

Efficient Market Hypothesis Analysis on the Indonesian Stock Exchange on the Asean Stock Market

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ARTICLE INFO

Keywords: Efficient Market Hypothesis, Stock Market, Stock Return

Received : 06, October

Revised : 08, November

Accepted: 10, December

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ABSTRACT

This research aims to analyze the performance of Indonesia Stock Exchange to ASEAN stock market during the period 2018-2022. The technique of determining the sample using purposive sampling method and 6 countries as samples are Indonesia, Singapore, Malaysia, Vietnam and Philippines. Hypothesis testing in this study used Descriptive Statistics Analysis, Test Run and Kolomogorov Smirnov with a significance level of 0.05. Test results show that: (1) Indonesia Stock Exchange has the highest efficient rating in ASEAN stock market (2) ASEAN Stock Exchange effect on Indonesia Stock Exchange. (3) The Indonesia Stock Exchange has a stock return pattern that fluctuates normally in the ASEAN stock market.

INTRODUCTION

The development of the stock market in the world today is very rapid, because it is supported by technological advances, making it easier for every investor to carry out transactions. The stock exchange is a barometer to see the progress of a country. ASIA region, stock exchange competition has been divided into several regions such as East Asia (Japan, China, Korea, etc.), West Asia (United Arab Emirates, Saudi Arabia, Qatar, etc.), Central Asia (India, Nepal, etc. - others) and finally Southeast Asia (Indonesia, Malaysia, Singapore, Vietnam, Thailand, Philippines and others). This research analyzes market efficiency on the Indonesian Stock Exchange for the ASEAN Stock Market for the 2018 - 2022 period. This research is supported by several previous studies, namely Yuan and Gupta (2014), Stakic et. al. (2015), Nassar (2016), Singh et. al. (2016), Shaik and Maheswarant (2017). The following is data on the 10 largest stocks in terms of market cap, which are listed on the Singapore, Indonesia, Malaysia and Thailand stock exchanges:

Table.1 Market cap ASEAN

<i>Companies</i>	<i>Closing price</i>	<i>Market cap</i>
<i>Singapore (SGX)</i>		
SingTel	3.56	40.80
Jardine Matheson	53.23	37.90
Jardine Strategic	27.92	30.80
DBS Group	13.02	23.30
OCBC	7.46	22.00
UOB	17.56	20.20
Hongkong Land	5.62	13.20
Wilmar International	2.91	13.20
IHH Healthcare	2.11	12.40
Thai Beverage	0.68	12.10
<i>Indonesia (IDX)</i>		
HM Sampoerna	105,700.00	36.50
Telkom Indonesia	3,285.00	24.60
BCA	13,275.00	24.10
Unilever Indonesia	41,100.00	23.30
BRI	11,800.00	21.40
Astra International	6,825.00	20.50
Bank Mandiri	9,725.00	16.70
Gudang Garam	60,700.00	8.70
BNI	5,275.00	7.20
Indofood CBP	14,725.00	6.40

<i>Malaysia (Bursa Malaysia)</i>		
Maybank	8.51	20.00
Public Bank	18.50	17.20
Petronas Chemicals	6.90	13.30
IHH Healthcare	6.49	12.90
Axiata Group	5.60	11.90
Maxis	6.06	11.00

<i>Companies</i>	<i>Closing price</i>	<i>Market cap</i>
Petronas Gas	22.24	10.60
DiGi.com	4.85	9.10
CIMB Group	4.20	8.60
IOI Corporation	4.67	7.10

Thailand (SET)

PTT	230.00	18.40
Siam Cement	426.00	14.40
Advanced Info Service	166.50	13.90
Siam Commercial Bank	130.00	12.40
Kasikornbank	161.00	10.80
CP ALL	40.30	10.20
Bangkok Bank	148.00	7.90
Krung Thai Bank	17.20	6.70
PTT Global Chemical	51.50	6.50
Bank of Ayudhya	30.30	6.20

