

Market Anomalies : January Effect in Indonesia Stock Exchange, Kuala Lumpur Stock Exchange And National Stock Exchange Of India Period 2016-2020

Siti Komariah
Aris Nursihab
Nur Endah Rimantari
Nurul Aini Juniar
Ulfa Herlina
Fery Septiyadi Maulana

DOI: <https://doi.org/10.37178/ca-c.23.1.299>

Siti Komariah, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia
Email: siti.komariah@widyatama.ac.id

Aris Nursihab, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia

Nur Endah Rimantari, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia

Nurul Aini Juniar, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia

Ulfa Herlina, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia

Fery Septiyadi Maulana, Faculty of Economic and Business, Widyatama University , Bandung, Indonesia

ABSTRACT

There is a lot of information which can affect stock price movements in the capital market. This information is often overreacted by the investors in making investment decisions. It often happens at certain moments, including at the beginning of the year (January). The purpose of this research is to determine the January effect phenomenon on the Indonesia, Malaysia and India Stock Exchanges for the 2016-2020 period. In addition, to find out whether there are differences in stock returns between January and other months, and to find out whether there are differences in stock returns on the Indonesian, Malaysian and Indian Stock Exchanges during the research period. The data used is weekly major stock price index data from January 2016 to December 2020 with a total of 259 time series data. The research method used is a comparative method. The analytical techniques used are normality test, homogeneity test, ANOVA test, Post Hoc test, and Independent Sample T-test. The results showed that there was no January

effect on the Indonesia Stock Exchange, Malaysia and India because there is no significant difference in the average value of stock returns between January and other months. The results of the stock return test show that there are differences in stock returns between the Stock Exchanges in Indonesia and India, and there are no differences in stock returns between the Stock exchanges in Indonesia and Malaysia.

Keywords: JKSE, KLSE, BSESN, Stock Return, Market Anomalies, January Effect

INTRODUCTION

Investment decisions generally involve a variety of information, whether public or published or private. News or information is an important component or usually triggers investors to take investment strategies that are considered feasible and profitable [1][2] [3] as the founder of the Efficient Market Theory states that if a market is categorized as efficient, the stock price value always reflects or reflects all relevant information. As a consequence, stock price movements are random and independent so that no one can predict the value of the stock (random walk). The efficient market hypothesis, which was first introduced by Fama, is one of the most important breakthroughs in the development of the theory of corporate finance. The same thing was also expressed by [1] who firmly said that one of the important findings in the history of financial theory development is the efficient market theory and of the many financial theories, the efficient market theory is the one that gets the most attention and is empirically tested in almost all fields. capital markets in the world.

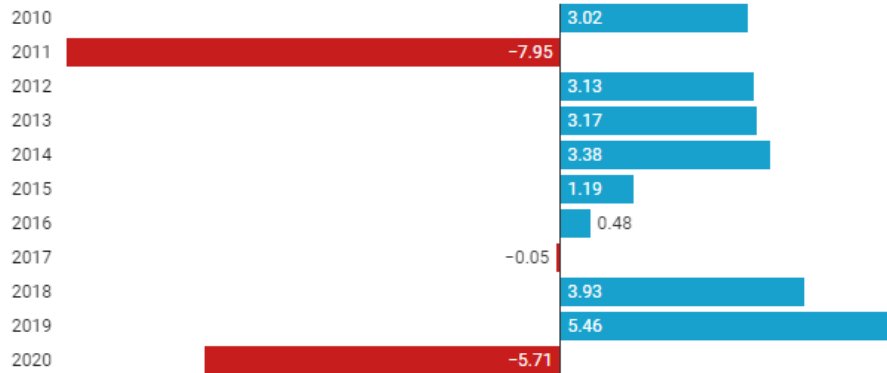
However, the concept of capital market efficiency is still often an interesting debate and continues to be explored in the financial sector. This is because there are several research results which on the one hand provide empirical evidence supporting the truth of the efficient market concept, but on the other hand there are also studies that find deviations from the efficient market concept. These deviations indicate that investors can gain profits in buying and selling shares by using considerations based on past data with the aim of predicting stock prices. These deviations are hereinafter referred to as market anomalies. According to [4, 5] market anomalies are techniques and strategies that seem to contradict the concept of efficient markets.

According to [6] there are at least four kinds of market anomalies that are known in financial theory, including: 1) Event anomalies, 2) Seasonal anomalies, 3) Firm anomalies, 4) Accounting anomalies. The January effect is one of the most common types of anomalies and is often discussed by researchers. The January Effect is characterized by a higher return pattern in January compared to other months [7]. The concept of the January Effect was first observed by investment banker from Washington, United States, [8, 9] who examined seasonal stock returns in January, then continued by research by [10] which stated that stock returns in January were significantly greater compared to other months for companies with small market capitalization. The existence of the January Effect is indicated by the abnormal return obtained by investors.

In Indonesia, January is usually a profitable month for stock investors on the Indonesia Stock Exchange (IDX). However, this is not happened in 2020. January of 2020 was the worst January for the Indonesian stock market in nine years. Throughout January 2020, the JCI fell by 5.71%. If you look at history, actually January can be said to be a friendly month for Indonesian stock market players. In the last 10 years (2010-2019), the JCI only posted negative monthly returns twice in January, namely in 2011 and 2017. The JCI's best appreciation in January occurred in 2019 or last year. As of the end of January 2019, the JCI shot up to 5.46% when compared to the position as of the end of December 2018. On average, the JCI posted a yield of 1.58% on a monthly basis

in January. (<https://www.cnbcindonesia.com> : 2020). The following is the return of the Composite Stock Price Index (IHSG) every January in 2010-2020 :

Picture 1 JCI in January (% MoM)



