
Market Anomalies: January Effect and Weekend Effect on Stock Return

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Received Date : 06.05.2024

Revised Date : 09.06.2024

Accepted Date : 10.06.2024

ABSTRACT

Every investor will always expect a return from their investment and can take advantage of seasonal or calendar anomalies to get the expected return. Seasonal or calendar anomalies are measured using the January Effect and Weekend Effect to determine the pattern of stock price movements. This study aims to examine the effect of the January Effect and Weekend Effect on stock returns. The population used is the LQ45 index which consists of 45 companies. The sample used was 17 companies selected through the purposive sampling technique. The data analysis method used is descriptive statistical analysis and multiple linear regression models. The results showed that stock returns in January showed a negative value, indicating that the January Effect did not affect stock returns. Stock returns show a positive value on Friday compared to other trading days which indicates the Weekend Effect has an effect on stock returns. Together, the January Effect and Weekend Effect influence LQ45 stock returns on the IDX.

Keywords : **January Effect; Weekend Effect; Return; Investment; Public Information**

ABSTRAK

Setiap investor akan selalu mengharapkan keuntungan dari investasinya dan dapat memanfaatkan anomali musiman atau kalender untuk mendapatkan keuntungan yang diharapkan. Anomali musiman atau kalender diukur dengan menggunakan January Effect dan Weekend Effect untuk mengetahui pola pergerakan harga saham. Penelitian ini bertujuan untuk menguji pengaruh January Effect dan Weekend Effect terhadap return saham. Populasi yang digunakan adalah indeks LQ45 yang terdiri dari 45 perusahaan. Sampel yang digunakan sebanyak 17 perusahaan yang dipilih melalui teknik purposive sampling. Metode analisis data yang digunakan adalah analisis statistik deskriptif dan model regresi linier berganda. Hasil penelitian menunjukkan bahwa return saham pada bulan Januari menunjukkan nilai negatif yang mengindikasikan bahwa January Effect tidak mempengaruhi return saham. Return saham menunjukkan nilai positif pada hari Jumat dibandingkan dengan hari perdagangan lainnya yang mengindikasikan Weekend Effect berpengaruh terhadap return saham. Secara bersama-sama, January Effect dan Weekend Effect berpengaruh terhadap return saham LQ45 di BEI.

Kata Kunci : **Efek Januari; Efek Akhir Pekan; Pengembalian; Investasi; Informasi Publik**

INTRODUCTION

Most people are expected to benefit to fulfill their needs. Investment is one option that has received significant attention from the general public as an attractive alternative. Every investor will definitely expect a return from the results of their investment. Return is the profit obtained from the investor's share ownership for the investment he made (Jefri et al., 2020). To get a return, investors use stocks as the main financial instrument. Shares are one of the most popular financial instruments for people or investors to invest in the capital market. Investing with stocks is an effective way for long-term investment (Sukartaatmadja & Lestari, 2023). Predictions about stock returns can be made through an understanding of stock-related information and relevant data. Through collecting relevant data, investors can estimate the level of risk and potential profit. Investors have the choice to buy, sell, or maintain share ownership. The importance of information obtained by investors in the context of an efficient capital market can be measured by the availability of complete, transparent, and fully accurate information. The state where information becomes a critical factor in capital market investment activities is when the market operates at full efficiency.

Stock prices are seen as unpredictable in the context of efficient market theory, which explains that daily stock returns usually show the same value every trading day. However, a growing body of research suggests that there are phenomena in the capital market that show deviations from the Efficient Market Hypothesis, especially in the form of weak efficient markets. This market anomaly is a condition, pattern, or event that is irregular and deviates from the concept of an efficient market hypothesis (Rahmawati & Setiyawan, 2022). Market anomalies consist of four types, namely corporate anomalies, seasonal anomalies, event anomalies, and accounting anomalies. This research focuses on seasonal anomalies. Seasonal or calendar anomalies refer to situations where investors can achieve unusual returns using historical price data. Investors have the ability to earn abnormal returns by anticipating future price patterns through analyzing historical data. The phenomenon known as the "January Effect" is one of the market anomalies that occurs in the capital market where returns in January are higher than other trading months. One of the causes of the January Effect is tax-loss selling (Berges, 1984). Meanwhile, Weekend Effect is a situation where returns on Monday are often much lower than returns on Friday (French, 1980).

