



ABSTRACT

In the widely recognized phenomenon of the weekend effect, it is commonly believed that Monday's stock prices are lower than Friday's. The authors believe that stock movements are unique in each country and sector. Does this phenomenon also occur sectorally in Indonesia? This study intends to answer this question. Therefore, the authors study the differences in stocks on Friday and Monday in the consumer, and property, agriculture sectors on the Indonesian Stock Exchange (IDX). The research problem is there a difference in stock prices and returns on Friday and Monday? To answer this question, the authors chose the sample purposively. The data are the open-close and trading volume of the three selected sectors on the IDX in the period January 2018 to September 2020. Using the independent sample t-test as an analytical tool, the study shows no difference between return and trading volume on Friday and Monday. Thus, the agriculture, consumer, and property sectors in Indonesia, experience no market anomaly called the weekend effect.

Keywords:

Stock price, return, trade volume, Monday effect, Friday effect, weekend effect

How to cite:

Stevie, M. M. ., & Asnawi, S. K. (2021). Is weekend effects a myth? . *Jurnal Ekonomi Perusahaan*, 28(2), 42–51. <https://doi.org/10.46806/jep.v28i2.831>

Copyright © Jurnal Ekonomi Perusahaan.
All rights reserved

Research Article

Is weekend effects a myth?

Maria Marcellinda Stevi^{1*}
Said Kelana Asnawi²

¹Finance Officer, PT. Vivo Communication Indonesia, Jakarta, Jakarta, Indonesia.

*Correspondence address:

20170161.student@kwikkiangie.ac.id

²Head of Graduate School of Management, Institut Bisnis dan Informatika Indonesia, Jakarta, Indonesia. Email address: said.kelana@kwikkiangie.ac.id

INTRODUCTION

In efficient market theory, investors can get a normal return if there is no constant price change. However, previous research found various deviations called seasonal anomalies or calendar effects on the stock market. The most frequently discussed seasonal anomaly is the day of the week effect, which is an anomaly that causes the return of trading days in a week to be different. This phenomenon believes that the difference in stock returns from the closing price on Friday and Monday is part of the weekend effect. This phenomenon is characterized by Friday's return which is higher than Monday's low return.

Monday is the start of the trading day after the holiday weekend (Saturday-Sunday). The impact of the holiday caused a lack of enthusiasm in the capital market and lowered investors' mood to invest on Monday. It is also believed that investors tend to feel pessimistic on Monday and tend to feel optimistic on Friday. This behavioral tendency makes the average return on Monday to be negative and on Friday to be positive. Another cause is the announcement of various news on certain entities that provoke investor reactions.

INTRODUCTION

In efficient market theory, investors can get a normal return if there is no constant price change. However, previous research found various deviations called seasonal anomalies or calendar effects on the stock market. The most frequently discussed seasonal anomaly is the day of the week effect, which is an anomaly that causes the return of trading days in a week to be different. This phenomenon believes that the difference in stock returns from the closing price on Friday and Monday is part of the weekend effect. This phenomenon is characterized by Friday's return which is higher than Monday's low return.

Monday is the start of the trading day after the holiday weekend (Saturday-Sunday). The impact of the holiday caused a lack of enthusiasm in the capital market and lowered investors' mood to invest on Monday. It is also believed that investors tend to feel pessimistic on Monday and tend to feel optimistic on Friday. This behavioral tendency makes the average return on Monday to be negative and on Friday to be positive. Another cause is the announcement of various news on certain entities that provoke investor reactions.

There's been a lot of research on this topic with mixed results. Udayani (2016) found that the Monday effect did not occur in LQ-45 stock returns for the 2014 period. This finding is different from the results of research conducted by Rahmawati and Hidayanti (2018) during the period February 2015 – January 2016. They found that the Monday effect occurred in the LQ45 of Indonesia Stock Exchange, which is indicated by negative stock returns on Monday. Cahyaningdyah (2017) stated that there is an effect of stock trading days on LQ-45 stock returns on the Indonesia Stock Exchange in the period 2007 – 2015. More specifically, stock returns are negative on Monday (Monday Effect) and reach the highest level on Friday (Weekend Effect). Research conducted by Budiwati et al. (2017) revealed that the difference in stock returns occurs in daily trades and there was no phenomenon of Monday effect and Weekend effect during their observation period.

