

ANALYSIS OF THE CHINESE NEW YEAR EFFECT ON THE INDONESIAN CAPITAL MARKET

^{*1}EDON RAMDANI, ²NUGRAHA, ³DISMAN and ⁴MAYA SARI

^{1, 2, 3, 4} Indonesian Education University. *Email: edon_ramdani@yahoo.com

Abstract

This study aims to determine whether there is an effect of the Chinese New Year on the return and volume of stock trading on the Indonesian stock exchange or not. Different test analysis using non-parametric test, t-test has been carried out. Higher average index returns were observed at '1 to 5 days before Chinese New Year' and '6 to 10 days after Chinese New Year holiday', while for average stock trading volume 5 days after Chinese New Year was higher. The results of the Wilcoxon Signed Ranks Test show that there is no significant effect of stock returns and trading volume before and after the Chinese New Year. The impact of the Chinese New Year on stock returns and trading volume on the Indonesia Stock Exchange is not proven in this study. The capital market of a country is influenced by the domination of the nation (ethnicity) in that country.

Keywords: Analysis, Stock, Chinese New Year, Indonesian Capital Market

Introduction

The debate about the efficient market theory (Efficiency Market Hypothesis) is still going on today. Adherents of traditional finance say that the stock price formed is a picture of the value of all available information, both fundamental value and also added insider information. Investors cannot beat market returns systematically and stock prices are rational (Statman, 1998)

In the concept of an efficient market, it means that the current stock price reflects all available information, this means past, present information and is supplemented by information about the company itself (Fama, 1970). The efficient market hypothesis has at least three basic assumptions (Shleifer, 2000), first that investors are assumed to act rationally so that they will value stocks rationally. Second, some investors may act irrationally but their behavior is random so that their effects will cancel each other out and do not affect prices. Then the three rational investors will reduce the influence of irrational investor behavior on prices in the capital market.

Behavioral finance is a fairy tale of the past (ex post story telling) which cannot produce any hypothesis to be tested. Behavioral finance is not a science; behavioral finance is only good at the individual micro level but does not get data validation support when entering the macro capital market context (Fama, 2012)

Fama's statement above is grossly exaggerated and over-confident according to behavioral finance experts. Fama is not consistent with the findings of his research with Kenneth R. French in 1992 which found that there were market anomalies. Fama and French found that stock beta as a risk measure was not able to explain the average stock returns.

Evidence of market inefficiency, one of which comes from empirical evidence which states that stock prices do not always move in a random pattern in the long run (De Bondt and Thaler, 1985) and in the short term (Bernard and Thomas, 1989; Jegadeesh and Titman), 1993).

The challenge to the efficient market hypothesis is also about the differences in stock volatility and dividend or revenue volatility of issuers in the market where volatility turns out to have greater volatility than dividend or revenue volatility (Shiller, 1981; Black, 1986).

Capital market anomalies can be caused by three things. First, the imperfection of the market structure, where no market can truly be called perfect in fact. Second, there is considerable power of deviant behavior by trading investors. Third, the reference to capital market theory used by investors in carrying out investment strategies is not appropriate so that it can cause errors or deviations in capital market assessments (Reilly, 2006).

Investor sentiment can influence their decision to invest. When deciding to invest, investors can be influenced by mood and mood conditions. When the mood is in a happy or happy condition, it can encourage investors to decide their investment policies. Mood dimensions or mood dimensions are positive affection formed from positive emotions and negative affection formed from negative emotions (Dessler, 2017).

The calendar anomaly is one of the cases that violates the efficient market hypothesis and affects the capital market. In the financial literature, calendar anomalies refer to the effect of special days and months of the year on different aspects of the Stock Exchange market. Research on calendar anomalies or seasons has become one of the focuses of research by experts, regarding their impact on financial decisions. The effect of Monday on the Dow Jones index during 1974-1984 was significantly high compared to other days, (Rogalski, 1984).

This study examines the effect of the Chinese New Year on the Indonesian capital market. At the celebration of religious holidays people tend to be in a happy or happy mood. Moods bring about reaction emotions when the moods and emotions are similar. Perception itself can be a person's influence in making decisions because the perception that is in one's mind will make someone think of alternatives that can be a solution or consideration in decision making (Rotternberg, 2005). Emotions and cognitions are continuously connected in the brain and each can have the potential to bias or enhance decision making depending on the type of decision to be made (Lerner et al., 2015).