Source : Refinitiv, CNBC Indonesia, 2020

The spread of the Corona virus infection is a factor that suppresses the performance of the JCI. Centered in China, cases of Corona virus infection have also been reported in other countries including our neighboring Malaysia and India. The Covid-19 pandemic has made the stock indexes of ASEAN countries experience a sharp correction. However, over time, only Indonesia's Composite Stock Price Index (JCI) has been slow to recover compared to Malaysia and India. The following is the performance data of the Stock Exchange Index in ASEAN countries in 2020 during the Covid-19 Pandemic:

Picture 2 ASEAN Member Countries Stock Exchange Index Performance Data 2020

Negara	Indeks	Tertinggi	Saat Ini	Pergerakan di 2020	Kasus Covid-19
Malaysia	KLSE	1607.32	1607.32	1.00%	8,704
Myanmar	YSX	485.18	445.87	-2.39%	206
Kamboja	CSX	802.2	686.88	-6.13%	156
Filipina	PSE	177.9	162	-7.43%	54,222
Vietnam	VNI	991.46	867.82	-10.40%	370
Thailand	SETI	1600.48	1362.54	-13.80%	3,217
Laos	LSE	710.92	594.96	-16.31%	19
Singapore	STI	3280	2631	-18.26%	45,424
Indonesia	IHSG	6291.66	5054.11	-19.46%	74,018

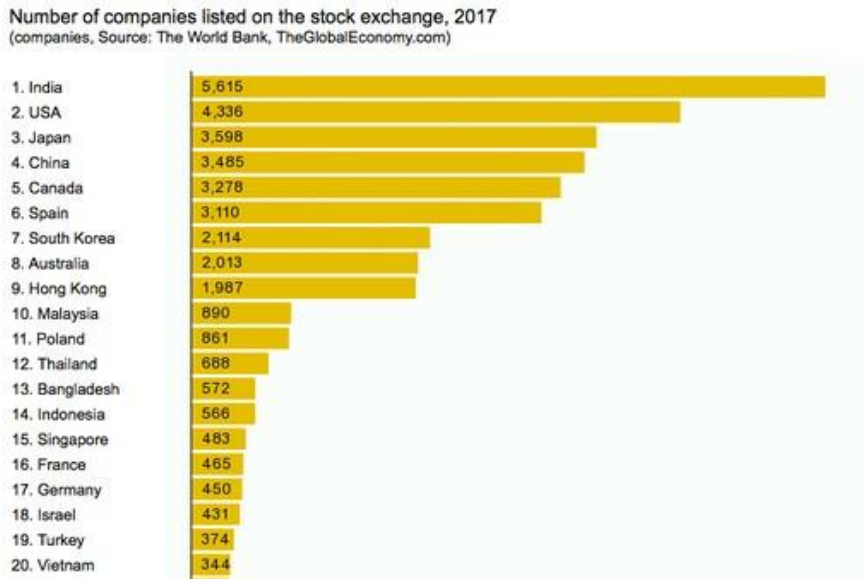
Source: lifepal.co.id

It can be said that the Malaysian stock exchange is the only stock exchange in Southeast Asia that has recovered from a sharp correction during the Covid-19 pandemic. From January 2020 to July 13, 2020, the performance of the Malaysian stock exchange was positive 1%. If we look at several other countries outside ASEAN, one of which is the country that has the largest number of publicly traded companies, namely India, the Indian Stock Exchange has started to recover after the COVID-19 pandemic. Bursa yang dulunya bernama Bombay Stock Exchange (BSE) India ini justru mencatatkan *net buy* atau beli bersih sebesar US\$ 6 miliar. Bloomberg reports, the number of net buys is the largest since March 2019 when stock markets in other countries, except China, experienced large withdrawals of foreign investment in their

stock portfolios in the past month including Indonesia. This reflects the recovery of the Indian stock market, catching up with the previous slump in the benchmark stock index in 2020. This year, the S&P BSE Sensex Index (the benchmark index on the Mumbai Stock Exchange) is already underperforming the MSCI Asia Pacific index by 6.5%. Throughout 2020, the Indian market recorded a net foreign buy of US\$23.4 billion, or the most since 2012 (www.bisnis.com/2021).

This study compares the January Effect phenomenon that occurs on the Stock Exchange in three countries, namely Indonesia, Malaysia and India. The reason the researcher chose the Malaysian and Indian stock exchanges as a comparison is because Malaysia is the stock exchange that has the best performance in ASEAN during the Covid pandemic, while India is the stock exchange with the largest number of publicly traded companies. In addition, the similar pattern of transactions between the Indonesian, Malaysian and Indian exchanges is one reason to compare the phenomenon of market anomalies that occur in these three exchanges.

Picture 3 Number of Companies Listed on Exchanges of Several Countries in 2017



Source: <https://www.cnbcindonesia.com>

Research on the phenomenon of the January Effect has been carried out by researchers. This study is interesting to see whether with different cultural conditions from foreign countries as stated by [6] that the January Effect is one of the dominant Calendar Anomaly occurring in developed country markets, but the effect is not significant in developing and underdeveloped markets, whether companies listed on the Indonesia Stock Exchange can experience the January effect phenomenon. In the research of [7, 11, 12], it is stated that the January Effect is the tendency of a high return in January, where in January it is estimated that investors will have the opportunity to get a higher rate of return than in other months. The event of increasing returns on the stock exchange has become a recurring event in almost stock exchanges throughout the world, including in Indonesia. And considering that this phenomenon can cause the capital market in Indonesia to be inefficient [13] tested the seasonal behavior of the Malaysian capital market stock returns (KLSE) which