The mixed result of previous studies uncourges the authors to further investigate the phenomenon with a new perspective, i.e., the sectoral approach. Intentionally, the authors chose agriculture, consumers, and property sectors as the research context for their industrial stability and massive size. Therefore, the The purpose of this study is, first, to find out whether there are market anomalies on Friday and Monday trading days that affect stock returns and trading volumes in the consumer, and property, agriculture sectors on the Indonesia Stock Exchange (IDX)? Second, to find out whether investors get abnormal returns, so that if there is a weekend effect, they sell their shares to get abnormal returns?

This research is expected to provide useful information for investors and companies to obtain in formulating effective investment strategies in the agriculture, consumer and property sectors on the Indonesia Stock Exchange (IDX). For academics and readers, the results of this research are expected to enrich the existing findings.

CONCEPTUAL FRAMEWORK

This research is focused on return and trading volume on Friday and Monday. What we want to know is the association between return and trading volume on each day, specifically on the lowest return and highest return group, as well as the lowest trading volume and highest trading volume.

Fama and French (1992) grouped each daily data into the highest 30%, 40% middle, and the lowest 30% categories. This grouping is needed to find out whether there are differences between groups. Furthermore, it can be seen whether there is a market anomaly (weekend effect) on trading days (Friday and Monday) on the stock exchange. The conceptual framework of the research is described as follows:

The above framework enables us to hypothesize the weekend effect on return and trade volume as follows:

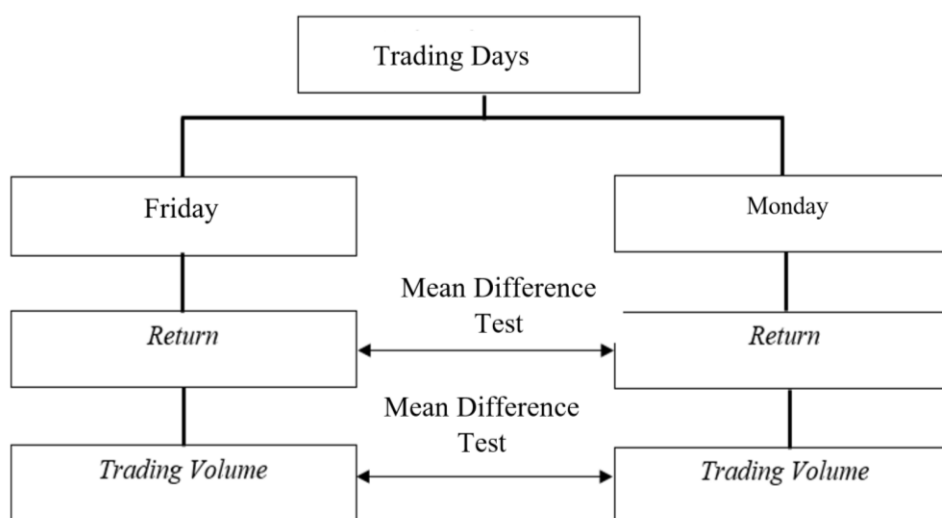
H1: For the lowest return category, the return of Monday is lower than Friday.

H2: For the highest return category, the return of Monday is lower than Friday.

H3: For the lowest trade volume category, trade volume of Monday lower than Friday.

H4: For the highest trade volume category, trade volume of Monday lower than Friday.

Figure 1
Conceptual Framework



RESEARCH METHOD

Research Object

The object of this research is the daily return (open – close) and trading volume of the agriculture, consumer, and property sectors on the Indonesia Stock Exchange for the period

Is weekend effect a myth?

January 2018–September 2020. Data is taken on Friday and Monday on the appropriate date, which allows pairing.

The sample size is 444, consist of 108 units of analysis for each sector of agriculture, consumer, and property in the period January 2018-December 2019. There are 40 unit of analysis for each. -each sector in the period January 2020–September 2020. The data for the three sectors were tested for the mean difference using the Independent Sample T-Test with the help of SPSS 22.