A number of studies have been conducted to analyze the impact of the January Effect and Weekend Effect phenomena on stock returns. The results of the study (Wulan & Amalia, 2023) show that partially the January Effect and Monday Effect affect stock returns while the Weekend Effect does not. While simultaneously the January Effect, Monday Effect and Weekend Effect affect stock returns. This is greatly influenced by internal and external factors so that it experiences very significant fluctuations. (Meijika & Margaretha, 2023) revealed that the telecommunications sub-sector listed on the Indonesia Stock Exchange experienced the January Effect. This is because there is no difference in abnormal returns before and after the 2022 celebration. (Pauzi & Siswantini, 2022) revealed that the Weekend Effect occurs in stock trading on the IDX30. Psychological factors can cause the Weekend Effect, such as investors who prefer to buy on weekends and tend to be optimistic on Fridays because they are excited to face the weekend.

However, some researchers found otherwise. The results of research (Pangestu & Ilmia, 2023) state that at PT Telkom Indonesia stock returns are not affected by Weekend and January Effect. This is due to the heavy outflow by foreigners in January and also the

cautious nature of local investors in responding to economic conditions. (Yolanda et al., 2023) stated that during the research period, market anomalies that occurred in the Indonesian Capital Market were Day of The Week Effect, Monday Effect, and Month of The Year Effect. Meanwhile, market anomalies that are not proven to occur in the Indonesian Capital Market are Weekend Effect and January Effect. Thus, it is suspected that in the research period there is no Weekend Effect caused by investors tending to be aggressive where they buy when prices go down and sell when prices go up.

The absence of the January effect is caused by national and international events that interfere with investor decisions. In other words, the January effect is obscured or lost due to events that suppress stock prices. (Afifatiningsih & Poerwati, 2023) in their research revealed that the January Effect does not have a significant impact on stock returns. The reason why the January Effect does not affect stock returns in LQ-45 companies listed on the Indonesia Stock Exchange (IDX) can be due to cultural differences between Indonesia and other developed countries. The January Effect phenomenon is more common in the capital markets of developed countries and has little impact on emerging markets such as Indonesia. (Yunita & Rahyuda, 2019) revealed that there was no January Effect phenomenon in the research year. The absence of the January Effect phenomenon indicates that the stocks in the IDX30 index group have a high market capitalization, which means that the stocks are performing well and providing promising returns to investors. In addition, the tax year in Indonesia does not occur at the end of December, but the tax year in Indonesia occurs in March. This is related to the practice of window dressing where fund managers make improvements to annual financial reports to investors to make them look better.

The inconsistency in the results of research that has been conducted regarding the January Effect and Weekend Effect is due to differences in the observation period, differences in the subjects studied, and differences in events that occur during the observation period. This is an opportunity for researchers to re-evaluate the January Effect and Weekend Effect on stock returns. Testing was carried out from 2020-2023 because that year was the year of the Covid-19 pandemic so that it became of interest to researchers to test the January Effect and Weekend Effect whether stock prices decreased or not so that it affected the returns obtained. The research method uses quantitative research and the data analysis used is descriptive statistical analysis and multiple linear regression models. The study uses the LQ45 index because it consists of 45 companies that have large market liquidity. In addition to the assessment of liquidity, the selection of these stocks considers market capitalization, so that LQ45 stocks are expected to represent the best performing companies in Indonesia (Azalia & Ashlah, 2022). The study aims to examine the effect of the January Effect and Weekend Effect on stock returns. where investors can take advantage of the January Effect and Weekend Effect phenomena as indicators or strategic guidelines in investing in the shares of companies that have the potential for profit.

