

## Stock Market Reaction to Corona Outbreak in Indonesia (Study on The Tourism Industry in Indonesia Stock Exchange)

Sang Ayu Putu Manik Pramiartini<sup>1</sup>, Ida Bagus Panji Sedana<sup>2</sup>

<sup>1,2</sup>*Faculty of Economics and Business, Udayana University (Unud), Bali, Indonesia*

*Corresponding author: Sang Ayu Putu Manik Pramiartini*

**ABSTRACT:** The purpose of this study was to determine the presence of abnormal returns in the tourism industry due to the Corona outbreak in Indonesia. This research is conducted at companies that are members of the Tourism Industry on the Indonesia Stock Exchange with a research period of 10 months (5 months before, t-date, and 5 months after). This research uses March 2, 2020, as the date, which is when the President announced the first case for Corona Outbreak. The sample in this study amounted to 26 companies with the analysis technique used was the t-test or Wilcoxon Signed Ranks Test. The results in this study are that the Corona Outbreak event did not make a difference before and after the date. The results of the Wilcoxon Signed Ranks Test is a significant level of 0.423 or greater than 0.05, so it was rejected. The conclusion in this study is that there is no difference in returns to the tourism industry on the Indonesia Stock Exchange. No difference occurs due to information leakage so that investors have analyzed in advance the investment decision to be used.

**Keywords:** *market reaction, tourism industry, abnormal return, Wilcoxon signed-ranks test*

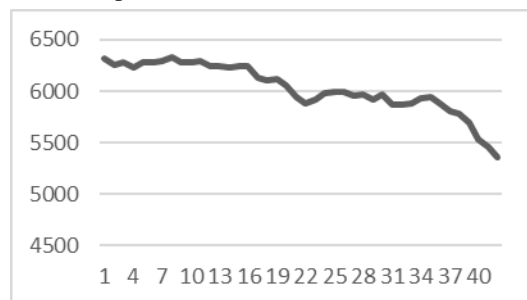
### I. INTRODUCTION

The capital market is one of the financial instruments that have an important role in helping the country's economic growth (Rahmawati, et al, 2020). The capital market itself has various instruments that can be traded, namely, stocks, bonds, warrants, rights, mutual funds, and others. Stocks are an instrument that can make investors get high returns but with high risk. This high risk is usually because the value of the stock can go up or down at any time or the stock often fluctuates.

Stocks are very sensitive to both macroeconomic and microeconomic conditions. According to Subrata and Werastuti (2020), stocks also react to events that disrupt value stability, such as political events, riots, natural disasters to unplanned events. One of the non-economic events that affected stocks and also the capital market in Indonesia in early 2020 was the Corona Outbreak. Previously, the Corona outbreak had infected several countries at the end of 2019, and in 2020 to be precise on March 2, 2020, Indonesia had the first case of the Corona Outbreak, which was announced directly by President Joko Widodo. Coronavirus or nCov - 19 is a virus that attacks the respiratory system. Based on data compiled from Kompas Indonesia (2020), the latest data, namely on Sunday, March 15, 2020, there were 157,476 infected, in 1155 countries. The death rate due to Covid-19 has reached 5,846 people and patients who have recovered have reached 75,953. In Indonesia, there are 117 patients with details of 5 people dying and 8 people being declared cured.

The Corona outbreak has caused the governments of countries to issue several policies. For example in China, the Lockdown policy is to reduce the spread of the virus. But, the policy caused people to be unable to carry out economic activities as usual. The economies of several other countries that did not adopt this policy were also affected. Indonesia is a country that does not implement a lockdown policy. Data compiled by CNBC Indonesia (2020) shows that the Corona Virus causes IDR 347 Trillion to evaporate from the Indonesian capital market. A sharp decline occurred on March 2, 2020, the JKSE was at the level of Rp5361.25 (Figure 1.). The

JKSE also provides a difference between before and after the Corona Outbreak (Rifa'i, et al, 2020). Based on this phenomenon, it can be seen that unexpected events can affect the movement of shares. The tourism industry



can be one of the industries experiencing turmoil due to the Corona outbreak.

**Figure 1. JKSE January - March 2020**

*Source: Data processed, 2020*

The tourism industry greatly helped Indonesia's economy. The fact that the tourism industry is greatly helped by seeing the large number of international tourists visiting Indonesia. According to the Ministry of Tourism's Pocket Book (2016), the contribution of the tourism sector to the national Gross Domestic Product (GDP) in 2014 has reached 9 percent or IDR 946.09 trillion. Based on the Tourism Pocket Book (2019), tourism is one of the fastest-growing economic sectors in recent years. In 2015, the tourism industry was ranked fourth in the largest contributor to the division, namely USD 12.23 billion or equivalent to IDR 169 trillion. In 2018, the tourism industry also experienced an increase in foreign tourist arrivals which reached 15.8 million.