Source: www.investing.com

There are companies that have dual listings or are listed on two stock exchanges in two countries, namely the IHH Healthcare company which was founded in Malaysia, even though it is listed on the Malaysian stock exchange and the Singapore stock exchange. Apart from that, there is also a company that was founded in Thailand but is registered in Singapore, namely the Thai Beverage company. From the table data above, it can be seen that the stock with the largest market cap is in Singapore, namely SingTel. And if from the list above the fifteen largest stocks are taken in terms of market cap, the following results are (market cap in billions of US dollars):

Table. 2 Companies with a High Market

<i>Companies</i>	<i>Country</i>	<i>Market cap</i>
SingTel	Singapore	40.84
Jardine Mathe son	Singapore	37.89
HM Sampoerna	Indonesia	36.52
Jardine Strate gic	Singapore	30.79
Telkom Indonesia	Indonesia	24.57
BCA	Indonesia	24.05
Unilever Indonesia	Indonesia	23.31
DBS Group	Singapore	23.29
OCBC	Singapore	21.96
<i>Companie s</i>	<i>Country</i>	<i>Market cap</i>
BRI	Indonesia	21.38
Astra Internation al	Indonesia	20.49
UOB	Singapore	20.20
Maybank	Malaysia	20.02
PTT	Thailand	18.44
Public Bank Bhd	Malaysia	17.21

From table 2 data, it can be seen that the position of the Indonesian capital market (IDX) is in a better position than the position of the capital markets in Malaysia and Thailand, but is still inferior to Singapore (SGX). Indonesia has a GDP of USD 889 billion, so it can be said that Indonesia is the country with the largest economy in Southeast Asia, much larger than Singapore which only has a GDP of USD 308 billion. However, in terms of the value of shares listed on the capital market as of February 12 2022, shares listed in Indonesia on average have a total market cap of 5.005 trillion rupiah or the equivalent of USD 371 billion. Meanwhile, shares registered in Singapore as of the end of January 2016 were 3326

recorded as having a market cap of SGD 855 billion, or the equivalent of USD 612 billion. From the current trend, it can be concluded that IDX has the opportunity to take over SGX's position as the largest stock exchange in Southeast Asia. When a Singapore company invests or opens a branch office outside Singapore, the company's operational activities will be limited by the regulations that apply in the country of origin where the company establishes the branch office. And because of these factors, companies that open branch offices in other countries will find it difficult to become the largest company in the country where they were founded.

Companies in Indonesia have a lot of room to develop in their own country, and once they are able to develop, the opportunities for IDX to expand are very large. This will make it easier for IDX to grow so that it can become bigger and also attract investors' interest in investing in Indonesia. The Indonesian government, in this case the Indonesian Stock Exchange (BEI), can follow the example of the Singapore government in making policies to make the Indonesian stock market develop, such as:

- a. Encouraging foreign companies to list on the IDX or dual listing by offering certain conveniences. If this is difficult to do, then at least Indonesian companies listed in Singapore can be directed to also list on the IDX.
- b. Opening up opportunities for foreign investment where they can buy shares from foreign companies.
- c. Creating and developing investment/trading products outside of stocks and bonds, such as index futures, exchange traded funds, real estate investment trusts (REIT), business trusts, structured warrants and others.

It is hoped that with this policy the Indonesian stock market can develop. However, this policy includes policies that adhere to liberalism and can also have the effect of competition for local investors/companies that will make it difficult to develop. But in several financial center countries such as Singapore, Hong Kong and Switzerland it has implemented this policy and succeeded in making the capital market and the economy as a whole develop rapidly.

LITERATURE REVIEW

Market Hypotesis Theory

A theory that explains the level of stock market efficiency in a country. The level of market efficiency can be described and explained through information provided by a company regarding its strengths and weaknesses. Market efficiency itself is divided into three, namely weak efficient markets, semi-strong efficient markets, and finally strong efficiency markets. Fama (1970) defines an efficient market as "a securities market is said to be efficient if security prices fully reflect the available information." There are three forms of efficient markets, namely:

1. Weak Form Hypothesis

This is a situation where stock prices reflect all the information contained in past price records. If this level of weak form efficiency is reached, in these market conditions it will be very difficult and even impossible for a manager to get a profit above the normal return (abnormal return), so it is very difficult to predict the direction of price changes in the coming period.

