The Influence Day of The Week Effect, Week Four Effect, and Month of The Year Effect toward Stock Return In LQ-45 Index 2015 - 2019

Anisa Ikaputri[1]
[1]Study Program Management, Faculty Economics and Business, Universitas Mercu Buana
Jl. Raya Meruya Selatan, Kembangan, Jakarta 11650
anisaika97@gmail.com

Abstract *– The purpose of this study was to examine the influence day of the week effect, week four effect, and month of the year effect toward stock return in LQ-45 index 2015 – 2019. The data used in this study are secondary data from www.yahoofinance.com. The samples of this study were the company that consistently incorporated in LQ-45 index during the research period in 2015 – 2019. This study used GARCH and t-test models. One of the GARCH models used in this study is IGARCH (Integrated Generalized Autoregressive Conditional Heteroscedasticity). The result of this study indicates the existence of day of the week effect. Specifically, a negative and significant effect on Monday (Monday effect) and positive and significant effect on Tuesday and Wednesday. The week four effect was also found in this study where there was a negative and significant return on Monday 4th week. This study also indicates the month of the year effect were a positive and significant return in January, February, and December, a negative and significant return in September.*

Keywords: *market anomalies, stock return, day of the week effect, week four effect, and month of the year effect.*

INTRODUCTION

Indonesia continues to experience growth in all sectors of development, both physical and non-physical development. This development requires the support of both domestic and overseas to be equitable and sustainable. In a country's development can't be separated from the activity and investment growth. The higher growth in investment, the higher the chances of economic growth can be achieved by a country. The purpose of foreign and domestic investors investing is to get a high rate of return.

In practice, stock returns do not reflect real market information. Many problems arise because the price of the stock does not reflect all the information that should be to cause the market to be inefficient. There are several phenomena, irregularities, or anomalies found according to research on efficient capital markets because the investors want the abnormal return.

Market anomalies are strategies that contrary to the concept of efficient market hypothesis, where the price of securities already reflects all the available information (Jogiyanto, 2016). However, market anomalies conditions allow investors to get an abnormal return. There are four types of market anomalies: event anomalies, seasonal anomalies, company anomalies, and accounting anomalies (Gumanti, 2011). The most popular seasonal anomalies phenomena used as research, they are the Day of Week the Effect, Week Four Effect, and Month of The Year Effect phenomena.

Day of The Week Effect indicates that the returns are abnormally high over certain days of the week than other days. (Derbali & Hallara, 2016). In efficient market hypothesis stock returns are not different on every trading day, but in the day of the week effect phenomenon, there are differences in returns for each trading day of the week.

Week Four Effect is a phenomenon that reveals that the Monday effect occurs in the fourth week of each month. While return on Monday in the first week until the third week is considered insignificant negative or equal to zero (Iramani & Mahdi, 2006). Due to liquidity reasons, there are a lot of expenses at the end of the month so that investors reduce trading in the capital market.

Month of The Year Effect refers to the phenomenon whereby the stock returns in selected months are higher than in other months (Jahfer & Inoue, 2014). The most studied pattern of the monthly effect in the stock market is called "January effect" where the stock return in January is higher than other months of the year. However, many researchers found that the month of the year effect also occurs not only in January but also in another month of the year.

Several previous researchers have examined the effect of calendar anomalies toward stock returns. Day of The Week Effect has been researched by (Derbali & Hallara, 2016) with conclusion that Day of The Week Effect has a positive and significant effect on stock returns. Meanwhile, according to (Maria Caporale & Zakirova, 2017) research proved that the Day of The Week Effect does not has a significant effect on stock returns.

Week Four Effect has been researched by (Abbas, 2017) with conclusion that Week Four Effect has a negative significant effect on stock returns. Meanwhile, according to (Khan & Rabbani, 2019) Week Four Effect has not significant effect on stock return.

Month of The Year Effect has been researched by (Gu, 2015) with conclusion Month of The Year has a significant effect on stock return in April and October. Meanwhile, according to (Thonse Hawaldar et al., 2017) Month of The Year Effect has a not significant effect on stock returns.

LITERATURE REVIEW

Stock Return

Stock return is the difference between the amount received and the invested amount divided by the amount invested (Brigham & Houston, 2014).