However, at the beginning of the year, the Tourism Industry had experienced a decline in tourist visits. This could be due to the Corona Outbreak and policies made by both domestic and foreign governments. This certainly affects tourism performance which can also have an impact on companies in the tourism industry. This can also have an impact on the share prices of companies that are members of the tourism industry on the Indonesia Stock Exchange.

There are several studies regarding market reactions to unexpected events, namely, Sambuari, Saerang and Maramis (2020) conducted a study on the Corona Outbreak of Food and Beverage Companies, which resulted in that this event did not cause the market to react. Wuqi Qui et al. (2018), who researched SARS and H7N9, found that these two outbreaks did not affect tourism and retail sector businesses. However, the research of Chen et al. (2007) who also researched the SARS virus in Taiwan found that SARS had a negative impact on hotel stock prices. There is a study by Moghadam et al. (2013) on E. Coli O157 outbreak based on market efficiency and found that this outbreak harmed product prices.

Based on the description of the background and existing problems, researchers have a purpose in this study was to determine the presence of abnormal returns on the tourism industry because of the outbreak of Corona in Indonesia.

## II. LITERATURE REVIEWS

Measurements used in the study of this market reaction will use abnormal return. According to Hartono, 2019 abnormal returns can occur as a result of certain events. The price of securities can be said to change if there is an event that contains information, while investor sentiment will be measured using abnormal returns. When an event or issue does not contain information, capital market players cannot absorb it. This also causes no abnormal returns to the capital market (Octavera, S and Rahadi, F., 2019).

There is a lot of research on the market reaction to an outbreak or virus. Research by Hendriswari (2007) regarding the bird flu outbreak in 2004 found results where this event gave a difference in abnormal returns between before and after the event. Research by Huber et al. (2018), with the Ebola virus and Rassy and Smith (2013) with the H1N1 outbreak, both obtained research results in the form that the outbreak under study affected the economy in the form of a negative impact. Besides, there is also research by Bowles et al. (2015) regarding the Ebola outbreak in Liberia and get the result that this outbreak affects the form of a decline in the economy in the investment sector. Based on some of these previous studies, the following hypothesis can be formulated:

H<sub>1</sub>: There is a significant difference in abnormal returns after the unexpected Corona Virus event in Indonesia

### III. RESEARCH METHOD

This research design uses descriptive quantitative research methods. The period of this research is 10 months (5 months before and 5 months after the event) during the time the Corona outbreak entered Indonesia. The research was conducted at the company in the industry of Tourism is incorporated in the Indonesia Stock Exchange (IDX). The company is not experiencing suspension, not carry out corporate action and the data recorded during the study period will be the sample.

Abnormal return is the return that is not fair and that happened because of recent events (Hartono, 2019). This study will use abnormal returns as a research variable. The steps used in calculating the abnormal return can be seen as follows (Hartono, 2019):

- 1). Calculate actual return

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} \dots \dots \dots (1)$$

- 2). Calculate the expected return

$$E[R_{it}] = R_{mt} \dots \dots \dots (2)$$

$$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} \dots \dots \dots (3)$$

- 3). Calculating the abnormal return

$$RTN_{it} = R_{it} - E(R_{it}) \dots \dots \dots (4)$$

- 4). Calculating the Average Abnormal Return(AAR)

$$AAR_t = \frac{\sum_{i=1}^k RTN_{i,t}}{k} \dots \dots \dots (5)$$

study used the t-test as a parametric statistical test when the data were normally distributed and the Wilcoxon signed-rank test if the data were not normally distributed. The criteria in this study are different in abnormal return, which can be said to be significant when greater than 5% then the hypothesis is rejected. If the significance value is less than 5%, the hypothesis is accepted.

