



## The Holy Months Impact of Islam Toward Stock Price in Jakarta Islamic Index (JII)

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### **Abstract:**

*The purpose of this research is to determine the effect of anomaly calendar towards stock price in haram months (Muharam, Rajab, Zulkaidah, and Zulhijjah) in Jakarta Islamic Index (JII). Population for this research include all stockmarkets under the category of Jakarta Islamic Index (JII) during the period of 1436H-1440H. Samples were chosen using purposive sampling, which include 44 companies. Results showed that there is no difference in JII stock price during holy months of Rajab, Zulkaidah, and Zulhijjah compared to any other period of the same year. This finding means that muslim society in Indonesia did not create an out of ordinary transaction in the market and there will be no significant change during the period of holy months. However, in Muharram, results showed different outcome compared to the other holy months.*

**Keywords:** Holy Months of Islam, Stock Price, Jakarta Islamic Index

**JEL Classification Code:** H54, R53

### **1. Introduction**

Seasonal anomaly consists of few things, such as Turn of the Month effect (TOM), monthly effect, holidays effect, religious holiday effect, or religious calendar. Researches with topics that centered around on religious months or religious holiday effect are the types of studies that focus on religious calendar. Those studies seek to understand how such time of the year can affect a nation with a dominant religion or beliefs, such as Indonesia with its muslim majority population.

According to Zafar et al. (2012), calendar anomaly is defined as a consistent pattern that happen within specific interval, specific time, and specific date. Seasonal anomaly shows that stock price can either increase or decrease based on the seasonal effect.

Haram months or holy months of Islam is a special month in Islamic point of view. It is called Haram because during that period, it is forbidden (haram) for muslims to go to war or commit murder. It is called a special month because during this period, Allah Swt. Will multiply His rewards to a muslim who do good deeds, just as He will multiply sins to those who commit atrocities. There are four haram months in Islam, namely Zulkaidah, Zulhijjah, Muharram, and Rajab.



Month of Zulhijjah is the last month in Islamic calendar. During this period, some muslims went to pilgrimage to Mecca, while some others celebrate Eid\_al-Adha by sacrificing animals like cows, goats, or camels. Those animals were slaughtered to honor sacrifice made by prophet Ibrahim and his son prophet Ismail. Such celebration event can increase consumption, while investment will be reduced. Changes in consumers behavior happened during each Islamic months, and will affect security return in Indonesia Stock Exchange (BEI). It will also explain each anomaly that might occur in Islamic calendar.

Investation in Islamic perspective is a recommended activity. With investation, wealth owned by people will be turned something productive and beneficial to other people. There are many kinds of investation, one of which is by investing in capital market. Capital market is defined by Husnan (2003) as a market for various long-term financial instrument which can be bought or sold, in form of credits or personal capital, and may be originated from governments or private company. Capital market has important role for country's economy because of its two functions. It can be used as a method to raise business funds or as a way for companies to obtain funding from investors.

One of the investation commonly used in capital market is buying stocks. According to Tandelilin (2001), stock is a proof of ownership over assets that is owned by the company who publish it. This proof of ownership come in the form of certificate, where the shareholders have the right to claim incomes and assets of the company. Basically, investor who bought or own the share in capital market will receive benefit in form of cash dividend or stock dividend and also acquiring capital gain. Stock price will fluctuate from time to time. Just as the law of supply and demand, if more people buy stocks, its price will tend to increase.

The rise of capital market in Indonesia begins with the launch of sharia mutual funds for the first time by Danareksa Syariah in 1997, which later followed by sharia index called Jakarta Islamic Index (JII) in 2000. Jakarta Islamic Index is the frist sharia stock index in Indonesia's capital market launched in 3<sup>rd</sup> of July, 2000. It is one of the stock indexes in Indonesia which counts the index of average stock price that fulfill the sharia criteria. Constituents of JII consists of 30 most liquid sharia index registered in BEI. This system is different compared to Indonesian Sharia Stock Index (Indeks Saham Syariah Indonesia - ISSI) which consist of all sharia stocks registered in BEI and are listed in Sharia Stock List (Daftar Efek Syariah - DES) published by Indonesia's Financial Services Authority (Otoritas Jasa Keuangan - OJK).

Abduleh (2018) performed research in Iran and Iraq Stock Exchange. Results of that study indicated that there is no significant difference in stock price between month of Muharram, Rajab, Zulkaidah, and Zulhijjah compared to any other months in Hijriah calendar. However, there is a significant difference of stock price in Iran Stock Exchange during month of Rajab and Zulkaidah, compared to other holy months of Islam.