is an emerging market in Southeast Asia in the period 1986-1996 resulting in high stock returns obtained in January and February. Meanwhile, [14] examined the effect of monthly seasonality (Month Effect) on the Nigerian Stock Exchange (NSE). The results showed that there was no effect of the January Effect but the researchers found the effect of July and August on the NSE. Similarly, research by [11, 12] found the same thing on the Indian Stock Exchange. However, in the study of [6] in his study, he considered seasonal or monthly stock returns in several developed and developing markets. The main finding of this research is that the returns for January, February, August and December are higher than the returns for other months. The results of this study confirm the January Effect on stock returns in India. This study confirms that the Indian stock market may be inefficient. India's state stock index is also one of the most dominant in influencing domestic indices. Nine indices were recorded that were influenced by the Indian state stock index represented by BSE Sensex. The development value of BSE Sensex is the largest in the Asian region, making the Indian stock market a leading indicator in the capital market in the region. Based on that, it is reasonable if the Indian stock index is integrated with various sectoral indices on the Indonesian stock exchange.

Based on the relationship and conditions possessed by the three countries, it raises the question whether with the existing conditions and relationships these three countries have the January Effect phenomenon. Therefore, it is necessary to conduct a re-study with the latest data to analyze the effect of the January Effect phenomenon on the stock exchanges in Indonesia, Malaysia and India to get the truth about changes in stock returns in Indonesia caused by market anomalies, especially during the pandemic, so this research is entitled " Market Anomalies : January Effect In IDX, KLSE and NSE of India".

LITERATURE REVIEW

Efficient Capital Market

The concept of an efficient market was first proposed by Eugene F. Fama in 1970. In an efficient capital market, a positive relationship between risk and expected return will occur. An efficient capital market is a capital market in which the prices of securities reflect all relevant information. [2] classifies the form of the efficient market into three efficient market hypotheses (EMH), namely:

Weak form

The market is said to be semi-strong efficient if the price of securities fully reflects all publicly available information, including information contained in the company's financial statements. This past information is information that has already happened. This weak form of market efficiency is related to the random walk theory which states that past data is not related to present values. If the market is efficient in this form, then no investor can get abnormal returns because they have private information. If this is true, then any form of Technical Analysis is of no use at all [15-19].

Semi Strong Form

The market is said to be semi-strong efficient if the price of securities fully reflects all publicly available information, including information contained in the company's financial statements.

Strong form

The market is said to be efficient in the strong form if the security price fully reflects all available information, including private information. If the market is efficient in this form, then no investor can get abnormal returns because they have private information.

Market Anomaly

The popularity of the efficient market hypothesis cannot be separated from debate. [5] argues that the market anomaly is one of the techniques and strategies that seem to contradict the efficient market hypothesis. According to [4] in the market anomaly, there are some things that should not exist if an efficient market exists. In addition, although most market anomalies are found in the semi-strong form of efficient market, market anomalies can also appear in all forms of efficient markets, either the weak form of efficient market, the semi-strong form of efficient market, or the strong form of efficient market. In addition, with market anomalies, investors also have the opportunity to obtain abnormal returns by relying on a certain event, which is clearly contrary to the efficient market hypothesis. [1] describes that there are at least four kinds of market anomalies that are known in financial theory, including:

- a. Event anomalies
- b. Seasonal anomalies
- c. Firm anomalies
- d. Accounting anomalies

January Effect

Of the four anomalies above, seasonal anomaly is a common anomaly in the capital market and one of the most popular forms of seasonal anomaly is the January Effect. According to [20], the January Effect is a phenomenon that refers to the observation that returns in January appear higher than returns in other months. This means that investors who buy shares in early January and then sell them back at the end of January have the opportunity to generate higher returns than doing the same thing in other months. In short, investors can take advantage of the January Effect phenomenon in the capital market to obtain abnormal returns.

According to [8] the occurrence of the January Effect phenomenon in the capital market can be caused by three factors, namely: 1) Tax-loss selling, 2) Window dressing, 3) Small stock's beta. Regarding tax-loss selling, [11, 21] explained that at the end of the year, many investment managers suggested that investors sell their shares, especially those who experienced losses, and buy them back at the beginning of the year. Because investors sell stocks that suffer losses, this creates a tax-loss for investors. Therefore, the activity of selling shares at the end of December and buying them back in early January is what causes stock prices to fall at the end of December and rise at the beginning of the year, thus making returns in January tend to be higher.

This January Effect can happen to many capital markets in the world, one of them is in Indonesia. Therefore, in this study there will be an anomaly in the January market effect on the capital market in Indonesia or not. In addition, we make comparisons with the stock exchanges of neighboring countries, namely Malaysia and India.

Overreaction

Market anomalies can occur because investors in the capital market are not always rational, especially in responding to information. Instead of setting prices according to information that is known to the public perfectly and instantly, as assumed by the efficient market hypothesis, investors are also often influenced by a cognitive and emotional bias that can eventually trigger an overreaction hypothesis. The overreaction hypothesis is a hypothesis which states that basically investors always overreact to information. In this context, market participants tend to set prices that are too high in reaction to information that they perceive as positive. On the other hand, market participants will set prices that are too low as a reaction to information that is considered negative [13]. The overreaction can occur due to the greed or fear of investors for information, thus triggering the stock price to be too high or too low from its intrinsic value.