The explanation of the relation to the stock price with return can be proved on the calculation in determining the daily return of stocks through the formula (Jogiyanto, 2013):

$$\frac{R_{t=(P_{t-P_{t-1}})}}{P_{t-1}} \quad \text{.....(1)}$$

Description:
Rt = Return on day t
Pt = Closing price on day t
Pt-1 = Closing price on day t-1

Efficient Market Hypothesis

The theory of the Efficient Market Hypothesis concept was developed by Fama in 1970. In the financial sector, the concept of an efficient market is more emphasized on the aspect of information, so that an efficient market is a market where the prices of all traded securities reflect all available information. There are 3 types of Efficient Market Hypothesis: Weak, Semi Strong and Strong form.

Market Anomalies

Market anomalies are evidence that refutes the theory of the existence of an efficient market that arises in all forms of efficient markets in weak, semi-strong or strong form that can be exploited to produce abnormal return (Gumanti, 2011). Market anomalies consist of : Seasonal Anomalies, Firm anomalies, accounting anomalies and event anomalies. The anomalies that often occur in the capital market are seasonal anomalies, because whose existence is highly dependent on time such as:

Day of The Week Effect

Day of the week effect is referred as inclination of the stock to display fairly higher return on Friday and lower return on Monday (Abbas, 2017). Mostly, a significant negative return occurs on Monday while a significant positive return on other days. The negative return trend on Monday is strongly influenced by the availability of information relating to stock in the capital market. Because, on Monday the information available is outdated, investors only hold information in the last week.

Week Four Effect

Week four effect is a phenomenon that reveals that the Monday effect occurs in the fourth week of each month. While return on Monday in the first week until the third week is considered insignificant negative or equal to zero (Iramani & Mahdi, 2006). A negative stock return occurs on the Monday fourth and fifth week and is influenced by the liquidation needs of investors.

Month of The Year Effect

The month of the year effect refers to a specific form of the calendar anomaly where the returns exhibit different patterns across different months of the year (Harshita et al., 2019).

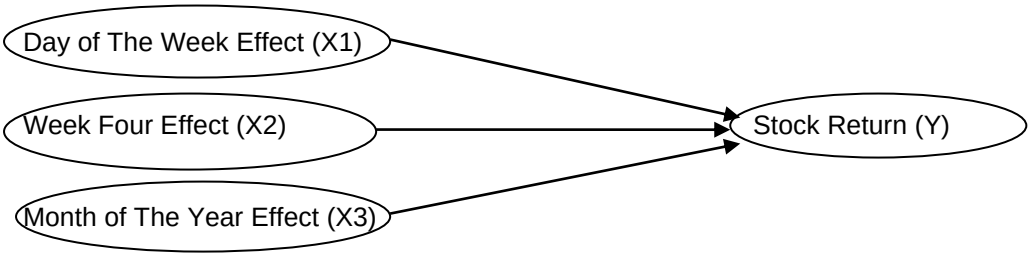

Figure 1. Framework

Hypothesis 1 : Day of the week effect has a significant effect toward stock return
Hypothesis 2 : Week four effect has a significant effect toward stock return
Hypothesis 3 : Month of the year effect has a significant effect toward stock return

RMETHODS

This study is to analyze the influence of Day of The Week Effect, Week Four Effect and Month of The Year Effect on Stock Return. The research was conducted in Indonesia, the population companies in LQ-45 Index during 2015 – 2019 listed in Indonesia Stock Exchange amounted to 65 companies and the sample is 28 companies. Data of the stock price obtained by the researcher from the official website of Indonesia Stock Exchange (BEI) www.idx.com and derived also from another subsite www.yahoofinance.co.id.

This study used the GARCH Test as an analysis method with the help of Eviews 9 software. This study uses daily data return, so many observations resulted in many parameters that must be observed. The more parameters that must be estimated resulting in the precision of the estimator is reduced to overcome the problem, the GARCH model is chosen (Nachrowi & Usman, 2006).

According to (Nachrowi & Usman, 2006) testing with the GARCH model with dummy variables (without constants) is generally described in the following model (Mean Equation) :

Mean Equation

$$Y_t = \alpha_1 X_{1t} + \alpha_2 X_{2t} + \cdots + e_t \quad \text{.....(2)}$$

Note :
Yt = Dependent variable on return day t
X1t,.. = Independent variable on return day t
α1,2… = Multiple regression coefficients
et = Residuals

Variance Equation

$$\sigma^2 t = \alpha_1 e^2_{t-1} + \lambda_1 \sigma^2_{t-1} \text{.....(3)}$$

Note :
$\sigma^2 t$ = Residual Variant
e^2 t-1 = Residuals of the previous period
σ^2 t-1 = Variant residual of the previous period