Research Variable

Research variable consist of sector stock daily index return (open-close) and sector stock daily index volume.

Stock return is the profit obtained by investors on their investments. The form can be in the form of share ownership, dividends or capital gain/loss. In this study, daily returns on Friday and Monday trading are made in pairs (Friday-Monday). To calculate daily stock returns, the following formula is used:

$$\text{Daily Index Return} = \frac{\text{Close} - \text{Open}}{\text{Open}}$$

Share volume is the number of shares traded on the stock exchange for a certain period. The most popular indicator of trading is the shares volume. This indicator is not based on the price, but the number of trades that occurred in a certain period. It is usually measured in billions of shares.

Sampling Method

The sample was chosen intentionally based on predetermined prerequisite (judgment sampling), namely:

1. Open-close index return data and trading volume on Fridays and Mondays (in pairs) on the Agriculture, Consumer, and Property sector indices on the Indonesia Stock Exchange during the period January 2018 – September 2020.
2. To eliminate data on Friday and Monday on a certain date that is incomplete, because Friday and Monday data must be paired.
3. The data is grouped into the highest 30% (highest), 40% middle (middle), 30% lowest (lowest) of the data return and trading volume of each index.
4. Samples are taken as much as 30% of the highest (highest) and 30% of the lowest (lowest) of the data return and trading volume of each index.
5. Create a grouping for research testing.

The data used are stock return data and trading volume in the period January 2018 – September 2020. The data are taken from the Indonesia Stock Exchange reports published in www.idx.co.id and the website www.duniainvestasi.com. Because the data has been available online, they are categorized as secondary retrieval technic is called recording data from online documents. The authors formalize that data retrieval technic as document data recording.

The author use independent sample t-test for paired data to test the hypotheses. The test is conducted using *IBM Statistical Package for the Social Sciences (SPSS)* as the tool of analysis.

