Capital Market Responses to the G20 Summit Events in Indonesia: An **Analytical Study**

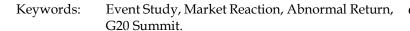
Ni Ketut Bintang Cahyani¹ Dodik Arivanto²

^{1,2}Fakultas Ekonomi dan Bisnis Universitas Udayana, Indonesia

*Correspondences: bintang.cahyani20@student.unud.ac.id

ABSTRACT

By calculating abnormal return, the study aims to analyzing how the capital market responded to the large holding of the G20 Indonesia Summit both before and after the event. With an observation duration of eleven days, this study is an event study. Sampling was carried out purposively to select 76 energy sector issuers listed on the Indonesia Stock Exchange. The Wilcoxon signed ranks test was used to evaluate the data. Based on study findings, the average abnormal return before and after Indonesia hosted the G20 Summit did not differ. The findings of this study indicate that information from the G20 Summit has not been considered important enough to influence the market. Investors are able to anticipate the energy transition agreement during the G20 Summit so that they do not rush to invest around the event.



Analisis Reaksi Pasar Modal pada Peristiwa Penyelenggaraan KTT G20 di Indonesia

ABSTRAK

Dengan menghitung abnormal return, studi bertujuan untuk memahami bagaimana pasar modal merespons penyelenggaraan besar KTT G20 Indonesia baik sebelum maupun setelah acara tersebut. Dengan durasi observasi sebelas hari, studi ini merupakan studi peristiwa. Pengambilan sampel dilakukan secara purposive untuk memilih 76 emiten sektor energi yang tercatat di Bursa Efek Indonesia. Uji Wilcoxon signed ranks digunakan untuk mengevaluasi data. Berdasarkan temuan studi, rata-rata abnormal return sebelum dan setelah Indonesia menjadi tuan rumah KTT G20 tidak memiliki perbedaan. Temuan studi ini mengindikasikan bahwa informasi dari KTT G20 belum dianggap cukup penting untuk mempengaruhi pasar. Investor mampu mengantisipasi kesepakatan transisi energi dalam penyelenggaraan KTT G20 sehingga tidak tergesa-gesa dalam berinvestasi di sekitar peristiwa berlangsung

Studi Peristiwa, Reaksi Pasar, Abnormal Return, Kata Kunci: KTT G20.

e-ISSN 2302-8556

Vol. 35 No. 5 Denpasar, 30 Mei 2025 Hal. 1521-1533

DOI:

10.24843/EJA.2024.v35.i05.p02

PENGUTIPAN:

Cahyani, N. K. B., & Ariyanto, D. (2025). Capital Market Responses to the G20 Summit Events in Indonesia: An Analytical Study. E-Jurnal Akuntansi, 35(5), 1521-1533

RIWAYAT ARTIKEL:

Artikel Masuk: 16 Maret 2024 Artikel Diterima: 21 April 2024

Artikel dapat diakses: https://ojs.unud.ac.id/index.php/Akuntansi/index



INTRODUCTION

In making investment decisions, an important factor that investors consider is the significance of the information content arising from events within both the economic and non-economic realms. The concept of information content relates to the definition of an efficient market, which posits that market efficiency occurs when the market responds to information about an event swiftly and accurately, leading to adjustments in stock prices that reflect the available information (Hartono, 2015:517). The 2022 G20 Summit, an international event held in Indonesia on November 15-16 and attended by 17 heads of G20 member countries, represents a significant non-economic event that impacted the economic sector, particularly the capital market. The discussions during this two-day summit resulted in several concrete agreements. One such agreement is the formation of a Just Energy Transition Partnership (JETP) with a funding allocation of US\$20 billion to support the development of New Renewable Energy (EBT) and accelerate the energy transition in Indonesia by ceasing the use of fossil fuels such as coal (Dewi, 2022).

According to data from the Indonesian Stock Exchange, the Indonesia Composite Index (IHSG) experienced fluctuations, transitioning from the green zone to the red zone multiple times (Sandria, 2022). When the outcomes of the agreement were announced, the Indonesian Composite Index closed with a decline in share prices from 7,035.5 to 7,014.38. It is thought that this decline was partially due to the drop in coal share prices, which reached US\$ 300 per ton, marking the lowest price in the last seven months. This decrease in coal prices potentially weakened the share price movements of coal issuers. These fluctuations indicate that the Indonesia Composite Index was impacted by the results of concrete agreements at the G20 Summit in Indonesia. However, the outcomes of the G20 Summit's agreement on the energy transition also caused share prices in the energy sector to decline several days before the event and to increase several days after the event. Figure 1 illustrates the stock price movements before, during, and after the event.

