observations collected from February to December 2023 and January 2024. In January, there were 726 observations, whereas the average number of observations for the months from February to December 2023 was 654. In other words, the mean number of observations in January is slightly higher than the average for non-January months within the medium market capitalization group.

Panel 4 describes data for companies with large market capitalization. The dataset consists of 1,440 observations gathered between February and December 2023 and January 2024, with 132 observations recorded in January. For months excluding January, the average number of observations (February–December 2023) was 119. Thus, it can be noted that, for the large market capitalization group, the number of observations in January remains greater than the average for non-January months.

After the data description, the subsequent section presents the results of the data normality test. Specifically, Table 3 displays all data utilized in this test, encompassing the overall dataset as well as the subsets representing companies of small, medium, and large sizes.

The results of the data normality test conducted using the Kolmogorov-Smirnov method indicate that all panels (1, 2, 3, and 4) yielded values of 1% (Table 3). These findings demonstrate that the dataset employed in this study exhibits considerable variability. Consequently, in accordance with established methodological guidelines, the independent t-test is deemed unsuitable for comparing differences in test outcomes; instead, the Mann-Whitney test is recommended.

Table 4 presents the results of abnormal return testing for the overall dataset and for groups of companies categorized by small, medium, and large market capitalization. Panel 1 evaluates abnormal returns across the entire dataset, comprising 17,760 observations – 1,628 in January and 16,132 in non-January months. Panel 1 reports a mean rank of 9,129.63 for January and 8,855.36 for non-January, indicating that the average abnormal return in January exceeds that of non-January. The Mann-Whitney U statistic for Panel 1 is 12,725,868, while the Wilcoxon W statistic is 142,854,646. When converted to a Z-score, the value is –2.058, with a two-tailed significance level of 5% ($p = 0.040$). These findings support Hypothesis 1, which posits the existence of abnormal stock returns in January, indicating a statistically significant difference between January and non-January periods.

In Panel 2, Table 4 examines abnormal returns for companies with small market capitalization,

Table 3. Results of the normality test estimation

Group	Measurement		
	Statistics	DF	Sig.
Panel 1. Kolmogorov-Smirnov Test All			
Abnormal Return January	0.213	1628	0.000
Non-January Abnormal Return	0.198	16132	0.000
Panel 2. Kolmogorov-Smirnov Test_ Small MC			
Abnormal Return January	0.243	770	0.000
Non-January Abnormal Return	0.2	7630	0.000
Panel 3. Kolmogorov-Smirnov Test_ Medium MC			
Abnormal Return January	0.164	726	0.000
Non-January Abnormal Return	0.194	7194	0.000
Panel 4. Kolmogorov-Smirnov Test_ Big MC			
Abnormal Return January	0.089	132	0.0120
Non-January Abnormal Return	0.19	1308	0.0000

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encompassing 8,400 observations 770 in January and 7,630 in non-January months. The mean rank values are 4,372.98 for January and 4,183.09 for non-January, again indicating a marginally higher average in January. The Mann-Whitney U statistic for Panel 2 is 2,804,737, and the Wilcoxon W statistic is 31,917,002. The corresponding z-score is –2.071, with a significance level of 5% (p = 0.038). Accordingly, it can be inferred that a statistically significant difference in abnormal stock returns exists between January and non-January months for companies with small market capitalization, thus supporting Hypothesis 1a, which posits the presence of an abnormal stock return difference in small market capitalization between January and non-January months.

In Panel 3, the analysis focuses on abnormal returns for firms with medium market capitalization, encompassing a total of 7,920 observations – 726 occurring in January and 7,194 in non-January months. Panel 1 reports a mean rank of 4,022.43 for January and 3,954 for non-January, indicating that average January returns are marginally higher. In Panel 3 of Table 4, the Mann-Whitney U statistic is 2,566,462.50, and the Wilcoxon W statistic is 28,446,877.50, corresponding to a Z-score of –0.766 and a p-value of 0.444, which exceeds the 10% significance threshold. Consequently, there is no statistically significant difference in abnormal returns between January and non-January for medium-cap companies, thereby rejecting Hypothesis 1b, which posits the existence of an abnormal stock return difference in medium market capitalization between January and non-January months.

Panel 4 evaluates abnormal returns for firms with large market capitalization, with a total of 1,440 observations – 132 in January and 1,308 in non-January months. Panel 1 records a mean rank of 733.69 for January and 719.17 for non-January, suggesting a slight elevation in January averages. In Panel 4 of Table 5, the Mann-Whitney U statistic is 84,587, and the Wilcoxon W statistic is 940,673, yielding a Z-score of –0.382 and a p-value of 0.702, also above the 10% significance threshold. Therefore, the data indicate no statistically significant difference in abnormal returns between January and non-January for large-cap firms. Consequently, Hypothesis 1c, asserting a disparity in abnormal stock returns for companies with large market capitalizations between January and non-January, must be rejected.