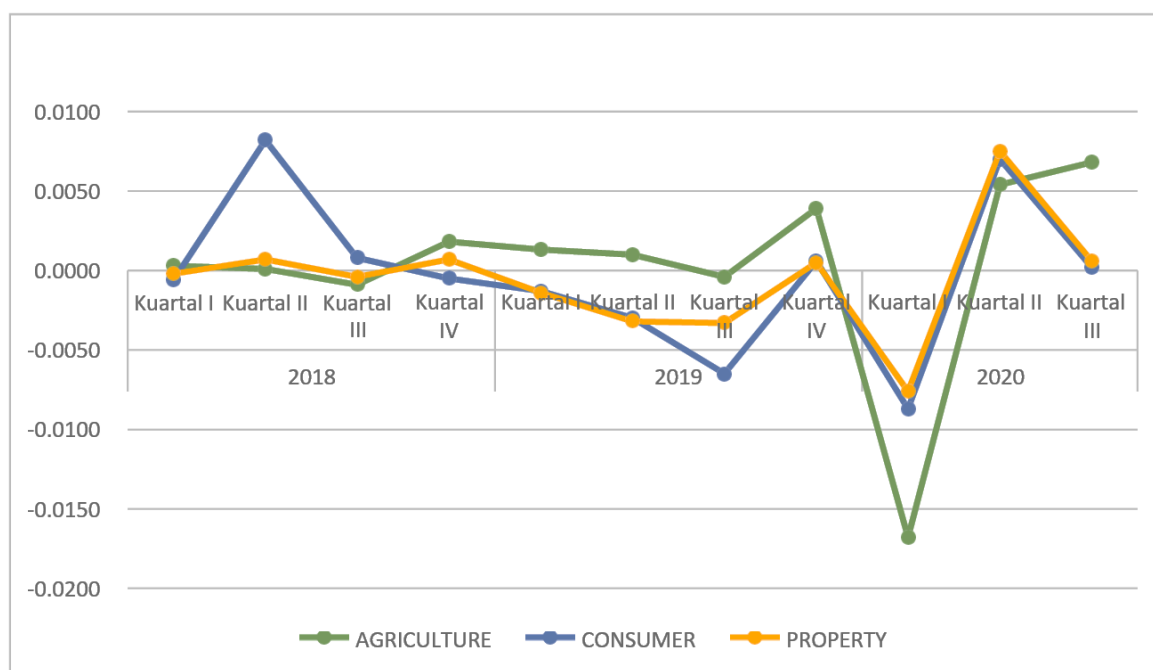
RESULT

Descriptive Analysis

Figure 4.1 describes the average (average) open-close return each quarter during the period January 2018 – September 2020. We can see that every quarter is volatile, where the increase and decrease in the stock price index is not balanced. One of the causes of these fluctuations is the existence of holiday allowances in the second quarter of 2018. The increase in people's purchasing power, which is related to the campaign and local elections in February to June 2018, made the consumer sector shares experience a drastic increase.

The most significant decline occurred in the first quarter of 2020 in the agriculture, consumer and property sectors. In the first quarter of 2020, this sharp decline was caused by the sentiment of the Covid-19 pandemic, which made many domestic investors sell their shares. Figure 2 also shows that the three sectors had given positive performance in the second quarter of 2020. However, in the third quarter of 2020, performance in the consumer and property sectors was again depressed as the capital market turmoil due to positive cases of Covid-19 continued to subside. At this point, the agriculture sector is still growing positively due to the perception that this sector is related to primary needs. Generally, people can refrain from buying secondary and tertiary goods, but not for primary needs. So, even in a crisis situation, companies in the agricultural sector are still needed.

Figure 2
Average Return Open-Close



Note: Kuartal=quarter

Trading Volume

In Figure 3 we can see that in the trading volume fluctuations in the volume of trade in the three sectors. The trading volume of the property sector in the second quarter of 2019 increased after stagnating in the first quarter of 2019, which was caused by the tendency of investors to hold back property purchases due to the general election. During the period January 2018–September 2020, the agriculture sector did not experience a significant increase or decrease. In the same period, the consumer sector experienced an increase and the property sector experienced a decline.

Hypothesis Test

Testing hypothesis 1: For the lowest return category, the return of Monday is lower than Friday

Hypothesis 1 expects a lower mean of return Monday than Friday. Overall, in the lowest category, the mean of return on Friday and Monday is negative. The question is, are those expectations fulfilled? Based on the t-test, these expectations were met by two sectors. First, the agriculture sector in 2020 ($p\text{-value}=0.012$), where the mean of return moved from 1.63 on Friday to -3.43 on Monday. Second, the property sector in the 2018-2019 period ($p\text{-value}=0.007$), where Monday's mean of return (-1.38) is considered significantly lower than Friday's mean return (-1.04).