Chinese New Year or Chinese New Year is one of the eleven religious holidays in Indonesia. This study aims to analyze whether the impact of Implek on the Indonesian Capital Market (IDX) is seen from the stock price (IHSG), Market Return and Trading Volume.

Literature review

The efficient market hypothesis is one of the main theories in the field of finance and is always discussed by academics in economics and finance. Friedman (1953), first put forward

his hypothesis which assumes that when the price of an asset is right, then everyone will not get additional benefits from selling the asset and that assumption is simply conveyed in the sentence "prices are right, there is no free lunch".

Bodie et al (2008) divide the efficient market into three categories, namely the weak form of efficient market, half strong form of efficient market and strong form of efficient market. Weak Form Efficient Market Hypothesis, this hypothesis explains that stock prices have reflected all past information available in the market such as price data, trading volume, or short interest. Efficient Market Hypothesis Half Strong Form, this hypothesis states that all information available in the market including information on the company's growth potential must have been reflected in stock prices such as product line data, management quality, and composition of financial statements such as balance sheets, patents, profit projections, and treatment accountancy. Strong Form Efficient Market Hypothesis, this hypothesis explains that stock prices have reflected all relevant information for the company, including information that is only available to internal company parties (insiders) so that even though the management and employees of the company have access to information before the information is available in the market, it does not allow them to take advantage of trading based on that information because all the information will be published immediately.

In fact, investors when deciding to invest are not only based on rational factors and mathematical calculations. Investors' behavior also affects decision-making, which is based on mood conditions, emotions and other habits and then drives their attitude (sentiment) when deciding to invest or not. This condition encourages market anomalies. Market anomalies are unusual, unusual or strange events that occur in the capital market. Market anomalies are deviations from currently accepted paradigms that are too broad to be ignored, too systematic to be considered random errors, and too basic to be accommodated by loosening the normative system. (Tversky and Kahneman, 1986).

Calendar anomaly is a form of market deviation, the influence of holidays, trading days and certain events. The mood, emotions or feelings of investors in the days before or after holidays, both national holidays and religious holidays, may vary in conditions which can also affect the behavior of investors in trading stocks. The effect before the holiday is very strong compared to the previous days (Marretta and Worthington, 2009).

Abadir and Spierdijk, 2005 in their research on the stock exchanges of Egypt, Jordan, Pakistan, Malaysia, Singapore, China, Hong Kong, Taiwan and South Korea regarding the impact of the Chinese New Year and Ramadan, found evidence that there was an influence of the Chinese New Year and Ramadan in these countries. .

Then the research, Yen and Shyy (1993) on the Stock Exchanges of Hong Kong, Japan, Malaysia, Singapore, South Korea and Taiwan from 1976 to 1990 found that the cumulative return 5 days before the Chinese New Year was significantly higher than the actual annual return. On the other hand, there is no significant evidence that the cumulative returns after Chinese New Year are higher or lower than the annual returns on the stock exchanges of these countries.

Research conducted by Abidin, Banchit et al. (2011) examined the effect of the Chinese New Year on the stock market in seven Asia Pacific countries in the period 1992 to 2011 and found evidence that there was a significant relationship that supported the Chinese New Year Effect. The results showed that there was a positive effect. on the five days before the Lunar New Year period in the stock markets of Hong Kong, Japan, Singapore, Malaysia and Taiwan. On the other hand, the findings show that there is no significant evidence to suggest that the returns on the Pre Lunar New Year festival are higher or higher. Lower than returns on other trading days in the South Korean and New Zealand stock markets. Second, the results show that there is no significant evidence to support that after the Lunar New Year, returns are positive or negative in all selected countries except South Korea. No significant evidence which supports the Lunar New Year Securities in the New Zealand Stock Market Overall, the stock markets of Hong Kong, Singapore, Malaysia, Taiwan and Japan appear to be affected by the Chinese New Year Effect.