Previous Research

In [6, 11] found the January Effect on the Indonesia Stock Exchange, however, the January Effect did not occur in the shares of small companies, except for the shares of large companies. In contrast to [22, 23] states that there is no difference in stock prices at the beginning of the year and the end of the year. So the research concludes that the January Effect does not occur on the Indonesia Stock Exchange. [24] the January Effect phenomenon in China, Argentina, and Turkey, but there was no January Effect phenomenon in Brazil and India. The results of [6] confirmed the existence of seasonal anomalies including the January Effect on the Indian stock market. The results of the study state that the stock market in India is inefficient, and therefore, investors can time their stock investment to increase returns. [25] that value premium has different patterns in January and non-January months for large and small capitalization firms. It was found that large stocks have a significant value premium only in January and this high January value premium among large stocks is mainly driven by loser stocks at the turn of the year. In contrast with large stocks, the value premium of small stocks occurs only in non-January months. [26] found that there was no January Effect phenomenon in the Indian stock market. This is likely because investors have been able to obtain information more smoothly and at no cost in recent decades. Another study also states that there is a January Effect phenomenon in England, Singapore, the United States, Malaysia, Taiwan, Hong Kong [22, 23, 25] stated there is a January Effect phenomenon in the United States. [4, 11, 14, 21] stated that there is a January Effect in the United States Stock Exchange. The results of this study contradict [6] who stated that there was no January Effect in the United States. On the other hand, some studies deny there is no January Effect, including Malaysia Bangladesh [14, 27] Indonesia [5].

METHOD

The method used in this research is a comparative descriptive method with a quantitative approach that aims to describe the *January Effect* phenomenon in IDX, KLSE, and NSE in the 2016-2020 period. Comparative studies are research that aims to compare two or more variables, to get answers or facts whether there is a comparison or not of the object being studied. Furthermore, this research uses the event study method. Event study can be used to see the reaction of the capital market (with a stock price movement approach) to a certain event. The units of analysis are the Jakarta Composite Index (JCI), the Kuala Lumpur Composite Index (KLCI), and the *Bombay*

Stock Exchange Sensitive Index (BSESN). The data used is secondary data taken from the website www.investing.com which is a weekly index for the period January 2016 to December 2020 with a total of 259 time series data for each country. The variables used in this research are stock returns on the stock exchanges of the three countries (Indonesia, Malaysia and India), with the following formula:

$$Ri = \frac{P_t - P_{t-1}}{P_{t-1}} \times 100$$

Ri = Stock Return

P_t = Share price (closing price) for share i at the end of the investment period.

$P_{(t-1)}$ = Share price (closing price) for share i at the beginning of the investment.

The data analysis used was descriptive statistical test, normality test, homogeneity test, analysis of variance (ANOVA) test, post hoc test and difference test. (1) Descriptive statistics provide an overview or description of data seen from the average value (mean), standard deviation, variance, maximum, minimum, *sum*, *range*, *kurtosis and skewness* [4] The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. If this assumption is violated, the statistical test becomes invalid for a small sample size. The normality test used in this study is the *One Sample Kolmogorov-Smirnov Test*. (3) The homogeneity test is a test in which the dependent variable must have the same variance in each category of the independent variable. This test is called *Levene's test of Homogeneity of variance*. (4) ANOVA test is an analytical tool that can be used to test related and unrelated hypotheses. The ANOVA test aims to compare the average value of three or more unrelated samples using the F-test. (5) Post Hoc Test is a data analysis conducted after the ANOVA test which aims to find out which groups have the same or different averages. Post Hoc test was carried out to support the results of the ANOVA test. In this research, the techniques used were Turkey HSD and Benferroni tests. (6) The difference test is carried out to test the difference in the average count between certain groups that have certain requirements under study. In this research using the Independent Sample T-test. In this independent difference test, it includes Group Statistics testing which aims to test the difference from the average value and the Independent Samples Test which aims to test whether there is a significant difference between the average stock returns on the Indonesia Stock Exchange, Kuala Lumpur Stock Exchange, and *Bombay Stock Exchange Sensitive Index* for the period 2016 – 2020 statistically.

RESULTS AND DISCUSSIONS

Result

January Effect is a phenomenon that refers to the observation that the return in January looks higher than the return in other months. This means that investors who buy shares in early January and then sell them back at the end of January will have the opportunity to generate higher returns than doing the same thing in other months. Below is an overview of the January Effect phenomenon on the Indonesia Stock Exchange, Kuala Lumpur Stock Exchange, and the National Stock Exchange of India in the 2016-2020 period:

Table 1

Stock Returns in January (First Week) 2016 – 2020

Date	RJKSE	RBSESN	RKLSE
Week-1, 2020	-0.77%	-0.27%	-1.24%
Week-1, 2019	1.39%	-1.06%	0.80%
Week-1, 2018	0.16%	0.28%	0.26%
Week-1, 2017	0.95%	2.25%	2.06%
Week-1, 2016	-1.02%	1.25%	-2.06%

Source : www.investing.com (processed data)

Based on the table above, it can be seen on the Indonesia Stock Exchange, that there was a positive return at the beginning of 2017, 2018, . However, a significant increase in returns only occurred in 2019. On the Indian and Malaysian Stock Exchanges, the highest increase in returns occurred in 2017. So that during the research year, the January effect phenomenon only occurred one year, namely in 2019 on the Indonesia Stock Exchange, and in 2017 for the Malaysia and India Stock Exchanges. However, if all stock returns are averaged during the study period, the January effect phenomenon does not occur.

