Ecoment Global Journal

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Geopolitical Risk & Indonesian Stock Market Response

***Sahdan Saputra[1], Ega Dwi Putri Marswandi[2], Wira Hendri[3]**

[1]Computer Scoence, Faculty of Engineering, Bumigora University, Mataram, Indonesia
[2,3]Management, Faculty of Economics and Business, Bumigora University, Mataram, Indonesia
Correspondence*:
Address: Setanggor, Praya Barat, 83572 | e-mail: sahdan@universitasbumigora.ac.id

Abstract

Objective: The aim of this research is to determine empirically the impact of geopolitical risk originating from countries with high geopolitical risk and domestic ones on the Composite Stock Price Index in Indonesia. In addition, this research aims to determine the role of geopolitical actions in strengthening or weakening the relationship between geopolitical risk and the Composite Stock Price Index in Indonesia.

Design/Methods/Approach: This research uses geopolitical risk index (GPRH) data from countries with the highest geopolitical risk index in the last 3 years and domestic ones consisting of Ukraine, Russia, America, China and Indonesia. Meanwhile, geopolitical action risk (GPRA) is a risk index measured in aggregate from January 2004-October 2023, so the number of observations in this study reached 238.

Findings: The findings in the research show that Ukraine and America have a negative and significant influence, while China and Russia have a positive and significant impact on the composite stock price index in Indonesia. Apart from that, this research also found that the influence of geopolitical risk on the composite stock price index in Indonesia is greater when geopolitical actions such as escalation of war and acts of terror occur.

Originality/Value: This research complements several previous studies regarding the impact of geopolitical risk on the Indonesian composite stock price index. Several previous studies have not examined the impact of each country's geopolitical risk on the composite stock price index and how it is moderated by geopolitical action.

Practical/Policy implication:
The findings in this research prove that countries that have high geopolitical risk have a significant influence on the Composite Stock Price Index in Indonesia. So that investors can use this research as a consideration when investing in the capital market by considering geopolitical risks originating from abroad and domestically.

Keywords: Geopolitical Risk, Geopolitical Action Risk, Composite Stock Price Index

JEL Classification: H56, G10
Received; December, 7 2023 Received in revised form: December, 14 2023 Accepted: December, 25 2023

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Introduction

Recently, there has been a growing interest in understanding geopolitical risks due to increasing tensions worldwide (Jung et al., 2021). Geopolitical risks encompass the threat of war, terrorist actions, and interstate tensions that can affect normal and peaceful international relations (Caldara & Iacoviello, 2018). We have witnessed conflicts such as the one between the US and Iran related to the nuclear deal, terrorist attacks in Europe, and tensions between Hong Kong and China. More recently, a war between Russia and Ukraine has unfolded. The economic recovery following the Covid-19 health crisis was hindered by Russia's invasion of Ukraine in February 2022 (Gubareva, 2021). This conflict has created geopolitical tensions with widespread impacts on global markets and economies (Alam et al., 2022; Kusi et al., 2020; Umar et al., 2023). Due to its intensity, the effects of the Russia-Ukraine conflict are even likened to wartime events. Theoretically, war, military conflicts, and geopolitics can elevate the level of uncertainty (Yousaf et al., 2022).

In many evolving discussions on geopolitical risk and its impact on the economy, financial literature often delves into how it affects changes in stock prices. According to Yousaf et al, (2022), literature often delves into how it affects changes in stock prices. According to Yousaf et al. (2022), geopolitical risk creates uncertainty among investors regarding the profitability of a company, subsequently leading to fluctuations in stock prices. Entrepreneurs, market players, and central bank officials view geopolitical risk as a key factor in investment decisions and stock market movements. The Bank of England even incorporates geopolitical risk, along with policy uncertainty, into the concept of the 'trinity of uncertainty,' which can significantly impact the economy (Carney, 2016). In recent years, the European Central Bank, the International Monetary Fund (IMF), and the World Bank regularly discuss and monitor the risks posed by geopolitical tensions. According to a 2017 Gallup survey of over 1,000 investors, 75 percent of respondents expressed concerns about the economic impact of various military and diplomatic conflicts worldwide (Caldara & Iacoviello, 2022). This is because the increased geopolitical risk can escalate financial market fluctuations and cause delays in investment decision-making, thereby negatively impacting overall economic outcomes (Caldara & Iacoviello, 2022; Ha et al., 2021).