2. Semi Strong Form Hypothesis

This is a market condition where prices not only reflect prices in the past, but all published information. The information published will be reflected in stock prices quickly and unbiasedly. Investors will not be able to obtain profits above normal (abnormal returns), by buying shares on the basis of a publication.

3. Strong Form Hypothesis

It is a market condition where all available relevant information is reflected in share prices. So that both published and unpublished information (private information) will be reflected in share prices. In circumstances like this, no investor can obtain an abnormal return (excess return) using any information.

Testing the efficient market hypothesis according to Tandelilin (2010, 227.) states that the efficient market hypothesis can be tested by carrying out the following tests:

a. Weak Form Hypothesis Testing

- 1) Study Return Patterns
- 2) Using Past Return Data
- 3) Study the relationship between returns and company characteristics.

b. Semi Strong Form Hypothesis Testing

In this test, an investor observes and analyzes the impact of information announcements on security prices which are often called event studies. Study and discuss the results obtained.

c. Strong Form Hypothesis Testing

When market conditions are said to be strong or strong form hypothesis, an investor will carry out tests on company insiders and certain groups of investors who are considered to have better access to information, and can obtain higher abnormal returns compared to general market returns.

Efficient Market Hypothesis ASEAN Stock Market

Efficient market hypothesis of the stock market is the efficient level of the stock market which can be described by the information available over a certain period of time. In this research, the level of the efficient market hypothesis can be seen from historical sales data on ASEAN stock market closing price transactions. This assumption is strengthened from research conducted by previous researchers such as Aumeboonsuke (2012) "Weak Form Efficiency of Six Equity Exchange in ASEAN", Salim et. al. (2013) "Testing the Weak Form Efficiency of the Stock Market: Pakistan as an Emerging Economy", Gupta & Guidi (2013) "Market Efficiency in the ASEAN Region: Evidence from Multivariate and Cointegration Test", Dyakova & Smith (2014) " African Stock Markets: Efficiency And Relative Predict Ability", Yuan & Gupta (2014) "Chinese Lunar New Year effect in Asian stock markets, 1999 – 2012", Stakic et. al. (2015) "The Efficiency of the stock market in Serbia", Nassar (2016) "The Day of The Week Effect Of Stock Return: Empirical Evidence From Five Selected Arab Countries", Singh et. al. (2016) "Testing the Weak Form of Efficient Market Hypothesis In Carbon Efficient Stocks Indices Along With Their Benchmark Indices In Select Countries", Shaik & Maheswarant (2017) "Random Walk in Emerging ASIAN Stock Markets".

In this research, a hypothesis can be developed regarding the level of efficiency of the Indonesian stock market in the ASEAN stock market, with the following hypothesis:

1. Efficient ranking of the Indonesian Stock Exchange stock market on the ASEAN stock market

The efficient ranking of the ASEAN stock market can be seen based on the market cap level or can also be seen through the market return. This is supported by research conducted by Singh, Leepsa, Kushwaha (2016). The results of this research showed that of the 4 countries, only Japan had an abnormal return rate each month due to the impact of the Tsunami that hit Japan in 2011.

H1: The Indonesian Stock Exchange has a high market efficiency rating in ASEAN.

2. Influence of the ASEAN Stock Exchange on the Indonesian Stock Exchange

The influence or not of an exchange on other exchanges can be seen from the IPOLEKSOSBUD factors in a country. This statement is supported by research by Nassar (2016). In Palestine Stock, the stock return on Sunday had a low return and on Tuesday it only increased. Egypt and Qatar stock had a good return rate during the week but experienced a decline on Monday. Jordan and Bahrain experienced a decline on Sunday, Monday and Tuesday and the following 4 days experienced an increase in returns.