The normality test aims to test whether in the regression model, the dependent variable and the independent variable or both are normally distributed. The normality test in this study was using the Kolmogorov Smirnov test. Based on the results of the normality test on stock returns on the Indonesia, Malaysia and India Stock Exchanges in the 2016 – 2020 period, the following results were obtained:

Table 2

One-Sample Kolmogorov-Smirnov Test

		Return
N		259
Normal parameter, a, b	Mean	.2822
	Std. Deviation	3,63411
Most Extreme Difference	Absolute	.117
	Positive	.055
	Negative	-.117
Test Statistics		.117
Asymp. Sig. (2-tailed)		.061

Table 3

One-Sample Kolmogorov-Smirnov Test

		Return
N		259
Normal parameter, a, b	Mean Std. Deviation	.2243 3.42474
Most Extreme Difference	Absolute Positive Negative	.115 .047 -.116
Test Statistics		.116
Asymp. Sig. (2-tailed)		.058

Table 4

One-Sample Kolmogorov-Smirnov Test

		Return
N		259
Normal parameter, a, b	Mean Std. Deviation	.2792 3.93433
Most Extreme Difference	Absolute Positive Negative	.113 .055 -.113
Test Statistics		.113
Asymp. Sig. (2-tailed)		.056

Based on the output table above, it is known that the Asymp Sig. (2-tailed) value is greater than 0.05. So according to the basis of decision making in the Kolmogorov-Smirnov normality test above, it can be concluded that the data are normally distributed. Thus, the assumptions or requirements for normality in the regression model have been fulfilled.

Levene's test of homogeneity of variance aims to test the ANOVA assumption that each group (category) of independent variables has the same variance. The homogeneity test in this study used Levene's test. Based on the results of the homogeneity test on the Indonesia, Malaysia and India Stock Exchanges in the 2016 – 2020 period, the following results were obtained:

Table 5

Homogeneity of Variances Test

Levene Statistics	df1	df2	Sig.
97.809	2	774	.106

Table 6

Homogeneity of Variances Test

Levene Statistics	df1	df2	Sig.
.856	11	247	.585

Table 7

Homogeneity of Variances Test

Levene Statistics	df1	df2	Sig.
2.062	11	247	.024

Based on the Test of Homogeneity of Variances output table above, it is known that the significance value (Sig.) > 0.05, it can be concluded that the data variance is the same and fulfills the ANOVA assumption.

The Analysis of Variance (ANOVA) test aims to compare the average values contained in the dependent variable in all groups being compared. Based on the results of the ANOVA test in stock returns on the Indonesia, Malaysia and India Stock Exchanges in the 2016 – 2020 period, the following results were obtained: Table 8

ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	66.186	11	6.017	1.262	.247
Within Groups	1177.605	247	4.768		
Total	1243	258			

Table 9

ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	11	0.000	.743	.696
Within Groups	.057	247	.0000		
Total	0.059	258			

Table 10

ANOVA Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	58.143	11	5.286	.883	.558
Within Groups	1478.633	247	5.986		
Total	1536.776	258			

Based on the ANOVA test output table above, it is known that the significance value (Sig.) > 0.05, it can be concluded that there is no difference in returns between January and other months on the Indonesia, Malaysia and India Stock Exchanges in the 2016 – 2020 period.

Table 11

Post Hoc Test

(I) Bulan (j) Bulan	Mean difference (I-J)	Std. Error	Sig.	95% confidence interval	
				Lower bound	Upper bound
Januari	.75632	.60929	.982	-1.3606	2.8732
	1.17182	1.03021	.990	-2.4884	4.8320
	.57545	.61770	.998	-1.5634	2.7143
	-.01500	.69730	1.000	-2.4416	2.4116
	.16482	.48815	1.000	-1.5370	1.8667
	-.29545	.53519	1.000	-2.1477	1.5568
	.25920	.54633	1.000	-1.6329	2.1513
	1.01091	.53424	.757	-.8382	2.8600
	-.16818	.44178	1.000	-1.7325	1.3961
	-.03699	.56198	1.000	-1.9829	1.9089
	-.47623	.55164	.999	-2.3820	1.4295

Table 12

Post Hoc Test

(I) Bulan (j) Bulan	Mean difference (I-J)	Std. Error	Sig.	95% confidence interval	
				Lower bound	Upper bound
Januari	-.00040	.00425	1.000	-.0152	.0144
	.00452	.00567	1.000	.0154	.0244
	-.00181	.00440	1.000	-.0171	.0135
	-.00254	.00505	1.000	-.0202	.0151
	.00074	.00476	1.000	-.0159	.0174
	-.00336	.00383	.999	-.0166	.0099
	.00161	.00371	1.000	-.0113	0.145
	.00383	.00327	.988	-.0076	.0153
	.00184	.00394	1.000	-.0118	.0155
	-.00200	.00434	1.000	-.0170	0.0130
	-.00435	.00399	.994	-.0181	.0094

Table 13

Post Hoc Test

(i) Bulan (j) Bulan	Mean difference (I-J)	Std. Error	Sig.	95% confidence interval	
				Lower bound	Upper bound
Januari	.90514	.66130	.962	-1.4235	3.2238
	1.16500	.94935	.982	-2.2091	4.5391
	-.40318	.82136	1.000	-3.3012	2.4948
	-.13773	.76010	1.000	-2.8083	2.5328
	.04886	.52453	1.000	-1.8682	1.7705
	-.31636	.49169	1.000	-2.0178	1.3851
	.42387	.47383	.999	-1.2197	2.0675
	.44318	.51279	.999	-1.3301	2.2164
	.29091	.63520	1.000	-1.9191	2.5010
	-.18232	.63157	1.000	-2.3845	2.0199
	-.22482	.50028	1.000	-1.9534	.5038

Based on the Post Hoc Test table, the significance value of the Post Hoc Games-Howell test shows that the groups that show differences in returns (marked with an asterisk “*”). So the results of the Post Hoc test show that there is no significant difference in the value of stock returns between the return values in January and other months

Table 14

Independent Sample T-Test Test on Indonesia Stock Exchange and Kuala Lumpur Stock Exchange

		Levenes test for Equality of Variances					T test for Equality of Mean			95% Confidence interval of the difference	
		F	Sig.				t	df	Sig, 2-tailed	Mean difference	Std. Error difference
Retun Saham	Equal Variances Assumed	5.257	.024	1.018	118	.311	.00123433	.00121295	-.00116765	.00363631	
	Equal variance Not assumed			1.018	100,437	.311	.00123433	.00121295	-.00117201	.00364067	

Table 6 shows the results of a significance (2-tailed) of 0.211 > 0.05, which means that there is no significant difference between the average stock returns on the Indonesia Stock Exchange and the Kuala Lumpur Stock Exchange. As for the Indian stock exchange, there is a significant difference between the average value of stock returns on the Indonesia Stock Exchange and the National Stock Exchange of India due to the significance level of 0.024 < 0.05.