RESULTS and DISCUSSION

Since its “discovery” in 1982, GARCH modeling has become a growth industry, with all kinds of variations on the original model. One that has become popular is the Generalized Autoregressive Conditional Heteroscedasticity (GARCH) model (Gujarati & Porter, 2008). However, in the GARCH model the variance equation > 1, there is indicate the unit root problem in the GARCH model, then IGARCH (Integrated Generalized Autoregressive Heteroscedasticity) model is used to estimate

Table 1. IGARCH (1,1) Day of The Week Effect

Companies	Mon	Tue	Wed	Thu	Fri
ADRO	0.001611	**0.003397***	-0.00084	0.000177	-0.00029
AKRA	**-0.00187***	6.84E-05	**0.003026***	0.000697	-0.00036
ASII	-0.00139	0.000118	0.000336	0.000149	0.001077
BBCA	**0.001172***	**0.001534***	**0.001411***	0.001083	0.00065
BBNI	**-0.00157***	**0.002082***	**0.001762***	**0.002162***	0.000951
BBRI	**-0.00168***	0.000125	**0.00201***	**0.001927***	**0.002896***
BBTN	**-0.00392***	**0.005532***	**0.003114***	0.00224	0.000439
BMRI	-0.00074	0.000856	0.000971	**0.002275***	0.00074
BSDE	**-0.00404***	0.000949	**0.002197***	0.001727	-0.00076
GGRM	-0.00152	-0.001	0.00167	0.001373	0.000154
ICBP	-0.00041	0.001277	0.00136	0.000184	0.000782
INCO	0.001715	0.000103	0.001281	0.001883	-0.00089
INDF	-0.00024	0.000856	0.000157	0.000288	0.000125
INTP	-0.00024	0.000787	**0.003051***	-0.00098	-0.00113
JSMR	-0.00118	**0.001921***	**0.001864***	0.000732	-0.0009
KLBF	**-0.00209***	0.001438	0.000851	2.40E-05	0.000668
LPPF	-0.00044	-0.00148	-0.0013	0.00297	0.00245
MNCN	-0.00159	0.000341	0.001218	0.00167	0.000696
PGAS	-0.00142	-0.00139	0.001829	-0.00125	-0.00021
PTBA	-0.00113	0.002557	-0.0022	0.000244	0.001392
PTPP	**-0.00373***	1.84E-05	0.001334	0.001265	-0.00125
SCMA	**0.003426***	**0.003785***	0.000863	0.00026	**-0.00306***
SMGR	**-0.00302***	-0.00159	**0.003322***	0.001359	8.87E-05
TLKM	0.000473	0.000401	-0.0011	0.000564	**0.001562***
UNTR	-0.00071	0.002263	0.001893	-0.00014	0.001055
UNVR	-0.00186	0.000519	0.000241	0.001396	0.001227
WIKA	-0.00144	0.000342	0.001586	0.000926	-0.00061
WSKT	-0.00204	0.001422	-0.00121	**0.00376***	0.000619

*Significant at 5% level

The IGARCH test Table 1 above shows, the test results of companies on the Day of The Week Effect variable. On Monday, there are 10 companies in the LQ-45 index which are significant at the 5% level which is dominated by negative coefficient values. On Tuesday, there are 6 companies in the LQ-45 index which are significant at the 5% level with a positive coefficient value. On Wednesday, there are 7 companies in the LQ-45 index which were significant at the 5% level with a positive coefficient value. On Thursday, there are 4 companies in the LQ-45 index which are significant at the 5% level with positive coefficient values. On Friday, there are 3 companies in the LQ-45 index which are significant at the 5% level with positive and negative coefficient values.

Proceed to do t-test to check if Day of The Week Effect has an effect on stock return. The hypotheses are as follows:

$H0 : \beta = 0$

$Ha : \beta \neq 0$

Table 2 T-Test Day of The Week Effect

	Monday	Tuesday	Wednesday	Thursday	Friday
β	-0.00068	0.000676	0.000777	0.000362	5E-05
Var	2.64E-06	2.1E-06	1.47E-06	8.9E-07	7.45E-07
T_{Stat}	**-2.23042**	**2.470305**	**3.389599**	2.027615	0.306315
T-Table	2.052	2.052	2.052	2.052	2.052

Based on the T-test table 2, the following are the explanation of the t-test results for the Day of The Week Effect:

1. Monday has a T-stat with a value of -2.23042, thus T-stat < T-table (-2.23042 < -2.052) which statistically, Monday has a negative effect on stock return or H0 is rejected, and Ha is accepted.
2. Tuesday has a T-stat with a value of 2.470305, thus T-stat > T-table (2.470305 > 2.052) which statistically, Tuesday has a positive effect on stock return or H0 is rejected, and Ha is accepted.
3. Wednesday has a T-stat with a value of 3.389599, thus T-stat > T-table (3.389599 > 2.052) which statistically, wednesday has a positive effect on stock return or H0 is rejected and Ha is accepted.