Munusamy (2018) performed research in India's Stock Exchange, where the results showed that there is a higher average of return during month of Ramadan compared to any other months. This research was continued later by changing the gregorian calendar to Islamic calendar and focused on the-month-of-the-years. The results indicated that highest average return and the most significant happened during month of Ramadan and Rabiulawal.

Halari, et al. (2015) showed that calendar effect did not only happen in Ramadan, but also during any other Islam holy months such as Syawal, Zulkaidah, and Rabiulawal. The effect caused by these holy months may vary, because there are many other factors in society that was affected by both Islam and local tradition.

Research surrounding the topic of anomaly calendar had been performed continuously, but only few actually focused on religious calendar. Therefore, this research will be focused on religious calendar phenomenon in Indonesia Stock Exchange, titled

## **2. Literature Review**

### **Efficient Market**

Efficient market can be explained as a market which securities can reflect all relevant informations. Sujana (2017) stated that such relevancy can be measured by whether or not the informations provided encompass: (a) past price changes; (b) public information; and (c) public and private information. The more accurately informations reflected to security prices, the higher the efficiency of such market.

### **Stock**

Stock is one of the shares that can be bought or sold in capital market. Tandelilin (2001) explained that stocks are proof of ownership of assets owned by company who published it. This proof of ownership is written as certificate, where the shareholders reserve a right to claim company's income or assets. This stock is presented as a piece of paper which explained how the owner of this paper is also the owner of the company who publish it.

### **Stock Price**

According to Tandelilin (2010), stock price is the reflection of investor's expectation towards earning factors, cash flow, and return rate. These three factors can be heavily influenced by macroeconomics. Anogara and Pakarti (2008) mentioned that the value of stocks can be segmented to three categories, namely: (a) par value; (b) base price, and (c) market price.



### **Jakarta Islamic Index (JII)**

Jakarta Islamic Index (JII) is the first sharia stock index launched in Indonesia capital market in 3<sup>rd</sup> of July, 2000. The constituent of JII consists of 30 most liquid sharia stocks indexed in BEI. This index is expected to be the benchmarks of performance for sharia stocks as well as to enforce development of sharia capital market. (<https://www.idx.co.id/idx-syariah/indeks-saham-syariah/>, 11<sup>th</sup> of February, 2020).

### **Islamic Calendar Anomaly (Religious Calendar)**

Anomaly is a phenomenon occur in market, where during such moment, things that do not contribute to market efficiency happened. According to Apriansyah (2013), there are several seasonal anomaly that can occur, such as Turn of the Month effect (TOM), monthly effect, holiday's effect. Religious holiday effect, or religious calendar. Research regarding monthly effect of religious calendar is a research focused on events during such period. Zafar et al. (2012) stated that calendar anomaly is a moment where there is consistent pattern which happened regularly during specific interval or date.

### **Haram Months in Islam**

Haram months are special months in Islam, named in such a way because during this period, it is forbidden (haram) for muslims to go to war or commit murder. It is also a month where Allah Swt. will multiply the rewards for the believer who do good deeds, and multiply sins for those who commit atrocities. There are few months in Islam that is considered as haram months, namely Muharram, Rajab, Zulkaidah, and Zulhijjah.

### **Correlation Between Islamic Holy Months and Stock Price**

Calendar anomaly is one example of seasonal anomaly in financial market, when stock price in haram months is different compared to any other. There are 12 months in Islamic calendar, but there are only 4 haram months. Because haram months are special occasion in Islam, there will be change in emotion and mood in muslims.

According to Syed (2017), periodic or seasonal pattern that occur during the year will happen once in one calendar cycle. If there is a seasonal effect or calendar anomaly in stock price, it will cause an abnormal benefit and investors can utilize such opportunity to achieve higher than average profit.

## **3. Research Method**

This research was performed using descriptive method and quantitative approach. Research objects are any companies that was listed in Jakarta Islamic Index (JII). Data that can be used for this research are companies' daily close price during 2015-2019. Purposive sampling was used as the sampling technique.

There are criteria that needs to be fulfilled by samples in order to be chosen, where they must be companies that listed in Jakarta Islamic Index during 2015-2019 period. Based on that arrangement, there are 44 samples chosen for this research.