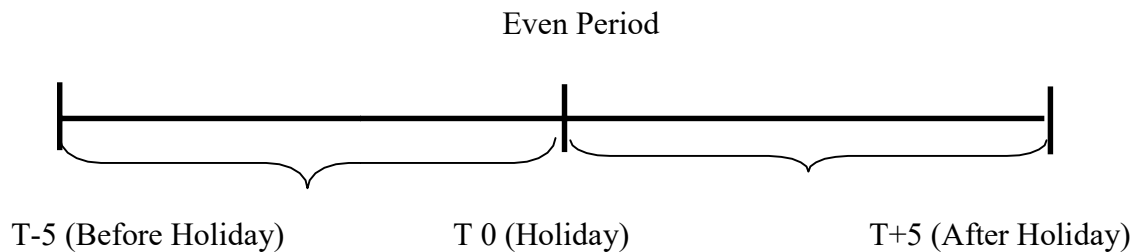
Wong et al (1990) in their research on the influence of the Chinese New Year and Eid al-Fitr in Malaysia, Singapore, Hong Kong, England and the United States in the period 1970 to 1985 found evidence of the influence of the Chinese New Year in Malaysia, Singapore and Hong Kong. Influence in Britain and America.

Furthermore, research conducted by Congsheng Wu, (2013), regarding the effect of the Chinese New Year holiday on stock returns of Chinese stocks traded in the United States (American Depositary Receipts/ADRs) during the period 1993 to 2011, obtained a positive holiday effect. During the Chinese New Year festival, but this effect becomes statistically insignificant after we control for or adjust for the US market again. Meanwhile, Chinese ADR had significantly higher average returns in the week before the festival, but lower average returns in the post-festival week.

The high and positive stock return on trading days before the holiday (pre-holiday effect) is significantly different when compared to the average stock return on other trading days because investors take profit taking to face the holidays (Ariel, 1990).

Research methodology

This research is an event study research. An event study is a study that studies the market reaction to an event whose information is published as an announcement. Another understanding of event study, observation of stock prices in the capital market to find out whether there is an abnormal return obtained by shareholders due to a certain event (Peterson, 1989). The research method used depends on the distribution of the data. If the data is normally distributed, the writer uses a parametric test, namely the Paired Sample T-test. However, if the data is not normally distributed, the authors use a nonparametric test, namely the Wilcoxon Signed Rank Test. Both are two-average difference tests that are used to determine whether there is a difference in the average of two paired samples. Then the test tool in this study using the Spss 26 software by testing the average stock return five days before and after the Chinese New Year. The data in this study uses the Composite Stock Price Index (IHSG) in the period 2006 to 2021



The hypothesis in this study is to test:

H1: it is suspected that there is an influence of the Chinese New Year on stock returns

H2: it is suspected that there is an influence of China's New Year on the Stock Trading Volume

Decision making basis:

If the probability of the result (sig value) > 0.05 or $-t_{table} < t_{count} < t_{table}$, then there is no difference between before and after holidays.

If the probability of the result (sig value) < 0.05 or $t_{count} < -t_{table}$ or $t_{count} > t_{table}$ then there is a difference between before and after holidays.

The first stage of testing in this research is a correlation test; the correlation test is intended to find out whether there is a relationship between the data before and after the Chinese New Year. Then the normality test was conducted to determine whether the research data were normally distributed or not. After knowing the results of the normality test, then a hypothesis test is carried out. If the data is normally distributed, then the parametric test is used, namely the Paired Sample T-test, while if the data is not normally distributed, the non-parametric test is used with the Wilcoxon Signed Rank Test.

Discussion and Conclusion

Correlation Test			Before	After
Chinesse	Stock returnbefore	PearsonCorrelation	1	.101
		Sig.(2-tailed)		.373
		N	80	80
	Stock returnafter	PearsonCorrelation	.101	1
		Sig.(2-tailed)	.373	
		N	80	80
	Volume before	PearsonCorrelation	1	.916**
		Sig. (2-tailed)		.000
		N	80	80
	Volumeafter	PearsonCorrelation	.916**	1
		Sig. (2-tailed)	.000	
		N	80	80

Hypothesis

1. H0: There is no significant correlation between return and stock trading volume before and after religious holidays
2. H1: There is a significant correlation between return and stock trading volume before and after religious holidays

The basis for decision making if the probability (sig value) > 0.05 then H0 is not rejected, if the probability (sig value) < 0.05 then H0 is rejected.