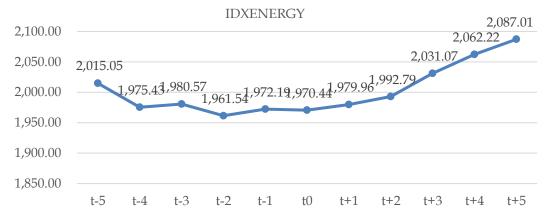


Figure 1. Stock Price Movements in the Energy Sector Before, During, and After the G20 Summit

Source: Investing.com, 2023

According to Figure 1, stock prices in the energy sector exhibited a consistent decline several days before the event. Notably, on the fourth day prior to the event, share prices decreased significantly from 2,015.05 to 1,975.43, a drop of 2%. This decline was purportedly due to a statement from Luhut Panjaitan, the coordinating minister for Maritime Affairs and Investment, a week before the G20 Summit regarding the government's decision to cease using coal-fired power plants and transition to renewable energy (Hidayah, 2022). Conversely, in the days immediately following the event, share prices in the energy sector saw a significant increase. This rise is attributed to the concrete business agreements in the new renewable energy (EBT) sector concluded at the recently held G20 Summit. Additionally, although Indonesia will gradually phase out coal power plants, some companies are well-prepared, as evidenced by several firms transitioning to low-carbon energy sources for their operational needs (Putri, 2022).

Fama (1970) defined a market as "informationally efficient" if prices at any given moment incorporate all available information about future values. Furthermore, Sahputra et al. (2022) noted that a closely related theory in the capital market, particularly concerning abnormal returns, is the market efficiency theory. This theory addresses information efficiency by showing how quickly the market responds to an announcement or information. An event study approach is utilized to assess market efficiency related to an event and to analyze the content of market information. Abnormal returns are employed to measure how the market reacts to an event by evaluating the market's informational content. The stock market will exhibit abnormal returns in response to events that disclose new information, and conversely, it will show no significant abnormal returns if no substantial information is revealed (Wibowo, 2017).

Research on market reactions to non-economic events, which serve as external information impacting the investment climate in Indonesia, has been extensively conducted. Studies such as those by (Andreas et al., 2020); (Azisanabely, 2020); and (Riyadi et al., 2019) have focused on the capital market reactions to the 2018 Asian Games in Jakarta. Additionally, the capital market responses to the IMF and World Bank Annual Meetings in Indonesia were examined by Saputra et al. (2021) and (Wahyudhi & Suaryana, 2019). Okpiani & Khoiriawati (2022) investigated the sensitivity of the stock market to Indonesia hosting the G20 Summit, particularly within the sharia banking industry on the Indonesia Stock Exchange. Furthermore, studies on hosting major events such as the Olympics have been conducted by Hayduk (2022); and (Langer et al., 2018).

Other studies have yielded varied results. Yousaf et al. (2022) demonstrated that the Russia-Ukraine conflict had a significant impact on the markets of most G20 countries, with the greatest effect observed in Russia's market. In contrast, Agriprana (2018) found that King Salman's visit to Indonesia had a significant impact on abnormal returns, highlighting the informational content of this event. However, differing outcomes were observed by Wijaya & Gunawan (2019), who reported that no abnormal returns were detected following the announcement of an investment agreement between the Saudi Arabian and Indonesian governments.



The study aims to assess whether there are differences in average market models before and after the G20 Summit, following the establishment of a concrete JETP commitment to energy transition. This is crucial because fluctuations in share prices of energy companies do not necessarily reflect whether the G20 Summit's outcome, which led to a JETP commitment, contains relevant information that can influence investors. The study was conducted to elucidate the variations in market reactions before and after the event, distinguishing it from other research. Additionally, this study is significant due to the inconsistency of results from previous studies regarding market reactions to other non-economic events and their impacts across different industries. The methodology of this study is illustrated in Figure 2.