Figure 3
Average Trading Volume

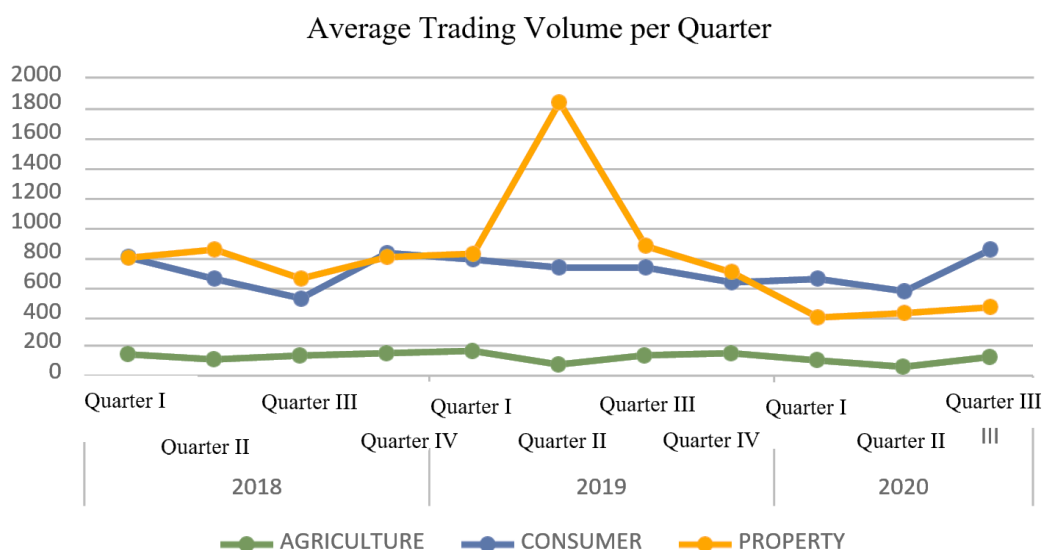


Table 1
Testing the Lowest Return Mean Difference with Independent T-Test

Sector	Period	Friday		Monday		p-value
		Mean of Return (%)	Deviation standard	Mean of Return (%)	Deviation standard	
Agri	2018-2019	-0.95	0.43	-1	0.51	0.662
	2020	-1.63	1	-3.43	1.76	0.012**
Consumer	2018-2019	-1.16	0.92	-1.58	1.1	0.13
	2020	-1.5	0.74	-2.79	2.43	0.137
Property	2018-2019	-1.04	0.35	-1.38	0.52	0.007*
	2020	-1.66	0.72	-2.5	1.37	0.123

Testing hypothesis 2: For the highest return category, the return of Monday is lower than Friday

The highest mean of return category is characterized by the positive means of return for Friday and Monday. That is, on both days, the overall means of return are gain. Hypothesis 2 expects a lower mean of return on Monday than Friday. Statistically, this expectation was only fulfilled by the agricultural sector in the period 2018-2019 and 2020. In the other two sectors, namely consumers and property, Monday's returns are considered not significantly different from Friday's returns.

Table 3
Testing the Lowest Return Mean Difference with Independent T-Test

Sector	Period	Friday		Monday		p-value
		Mean of Return (%)	Deviation standard	Mean of Return (%)	Deviation standard	
Agriculture	2018-2019	1.03	0.75	1.51	0.7	0.019**
	2020	1.3	0.92	2.53	1.28	0.024**
Consumer	2018-2019	1.19	0.7	1.27	1	0.725
	2020	2.6	2.24	1.19	1.27	0.1
Property	2018-2019	0.97	0.64	1.23	0.52	0.107
	2020	2.36	2.21	2.3	2.63	0.957

Testing hypothesis 3: For the lowest trade volume category, trade volume of Monday lower than Friday

Regarding trading volume, the weekend effect expects Monday's trading volume to be lower than Friday's. Are these expectations met in the lowest trading volume category?

Is weekend effect a myth?

Table 3 shows that, in general, there was a decrease in stock trading volume on Monday compared to Friday in this category. The exception occurred in 2020 in the agriculture sector, where the volume of trade on Monday was actually higher than Friday. Statistically, the difference in trading volume on Friday and Monday is not significant for all segments. Therefore, in this case, the weekend effect is not confirmed.

Table 3
Independent Sample T-Test for Lowest
Trading Volume

Sector	Period	Friday		Monday		p- value
		Mean of trading volume	Deviation standard	Mean of trading volume	Deviation standard	
Agriculture	2018-2019	134	56	125	64	0.572
	2020	90	44	105	79	0.612
Consumer	2018-2019	804	336	734	336	0.447
	2020	748	422	706	323	0.806
Property	2018-2019	1119	1643	907	985	0.568
	2020	418	165	364	149	0.457

Testing hypothesis 4: For the highest trade volume category, trade volume of Monday lower than Friday

In the category of the highest average share trading volume, there were variations in the trading volume on Friday and Monday. For the consumer segment (2020), the difference follows the weekend effect pattern, where the average stock trading volume on Friday (856) is higher than Monday (775). The rest of the segment shows the opposite of the expected weekend effect, where Monday's trading volume is actually higher than Friday's. However, in these two patterns, statistically, the difference in trading volume on Friday and Monday was not significant ($p\text{-value} > 0.05$). Thus, the weekend effect and its inverse did not occur and hypothesis 4 was not confirmed in this category.