Discussions

The January Effect Phenomenon at IDX in the 2016 - 2020 Period

Based on the results of the research described above, it can be seen that during the 2016-2020 period, the performance of the Indonesia Stock Exchange in January posted an average return of 1.638%. However, its positive performance in January does not reflect the January Effect phenomenon. This can be seen from the return in January which is still lower than the return in other months. Therefore, although investors can still record positive returns in January, investors will record higher returns if they invest in months except January. Instead of the January Effect, the average return in December for the 2016-2020 period always seems to show a positive performance and is even much higher than the average return in January. This may indicate that stock investors in Indonesia prefer to focus on window dressing to beautify their portfolios at the end of the year. This may indicate that stock investors in Indonesia prefer to focus on window dressing to make their portfolios better than before at the end of the year. Therefore, when entering January, the euphoria of buying shares by investors subsided slightly, or investors even took profit taking in January so that the performance of the Indonesian stock market during January tended to fluctuate. The absence of the January Effect phenomenon on the Indonesia Stock Exchange is not a new thing. Previously, research conducted by [22, 23] **Darman (2018) and Dewi & Sentosa (2019)** also revealed that the January Effect phenomenon was not found on the Indonesia Stock Exchange. According to them, this can happen because the market has absorbed all the available information. In other words, investors are now able to obtain information more smoothly and at lower costs or even for free. Therefore, investors can make investment decisions more quickly and buy stocks before the price rises, and if more investors do the same, the possibility of the January Effect will decrease.

The January Effect Phenomenon at KLSE in the 2016 - 2020 Period

Based on the results of the research described above, it is known that the January Effect phenomenon on the Kuala Lumpur Stock Exchange for the 2015-2019 period only occurred in 2017. Where the return in January shows the highest average stock return when compared to the average stock return in other months. The average value of stock returns in January 2017 was 1.47%. This is indicated due to the increase in positive sentiment in the Malaysian stock market that has occurred since mid-2016 and continued until mid-2017, which was marked by the FTSE Bursa Malaysia Index which broke its highest level in two years in June 2017. This strengthening of shares occurred in line with the strengthening of the ringgit exchange rate after touching the lowest level in 19 years. Positive information like this is good news for investors and causes a reaction to buying shares during that period. This clearly happened at the opening of 2017, so that stock returns in January were quite high compared to other months. This is in accordance with the research of [14, 28] with the results of their research which states that high stock returns are obtained in January and February in the Malaysian capital market (KLSE). However, in other years, the January Effect phenomenon was not found. This is reflected in the low return recorded at the beginning of the year (January) in research years other than 2017.

January Effect Phenomenon at NSE of India in 2016 - 2020 Period

Based on the results of the research described above, it can be seen that the January Effect phenomenon on the National Stock Exchange of India for the 2015-2019 period only occurred in 2017, where the average return in January in that year was 3.65%, and much lower than the second highest return in May, which was 3.08%. What happened on the National Stock Exchange of India in 2017 seems to be in line statement, which said that based on observations, returns in January appeared to be higher than returns in other months. In addition, the results of this study are also in line with the research of which confirmed the existence of seasonal anomalies including the January Effect in the Indian stock market. The occurrence of the January Effect phenomenon in the Indian stock market in 2017 was not without reason. Investors started 2017 with optimism that pushed the Indian stock market up to 7.97% (<http://www.capital-asset.co.id/2017>). However, this optimism did not last long, especially after the company's financial statements failed to exceed market expectations. Entering 2018 to 2020, the January Effect phenomenon on the National Stock Exchange of India seems to be fading. This condition is reflected by lower returns in January compared to returns in other months. However, on average, investors who invested in the National Stock Exchange of India in January were still able to record positive returns, but at a lower rate than returns in other months. This finding is in line with research conducted by [1, 8, 26], who said that the January Effect phenomenon was not found in the Indian stock market. This is likely because investors have been able to obtain information more smoothly and at no cost in recent decades.