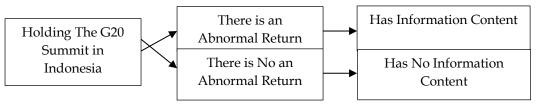


Figure 2. Research Model

Source: Reserach Data, 2024

Fama (1970) laid the foundation for this study by asserting that in an efficient market, the prices set in the capital market at any given time reflect all the accessible information at that time. Fama categorized market efficiency into three forms: weak, strong, and semi-strong, based on how quickly and accurately the market responds to new information. The relevance of the G20 Summit in Indonesia to this theory is evident through the use of abnormal returns, which gauge market efficiency. Notable among the summit's outcomes was the formation of the Just Energy Transition Partnership (JETP), committing US\$20 billion to support the development of new renewable energy and accelerate the energy transition by gradually phasing out fossil fuels. It is possible that investors were aware of the announcement and had considered all pertinent information before making investments. Upon receiving this information, investors likely responded promptly, leading to the formation of new stock prices or adjustments to existing ones based on the information processed. A market can be classified as semi-strong in its efficiency if it exhibits these characteristics.

Event study, as explained by Bowman in 1983, is a technique used in financial market analysis to observe how stock prices react to certain announcements or events that contain crucial information. This study aims not only to understand the direct effect of the event on stock prices but also to assess its impact on overall company value and the capital market, both systemically and non-systemically. Event studies are instrumental in testing market efficiency, examining the information content of events, and testing for semi-strong market efficiency. When an event occurs and the market swiftly reacts to the abnormal return, it is indicative of semi-strong efficiency and establishes a new equilibrium price.

In event studies, an important metric is the calculation of abnormal returns, which involves three stages. The first stage entails calculating the actual return; the second stage involves estimating the expected return; and the third, more complex

stage, involves calculating the abnormal return. According to Hartono (2015:647), to calculate abnormal returns, one must begin by computing the difference between the expected return—the anticipated value of the investment—and the actual return—the actual outcome of the investment. This difference can yield positive or negative values; if positive, it indicates the actual return is higher, but if negative, the expected return is higher. In the second step, calculating the expected return, this value must be estimated using several models. The market model, mean adjusted model, and market adjusted model are three models identified by Brown & Warner (1985) as suitable for estimating expected returns.

The announcement of concrete results from the G20 Summit in Indonesia, specifically the formation of a JETP commitment worth US\$20 billion, may surprise the market, particularly in the energy sector, because the agreement prompts an energy transition impacting both non-renewable and renewable energy stocks. The market's reaction indicates that it has assimilated information concerning the sustainability of shares in the energy sector through the results of the agreement produced by the G20 Summit event. Previous research has demonstrated that major non-economic events can significantly influence stock price movements before or after the event and may result in differences in the average of abnormal returns, as shown by studies such as Berman et al. (2000); Veraros et al. (2004); Bailey et al. (2005); Mari'a & Harlendro (2016); Agriprana (2018); Mishra et al. (2021); Yousaf et al. (2022); Sahl et al. (2023); Andreas et al. (2020); Azisanabely (2020); Irmayani & Purbawangsa (2019); Darmika & Adiputra (2020); Pham et al. (2019); and Yulita (2017). Such events not only attract investors and tourists but also raise public awareness, as noted by (Du & Huang, 2021); and (Larasasati & Natasya, 2017).

H₁: There is a difference in the average abnormal return before and after the G20 Summit event in Indonesia.

METHODOLOGY

This research employs a comparative quantitative approach to analyze the G20 Summit event in Indonesia, which resulted in an agreement for a fund allocation of IDR 300 million to aid and support Indonesia's energy transition, including the cessation of coal-fired power plants. The study encompasses a concise observation period of eleven working days on the Indonesian Stock Exchange, centered around the summit date (t=0, November 16, 2022). It assumes that investors are sufficiently informed and able to respond to the event within this brief timeframe. Nazir et al. (2014) noted that excessively long observation periods might incorporate the influence of extraneous events, while overly short periods may not allow for a proper analysis of the event's immediate impact.

The research is conducted on the IDX, utilizing several sources of secondary data, including a comprehensive list of companies, the Indonesian Composite Index (ICI), and daily or closing stock prices. Data is accessed through the official IDX website, Yahoo Finance, and Investing. By accessing the official website, this study identifies a population of 76 energy sector companies listed on the IDX. The sample size is determined through purposive sampling, based on specific characteristics deemed relevant to the research objectives. The following section outlines the process of determining the sample size in this study.



Table 1. Total Samples

No.	Sample Characteristic	Total Company
1	Listed companies in the energy sector on the Indonesia Stock Exchange in 2022	76
2	Companies lacking complete stock price data or with inactive shares during the event observation period	(13)
3	Listed companies in the energy sector on the IDX that conducted corporate actions around the observation period	(0)
Total Samples		63

Source: Research Data, 2023

The results from the table above indicate that the sample comprised a total of 63 issuers, which are companies listed in the energy sector on the IDX. The inclusion criteria for this research stipulate that during the observation period, the companies should not have engaged in corporate actions such as stock splits, mergers, acquisitions, etc., and must have had complete share price data available.