H2: The ASEAN Stock Exchange has an influence on the Indonesian Stock Exchange

3. The Indonesian Stock Exchange has a Market Efficient Category in the ASEAN Stock Market

The Indonesian Stock Exchange has a market efficient rating on the ASEAN stock market, this is supported by research by Stakic, Jovancai, Kapor (2015). Based on the results of this research, it can be explained that there were 2 periods that showed very contrasting differences, in the 2007 - 2009 period there was very low return growth, which only experienced an increase of 347.46 points, while in the 2010 - 2013 period there was a fairly high increase. This is due to world economic turmoil

H3: The Indonesian Stock Exchange has a market efficient category in the ASEAN stock market.

4. The ASEAN Stock Market has a random stock return pattern on the stock market in each country in ASEAN

The ASEAN stock market has a random stock return pattern on the stock market in each country, this is supported by research by Yuan, Gupta (2014). This research was conducted during Chinese New Year in seven ASIAN stock markets, namely China, Hong Kong, Japan, Malaysia, Singapore, South Korea and Taiwan. From this research, it can be found that the effect of Chinese New Year or Chinese New Year means that the stock markets in the seven ASIAN countries do not always have high market efficiency because there is a positive relationship between risk and stock returns. Furthermore, the conditional risk caused by the crisis in ASIA in 1997 caused China to do better than the other six countries. China's stock market is dominated by retail investors who prefer short-term profits and do not agree with long-term investment decisions.

H4: The ASEAN stock market has a random stock return pattern on the stock market in each country in ASEAN.

METHODOLOGY

Variable Measurement

Research Measurement Variables Stock Returns on the ASEAN Stock Exchange

Run Test = $R_i = \text{LN} (P_t/P_{t-1})$

Population and Sample

The population is an object or subject that is different in an area and understands certain requirements related to the research problem. The population that will be the object of this research is: ASEAN Stock Market for the period 2018 - 2022 which consists of 6 main stock markets, namely the Indonesian Stock Exchange, Singapore Exchange, Kuala Lumpur Stock Exchange, Stock Exchange of Thailand, Hanoi Securities Trading Center, The Philippine Stock Exchange.

The sampling method used in this research is the purposive sampling method, namely a technique for determining samples with certain considerations. In this case the sample from this research is based on the following criteria:

- a. It is a stock exchange listed on the ASEAN stock exchange.
- b. It is a stock exchange that has a high level of stock returns in the ASEAN region.
- c. It is a stock exchange that has a high chance of becoming the best stock exchange in ASEAN.
- d. It is a stock exchange that has a fluctuating return pattern.

Analysis Techniques

1. Descriptive Statistics

2. Run Test

Used to test autocorrelation to see the correlation between one period t and the previous period $(t-1)$ and also used to test the hypothesis of a random sample.

$$R_i = \text{LN} (P_t/P_{t-1})$$

3. Kolmogorov-Smirnov Test

Kolmogorov-Smirnov Test is a test or goodness-of-fit test, namely testing the suitability between the distribution of a series of sample values (observed scores) with a certain theoretical distribution.

RESEARCH RESULT

The data used in this research is based on closing prices on stock markets from 6 countries that have and are active in stock market transactions in the ASEAN region for the period 2018 - 2022. In this research, we analyze the value of stock returns obtained from the closing price values that have been calculated. publications by each exchange from each country. This research was conducted on the stock market in the ASEAN region so that it could produce a ranking of countries with the highest Efficient Market Hypothesis. The following is a table of closing price values for 6 countries that have and are active on the ASEAN regional stock exchange.