4. DISCUSSION

The study identifies and supports the first hypothesis (H1), which posits a positive difference in abnormal returns between January and non-January periods. This finding aligns with several recent

Table 4. Mann-Whitney test result

Indicators	Month	Obs.	Mean Rank	Some of the Ranks	Mann–Whitney U	Wilcoxon W	Z	Asymp. Sig. (2–tailed)	Decision
Panel 1. Ranks Mann-Whitney U Test: All									
Abnormal Return	January	1628.00	9,129.63	14863034.00	12725868.00	142854646.00	–2.058	0.040**	Accepted
	Non–January	16132.00	8855.36	142854646.00					
	Total	17760.00	–	–					
Panel 2. Ranks Mann-Whitney U Test: Small MC									
Abnormal Return	January	770.00	4372.98	3367198	2804737.00	31917002.00	–2,071	0.038**	Accepted
	Non–January	7630.00	4183.09	31917002					
	Total	8400.00	–	–					
Panel 3. Ranks Mann-Whitney U Test: Medium MC									
Abnormal Return	January	726.00	4022.43	2920282.5	266462.50	28446877.50	–0.766	0.444	Rejected
	Non–January	7194.00	3954.25	28446877.5					
	Total	7920.00	–	–					
Panel 4. Ranks Mann-Whitney U Test: Big MC									
Abnormal Return	January	132.00	733.69	96847	84587.00	940673.00	–0.382	0.702	Rejected
	Non–January	1308.00	719.17	940673					
	Total	1440.00	–	–					

Note: ** Significance 5%.

studies, such as those conducted by Aggarwal and Jha (2023), focusing on capital markets in the Asian region; Caporale and Plastun (2023), examining companies included in the Dow Jones Index, S&P500 Index, and Nasdaq Index; research within the banking sector in the Indian capital market; investigations into developing countries' capital markets in Asia, particularly China, Taiwan, Korea, Thailand, and Pakistan; and Stefanescu and Dumitriu (2023), who analyzed the London capital market. Similarly, Naz et al. (2023) also reported evidence of the January Effect across their research contexts.

The observed positive and significant difference in abnormal returns indicates that the January Effect is present, yielding positive returns at the beginning of the year, particularly for property and real estate companies listed on the Indonesia Stock Exchange. Furthermore, these findings suggest that market efficiency in the Indonesian Stock Exchange remains somewhat fragile, posing a challenge to the concept of market efficiency (Caporale & Plastun, 2023; Enow, 2024; Jeong et al., 2025; Shehadeh & Zheng, 2023). Consequently, it can be asserted that investors on the Indonesian Stock Exchange may adopt investment strategies that capitalize on the January Effect phenomenon.

Subsequently, the analysis of H1a indicates the existence of abnormal stock return differences in small market capitalization between January and non-January periods. The results of this study corroborate findings reported in several previous investigations. For instance, Patel (2024) focuses on empirical testing within the Indian capital market; Sawitri and Astuty (2018) examine multiple indices on the Indonesia Stock Exchange (IDX) as well as the CAC40 Index in the French capital market, the DAX in Germany, the FTSE Index in the London capital market, the IBEX35 in the Spanish capital market, and the Swedish capital market; Kovacik (2023) concentrates on the Danish capital market. All these studies conclude the presence of the January Effect phenomenon.

Anand and Kjellberg (2024), in their research on the Danish Stock Exchange, found that firms with small market capitalization tend to deliver superior return performance. The occurrence of the January Effect in this market segment has been attributed to retail investor behavior, particularly the selling of shares for holiday expenses and tax reduction purposes. This finding suggests that investors may capitalize on the January Effect phenomenon as an investment strategy by acquiring shares of issuers with small market capitalization.

Different results were obtained from the tests of H1b and H1c, which yielded statistically insignificant abnormal returns. Consequently, the two hypotheses, asserting that there is a difference in abnormal stock returns between medium and large market capitalizations in January compared to non-January periods, were rejected. This can be explained by the fact that, among medium- and large-sized companies, the January Effect phenomenon was not observed, likely due to the firms' stable and resilient conditions, high liquidity, and informational efficiency. These characteristics tend to reduce the potential for generating abnormal returns.

Furthermore, shareholders of medium and large-cap companies are generally less sensitive to short-term gains arising from practices such as tax selling. These findings are consistent with the research conducted by Moller and Zilca (2008), who reported no evidence of the January Effect during stable market periods, from one January to the next, for both medium- and large-cap stocks. They also align with Gerry (2017), who examined various global markets and concluded that the January Effect is often statistically insignificant.

CONCLUSION

This study examines the existence of the January Effect on the Indonesian Stock Exchange. The analysis was first conducted in aggregate and subsequently segmented based on the market capitalization of stocks within the property and real estate sectors. The findings reveal a significant difference in abnormal returns in the overall testing and within the group of companies with small market capitalization. Conversely, no such effect was observed in the medium- and large-capitalization company

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groups. These results suggest that the January Effect is present on the Indonesia Stock Exchange primarily among companies with small market capitalization.

The implications of this study may serve as a source of knowledge and reflection for investors, encouraging prudence in leveraging market anomalies – particularly the January Effect – to maximize profits. This is because the January Effect does not occur uniformly across all companies, and there is no guarantee that market anomalies will consistently yield unexpected average returns (abnormal returns) in capital market investments.

This study is limited in scope to issuers within the property and real estate sectors. Future research should be expanded to include both conventional and non-conventional companies, with emphasis on several types of calendar anomalies. Additionally, employing more comprehensive datasets would enhance the robustness and reliability of the results.

AUTHOR CONTRIBUTIONS

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