The dependent variable in this research is the market reaction, measured by calculating abnormal returns, while the G20 Summit event in Indonesia serves as the independent variable. The concept of abnormal return, used in financial market analysis, quantifies the deviation of the actual return—that which actually occurs from an investment—from the expected return (Hartono, 2015:647). The actual return is the return that occurs in reality, calculated using the following formula:

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \tag{1}$$

Where:

R_{i,t} = The actual return that occurs for a particular security-(i) in a particular period of events-(t)

 $P_{i,t}$ = Current relative stock prices

 $P_{i,t-1}$ = Previous share price

The Market Adjusted Model is utilized for calculating the expected return based on several considerations: 1) The market index return at that time is regarded as the best estimate for calculating security returns in this model (Hartono, 2015:659); 2) it facilitates the detection of abnormal returns (Prameswari & Wirakusuma, 2018); and 3) although it is not as complex as other models, it can still produce results that are comparably effective (Brown & Warner, 1985). Below is the formula used to calculate the daily market return.

$$R_{m,t} = \frac{ICI_{t-1}CI_{t-1}}{ICI_{t-1}} \tag{2}$$

Where:

 $R_{m,t}$ = Market index return on a certain day (on day-t)

ICI_t = ICI closing price on a certain day (on day-t)

ICI_{t-1} = ICI closing stock price on the previews day (on day t-1)

After the daily market return calculated, the value of the expected return is the value of the daily market return. The formula for expected return is as follows. $E[R_{i,t}] = R_{m,t}$ (3)

Where:

 $E[R_{i,t}]$ = Expected return of certain securities (i) in a certain event period (t)

 $R_{m,t}$ = Daily market returns

The calculation of the abnormal return formula is as follows, which is the difference between the actual return and the expected return (Hartono, 2015:647).

$$AR_{i,t} = R_{i,t} - E[R_{i,t}].$$
 (4)

Where:

AR_{i,t} = Abnormal returns of certain securities (i) in a certain evet period (t)

 $R_{i,t}$ = Actual return of certain securities (i) in a certain event period (t)

 $E[R_{i,t}]$ = Expected return of certain securities (i) in a certain event period (t)

Meanwhile, the average abnormal return can be calculated using the following formula, which is the average abnormal return in the event window.

$$AAR = \frac{\sum_{i=1}^{n} ARi,t}{n}$$
 (5)

Where:

AAR = Average Abnormal Returns

ARi,t = *Abnormal return* s of certain securities (i) in a certain period (t)

n = Samples Total

All necessary information will be collected and analyzed in stages. Initially, descriptive statistics will be utilized to describe the data. Subsequently, the data distribution will be verified through a normality test. Depending on the distribution of the data, the hypothesis will be assessed using either the paired sample t-test or the Wilcoxon signed-rank test. The primary objective of this study is to ascertain whether there are significant variations in the average abnormal returns before and after the G20 Summit in Indonesia. A significance threshold of α =5% will be employed to determine whether the hypothesis should be accepted (if below α) or rejected (if it exceeds the α value).

EMPIRICAL RESULTS

Table 2. Calculation Results of Average Abnormal Return During the Observation Period

The state of the s		
Date	Period	Average Abnormal Return
9 Nov 2022	t-5	-0.006
10 Nov 2022	t-4	-0.007
11 Nov 2022	t-3	-0.004
14 Nov 2022	t-2	0.021
15 Nov 2022	t-1	0.001
16 Nov 2022	t=0	-0.003
17 Nov 2022	t+1	-0.005
18 Nov 2022	t+2	-0.009
21 Nov 2022	t+3	0.005
22 Nov 2022	t+4	0.013
23 Nov 2022	t+5	0.003

Source: Research Data, 2024

The initial step in data analysis involves providing a description of the independent variable investigated in this study, namely abnormal returns. This value is utilized to analyze market reactions over a specified period or during the



event observation window. The results of the descriptive analysis are presented in Table 2.

The analysis presented in Table 2 reveals that there were consecutive negative abnormal returns from five days to three days before the event. Negative abnormal returns were also observed during the event and up to two days afterward. In contrast, positive abnormal returns were recorded two days and one day before the event, followed by the third to fifth days after. Throughout the observation period before the G20 Summit in Indonesia, abnormal returns fluctuated almost daily. There was a decrease on day -4, followed by a significant increase until day -2, then another decrease until day -1. Post-event, the abnormal return decreased until day +2; however, it then showed a significant increase until day +4, before decreasing again on day +5, though it remained positive. The highest abnormal return occurred two days before the G20 Summit, while the lowest occurred two days after the event concluded.