Indonesia, as a country with an open economic system, is certainly not immune to the effects of the increasingly heated global geopolitical risks. Indonesia is a nation that has economic connectivity, both in terms of trade and finance, with countries directly involved in global geopolitical activities (Suwito et al., 2020). According to Pringpong et al, (2023) and Cheng et al. (2018), geopolitical risks originating from abroad have a higher impact on countries with open and developing economic systems. Therefore, it is essential to examine whether Indonesia, as a country with an open economic system, experiences spillover effects of geopolitical risks from countries involved in current global geopolitics. The literature on the impact of geopolitical risks on the stock market is still not widely developed in Indonesia. Some studies, such as Dwianto & Yulita (2019); Gaol (2023); and Sumarjo et al. (2022), have explored the impact of geopolitical risks on the stock market reactions of oil and gas companies and manufacturing companies.

This study utilizes a new measure of GPR (Geopolitical Risk) developed Caldara & Iacoviello, (2022) to empirically investigate the impact of international political risk on firm value. They argue that GPR captures political uncertainty better than EPU (Economic Policy Uncertainty) because GPR is not driven by economic and financial turbulence. Our motivation for this research is based on the need to assess the stock market reactions in Indonesia during periods of increased geopolitical risk (GPRH) to provide valuable insights for investors and practitioners. To the best of our knowledge, this is the first study examining the geopolitical risks of countries economically connected to Indonesia, such as the United States, China, Ukraine, Russia, and domestic geopolitical indices. Additionally, this research aims to analyze how the Indonesian stock market reacts during Geopolitical Acts (GPRA) such as escalated warfare and terrorist actions.

This research consists of five sections. The first section presents the background and research motivation. It discusses the importance of studying the influence of geopolitical risk on the Composite Stock Price Index (IHSG) in Indonesia. The second section outlines previous research that serves as a reference for this study and the formulation of hypotheses. The research methodology is discussed in the third section, covering the types of data, data sources, data collection processes, and the methods used in hypothesis testing. The fourth section contains the research findings and discussions. Finally, the fifth section presents conclusions and recommendations for further research with the same theme.

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Literature Review and Hypothesis Development

Literature Review

The growth of literature on the impact of geopolitical risk is particularly focused on financial markets and commodity prices. Several studies, such as those conducted by Hoque & Zaidi (2020); Apergis et al. (2018); Demiralay & Kilincarslan (2019); dan Balcilar et al. (2018), have analyzed how geopolitical risk affects stock returns. Antonakakis et al, (2017) measured whether the relationship between stock returns and oil prices is influenced by geopolitical risk. Mei et al. (2020) investigated the impact of geopolitical risk on changes in futures oil prices. Al Mamun et al. (2020) examined the relationship between geopolitical risk and the returns of stocks, bonds, the dollar index, gold futures, and the Bitcoin price index. Research by Phan et al. (2019) measured the impact of geopolitical risk on research and development (R&D) investments by companies. Shen et al. (2021) analyzed the relationship between geopolitical risk and merger and acquisition activities.

Hypothesis Development

Referring to studies examining the correlation between geopolitical risk and capital investment, as conducted by Bilgin & Karabulut (2020), which measures the impact of geopolitical risk on government investments as a whole. Using panel data from 18 countries over the period 1985-2015, this study concludes that geopolitical risk has a positive impact on government investments. Conversely, its impact on private sector capital investment is the opposite. Research by Tan et al. (2022) explores the influence of geopolitical risk on capital investment, affirming that companies respond to geopolitical risk by reducing their capital investments.

Kim et al, (2019) analyzed the impact of geopolitical risk on investor strategies in the Korean market, using daily data from 505 companies for the period 2015-2017. They conveyed that when the risk from North Korea increases significantly, domestic investors tend to increase their portfolio value in Korea, while foreign investors decrease it. However, they observed that the performance of domestic institutional investors is much better than that of foreign investors due to increased information asymmetry. Additionally, nearly half of the companies in the United Kingdom view war or geopolitical acts (GPRA) as a source of uncertainty for their businesses (Royhana & Warninda, 2021). Research conducted by Pringpong et al, (2023) found that geopolitical risk has a higher impact on firm value during geopolitical actions such as terrorist acts. Therefore, economic actors such as companies, consumers, and investors may hesitate to make decisions if government economic policies frequently change or cannot be accurately predicted, leading to the adoption of a 'wait and see' approach to cope with uncertainty (Al-Thaqeb & Algharabali, 2019).

H1: Geopolitical risks influence the Composite Stock Price Index in Indonesia
H2: Geopolitical actions moderate the influence of geopolitical risk on the composite stock price index in Indonesia.