### IV. RESULTS AND DISCUSSION

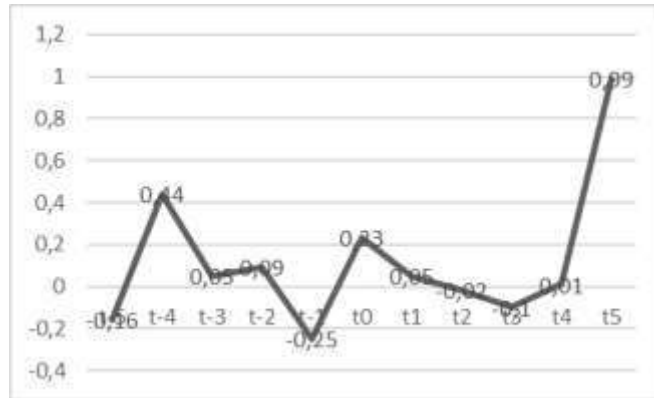
In the Handbook of Tourism Crisis Management by the Ministry of Tourism of the Republic of Indonesia, a sector in the rapidly growing economy. In 2018, the tourism industry has experienced an increase in foreign exchange up to USD 17.6 billion, where the number of foreign tourist arrivals reached 15.8 million. This causes tourism to become an important sector to be managed properly because if tourism is disrupted, its performance can decrease and of course it will have an impact on the economy. One of the impacts is a decrease in the number of tourist visits in which will then be followed by the sluggish economy. 26 companies will be sampled after purposive sampling was carried out. Several companies experiencing suspensions, conducting corporate actions, and the data were not recorded during the study period were excluded from the research sample.

**Table 1. Recapitulation of Abnormal Return Calculation Results in the Observation Period**

Period	Abnormal Return		Average Abnormal Return
	Positive	Negative	
t-5	4	22	-0.16
t-4	18	8	0.44
t-3	20	6	0.05
t-2	22	4	0.09
t-1	1	25	-0.25
t0	24	2	0.23
t1	5	21	0.05
t2	7	19	-0.02
t3	5	21	-0.1
t4	8	18	0.01
t5	26	0	0.99
Total	140	146	286
Percentage	48.95%	51.05%	100%

*Source: Data processed, 2020*

Based on table 1, a normal return with a negative value means that the actual return of the company's shares has a smaller value than the expected return predicted by investors. An abnormal return with a positive value means that the company's actual return has a greater value than the expected return.



**Figure 2. Graph of Average Abnormal Return Tourism Industry, Indonesia Stock Exchange**

*Source: Data processed, 2020*

Figure 2 shows that the movement of the average abnormal return has decreased sharply from period t-2 to t-1 then has an increase in t0. However, from t0 the tourism industry continued to decline until the observation period t3 and then increased to the next period up to t5.

Data from abnormal return and average abnormal return (AAR) is tested for normality to determine the hypothesis test to be used and the results show that the two data are not normally distributed so that the test used is the Wilcoxon Signed Ranks Test.

**Table 2. Wilcoxon Signed Ranks Test Abnormal Return Test Results Before and After Unexpected Events of Corona Outbreak in Indonesia (Tourism Industry)**

Observation Period	t	Sig.
t-5	-2.3118	0.002
t-4	1.1391	0.021
t-3	1.4957	0.039
t-2	2.1243	0.006
t-1	-4.1550	0.000
t0	3.2703	0.001
t1	0.2221	0.007
t2	-0.4336	0.080
t3	-3.3653	0.001
t4	0.1752	0.293
t5	40.0030	0.000

*Source: Data processed, 2020*

Table 2 shows that the market gave a negative reaction to the Corona Outbreak, especially in the t-5 observation period which had an at-calculated value of -2.3118 with a significant level of 0.002 < 0.05, t-1 which had an at-calculated value of -4.1150 with a significance level 0.000 < 0.05, t2 which has at a value of 0.4336 with a significance level of 0.080, and t3 which has a value of -3.3653 with a significance level of 0.001 < 0.05.

**Table 3. Wilcoxon Signed Ranks Test Results in Average Abnormal Return (AAR) Before and After Unexpected Events of Corona Outbreak in Indonesia (Tourism Industry)**

	Sig.	Criteria
AAR	0.423	0.05

*Source: Data processed, 2020*

Based on Table 3, it can show that the average abnormal return (AAR) during the observation period shows a significance value of 0.423. This significance value is greater than 0.05 so that it can indicate that there is no significant difference between before and after the event or the hypothesis is rejected.