Table 3. Descriptive Analysis Results

	N	Minimum	Maximum	Mean	Std. Deviation
AAR Before	63	-0.025	0.059	0.001	0.016
AAR After	63	-0.048	0.044	0.002	0.014
Valid N (listwise)	63				

Source: Research Data, 2024

According to Table 3, the analysis indicates that before the G20 Summit in Indonesia, the lowest average abnormal return was recorded by PT Indo Tambangraya Megah Tbk and the highest by PT Mitra Energi Persada Tbk, with values ranging from -0.025 to 0.059, respectively. The mean was 0.001 with a standard deviation of 0.016. After the summit, PT Logindo Samudramakmur Tbk had the lowest average abnormal return at -0.048, while PT Bayan Resources Tbk exhibited the highest at 0.044. The post-summit mean value was 0.002 with a standard deviation of 0.014.

Table 4. Normality Test results

		Tests o	f Normality			
	Kolmo	Kolmogorov-Smirnov ^a			apiro-W	ilk
	Statistic	df	Sig.	Statistic	df	Sig.
AAR BEFORE	0.196	63	0.000	0.816	63	0.000
AAR AFTER	0.140	63	0.004	0.894	63	0.000
a. Lilliefors Significance Correction						

Source: Research Data, 2024

Table 4 indicates that the significance value of the average abnormal return before and after the G20 Summit is less than 0.05, suggesting a non-normal distribution of the data. Based on these results, although the Paired Sample t-Test is not applicable, an alternative test is available—namely, the Wilcoxon Signed Rank Test, which is suitable for hypothesis testing or assessing differences.

Table 5. Wilcoxon Signed Rank Test Results

	Ranks			
		N	Mean Rank	Sum of Ranks
AAR AFTER - AAR	Negative Ranks	24a	32.04	769.00
BEFORE	Positive Ranks	37 ^b	30.32	1122.00
	Ties	2 ^c		
	Total	63		

- a. AAR AFTER < AAR BEFORE
- b. AAR AFTER > AAR BEFORE
- c. AAR AFTER = AAR BEFORE

Source: Research Data, 2024

Referring to Table 5, the data indicates a negative difference in the five-day average abnormal return before and after the G20 Summit for 24 companies, with an average decrease of 32.04 and a total investment value of 769.00. Conversely, there was a positive difference observed in 37 companies, denoted as 37 positive data (N), which experienced an average increase of 30.32 and a total investment of 1122.00. The results of this non-parametric test also identified 2 instances of similar values (ties) between the pre- and post-G20 Summit periods in Indonesia.

Tabel 6. Wilcoxon Signed Rank Test Results

Test Statistics ^a				
	AAR AFTER - AAR BEFORE			
Z	-1.268 ^b			
Asymp. Sig. (2-tailed)	0.205			
a. Wilcoxon Signed Ranks Test				
b. Based on negative ranks.				

Source: Research Data, 2024

Table 6 displays a significance value of 0.205, which is greater than 0.05. According to the test results, Hypothesis 1 (H1) is rejected, supporting the assumption that the average abnormal return remains consistent before and after the G20 Summit in Indonesia. The analysis suggests that the G20 Summit, despite resulting in a concrete agreement on energy transition, did not significantly impact the capital market activities, particularly for companies in the energy sector. The information content of the G20 Summit's agreement on energy transition was insufficient to significantly influence market movements or investor decision-making.

The market would react to the G20 Summit event in Indonesia, which culminated in a concrete agreement on energy transition, if the event were perceived as an announcement containing information potent enough to impact the market. Based on the analysis, investors appeared relatively unaffected by the agreement outcomes from the G20 Summit concerning the energy transition, which involves ceasing the use of coal and shifting to new renewable energy sources. This is reflected in the abnormal return values, which did not exhibit any significant differences.