LITERATURE REVIEW

The concept of market efficiency has been the subject of interesting empirical research since Fama outlined an analytical theory known as the Efficiency Market Hypothesis (EMH). Efficient markets are classified into three parts; weak form, semi-strong form, and strong form (Fama, 1970). An efficient market is one in which all traded security prices reflect all available information. This information can be in the form of company earnings reports, dividend distributions, stock splits, reports from capital market analysts. The concept of an efficient capital market implies a process of adjusting

security prices to a new equilibrium price in response to perfect new information. The market is said to be efficient if the time to adjust the new equilibrium price is done very quickly. How fast the time to be able to absorb all the information depends on the type of information, this type of information for example is the announcement of earnings by the issuing company (Nasution, 2017). Investors can understand and use information to decide whether to sell or buy which will have an impact on stock prices. Purchases must be made at the right time that can have an impact on the price of the security so that investors confidently predict the price. However, it cannot be denied that investors are often irrational in making decisions.

The study of how psychological phenomena affect financial behavior is called behavior finance. It clearly states that behavioral finance is an approach that explains how humans make investments or deal with finance influenced by psychological factors. The discussion of Behavioral Finance theory is a bit more careful because it has included an analysis of psychological factors in discussing decisions in the financial field. Kahneman as one of the promoters of this theory received the Nobel Prize in 2002 which provides an alternative analysis in economics and finance (Hers; Beyond, 2000).

RESEARCH METHOD

The population in this study is the LQ45 stock index which consists of 45 companies listed on the Indonesia Stock Exchange for the period 2020-2023. The variables in this study are January Effect, Weekend Effect, and Stock Return. See Formula 1 for the formula to measure the January effect.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \quad (1)$$

Based on Formula 1, where R_{it} is the January i stock return in period t , while P_{it} is the stock price after January t , and P_{it-1} = stock price before January $t-1$. See Formula 2 for the formula to measure the Weekend effect.

$$R_{it \text{ Jum'at}} = \frac{P_{it \text{ Jum'at}} - P_{it \text{ Senin}}}{P_{it \text{ Senin}}} \quad (2)$$

Based on Formula 2, where Friday R_{it} is Friday's stock return in period t and Monday P_{it} is Monday's stock price in period t . See Formula 3 for the formula to measure the Stock Return.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \quad (3)$$

Based on Formula 3, where R_{it} is the Return of stock i in period t , while P_{it} is the Price of stock i in period t , and P_{it-1} is the Price of stock i in period $t-1$.

Data collection is done by obtaining the daily closing price of LQ45 index stocks through the official website of the Indonesia Stock Exchange and Yahoo Finance database.

The sample selection process is carried out using purposive sampling method. Where the data obtained has met the predetermined criteria: (1) Companies that remain consistent do not leave and are listed in the LQ45 index on the Indonesia Stock Exchange for the 2020-2023 period. (2) Companies that do not take corporate actions listed in the LQ45 index on the Indonesia Stock Exchange for the period 2020-2023.

To test the hypothesis using the T test and F test in multiple linear regression analysis. In this study, the hypothesis is formulated, namely: (1) H1: January Effect has an effect on LQ45 stock returns on the Indonesia Stock Exchange. (2) H2: Weekend Effect affects LQ45 stock returns on the Indonesia Stock Exchange. (3) H3: together the January Effect and Weekend Effect have an effect on LQ45 stock returns on the Indonesia Stock Exchange. The multiple linear regression equation in this research is contained in Formula 4.

$$\gamma = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon \tag{4}$$

Based on Formula 4, where γ is stock return, α is Constant, X_1 is January Effect, X_2 is Weekend Effect, β_1 , and β_2 are regression coefficients, and ϵ is Error.