Analisis Statistik Deskriptif

Tabel.3 Statistik Deskriptif

	BEI	KLCI	SGX	PSEi	SET	VN
N Valid	60	60	60	60	60	60
Missing	0	0	0	0	0	0
Mean	63,06			331,7		
	7.026,38	7.348,62	4.350	95,04	48.040,9	6.692,59
				3	52	8.000

Source: diolah dari berbagai sumber

a. Indonesia stock exchange

On this stock exchange, it can be explained that the share price condition is quite strong because it has a closing price value that is above the standard price, amounting to 56.67%, while the value that is below the closing price is 43.33% of 60 samples over 5 periods, namely year 2018 – 2022. During the 5 year observation period it can be explained that the lowest closing price value occurred throughout 2018, this was due to the world global crisis which affected economic conditions in Indonesia so that Indonesia had to maintain the economy in the real sector and also improve the volume of Indonesian exports which tended to decline in the previous year. Apart from that, economic growth in Indonesia in 2018 increased by 6.2% with controlled inflation of 4.3%.

b. Kuala Lumpur Stock Exchange

On the Kuala Lumpur Stock Exchange, it can be seen that 53.33% of the closing price values were below the standard price over the last 5 years, while the value above the normal value was only 46.67%. This value is caused by the crisis that Malaysia is currently facing, such as the political crisis or the alleged corruption of the Malaysian Prime Minister. Apart from that, Malaysia's Gross Domestic Product increased to 86%, this resulted in the Malaysian ringgit exchange rate against the US dollar weakening by 40% to RM 4.34 per USD. Even though Malaysia is currently experiencing a crisis, the Malaysian government is confident and optimistic that the Malaysian economy can improve in 2022. Malaysia's economic growth in 2022 was 4.5%, which was smaller than the growth in 2021, which was 5%. This economic growth was supported by Malaysia as the second largest exporter in the liquefied natural gas sector which experienced obstacles due to alleged corruption cases involving Malaysian BUMN1.

c. Singapore Exchange

From 2018 to mid-2021, the Singapore Exchange experienced a strengthening of the closing price value and became one of the benchmarks for the economy in the ASEAN region because the value of the Singapore dollar against the US dollar strengthened from 2018 to mid-2021, but after July 2021, Singapore experienced a decrease in the closing value. price. In fact, Singapore's economy in the fourth quarter experienced growth of 1.8%, where the manufacturing sector contributed around a fifth of total GDP, a contraction of 6.7% in the fourth quarter. This contraction was caused by a decrease in transportation engineering and electronics production. Gross domestic product for the three months to the end of December rose 6.2% seasonally adjusted and annually compared to the previous quarter. For the whole of 2021, Singapore's economy grew by 2%, but this growth was slower than in 2020, namely 3.3%. Singapore's slow economic growth continued until 2022, because Singapore's Gross Domestic Product (GDP) only rose 1.8%. The slow growth of Singapore's economy had an impact on its stock market which experienced a decline in closing price values from mid-July 2021 to December 2021. It was recorded

that the closing price value of the Singapore Exchange was 50% of the standard value for the last 5 years, namely from 2018 to 2018. 2022, while the remaining 50% is below standard.

d. . Stock Exchange of Thailand

On the Stock Exchange of Thailand, it can be explained that the closing price value which is below the standard price is 46.6%, which is much smaller than the closing price value which is above the standard price, namely 53.7%. This is supported by the government's state spending arrangements and tourist visits from foreign tourists to Thailand. The National Economic and Social Development Board (NESDB) noted that the Thai economy grew by 3.2% in 2020, meanwhile, growth on a seasonally adjusted quarter-on-quarter annual basis, the Thai economy experienced growth of 0.6% in third quarter, down from growth of 0.7% in the previous quarter. The closing price value of the Stock Exchange of Thailand can continue to strengthen because the tourism sector in Thailand experiences increases every year, thus influencing the increase in the value of Thai shares.

e. Hanoi Securities Trading Center

On this exchange, it can be explained that the Hanoi Securities Trading Center has a closing price value that is below the standard by 55%, while the value that is above the standard value is only 45% of the 5 year research period. In 2021, Vietnam's economy grew at the fastest rate since 2007 and maintained its growth momentum since 2012. However, from July 2021 to the end of 2022, Vietnam's closing price experienced a decline due to several factors such as unfavorable weather which affected Vietnam's agricultural output, environmental disasters. maritime affairs thus affecting Vietnam's fishery results and also unfavorable global economic factors, which means that Vietnam's growth position is behind India, China and the Philippines.