Data needed in this research are secondary data from JII which obtained from their website <https://www.idx.co.id/>. Data were collected using documentation and literature study of stock price during 1435-1440 Hijria or 2015-2019 in Gregorian calendar. Literature study is an activity performed to obtain supporting data or theory needed for research. Some literature studied are journal's articles, books, news, and more.

#### 4. Finding and Discussion

##### Descriptive Analysis

The purpose of descriptive statistic is to collect, process, measure, and making conclusion from statistical data in order to obtain needed informations. Those informations consists of maximum value, minimum value, mean, and standard deviations.

In this research, there are 4 variables, namely Muharram, Rajab, Zulkaidah, and Zulhijjah. Data that were used are daily stock's close price from companies listed in Jakarta Islamic Index (JII) during 2015-2019 period. The results from descriptive analysis are shown in the table below:

**Table 1:** Result of Descriptive Analysis

Variables	N	Min	Max	Mean	Std. Deviation
Muharram	95	645.60	744.76	7437.78	24.07377
Rajab	101	544.39	758.16	69317.51	62.98730
Zulkaidah	99	542.00	757.07	67011.07	64.06100
Zulhijjah	103	582.21	756.69	70543.31	54.69123

Sources: SPSS data processed

From the table above, it can be seen that there are variety of value. The average highest stock price happened on Zulhijjah, which is 70543.31, followed by Rajab in 69317.51, Zulkaidah in 67011.07, and Muharram in 7437.78.

##### Normality Test

Normality test was performed to understand distributions of data that will be processed in this research. The test chosen was Kolmogorof-Smirnov (K-S) test, because data that will be used in this research comes in interval/ratio scale (quantitative). The results from normality test can be seen in the table below:

**Table 2:** Normality Test Result *Kolmogorov-Smirnov* (K-S)

Variables	<i>Kolmogorof- Smirnov</i>	Results
Muharram	0.000	Not Normal

Rajab	0.000	Not Normal
Zulkaidah	0.000	Not Normal
Zulhijjah	0.000	Not Normal

Source: SPSS data processed

With 5% significance level, all data on the table above do not have normal distribution. Results of normality test using Kolmogorof-Smirnov shoed that all variables do not distribute normally with significance level below 0.05. Thus, additional testing for all variables must be performed using Mann Whitney test.

### Mann Whitney Test

Mann Whitney test is a non-parametric procedure used for testing hypotheses of the difference between two independent population. In this research, all testing for variables were performed using Mann Whitney. This is because all variables do not fulfill the normality assumption. The result from Mann Whitney test is presented in table below:

**Table 3:** Mann Whitney test Results

Variables	Sig.	Conclusion
Muharram	0.001 (<0.05)	H <sub>1</sub> accepted (Differences are present)
Rajab	0.278 (>0.05)	H <sub>2</sub> rejected (No difference)
Zulkaidah	0.371 (>0.05)	H <sub>3</sub> rejected (No difference)
Zulhijjah	0.694 (>0.05)	H <sub>4</sub> rejected (No difference)

Source: SPSS data processed

The table above showed that month of Muharram has significancy level of less than 0.05, which means H<sub>1</sub> is accepted. This means that there is a significant difference during month of Muharram compared to other non-holy months on stock price in JII. The other months, that is Rajab, Zulkaidah, and Zulhijjah have significance level above 0.05, which means that H<sub>2</sub>, H<sub>3</sub>, and H<sub>4</sub> are rejected. This means that during those months, compared to any other non-holy months, there are no significant difference of stock price in JII.

Haram months are special occasions in Islam. It is called as such because during that period, it is forbidden (haram) for muslims to go to war or commit murder. It is also during this special month that Allah Swt. will multiply the reward for believers who do good deeds and multiply the sin for those who commit atrocities. The four months mentioned are Muharram, Rajab, Zulkaidah, and Zulhijjah. In this section, differences between holy months and non-holy months will be explained. These differences will be measured using daily stock price index in Jakarta Islamic Index (JII) for all Islamic months.