RESULTS AND DISCUSSION

This research uses quantitative methods and descriptive statistical analysis with the help of the SPSS application. Based on the predetermined criteria, 17 research samples were selected during the 2020-2023 period. (See Table 1)

Table 1. Company Sample List 2020-2023

No.	Kode	Nama Emiten
1	ADRO	Adaro Energy Indonesia Tbk
2	ANTM	Aneka Tambang Tbk
3	ASII	Astra International Tbk
4	BBNI	PT Bank Negara Indonesia (Persero) Tbk
5	CPIN	Charoen Pokphand Indonesia Tbk
6	ICBP	Indofood CBP Sukses Makmur Tbk
7	INCO	Vale Indonesia Tbk
8	INDF	Indofood Sukses Makmur Tbk
9	INKP	Indah Kiat Pulp & Paper Tbk
10	INTP	Indocement Tunggal Prakarsa Tbk
11	ITMG	Indo Tambangraya Megah Tbk
12	JPFA	JAPFA Comfeed Indonesia Tbk
13	KLBF	Kalbe Farma Tbk
14	PGAS	PT Perusahaan Gas Negara Tbk
15	PTBA	Bukit Asam Tbk
16	TLKM	PT Telkom Indonesia (Persero) Tbk
17	UNTR	United Tractors Tbk

Source: *IDX.co.id*

The following in Table 2 is the result of the descriptive statistical test of the research sample.

Table 2. Descriptive Statistics

	Return Saham	January Effect	Weekend Effect
Minimum	-0,00327211	-0,01202387	-0,00606187
Maximum	0,00432250	0,01180042	0,01051210
Mean	0,0003799046	-0,0020163226	0,0016071583
Std. Deviation	0,00120124003	0,00477783717	0,00328857365

Source: *data processing, 2023*

Table 2 shows that there are differences between the minimum, maximum, and mean values of stock returns, the January Effect, and the Weekend Effect. The minimum value of the dependent variable Return is -0.00327211, the maximum value is 0.00432250,

the mean is 0.0003799046 and the standard deviation is 0.00120124003 or the minimum, maximum, mean, and standard deviation of stock returns is 0%. The independent variable January Effect shows -0.01202387 or -1%, a maximum value of 0.01180042 or 1%, a mean of -0.0020163226 or 0%, and a standard deviation of 0.00477783717 or 0%. The independent variable Weekend Effect shows a minimum value of -0.00606187 or -1%, a maximum value of 0.01051210 or 1%, a mean of 0.0016071583 or 0% and a standard deviation of 0.00328857365 or 0%. These results show that the mean value of Weekend Effect has a higher value. This shows that the LQ45 stock index listed on the Indonesia Stock Exchange for the period 2020-2023 has a Weekend Effect more often than other variables.

The data analysis model used in this study is multiple linear regression analysis. The details and results of the multiple linear regression analysis are shown in the following Table 3.

Table 3. Multiple Linear Regression

Model	Unstandardized Coefficient		Coefficient ^a		Sig.	Colinearity Statistics	
	B	Std. Error	Standardized Coefficient	t		Tolerance	VIF
(Constant)	0,000	0,000		1,156	0,252		
January Effect	0,044	0,027	0,174	1,615	0,111	0,983	1,017
Weekend Effect	0,184	0,039	0,504	4,682	0,000	0,983	1,017

a. Dependent Variable: Stock Return (Y)

Source: data processing, 2023

The multiple linear equations generated based on Table 2 of the multiple linear regression analysis test results are in Formula 5.

$$\text{Stock Return} = 0,000 + 0,044 \text{ January Effect} + 0,184 \text{ Weekend Effect} + \epsilon \quad (5)$$

Based on Formula 5, the constant (α) has a positive value of 0.000. The positive sign indicates a unidirectional influence between the independent variable and the dependent variable. This shows that the January Effect (X1) and Weekend Effect (X2) variables do not change, where the value of the Stock Return variable is 0.000. While the Regression coefficient of the January Effect variable (X1) has a positive value of 0.044. This shows that if the January Effect experiences a 1% increase, the Stock Return will increase by 0.044 with the assumption that the other independent variables are considered constant. The regression coefficient of the Weekend Effect variable (X2) has a positive value of 0.184. This indicates that if the Weekend Effect experiences a 1% increase, the Stock Return will increase by 0.184 assuming other independent variables are considered constant.