f. The Philippine Stock Exchange

On the Philippines Stock Exchange, it can be explained that the closing price value that is below the standard price is only 33.37%, while the value that is above the standard is 66.67%. This shows that in terms of stock exchange value, The Philippines Stock Exchange has the highest value compared to 6 other countries in the ASEAN region. The Philippine Statistics Authority announced that the Philippines' gross domestic product (GDP) increased by 7.1%. Philippines GDP also rose 1.2% compared to the previous quarter. Apart from that, Philippine political factors also greatly influence the Philippine economy, such as the policies made by the President of the Philippines which caused the economy to increase by more than the 6% estimated until 2024. The Philippines' GDP growth in the third quarter of 2022 was 7.1%, surpassing China's growth of 7.1%. 6.7% and Vietnam 6.4%. Meanwhile, India's growth in the third quarter of 2022 reached 7.1%, but this has not been published by the Indian government. The Philippines' closing price value could become the

strongest in ASEAN thanks to the demographic bonus or growth of the young population and USD 160 billion in funds for infrastructure development to create new jobs in the Philippines.

Analisis Run Test

Tabel.4 Run Test
Tabel Run Test

	BEI	KLCI	SG X	PSEi	SET	VN
Test Value ^a	63,06 7,026 ..38	7,348. 629	4.35 0	331,7 95,04 3	48,04 0.952	6,69 2,59 8
Asym p. Sig. (2-tailed)	.000	.000	.000	.000	.000	.000

Source: data in processed

In the run test, the results can be said to be good or have a high level of efficiency in the stock market if it has an asymp value. Sig < of the significance value (α) is 0.05. From the table above, it can be explained about the level of market efficiency found in 6 stock markets taken from countries that have and are active in stock markets in the ASEAN region. The majority of stock markets in the ASEAN region have a fairly high level of efficiency, this is supported by improvements in performance on each stock exchange. The Indonesian Stock Exchange has high efficiency because Indonesia has adopted policies that have been implemented by countries that are financial centers such as Singapore, China, Russia and the United States, one of these policies is the Go Public Information Center, making it easier for people who If you want to invest funds on the stock exchange, you can place the right proportion of shares. With this policy, the Indonesian Stock Exchange can attract more investor interest than when it had not used these policies.

The Singapore Exchange has a fairly high level of efficiency due to the various policies that have been made by the Singapore government so that it can attract more investors. The Singapore Exchange has advantages in the tourism sector and other service sectors. This is what causes the Singapore Exchange to have a fairly high level of efficiency. For the Kuala Lumpur Stock Exchange in 2022, it developed a sharia-based securities product which is expected to increase and increase investors' interest in investing their capital in Malaysia. This sharia-based securities product is one of the steps taken by Malaysia to gain a place and interest in the eyes of investors. The Kuala Lumpur Stock Exchange is developing sharia-based securities products by collaborating with the Indonesian Stock Exchange.

Lastly, the Stock Exchange of Thailand, The Philippines Stock Exchange and the Hanoi Securities Trading Center can be said to have a good level of efficiency because these three stock exchanges have policies that can attract investors to invest funds in their respective countries' exchanges. One of the policies is dual listing or a policy where every investor or company is allowed to invest and register its company name in more than one country.