There is no difference in abnormal returns due to the Corona Outbreak in Indonesia, especially in the Tourism Industry, because the Corona Outbreak itself has the possibility of leakage of information received by investors. This is because before infecting the State of Indonesia, the Corona Outbreak had infected several countries. The information that was spread about the Corona Outbreak before it arrived in Indonesia became the information content that was absorbed by investors. This shows that the market has reacted even before the t-date which is indicated by a sharp decline that occurred in the observation period (t-1) or one month before the t-date. One month's t-date is January 2020, where this month the Corona outbreak has infected China, Thailand, Japan, and the United States (Kompas, 2020). It is undeniable that investors do not react to the information on the Corona Outbreak in Indonesia. It can be seen that during the observation period t-1 to t0 the abnormal return still increased to a positive value. The absence of a difference in abnormal returns indicates that the market is not reacting which can be caused by investors having conducted an analysis first through the information that has been obtained previously, so it can be said that there has been a leak of information that has caused no difference due to the Corona Outbreak in Indonesia.

The negative market reaction as indicated by the negative abnormal return value shows a decrease in the reaction shown by investors, especially in the tourism industry. The decline in the number of tourists caused thousands of hotels and restaurants to close because there was no income to be made during the Corona Outbreak. This is also shown by the record made by the Indonesian Hotel and Restaurant Association (PHRI), where the total loss caused by the Corona Outbreak to the Tourism Industry reached IDR 85.7 trillion. One of the most popular destinations for tourists, namely, the Province of Bali recorded losses in the Tourism Industry of up to IDR 9.7 trillion per month. The decline in the number of tourists shows that the income of tourism actors is also affected, one of which can be shown through the value of the company's shares in the tourism industry (detikNews,2020).

## V. CONCLUSION

The researcher's conclusions, there is no difference of abnormal return between 5 months before and five months after the President announced the positive Indonesian citizen Corona on stairs 1 March 2, 2020, especially in the tourism industry. This is shown by the market has reacted negatively in the t-1 observation period or one month before the date due to the leakage of information regarding the Corona Outbreak event that investors can absorb to determine the decisions to be taken. Besides, due to several policies from both the foreign government and the Indonesian government after the Corona outbreak that affected the performance of the tourism industry.

## REFERENCES

- [1] Alpha, Arlène & Figuié, Muriel. (2016). *Impact of the Ebola Virus Disease Outbreak on Market Chains and Trade of Agricultural Products in West Africa*. Food and Agriculture Organization of the United Nations. ISBN 978-92-5-109223-1
- [2] Arnani, Mela. (2020). *Timeline Wabah Virus Corona, Terdeteksi pada Desember 2019 hingga jadi Pandemi Global*. Downloaded dari: Kompas Indonesia. Website: <https://www.kompas.com/tren/read/2020/03/12/113008565/timeline-wabah-virus-corona-terdeteksi-pada-desember-2019-hingga-jadi?page=all>
- [3] Bowles, J., Hjort, J., Melvin, T., & Werker, E. (2016). *Ebola, jobs, and economic activity in Liberia*. *Journal of Epidemiology and Community Health*, 70(3), 271–277. <https://doi.org/10.1136/jech-2015-205959>
- [4] Bowles, Jeremy, Melvin, Timothy, Werker, E. (2015). *The Impact of The Ebola Outbreak on Firms in Liberia*. April 2014, 95–96.
- [5] Bramasta, Dandy Bayu. 2020. *Mengenal Apa Itu New Normal di Tengah Pandemi Corona*. Downloaded dari Kompas Indonesia. Website: <https://www.kompas.com/tren/read/2020/05/20/063100865/mengenal-apa-itu-new-normal-di-tengah-pandemi-corona?page=all>
- [6] Bulman, T. et al. (2014). *The Economic Impact of the 2014 Ebola Epidemic: Short and Medium Term Estimates for West Africa*. 1–71.
- [7] Chen, M. H., Jang, S. C. (Shawn), & Kim, W. G. (2007). *The impact of the SARS outbreak on Taiwanese hotel stock performance: An event-study approach*. *International Journal of Hospitality Management*, 26(1), 200–212. <https://doi.org/10.1016/j.ijhm.2005.11.004>
- [8] Chun-Da Chen, Chin-Chun Chen, Wan-Wei Tang, & Bor-Yi Huang. (2009). *The Positive and Negative Impacts of the Sars Outbreak: A Case of the Taiwan Industries*. *The Journal of Developing Areas*, 43(1), 281–293. <https://doi.org/10.1353/jda.0.0041>
- [9] Dzulfaroh, Ahmad Naufal. (2020). *Termasuk Italia, Berikut Negara-Negara yang Lakukan "Lockdown"*. Downloaded dari Kompas Indonesia. Website: <https://www.kompas.com/tren/read/2020/03/13/103100665/termasuk-italia-berikut-negara-negara-yang-lakukan-lockdown>
- [10] Hartono, Jogiyanto, (2019). *Teori Portofolio dan Analisis Investasi. Edisi Kesebelas*. Yogyakarta :BPPE