The absence of a significant investor reaction is attributed to the protracted nature of implementing the energy transition. The plan to cease using coal and shift to new renewable energy (EBT) could not be immediately executed upon the announcement of the agreement, despite the provision of funding assistance



amounting to US\$ 20 billion (approximately IDR 300 billion) intended to support Indonesia's acceleration of the energy transition. While coal companies may have perceived an imminent threat upon the announcement, the transition process requires substantial time as the government seeks alternative energy sources to replace coal-fired power plants and secures the substantial funds needed for their early retirement. Although there is a funding commitment of US\$ 20 billion through the JETP in the G20 Summit agreement, these funds are contingent upon Indonesia developing a detailed plan and program for phasing out coal to accelerate the development of new renewable energy. This conditional nature of the funding likely contributed to the market's subdued response to the energy transition agreement during the G20 Summit, resulting in normal stock prices and abnormal returns both before and after the event.

The findings of this study do not confirm the market efficiency theory, which posits that market prices incorporate all available information. After careful analysis, it was observed that the events examined did not contain sufficient relevant information to significantly influence the market, resulting in no observable difference in market response during the observation period. Although this study does not confirm market efficiency theory, theoretically, its results may serve as a reference for further studies on market reactions to non-economic events. These findings align with those of Lo Duca & Stracca (2015); Dahlstrom & Winstedt (2017); Smeets & Zimmermann (2013); Langer et al. (2018); Okpiani & Khoiriawati (2022); Agriprana (2018); Wijaya & Gunawan (2019); Andreas et al. (2020); Saputra et al. (2021); and Gunawan & Wirama (2023), indicating that non-economic events, especially major ones like the G20 Summit, do not always convey impactful information content that compels investor action, thereby maintaining market normalcy.

CONCLUSIONS

According to the results of the eleven-day observation period, it was concluded that there is no difference in the average abnormal return before and after the G20 Summit in Indonesia. The findings suggest that the information content of the event was not sufficiently relevant to influence market movements. Investors were able to predict and anticipate the energy transition agreement during the G20 Summit, which prevented hasty investment decisions surrounding the event.

The limitation of this study is that it examines only one of the potential issues raised during the G20 Summit in Indonesia, thus it cannot fully explain the overall impact on specific industries. Moreover, the study employs a short observation period, which might mitigate the market's response to significant events. Future research could consider examining market reactions to different variables, such as the absence of several state leaders, including Russian President Vladimir Putin, across various industries. Additionally, if future studies encounter issues such as non-normally distributed data, it is advisable to manage outlier data. It is also recommended that future researchers consider extending the event window to better match the nature of the event studied, incorporate alternative methods for calculating abnormal returns, and use other metrics such as trading volume activity for comparison. Investors are advised to carefully analyze each event to maximize profits and minimize financial risks. Should similar events to

the G20 Summit occur in the future, resulting in agreements like funding commitments for energy transitions, investors might consider maintaining their investment activities as before the announcement, given the low investment risk associated with such agreements.

REFERENCES

- Agriprana, A. (2018). Pengaruh Kunjungan Raja Salman Arab Saudi ke Indonesia terhadap Return Saham Lq45 (Studi Peristiwa di Bursa Efek Indonesia). https://dspace.uii.ac.id/handle/123456789/12170.
- Andreas, Gumanti, T. A., Nurjannah, U., & Awwaliyah, I. N. (2020). The effect of announcement as the host of XVIII Asian games on the Indonesian stock market. *Investment Management and Financial Innovations*, 17(1), 109–118. https://doi.org/10.21511/imfi.17(1).2020.10.
- Azisanabely, M. N. (2020). Reaksi Pasar Modal terhadap Penyelenggaraan Asian Games 2018 di Indonesia (Event Study pada Saham Lq-45 di Bursa Efek Indonesia). *Jurnal Ilmiah Mahasiswa FEB*, 8(2), 1–17.
- Bailey, B. A., Heck, J. L., & Wilkens, K. A. (2005). International Mutual Fund Performance and Political Risk. In *Review of Pacific Basin Financial Markets and Policies* (Vol. 8, Issue 1). www.worldscientific.com.
- Berman, G., Brooks, R., & Davidson, S. (2000). The Sydney Olympic Games announcement and Australian stock market reaction. *Applied Economics Letters*, 7(12), 781–784. https://doi.org/10.1080/135048500444796.
- Bowman, R. G. (1983). Understanding and Conducting Event Studies. *Journal of Business Finance & Accounting*.
- Brown, S. J., & Warner, J. B. (1985). The Case of Event Studies. In *Journal of Financial Economics* (Vol. 14). North-Holland Using Daily Stock Return.
- Dahlstrom, A., & Winstedt, J. (2017). Measuring The Impact of The 2009 COP15 Copenhagen Summit. *Department of National Economics and Statistics*, 1–33.
- Darmika, I. G. B., & Adiputra, I. M. P. (2020). Analisis Komparatif Saham Lq45 Sebelum dan Sesudah Peristiwa Dikeluarkannya Indonesia dari Daftar Negara Berkembang oleh Kantor Perwakilan Dagang Amerika Serikat (USTR). In *Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha*, 11(2).
- Dewi, H. K. (2022). *Hasil KTT G20 Positif untuk Indonesia, Ini Peluang Investasi Reksadana dan Emas*. Bareksa. https://www.bareksa.com/berita/bareksa-navigator/2022-11-22/hasil-ktt-g20-positif-untuk-indonesia-ini-peluang-investasi-reksadana-dan-emas.
- Du, X., & Huang, Z. (2021). How does the G20 summit affect land market? Evidence from China. *International Journal of Strategic Property Management*, 25(6), 432–445. https://doi.org/10.3846/ijspm.2021.15470.
- Fama, E. F. (1970). American Finance Association Efficient Capital Markets: A Review of Theory and Empirical Work Efficient Capital Markets: A Review Of Theory And Empirical Work. In Source: The Journal of Finance, 25(2).
- Gunawan, D. N. P. H., & Wirama, D. G. (2023). Reaksi Pasar atas Pergantian Nama Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 2012–2022. *Jurnal Samudra Ekonomi Dan Bisnis*, 15(1), 89–99. https://doi.org/10.33059/jseb.v15i1.8197.