Kolmogorof Smirnov Test

Tabel.5 One-Sample Kolmogorov-Smirnov Test
Tabel One- Sample Kolmogorov-Smirnov Test

		One-Sample Kolmogorov-Smirnov Test					
		BEI	KLCI	SG X	PSEi	SET	VN
N		60	60	60	60	60	60
Normal Parameters ^{a,b}	Mean	63,06			331,7		6,692,
	Standard Deviation	7,026.	7,348.	4.35	95.04	48,04	598.0
Normal Parameters ^{a,b}	Mean	383	629	0	3	0.952	00
	Standard Deviation	59,66	4,135.	2.98	431,0	44,38	6,199,
Normal Parameters ^{a,b}	Mean	7,412.	029	54	47.40	7.309	272.2
	Standard Deviation	016			86		59
Asymp. Sig. (2-tailed)		,200 ^{c,d}	,004 ^c	,056 ^c	,017 ^c	,200 ^{c,d}	,200 ^{c,d}

Source: data in processed

In the one-sample Kolmogorov-Smirnov Test, it can be assessed as having a normal level of distribution of closing price values if asymp. Sig has a value > the significance value (α), which is 0.05. From the table above, it can be explained about the level of fluctuation or distribution of closing stock price values on the 6 stock markets that are owned and active in countries in the ASEAN region. The following is an explanation of the One-Sample Kolmogrov Smirnov Test analysis:

a. Indonesia stock exchange

On the Indonesian Stock Exchange, it can be explained that the closing price value was distributed normally during the 5 year observation period. It was noted that the closing price value of the Indonesian Stock Exchange experienced an increase from 2018 to 2022. And fluctuations in share value were considered normal because there were no extreme changes in value or changes in share value below 1% from one period to another.

b. Kuala Lumpur Stock Exchange

On this stock exchange, it is explained that there are fluctuations or abnormal distributions from one time to another. This can be seen in the closing price of shares which experienced extreme changes, namely an increase or decrease of 2% on average. Since 2018, the Kuala Lumpur Stock Exchange has experienced an increase in the closing price value until July 2021, but in August 2021 the share value has decreased.

c. Singapore Exchange

On the Singapore Exchange it can be explained that the closing price of shares experienced a fairly normal share value distribution or changes in share value below 1%. This can be seen from the closing price of the shares which changes normally. From 2018 to June 2021 there was an increase in share value, but in July 2021 there was a decline in share value until the end of 2022. Although there was an increase and decrease in share value, it occurred normally and was not extreme.

d. Stock Exchange of Thailand

On the Stock Exchange of Thailand, it can be explained that the closing price value fluctuates normally or the distribution of values is normal or the change in share value is below 1%. This can be seen in the closing price value which changes every year in the middle of the year between June and July. from 2018 to 2022. The changes that occurred were considered not extreme and were still normal during the last 5 years from 2018 to 2022.

e. Hanoi Securities Trading Center

At the Hanoi Securities Trading Center there were no extreme fluctuations in closing price values because changes in share values from 2018 to 2022 could be categorized as normal changes or changes in share values below 1%. From 2018 to May 2019 there was a normal increase in share prices but from June 2019 to December 2013 there was a normal decline in share prices. In 2020 there was an increase in share prices, then at the beginning of 2021 there were normal share price fluctuations until the end of December 2022.

f. The Philippine Stock Exchange

The Philippines Stock Exchange experienced abnormal fluctuations in closing price values because the changes in share values were very extreme and the gap between the previous share value and the current share value was quite large. From 2018 to July 2019 there was an increase in share prices, but in August 2019 there was a fairly extreme decline in share values, namely 8.45% and this happened repeatedly in the period August 2019 to 1 December 2022.

DISCUSSION

Efficient ranking of the Indonesian Stock Exchange stock market on the ASEAN stock market

Based on the analysis results from different tests, it can be explained that the Indonesian Stock Exchange has a market efficiency ranking in second place below that of the Philippines Stock Exchange. The Indonesian Stock Exchange has quite strong stock price conditions because it has a closing price value that is above the standard price amounting to 56.67% while the value that is below the closing price is 43.33% of 60 samples over 5 periods, namely 2018 - 2022 During the 5 year observation period, it can be explained that the lowest closing price value occurred throughout 2018, this was due to the world global crisis which

affected economic conditions in Indonesia so that Indonesia had to maintain the economy in the real sector and also improve the volume of Indonesian exports which tended to decline in the previous year. Apart from that, economic growth in Indonesia in 2018 increased by 6.2% with controlled inflation of 4.3%. The Indonesian Stock Exchange has high efficiency because Indonesia has adopted policies that have been implemented by countries that are financial centers such as Singapore, China, Russia and the United States, one of these policies is the Go Public Information Center, making it easier for people who If you want to invest funds on the stock exchange, you can place the right proportion of shares. With this policy, the Indonesian Stock Exchange can attract more investor interest than when it had not used these policies. This is in accordance with previous research by Singh, Leepsa, Kushwaha (2016).