- [11] Hendriswari, Iqken. 2007. *Pengaruh Wabah Virus Flu Burung Terhadap Return Saham Perusahaan Peternakan Ayam di Bursa Efek Jakarta*. Sanata Dharma University.
- [12] Hindayani, Novia. (2020). *Analisis Reaksi Pasar Saham Atas Peristiwa Covid-19*.4(3):1645–61.
- [13] Huber, C., Finelli, L., & Stevens, W. (2018). *The Economic and Social Burden of the 2014 Ebola Outbreak in West Africa*. *Journal of Infectious Diseases*, 218(1), S698–S704. <https://doi.org/10.1093/infdis/jiy213>
- [14] Ismanto, Juli. (2020). *Reaksi Pasar Modal Terhadap Pengumuman PSBB DKI Jakarta Jilid II ( Event Study LQ-45 Terdaftar BEI )*.51–66.
- [15] Joo, H., Maskery, B. A., Berro, A. D., Rotz, L. D., Lee, Y. K., & Brown, C. M. (2019). *Economic Impact of the 2015 MERS Outbreak on the Republic of Korea's Tourism-Related Industries*. *Health Security*, 17(2), 100–108. <https://doi.org/10.1089/hs.2018.0115>
- [16] Kementerian Pariwisata Republik Indonesia. (2019). *Buku Saku Manajemen Krisis Kepariwisata*. Downloaded dari Kementerian Pariwisata dan Ekonomi Kreatif/Badan Pariwisata dan Ekonomi Kreatif Republik Indonesia. Website:[https://www.kemendparekraf.go.id/asset\\_admin/assets/uploads/media/pdf/media\\_1581589388\\_BUKU\\_SAKU\\_20112019\\_clean.pdf](https://www.kemendparekraf.go.id/asset_admin/assets/uploads/media/pdf/media_1581589388_BUKU_SAKU_20112019_clean.pdf)
- [17] Khoiriah, Monita, Moh. Amin, and Arista F. Kartikasari. (2020). *Pengaruh Sebelum Dan Saat Adanya Pandemi Covid-19 Terhadap Saham LQ-45 Di Bursa Efek Indonesia Tahun 2020*. E-Jra09(02):47–57.
- [18] Lembaga Penyelidikan Ekonomi dan Masyarakat FEB UI. (2019). *Kajian Dampak Sektor Pariwisata terhadap Perekonomian Indonesia*. Downloaded dari : Kementerian Pariwisata dan Ekonomi Kreatif/Badan Pariwisata dan Ekonomi Kreatif Republik Indonesia. Website: <http://www.kemendparekraf.go.id/index.php/post/kajian-dampak-sektor-pariwisata-terhadap-perekonomian-indonesia>
- [19] Lidyana, Vadhia. 2020. *Dampak PSBB ke Ekonomi dan Pesan untuk Anies*. Downloaded dari Detik Finance. Website: <https://finance.detik.com/berita-ekonomi-bisnis/d-4969028/dampak-psbb-ke-ekonomi-dan-pesan-untuk-anies/1>
- [20] Marinč, R. I. M. (2016). *Geographic Proximity of Information to Financial Markets and Impact on Stock Prices: Evidence from the Ebola Outbreak*. 13–21. <https://doi.org/10.33107/ubt-ic.2016.19>
- [21] Mawdsley, N. et al. (2002). *Bali Setelah Tragedi*. Downloaded dari World Bank. Website:<http://documents1.worldbank.org/curated/ar/641761468049459174/pdf/536910WP0INDON10Box345623B01PUBLIC1.pdf>
- [22] Moghadam, A. K., Schmidt, C., & Grier, K. (2013). *The impact of E. Coli O157: H7 recalls on live cattle futures prices*: Revisited. *Food Policy*, 42, 81–87. <https://doi.org/10.1016/j.foodpol.2013.07.002>
- [23] Putri, Gloria Setyvani. (2020). *Update Virus Corona 15 Maret: 75.953 Pasien Sembuh*. Downloaded dari Kompas Indonesia. Website: <https://www.kompas.com/sains/read/2020/03/15/113100723/update-virus-corona-15-maret-75953-pasien-di-155-negara-sembruh>
- [24] Putri, Tasya Nabila Audina. (2020). *Reaksi Pasar Modal Indonesia Terhadap Fluktuasi Rupiah Atas Pandemi Covid-19 (Studi Pada Perusahaan Yang Terdaftar Pada LQ45 Di Bursa Efek Indonesia)*. *Jurnal Ilmiah Mahasiswa FEB*.8(2).