Jakarta Islamic Index (JII) is the first sharia stock index in Indonesia. Every stock that indexed in JII will be evaluated based on its compliance to sharia rule. JII will be reviewed every 6 months, which is January and July, or

based on the period set by Capital Market and Financial Institutions Supervisory Agency (Badan Pengawas Pasar Modal dan Lembaga Keuangan or Bapepam-LK). Any change regarding the issuers will be continuously monitored and measured based on the available public data. This measurement is necessary to better understand how calendar anomaly can affect stock prices in haram months (Muharram, Rajab, Zulkaidah, and Zulhijjah) in Jakarta Islamic Index (JII).

a. The impact of month of Muharram towards stock price in Jakarta Islamic Index (JII)

Based on Mann Whitney analysis on Muharram, results indicated that the significance value is 0.001 or less than 0.05. This means that stock prices during Muharram have significant difference with stock price during any other months. Because of this,  $H_1$  is accepted, which shows that there are differences in stock price during Muharram compared to any other months. It can be concluded that there is a calendar anomaly on stock price in Jakarta Islamic Index during month of Muharram.

In this research, month of Muharram has significant difference regarding stock price in JII compared to any other month. This is due to the fact that Muharram is both an Islamic New Year and considered as month of *khidmat*, which celebrated by doing more worshipping act. It is presumed that such celebration can affect investor's mood in stock market. Results in this research is supported by (Atala, 2017), where they explained about difference in stock price during Muharram compared to any other months. This results, however, is contradictive with study by (Abduleh *et al.* 2018) in Iran and Iraq Stock Exchange, where they stated that there are no difference in stock price between Muharram or any other months.

b. The impact of month of Rajab towards stock price in Jakarta Islamic Index (JII)

Based on Mann Whitney analysis on Rajab, results indicated that the significance value is 0.278 or more than 0.05. It means that stock price during Rajab does not have any significant difference compared to stock price on any other months. Thus, this research concluded that there are no differences in stock price during month of Rajab compared to any other months. It is presumed that month of Rajab does not actually affect investor's mood in stock market. Even though Rajab is one of the special months given by Allah Swt., muslims' behavior does not change much in stock market. With this finding, it can be concluded that there is no calendar anomaly in Jakarta Islamic Index (JII) stock market during month of Rajab.

Based on data analysis, stock price difference in Rajab is not significant compared to any other months. This results do not support research performed by (Abduleh *et al.* 2018) about how Islamic Holy

Months can affect Iran and Iraq Stock Exchange. They stated that there is a significant difference in Rajab compared to any other months. Abduleh *et al.* also mentioned that such differences may not be caused by real market activities.

c. The impact of month of Zulkaidah towards stock price in Jakarta Islamic Index (JII)

Based on Mann Whitney analysis on Rajab, results indicated that the significance value is 0.371 or more than 0.05. It showed that stock price during month of Zulkaidah does not have any difference compared to any other months. Although this period is also considered as special month by Allah Swt., muslim society showed no major behavioral change in stock market. Thus, it can be concluded that there is no calendar anomaly that affect Jakarta Islamic Index (JII) stock price during month of Zulkaidah.

Based on data analysis, comparison of stock price during month of Zulkaidah and any other months showed no significant difference. This results is different compared to study by (Abduleh *et al.* 2018) in Iran and Iraq Stock Exchange. In their research, it was evident that there is a significant difference during month of Zulkaidah compared to any other months. They also mentioned that such difference may not be caused by real market activities.

d. The impact of month of Zulhijjah towards stock price in Jakarta Islamic Index (JII)

Based on Mann Whitney analysis on Rajab, results indicated that the significance value is 0.694 or more than 0.05. This indicates that stock price during month of Zulhijjah does not have any significant difference compared to any other months. This month of Zulhijjah is also one of the special Islamic months blessed by Allah Swt., but muslims do not show any different behavior in stock market. Thus, it can be concluded that there is no calendar anomaly in stock price of Jakarta Islamic Index (JII) during month of Zulhijjah.

This finding supports study performed by Abduleh *et al.* (2018) about Iran and Iraq Stock Exchange and how Islamic holy months affect it. Their research showed that there is not significant difference in Iran and Iraq stock price during month of Zulhijjah compared to any other months. However, finding from this research contradict results from Akhter *et al.* (2015), where they concluded that there is difference in stock price during month of Zulhijjah compared to any other months. Their research was performed in Malaysia.

## 5. Conclusion

Results indicated that there is no difference in JII's stock price during Rajab, Zulkaidah, and Zulhijjah compared to any other months. This finding





showed that Indonesia's muslim society did not show any change of behavior in the market as there are no significant changes during these periods. However, on month of Muharram, results showed different finding. There is a calendar anomaly during month of Muharram, which affect investor's mood and cause changes in buying or selling behavior compared to any other months.

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