Table 3. IGARCH (1,1) Week Four Effect

Companies	MN1	MN2	MN3	MN4	MN5
ADRO	**0.018442***	-0.00433	0.004802	-0.00326	**-0.0145***
AKRA	**0.006986***	-0.00485	**-0.00389***	0.000146	-0.003
ASII	**0.011569***	-0.00096	-0.00235	**-0.00486***	0.003543
BBCA	**0.00321***	-0.00033	**0.005354***	-0.00059	-0.00384
BBNI	0.000617	-0.00185	-0.00281	**-0.00494***	-0.00128
BBRI	0.003824	0.00225	-0.0017	**-0.00576***	**-0.00788***
BBTN	0.003092	**-0.0085***	-0.00367	**-0.01055***	**-0.02271**
BMRI	**0.004075***	**-0.00474***	-0.00056	-0.00402	-0.00203
BSDE	**-0.01266***	**-0.00748***	-0.00352	**-0.00862***	-0.0017
GGRM	**-0.00397***	4.69E-05	0.000223	**-0.00612***	-0.00433
ICBP	0.002556	-0.00322	0.000116	**-0.00475***	0.002543
INCO	**0.011644***	-0.00148	0.00065	-0.00432	0.001111
INDF	**0.005736***	**-0.00327***	0.000945	**-0.00322***	-0.00469
INTP	**0.007543***	-0.00247	0.00291	0.002457	-0.00918
JSMR	**0.008798***	**-0.0088***	0.000292	**-0.00626***	-0.00314
KLBF	-0.00123	**-0.00538***	**-0.00311***	0.00165	0.005533

*Significant at 5% level

Table 4. IGARCH (1,1) Week Four Effect

Companies	MN1	MN2	MN3	MN4	MN5
LPPF	-0.00127	**-0.00777***	0.004423	0.00055	0.010924
MNCN	**0.006519***	-0.00435	**-0.01027***	-0.00101	0.008994
PGAS	0.004793	**-0.00901***	**0.006101***	0.001381	-0.00507
PTBA	**0.005987***	-0.00141	**0.005146***	**-0.00775***	-0.01058
PTPP	**0.004575***	**-0.00566***	-0.00374	**-0.00739***	0.001449
SCMA	**0.015484***	**-0.00797***	-0.00291	-0.00523	0.010311
SMGR	-0.00031	**-0.00623***	**0.003513***	**-0.00373***	-0.00704
TLKM	**0.009455***	0.000208	-0.00086	-0.00121	-0.00303
UNTR	**0.008721***	-0.00442	0.000426	-0.00549	0.001133
UNVR	-0.00276	-0.00154	-0.0011	-0.0008	-0.00647
WIKA	**0.004425***	-0.00368	-0.00198	-0.00358	-0.00176
WSKT	-0.00526	-0.0039	0.001136	-0.00702	**0.012428***

*Significant at 5% level

The IGARCH test table 3 and 4 above show, the test results of companies on the Week Four Effect variable. On Monday 1st week, there are 18 companies in the LQ-45 index which are significant at the 5% level which are positive and negative coefficient values. On Monday 2nd week, there are 11 companies in the LQ-45 index which are significant at the 5% level with negative coefficient value. On Monday 3rd week, there are 7 companies in the LQ-45 index which are significant at the 5% level with positive and negative coefficient value. On Monday 4th week, there are 12 companies in the LQ-45 index which are significant at the 5% level with negative coefficient values. On Monday 5th week, there are 4 companies in the LQ-45 index which are significant at the 5% level with positive and negative coefficient values.