- [25] Qui, Wuqi., Chu, Cordia. & Wu, Jing. (2018). *The Impacts on Health, Society, and Economy of SARS and H7N9 Outbreaks in Cina: A Case Comparison Study*. *Hindawi Journal of Environmental and Public Health*. Vol. 2018, Article ID 2710185, <https://DOI.org/10.1155/2018/2710185>, v2018.P07
- [26] Rahmawati, Asih, dkk. (2020). *Reaksi Pasar Modal Atas Pemberlakuan PSBB Di Tengah Pandemi Covid 19*.1(02):58–66.
- [27] Rassy, D., & Smith, R. D. (2013). *The economic impact of H1N1 on Mexico's tourist and pork sectors*. *Health Economics (United Kingdom)*, 22(7), 824–834. <https://doi.org/10.1002/hec.2862>
- [28] Rifa'i, M. Hasan, Junaidi, dan Arista Fauzi Kartika Sari. (2020). *Pengaruh Peristiwa Pandemi Covid-19 Terhadap Indeks Harga Saham Gabungan*. E-Jra09(02):47–57.
- [29] Sambuari, Inri B., Ivonne S. Saerang, and Joubert B. Maramis. (2015). *Reaksi Pasar Modal Terhadap Peristiwa Virus Corona (Covid-19) Pada Perusahaan Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia*. Vol.7.
- [30] Samsul, Muhammad. (2015). *Pasar Modal dan Manajemen Portofolio*. Edisi 2. Jakarta :Erlangga
- [31] Shi, Wenming, & Li, K. X. (2017). *Impact of unexpected events on inbound tourism demand modeling: evidence of Middle East Respiratory Syndrome outbreak in South Korea*. *Asia Pacific Journal of Tourism Research*, 22(3), 344–356. <https://doi.org/10.1080/10941665.2016.1250795>
- [32] [stockbit.com/symbol/IHSG](http://stockbit.com/symbol/IHSG)
- [33] Subrata, I. Kadek, dan Desak Nyoman Sri Werastuti. (2020). *Analisis Reaksi Pasar Pada Penetapan Status Darurat Global Ke Level Tertinggi Terkait Virus Corona Oleh WHO ( World Health Organization ) Pada Bursa Efek Indonesia*. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha*11(2):169–77.
- [34] Sugiyono. (2019). *Metode Penelitian Pendidikan*. Bandung:Alfabeta.
- [35] Tandelilin, Eduardus, (2010). *Portofolio dan Investasi*. Depok :Kanisius.
- [36] Verikos, G., McCaw, J., McVernon, J., & A, H. (2010). *H1N1 influenza in Australia and its macroeconomic effects*. G-212. <http://www.monash.edu.au/policy/elecpr/g-212.htm>
- [37] Welle, Deutsche. (2020). *Bagaimana Sektor Pariwisata Indonesia Bertahan di Tengah Pandemi Corona*. Downloaded dari detikNews. Website: <https://news.detik.com/dw/d-5161151/bagaimana-sektor-pariwisata-indonesia-bertahan-di-tengah-pandemi-corona>
- [38] Widoatmodjo, Sawidji. (2015). *Pengetahuan Pasar Modal Untuk Konteks Indonesia*. Jakarta : Kompas Gramedia
- [39] Wong, R. Y. C. & A. Siu. (2004). *Economic Impact of SARS: The Case of Hong Kong*. *Asian Economic Papers*, 3(1), 62–83. <https://doi.org/10.1162/1535351041747996>
- [40] Yam. (2020). *Virus Corona Bikin Rp347 T Menguap di Pasar Modal RI*. Downloaded dari CNBC Indonesia. Website: <https://www.cnbcindonesia.com/market/20200202175039-17-134595/virus-corona-bikin-rp-347-t-menguap-dari-pasar-modal-ri>
- [41] Zulfikar. (2016). *Penghantar Pasar Modal dengan Pendekatan Statistika*. Yogyakarta:Dipublish.
- [42] Zulfitra, dan Muliahadhi Tumanggor. (2020). *Reaksi Pasar Modal Index LQ45, Index Consumer Goods, Index Manufacture Dan Index Finance Pada Peristiwa Pandemi Covid-19 April 2020 Di Indonesia*. *JURNAL SeMaRaK* 3(3):1. doi: 10.32493/smk.v3i3.7096.