Correlation Analysis Results:

In the table above, the significant value for stock returns is $0.373 > 0.05 \rightarrow$ it means that H0 is not rejected; this shows that there is no real positive correlation between stock prices before and after religious holidays. Meanwhile, for stock trading volume, the significance value is $0.000 < 0.05$ meaning H0 is rejected, which indicates a significant positive correlation between stock trading volume before and after the Chinese New Year.

Normality test						
Chinese New Year	N		Return Before	Volume Before	Return After	Volume After
	NormalParameters ^{a,b}	Mean	0.1184%	7100608495.31	-0.0254%	7208619238.76
		Std.Deviation	0.99208%	6086652137.332	0.85724%	6493950835.028
	MostExtremeDifferences	Absolute	0.084	0.247	0.102	0.228
		Positive	0.067	0.247	0.060	0.228
		Negative	-0.084	-0.157	-0.102	-0.151
	Test Statistic		0.084	0.247	0.102	0.228
	Asymp.Sig.(2-tailed)		.200 ^{c,d}	.000 ^c	.040 ^c	.000 ^c

Testing hypothesis:

1. H0: Stock price data is normally distributed
2. H1: Stock price data is not normally distributed

Decision making basis:

1. If the probability (significance value) > 0.05 then H0 is not rejected
2. If the probability (significance value) < 0.05 then H0 is rejected.

The results of the analysis of the normality test are facts, in general the data five days before and after religious holidays are not normally distributed or the average significance value is below <0.05, which means H0 is rejected and H1 is accepted, namely, data on return and trading volume before and after the Chinese New Year. Not normally distributed.

Non Parametric Test

Based on the normality test, the results of the data were not normally distributed. In the difference test, if the data are not normally distributed, then to test the research hypothesis, a non-parametric test is used using the Wilcoxon Signed Rank Test test model.

Wilcoxon Signed Rank Test		Return	Volume
Chinese New Year	Z	-1.031 ^c	-.043 ^c
	Asymp. Sig. (2-tailed)	.302	.966

Hypothesis

H0: The average stock return and trading volume five days before and five days after the Chinese New Year, are not statistically significant.

H1: The average stock returns and trading volume five days before and five days after the Chinese New Year, are statistically significant.

Decision Making Basis

1. If the probability (sig value) > 0.05 or $t_{table} < t_{count} < t_{table}$ then H_0 is not rejected
2. If the probability (sig value) < 0.05 or $t_{table} < t_{count} < t_{table}$ then H_0 is rejected

Based on the non-parametric test using the Wilcoxon Signed Rank Test, the results of the significance value for stock returns are $0.302 > 0.05$ and Trading Volume is $0.966 > 0.05$, which means that H_0 is not rejected, namely the average stock return and trading volume five days before and five days after the new year. China, not statistically significantly different.

The conclusion of this study is that the Chinese New Year does not have an impact on the Indonesian capital market, whether it is tested for its effect on stock returns or stock trading volume. The results of the study are in line with the research of Sasikirono and Meidiaswati, 2017 regarding the effect of religious holidays on the Indonesian stock exchange for the period 2005 to 2015 which states that the Chinese New Year has no impact. The results of this study are different from the results of studies in China, Hong Kong, Taiwan, Singapore, Malaysia, Japan, and Korea which get the results of the Chinese New Year effect, this shows that ethnic dominance and culture (similarity) in a country affects or has an impact on the capital markets of these countries.