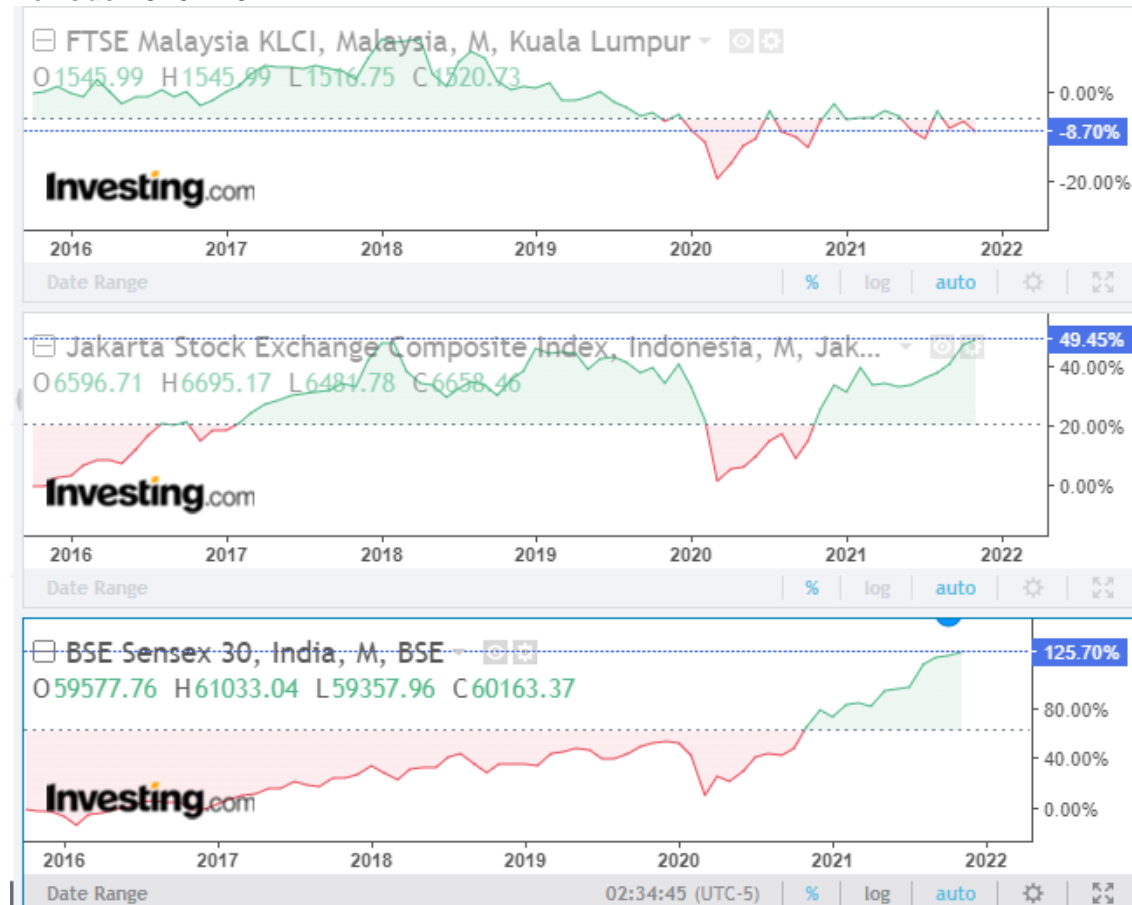
The Comparison of IDX, KLSE and BSESN Returns

Based on the results of statistical processing, it can be concluded that there is a difference in stock returns between the Stock Exchanges in Indonesia and India, but there is no difference in stock returns on the Indonesia Stock Exchange and the Malaysia Stock Exchange. It shows that the overall return pattern for the Indonesian and Malaysian stock exchanges has a similar pattern, although the return at the beginning of the year (January) has a different pattern. This is because Indonesia and Malaysia are still one family, namely Malay, also geographically very close compared to India. So there are similarities in the behavior of both investors in Indonesia and Malaysia. Meanwhile with India, cultural and religious differences also make differences in the investment behavior of investors. This causes differences in the pattern of returns that occur on the Indonesia Stock Exchange and the India Stock Exchange. This is reinforced by the chart of stock price movements below:

Gambar 4

JKSE, KLSE dan BSESN

Periode 2016 - 2021



Source : www.investing.com (processed data)

From chart 4 above, it can be seen that in the last 5 years, there are similarities in the pattern of stock price movements on the Indonesia Stock Exchange and the Malaysia Stock Exchange. While the pattern of Indian stock price movements shows a different pattern.

CONCLUSION AND SUGGESTION

Conclusion

Based on the discussion above, it can be concluded that the research results show that:

1. There is no January Effect phenomenon on the Indonesia Stock Exchange during the 2016-2020 period. This is reflected in the absence of returns in January which were higher than returns in other months. Meanwhile, the January Effect phenomenon on the Kuala Lumpur Stock Exchange and the National Stock Exchange of India only occurred in 2017. On the other hand, during the period 2016, 2018, 2019 and 2020, the January Effect phenomenon wasn't found.

2. There is no difference in returns between January and other months on the Indonesia Stock Exchange, Kuala Lumpur Stock Exchange and the National Stock Exchange of India during the 2016-2020 period.

3. There is a difference in stock returns between the Stock Exchanges in Indonesia and India, but there is no difference in stock returns on the Indonesia Stock Exchange and the Malaysia Stock Exchange.

Suggestion

For investors, they should continue to carry out technical and fundamental analysis in deciding to invest in stocks, especially at the end of the year and the beginning of the year. This is due to the many investor actions that occurred during the end and the beginning of the year. Investors should first process the information obtained in the market so that the decision to buy shares will be right. Never be influenced by phenomena that "definitely" will happen, one of which is information that often circulates in the market is, at the opening of the year, stock prices tend to rise, so we are influenced to buy shares at that time. Because the January Effect will not always occur every year. In addition to technical and fundamental analysis, investors should study the behavior of investors in the capital market, so that we can understand the behavior patterns of investors, especially behavior at the end of the year and the beginning of the year.