The influence of the ASEAN Stock Exchange on the Indonesian Stock Exchange

The ASEAN stock exchange has an influence on the Indonesian Stock Exchange, when it has high efficiency it will automatically influence the level of market efficiency on the ASEAN regional stock exchange. The ASEAN stock exchange has a market efficiency level with the majority being quite good as evidenced by the strengthening economy in ASEAN. Apart from that, cooperation between fellow ASEAN countries allows for quite significant changes, especially for the Indonesian Stock Exchange. For the Kuala Lumpur Stock Exchange in 2022, it developed a sharia-based securities product which is expected to increase and increase investors' interest in investing their capital in Malaysia. This sharia-based securities product is one of the steps taken by Malaysia to gain a place and interest in the eyes of investors. The Kuala Lumpur Stock Exchange is developing sharia-based securities products by collaborating with the Indonesian Stock Exchange. This is in accordance with previous research by Nassar (2016).

The Indonesian Stock Exchange has a Market Efficient Category on the ASEAN Stock Market

On the ASEAN stock exchange, the majority of each country has a category to become an efficient market. This is proven by the Indonesian Stock Exchange having high efficiency because Indonesia has adopted policies that have been implemented by countries that are financial centers such as Singapore, China, Russia and the United States, one of these policies is the Go Public Information Center making it easier People who want to invest funds on the stock exchange can place the right proportion of shares. With this policy, the Indonesian Stock Exchange can attract more investor interest than when it had not used these policies. The Indonesian Stock Exchange has a normally distributed closing price value during the 5 year observation period. It was noted that the closing price value of the Indonesian Stock Exchange experienced increase from 2018 to 2022. And fluctuations in share value are considered normal because there are no extreme changes in value or changes

in share value below 1% from one period to another. This is in accordance with previous research by Stakic, Jovancai, Kapor (2015).

The ASEAN Stock Market has a random stock return pattern on the stock market in each country in ASEAN

On the Indonesian Stock Exchange, it can be explained that the closing price value was distributed normally during the 5 year observation period. It was noted that the closing price value of the Indonesian Stock Exchange experienced an increase from 2018 to 2022. And fluctuations in share value were considered normal because there were no extreme changes in value or changes in share value below 1% from one period to another.

CONCLUSIONS AND RECOMMENDATIONS

1. The Indonesian Stock Exchange is ranked as an efficient market in second place after The Philippines Stock Exchange, this is because the Indonesian Stock Exchange has far fewer share prices that are above the standard price compared to The Philippines Stock Exchange.
2. The ASEAN stock exchange has an influence on the Indonesian Stock Exchange. This is proven by the level of efficiency of the ASEAN stock market. The majority of the ASEAN stock markets have a good level of efficiency, but what is different is the closing price conditions of each country's shares which fluctuate differently depending on the internal conditions of a country. When changes occur, these conditions will have an impact on the stock market value in the ASEAN region.
3. The Indonesian Stock Exchange has the category of being an efficient stock market in the ASEAN region, this is proven by the policies that have been made by the government such as the Go Public Information Center with the aim of attracting investors to invest their funds in the Indonesian Stock Exchange.
4. The Indonesian Stock Exchange has a return pattern that fluctuates normally, it can be said to be normal because the changes in closing price are not too extreme, namely below 1%.

ADVANCED RESEARCH

Still conducting further research to continue the Efficient Market Hypothesis Analysis on the Indonesian Stock Exchange in the Asean Stock Market

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