Proceed to do t-test to check if Week Four Effect has an effect on stock return. The hypotheses are as follows:

H0 : $\beta = 0$
Ha : $\beta \neq 0$

Table 5. T-Test Week Four Effect

	MN1	MN2	MN3	MN4	MN5
B	0.004004	-0.00267	0.000241	-0.00264	-0.00117
Var	4.01E-05	1.27E-05	8.08E-06	1.15E-05	3.35E-05
T_{-Stat}	**3.343997**	**-3.96175**	0.447756	**-4.12684**	-1.06655
T-Table	2.052	2.052	2.052	2.052	2.052

Based on the T - test Table 5, the following are the explanation of the t-test results for the Week Four Effect :

1. Monday 1st week has a T-stat with a value of 3.343997, thus T-stat > T-table (3.343997 > 2.052) which statistically, Monday 1st week has a positive effect on stock return or H0 is rejected and Ha is accepted.
2. Monday 2nd week has a T-stat with a value of -3.96175, thus T-stat > T-table (-3.96175 < -2.052) which statistically, Monday 2nd week has a negative effect on stock return or H0 is rejected, and Ha is accepted.

3. Monday 4th week has a T-stat with a value of -4.12684, thus T-stat > T-table (-4.12684 < -2.052) which statistically, Monday 4th week has a negative effect on stock return or H0 is rejected and Ha is accepted.

The IGARCH test results of companies on the Month of The Year Effect variable. In January, there are 20 companies in the LQ-45 index which are significant at the 5% level which is dominated by positive coefficient values. In February, there are 11 companies in the LQ-45 index which are significant at the 5% level which is dominated by positive coefficient values. In March, there are 4 companies in the LQ-45 index which are significant at the 5% level with positive & negative coefficient value. In April, there are 4 companies in the LQ-45 index which are significant at the 5% level with negative coefficient values. In May, there are 4 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values. In June, here are 5 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values.

In July, there are 5 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values. In August there are 5 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values. In September, there are 8 companies in the LQ-45 index which are significant at the 5% level wihich is dominated by negative coefficient values. In October, there are 9 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values. In November, there are 7 companies in the LQ-45 index which are significant at the 5% level with negative & positive coefficient values. In December, there are 7 companies in the LQ-45 index which are significant at the 5% level with positive coefficient values.

Proceed to do t-test to check if Month of The Year has an effect on stock return. The hypotheses are as follows:

H0 : β = 0

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
β	0.0533	0.0155	0.0010	-0.0014	-0.0056	-0.0002	0.0048	-0.0023	-0.0126	0.0066	0.0142	0.0262
Var	0.0166	0.0010	0.0006	0.0003	0.0004	0.0016	0.0013	0.0007	0.0007	0.0010	0.0194	0.0015
T_{-Stat}	**2.1902**	**2.6199**	0.2167	-0.3924	-1.5006	-0.0206	0.6935	-0.4454	**-2.4355**	1.0981	0.5401	**3.6040**
T-Table	2.052	2.052	2.052	2.052	2.052	2.052	2.052	2.052	2.052	2.052	2.052	2.052

Ha : β ≠ 0

Table 6. T-Test Month of The Year Effect

Based on the t - test table 6, the following are the explanation of the t-test results for the Month of The Year Effect:

1. January has a T-stat with a value of 2.1902, thus T-stat > T-table (2.1902 > 2.052) which statistically, January has a positive effect on stock return or H0 is rejected, and Ha is accepted.
2. February has a T-stat with a value of 2.6199, thus T-stat > T-table (2.6199 > 2.052) which statistically, February has a positive effect on stock return or H0 is rejected, and Ha is accepted.
3. September has a T-stat with a value of -2.4355, thus T-stat > T-table (-2.4355 < -2.052) which statistically, September has a negative effect on stock return or H0 is rejected, and Ha is accepted.
4. December has a T-stat with a value of 3.6040, thus T-stat > T-table (3.6040 > 2.052) which statistically, December has a positive effect on stock return or H0 is rejected, and Ha is accepted.

Discussion

Based on table 2 the T-test for Day of The Week Effect, it can be seen from T-stat and T-table value on Monday (-2.23042) < (-2.052) then Monday has a negative and significant effect to stock return. Tuesday (2.407305) > (2.052) and Wednesday (3.389599) > (2.052) it means that Tuesday and Wednesday has a positive and significant effect to stock return.

The negative and significant effect on Monday is caused by the behavior of investor and information that use by investors is the information last week so is not relevant to the current information. Based on the result, investors tend to sell stocks compared to buying stocks therefore stock prices tend to be lower on Monday than other days so return received on Monday tend to be lower even negative when compared to other days.