REFERENCES

1. Mehta, K. and R. Chander, *Seasonality in Indian stock market: a re-examination of January effect*. Asia Pacific Business Review, 2009. 5(4): p. 28-42 DOI: <https://doi.org/10.1177/097324700900500403>.
2. Fama, E.F., *Efficient capital markets a review of theory and empirical work*. The Fama Portfolio, 2021: p. 76-121.
3. Valizadeh, M. and F. Soltanpour, *Focused direct corrective feedback: Effects on the elementary English learners' written syntactic complexity*. Eurasian Journal of Applied Linguistics, 2021. 7(1): p. 132-150 DOI: <https://doi.org/10.32601/ejal.911207>.
4. Gumanti, T.A. and E.S. Utami, *Efficiency Market Forms and Tests*. Jurnal akuntansi dan Keuangan, 2002. 4(1): p. 54-68.
5. Levy, H. and D. Gunthorpe, *Introduction to investments*. 1999: South-Western Pub.
6. Pandey, I.M., *Is There Seasonality in the Sensex Monthly Returns?* Vol. 6. 2002: Indian Institute of Management Ahmadabad.
7. Sun, Q. and W.H.S. Tong, *Risk and the January effect*. Journal of Banking & Finance, 2010. 34(5): p. 965-974 DOI: <https://doi.org/10.1016/j.jbankfin.2009.10.005>.
8. Sharma, G.D., S. Mittal, and P. Khurana, *Month of the year anomalies in stock markets: Evidence from India*. the international journal of applied economics and finance, 2014. 8(3): p. 82-97 DOI: <https://doi.org/10.3923/ijaef.2014.82.97>.
9. Vildan, İ.-K. and E. Kavak, *Variation sets in child-directed and child speech: A case study in Turkish*. Eurasian Journal of Applied Linguistics, 2021. 7(1): p. 1-10.
10. Rozeff, M.S. and W.R. Kinney Jr, *Capital market seasonality: The case of stock returns*. Journal of financial economics, 1976. 3(4): p. 379-402 DOI: [https://doi.org/10.1016/0304-405X\(76\)90028-3](https://doi.org/10.1016/0304-405X(76)90028-3).
11. Rahmawati, I.Y. and T. Pandansari, *January Effect Anomaly Testing on Stocks in Companies Listed in Jakarta Islamic Index*. Media Ekonomi, 2020: p. 6-15 DOI: <https://doi.org/10.30595/medek.v0i0.8543>.
12. Xiu, X. and N.M.B. Ibrahim, *Role of Learner Autonomy and Students' Perception in Legitimizing China English as A Variety of English*. Eurasian Journal of Applied Linguistics, 2021. 7(2): p. 31-45.
13. Yull, E., *Overreaction Hypothesis Analysis and the Effect of Firm Size, Bid-Ask Spread, and Stock Liquidity on the Price Reversal Phenomenon: (Empirical Study on Companies Listed on the Stock Exchange)*. PEKBIS (Jurnal Pendidikan Ekonomi Dan Bisnis), 2011. 4(01).

14. Ahsan, A.F.M.M. and A.H. Sarkar, *Does January effect exist in Bangladesh?* International Journal of Business and Management, 2013. **8**(7): p. 82 DOI: <https://doi.org/10.5539/ijbm.v8n7p82>.
15. Brookes, G., *Glyphosate use in Asia and implications of possible restrictions on its use.* AgBioForum, 2019. **22**: p. 1-26.
16. Bukkuri, A., *Optimal control analysis of combined chemotherapy-immunotherapy treatment regimens in a PKPD cancer evolution model.* Biomath, 2020. **9**(1): p. 1-12 DOI: <https://doi.org/10.11145/j.biomath.2020.08.173>.
17. Ganiev, T., V. Karyakin, and S. Zadonsky, *MILITARY STANDOFF BETWEEN THE US AND IRAN: THE PARTIES' MILITARY POTENTIALS AND HYPOTHETICAL SCENARIOS OF CONFLICT DEVELOPMENT IN THE MIDDLE EAST.* Central Asia and the Caucasus, 2020. **21**(2): p. 50-65 DOI: <https://doi.org/10.37178/ca-c.20.2.05>.
18. Stopić, Z., *Croatia and the Chinese "17+ 1" Cooperation Framework.* Croatian International Relations Review, 2020. **26**(86): p. 130-154 DOI: <https://doi.org/10.37173/cirr.26.86.5>.
19. Retnosari, V.A. and A. Jayadi, *Analysis of the Determinants of Indonesia's Exports with ASEAN Countries and Seven Trading Partner Countries Using the Gravity Model.* Cuadernos de Economía, 2020. **43**(123): p. 391-400.
20. Perez, G., *Does the January Effect Still Exist?* International Journal of Financial Research, 2018. **9**(1): p. 50-73 DOI: <https://doi.org/10.5430/ijfr.v9n1p50>.
21. Raj, M. and D. Kumari, *Day-of-the-week and other market anomalies in the Indian stock market.* International journal of emerging markets, 2006. **9**(6) DOI: <https://doi.org/10.1108/17468800610674462>.
22. Darman, D., *DOES THE JANUARY EFFECT PHENOMENON HAPPEN IN THE INDONESIA STOCK EXCHANGE?* Jurnal Riset Akuntansi dan Keuangan, 2018. **6**(1): p. 73-80.
23. Dewi, D.Y. and P.W. Santosa, *Does the January effect anomaly still exist at Indonesia Stock Exchange.* The International Journal of Business Management and Technology, 2019. **3**(6): p. 283-292.
24. Guler, S., *January effect in stock returns: Evidence from emerging markets.* Interdisciplinary Journal of Contemporary Research in Business, 2013. **5**(4): p. 641-648.
25. Chou, J., P.K. Das, and S.P.U. Rao, *The value premium and the January effect.* Managerial Finance, 2011 DOI: <https://doi.org/10.1108/03074351111134727>.
26. Yuan et al., *A study of market efficiency in Asian emerging markets-evidence of the January Effect and Momentum Effect.* Applied Science and Management Research, 2015. **8**(4).
27. Addinpujoartanto, N.A., *Analysis of January Effect on Big Stock Companies and Small Stock Companies at Indonesia Stock Exchange.* International Journal of Business, Humanities, Education and Social Sciences (IJBHES), 2019. **1**(2): p. 47-56 DOI: <https://doi.org/10.46923/ijbhes.v1i2.40>.
28. Ahmad, Z. and S. Hussain, *KLSE Long run overreaction and the Chinese New-Year effect.* Journal of business finance & accounting, 2001. **28**(1-2): p. 63-105 DOI: <https://doi.org/10.1111/1468-5957.00366>.