Table 4
Independent Sample T-Test for Highest
Trading Volume

Sector	Period	Friday		Monday		p- value
		Mean of trading volume	Deviation standard	Mean of trading volume	Deviation standard	
Agri	2018-2019	146	65	164	60	0.287
	2020	94	57	126	102	0.397
Consumer	2018-2019	693	225	695	234	0.969
	2020	856	280	775	492	0.659
Property	2018-2019	791	220	975	270	0.009*
	2020	499	256	573	323	0.582

DISCUSSION

This research found that in most categories and times, the influence of the weekend effect on stock return and trade volume is not supported. The impact of the weekend effect on stocks' return and trade volume is specific. It follows an industry's idiosyncratic nature at a particular time. As this study found, this phenomenon works specifically in the agriculture sector in 2020 for the lowest return category. It also functions in the same field for the highest return category. In 2021, a significant effect on trade volume only occurred in the property sector 2020 in the highest volume category.

Perez (2017) found that in the Chinese Stock Market, there is no difference in returns on Mondays with non-Mondays. Rahmawati and Hidayanti (2016) stated that the Monday Effect occurred in stock trading, but the Weekend Effect did not. This study sharpens previous findings. If we see sectorally, we can find the weekend effect different behavior in distinct sectors, as stated above.

CONCLUSION

The impact of weekend effect on stock return is found in: (1) lowest return category for agriculture in 2020 and property in 2018-2019 period, and (2) highest return category in 2018-2019 period and year 2020. The impact on trade volume is confirmed for the highest volume category in property sector in 2018-2019 period.

This research was conducted during the COVID-19 pandemic. Investor behavior at this time is probably affected by the national and global economic recession, including the possibility of psychological pressure from the pandemic atmosphere, which is substantially restricted. Future research could conduct the same study on the same sector to check if there are differences in results before and after the pandemic. Research on the Wednesday effect is also interesting.