Bibliography

- Abidin, Sazali, & Banchit, Azilawati, & Sun, Shiwei, & Tian, Zhenfei, (2015), Chinese New Year Effects on Stock Returns: Evidence from Asia-Pacific Stock Markets, <https://www.researchgate.net/publication/265799068>
- Ariel, R.A. (1990). High stock returns before holidays: existence and evidence on possible causes, *The Journal of Finance*, 45 (5), pp. 1611-1626
- Bernard, V.L. and J. Thomas, 1989, Post-earnings-announcement drift: delayed price response or risk premium? *Journal of Accounting Research* 27 (Supplement), 1-36.
- Black, Fischer, 1986, Noise, *THE JOURNAL OF FINANCE*, VOL. XLI, NO. 3, JULY 1986
- Bodie, Z., Kane, A., & Marcus, A.J. (2009). *Investments and portfolio management* (Global Edition). New York: The McGraw-Hill Companies, Inc.
- Congsheng Wu (2013). The Chinese New Year holiday effect: evidence from Chinese ADRs. *Investment Management and Financial Innovations*, 10(2). *Investment Management and Financial Innovations*, Volume 10, Issue 2, 2013
- DeBondt, W. F. M., and R. Thaler, 1985. Does the stock market overreact? *Journal of Finance* 40(3), 793-805.
- Dessler, Gary. 2017. "Human Resource Management". 15th Edition. United States of America: Pearson Education, Inc.
- Fama, Eugene F; Efficient Capital Markets: A Review of Theory and Empirical Work Author(s): *The Journal of Finance*, Vol. 25, No. 2, Papers and Proceedings of the Twenty-Eighth Annual Meeting of the American Finance Association New York, N.Y. December, 28-30, 1969 (May, 1970), pp. 383-417 Published by: Blackwell Publishing for the American Finance Association Stable URL: <http://www.jstor.org/stable/2325486>

- Fama, E.F. dan R. Litterman. 2012. "An Experienced View on Markets and Investing". *Financial Analysts Journal*, Vol. 68, No. 6, hlm 1-5
- Friedman, M. (1953). *Essays in positive economics*. Chicago, Illinois: University of Chicago Press.
- Jegadeesh, N. and Titman, S. (1993) 'Returns to buying winners and selling losers: Implications for stock market efficiency', *Journal of Finance*, Vol. 48, pp. 65-91
- Lerner, Jennifer S., Ye Li, PiercarloValdesolo, and Karim S. Kassam. 2015. "Emotion and Decision Making" *Annual Review of Psychology* 66, No. 1, Page 799-823. Diaksespada 19 Oktober 2020. <https://doi.org/10.1146/annurev-psych-010213-115043>
- Marret dan Worthington, 2007. An empirical note on the holiday effect in the Australian stock market, 1996-2006, School of Accounting & Finance, University of Wollongong, Working Paper 11
- Peterson, Pamela. 1989. *Events Studies: A Review of Issues and Methodology*. *Quarterly Journal of Business and Economics*, summer. 28(3), pp:36-66
- Reilly, F.K. and Edgar, A.N. (2006), *Investments*, 7th Ed., Thomson, Luton.
- Rogalski, R.J. (1984) New Findings Regarding Day-Of-The-Week Returns over Trading and Non-Trading Periods: A Note. *Journal of Finance*, 39, 1603-1614. <https://doi.org/10.1111/j.1540-6261.1984.tb04927.x>
- Rottenberg. 2005. "Mood and Emotion in Major Depression" *Current Directions in Psychological Science* 14(3):167-170 DOI:10.1111/j.0963-7214.2005.00354.x
- Sasikirono, Nugroho, & Meidiaswati, Harlina, (2017), *Holiday Effect in the Indonesian Stock Market*, *Advances in Intelligent Systems Research*, volume 131, International Conference of Organizational Innovation (ICOI 2017), Atlantis Press.
- Shiller, R. (1981). "Do Stock Prices Move Too Much to be justified by Subsequent Changes in Dividends?" *American Economic Review*. 71(3): 421-36.
- Shleifer, A., 2000. *An Introduction to Behavioral Finance*, Oxford University Press;
- Statman, Meir. (1995); *Behavioral Finance versus Standard Finance*; in *Behavioral Finance and Decision Theory in Investment Management*; ICFA Continuing Education, Association Investment Management and Research.
- Tversky, Amos and Daniel Kahneman. 1986. *Rational Choice and the Framing of Decisions*. *The Journal of Business*, 59(4): S251-S278.
- Wong, PL, SK Neoh, KH Lee and TS Thong (1990). *Seasonality in the Malaysian stock market*. *Asia Pacific Journal of Management*, 7, 43-62.
- Yen, H., & Shyy, A. L. (1993). *Chinese Lunar New Year effect in Asian stock market*. *Taiwan National University Management Journal*, 4, 417-436.