Based on table 4 the T-test for Week Four Effect, it can be seen from T-stat and T-table value in Monday 1st week (3.3343997) > (2.052). Monday 2nd week (-3.96175) < (-2.052) and Monday 4th week (-4.12684) < (-2.052). However, the Monday 1st week – Monday 3rd week is considered insignificant negative and equal to zero (Iramani & Mahdi, 2006). Then, the Monday 4th week has negative and significant effect to stock return.

The Monday 4th and 5th week or the end of the month to be the week where investor's needs will increase but investor's income has not yet increased, this is because most of the companies give wages, salaries, and honorarium at the beginning of the month.

Based on table 6 the T-test for Month of The Year Effect, it can be seen from T-stat and T-table value in January (2.1902) > (2.052), February (2.6199) > (2.052), and December (3.6040) > (2.052) it means that January, February, and December have a positive and significant effect to stock return. For September (-3.060) < (-2.052) then September has a negative and significant effect to stock return.

The month of the year effect is caused by tax-loss selling, window dressing, information, bid-ask bounce, and combination of these causes. Especially, in the end or beginning of the year in which investors expect to get higher return.

CONCLUSION

Based on the analysis of Day of The Week Effect, Week Four Effect, and Month of The year effect toward stock return in LQ-45, it can be concluded as follows:

1. Day of the week effect has a significant effect toward stock return in LQ-45 index 2015 - 2019. Indicated by the result on Monday with a negative & significant effect, Tuesday with positive & significant effect and Wednesday with positive & significant effect.
2. Week four effect has a significant effect toward stock return in LQ-45 index 2015 - 2019. Indicated by the result on Monday 4th week with a negative and significant effect.
3. Month of the year has a significant effect toward stock return in LQ-45 index 2015-2019. Indicated by the result in January with positive & significant effect, in February with positive and significant effect, September negative & significant effect and December with positive and significant effect.

REFERENCES

Abbas, S. Z. (2017). Calendar anomalies in south asian stock markets. 6(May), 109–126.

Brigham, E. F., & Houston, J. F. (2014). Dasar-Dasar Manajemen Keuangan. Salemba Empat.

Derbali, A., & Hallara, S. (2016). Day-of-the-week effect on the Tunisian stock market return and volatility. *Cogent Business and Management*, *3*(1). https://doi.org/10.1080/23311975.2016.1147111

Gu, A. Y. (2015). The June Phenomenon and the Changing Month of the Year Effect. Accounting and Finance Research, 4(3), 1–8. https://doi.org/10.5430/afr.v4n3p1

Gujarati, D. N., & Porter, D. C. (2008). Basic Econometrics (Fifth Edition). McGraw-Hill.

Harshita, Singh, S., & Yadav, S. S. (2019). Unique Calendar Effects in the Indian Stock Market: Evidence and Explanations. *Journal of Emerging Market Finance*, *18*(1_suppl), S35–S58. https://doi.org/10.1177/0972652719831549

Indonesia Stock Exchange. (2020). https://www.idx.co.id/. Accessed on 01 March 2020.

Iramani, & Mahdi, I. (2006). Studi Tentang Pengaruh Hari Perdagangan Terhadap Return Saham Pada Bej. Jurnal Akuntansi Dan Keuangan, 8(2), 63–70. https://doi.org/10.9744/jak.8.2.pp.63-70

Jahfer, A., & Inoue, T. (2014). Financial development, foreign direct investment and economic growth in Sri Lanka. International Journal of Economic Policy in Emerging Economies, 7(1), 77–93. https://doi.org/10.1504/IJEPEE.2014.059889

Jogiyanto, H. (2013). *Teori Portofolio dan Analisis Investasi*. BPFE.

Jogiyanto, H. (2016). *Teori Portofolio dan Analisi Investasi* (Kesepuluh). BPFE.

Khan, M. S. R., & Rabbani, N. (2019). Market Conditions and Calendar Anomalies in Japanese Stock Returns. Asia-Pacific Financial Markets, 26(2), 187–209. https://doi.org/10.1007/s10690-018-9263-4

Maria Caporale, G., & Zakirova, V. (2017). Calendar anomalies in the Russian stock market. Russian Journal of Economics, 3(1), 101–108. https://doi.org/10.1016/j.ruje.2017.02.007

Thonse Hawaldar, I., Shakila, B., & Pinto, P. (2017). Empirical Testing of Month of the Year Effect on Selected Commercial Banks and Services Sector Companies Listed on Bahrain Bourse.

International Journal of Economics and Financial Issues, 7(2), 426–436. http:www.econjournals.com.