Table 4. Determination Coefficient

Model	Model Summary ^b			
	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,511 ^a	0,261	0,238	0,00104849756

a. Predictors: (Constant), Weekend Effect, January Effect

b. Dependent Variable: Stock Return (Y)

Source: data processing, 2023

Based on Table 4, the Adjusted R square column indicates that the January Effect and Weekend Effect affect stock returns by 23.8%, with several variables not included in this analysis explaining the remaining 76.2%.

Table 5. Hypothesis T-test

Model	Coefficient ^a		t	Sig.
	Unstandardized Coefficient B	Standardized Coefficient Beta		
(Constant)	0,000		1,156	0,252
January Effect	0,044	0,027	1,615	0,111
Weekend Effect	0,184	0,039	4,682	0,000

a. Dependent Variable: Stock Return (Y)

Source: data processing, 2023

Table 6. Hypothesis F-test

Model	Sum of Squares	ANOVA ^a		F	Sig
		Df	Mean Square		
1 Regression	0,000	2	0,000	11,471	0,000 ^b
Residual	0,000	65	0,000		
Total	0,000	67			

a. Dependent Variable: Stock Return

b. Predictors: (Constant), Weekend Effect, January Effect

Source: data processing, 2023

Based on the T-test results in Table 5, it show that the January Effect significance value is $0.111 > 0.05$. Thus, the conclusion is that from 2020 to 2023 the January Effect does not affect the stock returns of a number of companies included in the LQ45 index. This shows that investor returns in January are consistent with other research months. When compared to previous months, stock returns in January are lower. This clearly does not fulfill the prerequisite of the January Effect, which is that the average stock return in January must be the highest when compared to other months. Investors tend to withdraw from the stock market, causing the average stock return to correct negatively. This is because January is the first month after the year-end holidays where companies are just planning for the next year. Investors can choose from a variety of investment options so they don't just wait for the January Effect or other seasonal anomalies to get the expected return. Meanwhile, the significance value of Weekend Effect is $0.000 < 0.05$. So the conclusion is that the Weekend Effect has a significant effect on the LQ45 index stock returns in the period 2020 to 2023. This shows that compared to other trading days, stock returns on Friday are greater or positive. Weekend Effect, where investors have a tendency to make purchases on weekends and show optimism on Fridays due to their excitement about the weekend caused by psychological influences. The tendency to behave illogically affects Friday's stock price movements in a favorable way.

While based on the F-test in Table 6, results show that the significance value is 0.000. Thus, $0.000 < 0.05$ indicates that together the January Effect and Weekend Effect have a significant impact on stock returns. The January Effect is caused by companies issuing shares under unfavorable conditions and improving their annual financial results. The

Weekend Effect occurs due to psychological factors of investors who are less rational because they will soon enter the holidays.

CONCLUSION

The conclusion that can be obtained from this study based on the test results is that there is no significant effect of the January Effect on LQ45 stock returns in the 2020-2023 period. This shows that investor returns in January are consistent with other research months. When compared to the previous months, stock returns in January were lower. Thus, investors do not need to wait for the January Effect to take advantage of various investment opportunities. Meanwhile, the Weekend Effect significantly affects the LQ45 stock returns. This shows that compared to other trading days, stock returns on Friday are greater or positive. Investors showed optimism on Friday due to their excitement about the weekend caused by psychological influences. The January Effect and Weekend Effect together have a significant impact on stock returns. The January Effect is caused by companies selling stocks in poor condition to improve their financial statements at the end of the year. The Weekend Effect occurs due to the psychological factors of investors who will soon enter the holidays.

RECOMMENDATION

The recommendations that can be given in this study are: (1) Because the research time used is only 4 years, from 2020 to 2023, it is hoped that further researchers can extend the research period to get more precise results. (2) Because LQ45 is the research object used in this study, it is hoped that future researchers can replace it with other research objects such as JII, IDX30 and so on. (3) Since this study only uses market anomalies to measure stock movements, it is expected that future researchers to replace variables such as interest rates, where lower interest rates usually encourage investment into stocks because borrowing costs are cheaper and bonds become less attractive. In addition, it can also use trading volume, where high trading volume can indicate great interest from investors.

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