- Hartono, J. (2015). Teori Portofolio dan Analisis Investasi. Edisi Kesepuluh. BPFE.
- Hayduk, T. (2022). Who Benefitted From the PyeongChang Olympic Announcement? Evidence From the South Korean Stock Market. *Journal of Sports Economics*, 23(1), 39–75. https://doi.org/10.1177/15270025211030161.
- Hidayah, A. (2022). Saham Batubara Longsor Berjamaah, Emiten Ini Paling Boncos. CNBC Indonesia. https://www.cnbcindonesia.com/market/20221115152024-17-388178/saham-batubara-longsor-berjamaah-emiten-ini-paling-boncos.
- Irmayani, N. W. D., & Purbawangsa, I. B. A. (2019). The Impact of Events Around Opening of ASIAN Games 2018 on Market Reactions of Good Industry Consumer Sectors in Indonesia Stock Exchange. *Russian Journal of Agricultural and Socio-Economic Sciences*, 86(2), 148–154. https://doi.org/10.18551/rjoas.2019-02.17.
- Langer, V. C. E., Maennig, W., & Richter, F. (2018). The Olympic Games as a News Shock: Macroeconomic Implications. *Journal of Sports Economics*, 19(6), 884–906. https://doi.org/10.1177/1527002517690788.
- Larasasati, C., & Desy Natasya, E. (2017). Peran Indonesia di G-20: Peluang dan Tantangan. *Jurnal Hubungan Internasional*, 10(2).
- Lo Duca, M., & Stracca, L. (2015). Worth the hype? The effect of G20 summits on global financial markets. *Journal of International Money and Finance*, 53, 192–217. https://doi.org/10.1016/j.jimonfin.2015.01.003.
- Mari'a, H. A., & Harlendro. (2016). Reaksi Pasar Modal Indonesia terhadap Peristiwa Masyarakat Ekonomi ASEAN (MEA) 2015 (Studi Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia). *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*. https://jimfeb.ub.ac.id/index.php/jimfeb/article/view.2901.
- Mishra, S., Vyas, V., & Kumar Meena, V. (2021). Abnormal Return and Impact of Information of Natural Disaster on the Indian Stock Market. *Journal of Commerce & Accounting Research*, 10(3), 23–25. https://orcid.org/0000-0003-3570-9813.
- Nazir, S. M., Younus, H., Kaleem, A., & Anwar, Z. (2014). Impact of political events on stock market return: empirical evidence from Pakistan. *Journal of Economic and Administrative Sciences*, 30(1), 60–78. https://doi.org/10.1108/jeas-03-2013-0011.
- Okpiani, W. A., & Khoiriawati, N. (2022). Estimasi Perbedaan Harga Saham dan Volume Perdagangan Saham Sektor Perbankan Syariah di Indonesia Studi Peristiwa: KTT G20 di Bali Tahun 2022. *Malia: Jurnal Ekonomi Islam, 14*(1), 309–328. https://doi.org/10.35891/ml.v14i1.3778.
- Pham, H., Al-Hares, O., Ramiah, V., Moosa, N., & Veron, J. F. (2019). Measuring the effect of the North Korea-U.S. summit on the South Korean stock market. *Cogent Economics and Finance*, 7(1). https://doi.org/10.1080/23322039.2019.1690212.
- Prameswari, I. A. N., & Wirakusuma, M. G. (2018). Analisis Reaksi Pasar Modal Pada Peristiwa Pemilihan Gubernur Dki Jakarta Tahun 2017. *E-Jurnal Akuntansi*, 944. https://doi.org/10.24843/eja.2018.v22.i02.p05.
- Putri, A. M. H. (2022). Bedah Kesepakatan Transisi Energi G20! Siap Tanpa Batu Bara? CNBC Indonesia.