REFERENCES

- Afifah, Denia Regina. 2018. Analisis pengaruh fundamental terhadap return saham dengan resiko saham sebagai variabel intervening (Studi Empiris Pada Perusahaan Indeks Saham Syariah Indonesia Periode 2014-2016). Universitas Pasundan Bandung. Retrieved December 12, 2020, from <http://repository.unpas.ac.id/id/eprint/36491%0A>.
- Asnawi, Said Kelana dan Chandra Wijaya. 2007. *Metodologi Penelitian Keuangan*. Jakarta: Graha Ilmu.
- Asnawi, S. K., Salim, G., & Malik, W. A. (2020). Does black monday appear on The Indonesia Stock Exchange? *Jurnal Organisasi Dan Manajemen*, 16(1), 24–35. <https://doi.org/10.33830/jom.v16i1.780.2020>
- Audina, M., & Laturette, K. (2017). January effect pada sektor property, real estate, dan building Construction Di Bei. *Jurnal Riset Akuntansi Dan Keuangan*, 5(1), 1337–1348. <https://doi.org/10.17509/jrak.v5i1.6732>
- Budiwati, C., Si, M., & Yudana, R. N. (2017). *The Effects of the Days of the Week on the Indonesian Stock Exchange*. 2(4), 22–27, retrieved December 18, 2020, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3157573
- Cahyaningdyah, D. (2017). Analisis pengaruh hari Perdagangan terhadap return saham di Bursa Efek Indonesia: Pengujian menggunakan Garch (Generalized Autoregressive Conditional Heteroskedasticity). *Ekspektra: Jurnal Bisnis dan Manajemen*, 1(1). <https://doi.org/10.25139/ekt.v1i1.84>
- Caporale, G. M., & Plastun, A. (2016). Calendar Anomalies in the Ukrainian Stock Market. *SSRN Electronic Journal*. Retrieved December 12, 2020, from <https://doi.org/10.2139/ssrn.2770571>
- Christie, M. J., & Venables, P. H. (1973). Mood Changes in Relation to Age, EPI Scores, Time and Day. *British Journal of Social and Clinical Psychology*, 12(1). Retrieved December 2020, from <https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8260.1973.tb00846.x>
- Data Harga Saham Bursa Efek Indonesia. (n.d.). *Dunia Investasi* [Official Website]. www.duniainvestasi.com.
- Data Pasar. (n.d.). *Indonesia Stock Exchange* [Official Website]. www.idx.co.id
- Devaki, A. (2017). Faktor-faktor yang Mempengaruhi Return Saham pada Perusahaan LQ45 di Bursa Efek Indonesia. *Jurnal Benefita: Ekonomi Pembangunan, Manajemen Bisnis & Akuntansi* 2, 2, Retrieved December 18, 2020, from <http://ejournal.ildikti10.id/index.php/benefita/article/view/2004/0>
- Fama, E., & French, K.R. (1992). The cross-ection of expected stock returns. *The Journals of FINANCE*, 47(2), 427-465. <https://doi.org/10.1111/j.1540-6261.1992.tb04398.x>
- Hartoyo, O. T. S., & Purbawangsa, I. A. (2018). Pengujian anomali pasar size effect dan the day of week di Bursa Efek Indonesia. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 9, 2147, <https://doi.org/10.24843/eeb.2018.v07.i09.p03>
- Kra, B., Lu, X., & Yin, H. (2019). The weekend effect in African Stock Markets. *International Journal of Business and Applied Social Science*, 24–28, diakses 12 Desember 2020, <https://doi.org/10.33642/ijbass.v5n11p4>
- Perez, G. G. A. (2017). Monday effect in the Chinese Stock Market. *International Journal of Financial Research*, 9(1), 1–7, diakses 15 Desember 2020, <https://doi.org/10.5430/ijfr.v9n1p1>
- Rahmawati, S., & Hidayanti, L. N. (2018). Analisis monday dan weekend effect pada saham perusahaan LQ 45 di Bursa Efek Indonesia. *Analisis Monday Effect Dan Weekend Effect Pada Return Saham Perusahaan LQ 45 Di Bursa Efek Indonesia*, 11.
- Rani, P. (2019). The weekend effect on the stock returns of national stock exchange, diakses 14 Desember 2020, <http://zenonpub.com/images/pdf-files/Vol4/Issue2/7PoonamRani.pdf>
- Sofiana, N. (2020). Analisis return saham Jumat dan Senin perusahaan kategori Kompas 100 yang terdaftar di Bursa Efek Jakarta. [Undergraduate Thesis]. *Universitas Muhammadiyah Malang*. Retrieved from <http://eprints.umm.ac.id/61194/>
- Sumarsih. (2019). Analisis pengaruh faktor ekonomi pada saham perbankan di Bursa Efek Indonesia. *Akrab Juara*, 4(2). Retrieved December 12, 2020, from <http://www.akrabjuara.com/index.php/akrabjuara/article/view/578/644>.

- Sekaran, U., & Bougie, R. (2017). *Metode Penelitian untuk Bisnis*. Buku 1. [Translated]. Jakarta: Salemba Empat.
- Sekaran, U., & Bougie, R. (2017). *Metode Penelitian untuk Bisnis*. Buku 2. [Translated]. Jakarta: Salemba Empat.
- Tapa, A., & Hussin, M. (2016). The relationship between stock return and trading volume in Malaysian ACE market. *International Journal of Economics and Financial Issues*, 6(7Special Issue), 271–278, diakses 14 desember 2020, <https://search.proquest.com/openview/2c16de5366185c0d1c844223d5894e6e/1?pq-origsite=gscholar&cbl=816338>
- Udayani, V. (2016). Pengujian Monday effecct dan Rogalski Effect pada return saham LQ-45 di Bursa Efek Indonesia [Undergraduate Thesis]. *STIE Perbanas Surabaya*. Retrived December 15, 2020, from <http://eprints.perbanas.ac.id/373/>
- Widayanti, C. I. (2018). Pengaruh weekend Monday effect, weekend effect dan Rogalski effect terhadap return saham (Studi Kasus Perusahaan LQ-45 di Galeri Investasi BEI STIESIA Periode 2015-2017). Retrieved December 15, 2020, from <https://repository.stiesia.ac.id/id/eprint/2129/>
- Wulandari, F., & Diana, N. (2017). Analisis Monday effect dan Friday efeect pada indeks Likuiditas 45 di Bursa Effect Indonesia. Retrived December 15, 2020, from <http://riset.unisma.ac.id/index.php/jra/article/viewFile/915/905>