- Riyadi, S., Sujito, & Rinawati, T. (2019). Reaksi Pasar Modal Sebelum dan Sesudah Peristiwa Upacara Pembukaan Asean Games 2018 di Jakarta. *Dinamika Sosial Budaya*, 21(1), 57–67. https://dx.doi.org/10.266623/jdsb.v21i1.1504.
- Sahl, E. A. F., Wijayanto, A., & Listyorini, S. (2023). Reaction of the Indonesian capital market to the conflict between Russia and Ukraine: Event study approach to abnormal return and trading volume activity of coal issuers' shares on the IDX. *World Journal of Advanced Research and Reviews*, 18(1), 197–205. https://doi.org/10.30574/wjarr.2023.18.1.0576.
- Sahputra, A., Lindrianasari, Dharma, F., & Amelia, Y. (2022). Analisis Perbandingan Abnormal Return dan Trading Volume Activity Sebelum dan Sesudah Diumumkannya Kasus Pertama Covid-19. *Jurnal Akuntansi Bisnis*, 15(1). https://doi.org/10.30813/jab.v15i1.2796.
- Sandria, F. (2022). KTT G20 Berakhir, IHSG Bisa Dapat Berkah Apa Hari Ini? CNBC Indonesia. https://www.cnbcindonesia.com/research/20221116043948-128-388316/ktt-g20-berakhir-ihsg-bisa-dapat-berkah-apa-hari-ini/1.
- Saputra, D. R., Utami, E. S., & Sumani. (2021). Respons Pasar Modal pada Peristiwa Pertemuan IMF dan Bank Dunia di Indonesia (Event Study Perusahaan Manufaktur Subsektor Food and Beverage yang Terdaftar di BEI). *Bisma: Jurnal Bisnis Dan Manajemen, 15*(3), 191–199. https://jurnal.unej.ac.id/index.php/BISMA.
- Smeets, D., & Zimmermann, M. (2013). Did the EU Summits Succeed in Convincing the Markets during the Recent Crisis? *Journal of Common Market Studies*, 51(6), 1158–1177. https://doi.org/10.1111/jcms.12062.
- Veraros, N., Kasimati, E., & Dawson, P. (2004). The 2004 Olympic Games announcement and its effect on the Athens and Milan stock exchanges. *Applied Economics Letters*, 11(12), 749–753. https://doi.org/10.1080/1350485042000254584.
- Wahyudhi, P. S., & Agung Suaryana, I. G. N. (2019). Reaksi Pasar Atas Kesepakatan Investasi Bidang Infrastruktur dalam Pertemuan International Monetary Fund-World Bank 2018. *E-Jurnal Akuntansi*, 616. https://doi.org/10.24843/eja.2019.v27.i01.p23.
- Wibowo, A. (2017). Reaksi Investor Pasar Modal Indonesia terhadap Paket Kebijakan Ekonomi Tahap I Jokowi-JK (Studi pada Saham LQ45 Periode Agustus 2015-Februari 2016). *Media Ekonomi Dan Manajemen*, 32(1).
- Wijaya, K., & Gunawan, H. (2019). Reaksi Pasar Modal Indonesia Terhadap Kesepakatan Investasi Antara Pemerintah Indonesia dengan Pemerintah Arab Saudi. In *Journal of Business Administration*, 3(2).
- Yousaf, I., Patel, R., & Yarovaya, L. (2022). The reaction of G20+ stock markets to the Russia–Ukraine conflict "black-swan" event: Evidence from event study approach. *Journal of Behavioral and Experimental Finance*, 35. https://doi.org/10.1016/j.jbef.2022.100723.
- Yulita, I. K. (2017). Reaksi Pasar Modal terhadap Pengumuman Keputusan Investasi Raja Salman di Indonesia. *Jurnal Studi*, 21(1), 95–106. https://e-journal.usd.ac.id/index.php/JP/article/view/911.