Research Methods

This study is a quantitative research utilizing secondary data in the form of geopolitical risk index data consisting of four countries with the highest geopolitical risk indices and domestic indices for the years 2021-2023. In analyzing the influence of geopolitical risk on stock market reactions in Indonesia, this research employs multiple regression analysis with the assistance of Eviews 12 software. The geopolitical risk data for each country (GPRH) and geopolitical actions (GPRA) refer to Caldara & Iacoviello (2022) measurement of geopolitical risk, cited from www.policyuncertainty.com. Meanwhile, stock market data represented by the Composite Stock Price Index (IHSG) is quoted from yahoofinance.com and converted into Indonesian Rupiah. The research data consists of monthly data starting from January 2004 to October 2023, resulting in 238 time series observations. Time series analysis can be used to evaluate cause-and-effect relationships in the context of variable changes over time (Saputra & Dethan, 2023). Referring to Gujarati & Porter, (2015) the general form of the equation in this study is as follows:

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

$IHSG_t = a + b1GPRH\_IDN_t + b2GPRH\_UKR_t + b3GPRH\_AMR_t + b4GPRH\_RUS_t + b5GPRH\_CHN_t + e_t$.....(1)

$IHSG_t = a + b1GPRH\_IDN_t*GPRA_t + b2GPRH\_UKR_t*GPRA_t + b3GPRH\_AMR_t* GPRA_t + b4GPRH\_RUS_t* GPRA_t + b5GPRH\_CHN_t* GPRA_t + e_t$.....(2)

Equation 1 in this study represents the form of the equation used to test the influence of the geopolitical risk of each country on the Composite Stock Price Index (IHSG) in Indonesia. The four countries referred to are Ukraine, the United States, Russia, and China. Additionally, this research analyzes domestic geopolitical risk, which is Indonesia's geopolitical risk. In Equation 2, an interaction is conducted between The Geopolitical Acts (GPRA), an index measuring the Escalation of War and Terrorist Actions. The purpose of the interaction between GPRH and GPRA is to determine whether the escalation of war and terrorist actions strengthens or weakens the influence of the geopolitical risk of each country on the Composite Stock Price Index (IHSG) in Indonesia.

Table 1. Operational Definition of Variables

Variable	Measurement	Code
Dependent Variable		
IHSG	Ln IDX Composite Stock Price Index	IHSG
Independent Variable		
GPRH Indonesia	Indonesian Geopolitical Risk Index	GPRH IDN
GPRH Ukraine	Ukraine Geopolitical Risk Index	GPRH UKR
GPRH America	American Geopolitical Risk Index	GPRH AMR
GPRH Russia	Russian Geopolitical Risk Index	GPRH RUS
GPRH China	China Geopolitical Risk Index	GPRH CHN
Moderating Variables		
GPRA	Ln Geopolitical Action Index	GPRA

Result and Discussion

The results in this study are summarized in tables 2, 3, and 4. Table 2 explains the descriptive statistical results consisting of mean, median, maximum, minimum, standard deviation, and number of observations in the study. Table 3 contains a summary of the statistical results of the influence of geopolitical risk for each country on the composite stock price index in Indonesia. Lastly in table 4 is the result of the interaction between geopolitical risk and geopolitical action on the Composite Stock Price Index (IHSG) in Indonesia.

Table. 2 Descriptive Statistics Results

	IHSG	Ukraine	America	Russia	Indonesia	China	GPRA
Mean	3.55	0.37	2.80	0.88	0.04	0.56	1.83
Median	3.66	0.08	2.67	0.65	0.04	0.48	1.85
Maximum	3.86	5.55	6.00	5.58	0.42	1.83	2.22
Minimum	2.86	0.00	1.68	0.23	0.00	0.17	1.32
Std.Dev	0.27	0.78	0.64	0.70	0.04	0.27	0.16
Observation	238	238	238	238	238	238	238

Source: Output Eviews 12

1. The mean IHSG value in this study showed 3.5, median 3.66, maximum 3.86, and minimum 2.86. Meanwhile, the standard deviation value is 0.27 with a total of 238 observations.
2. The mean GPRH_UKR value in this study showed 0.37. median 0.08, maximum 5.55 and minimum value 0.00. Meanwhile, the standard deviation value is 0.78 with a total of 238 research observations.

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

3. The mean GPRH_AMR value in this study showed 2.80. median 2.67, maximum 6.00 and minimum value 1.68. Meanwhile, the standard deviation value is 0.70 with a total of 238 research observations.
4. The mean GPRH_RUS value in this study showed 0.88. median 0.65, maximum 5.58 and minimum value 0.23. Meanwhile, the standard deviation value is 0.70 with a total of 238 research observations.
5. The mean GPRH_IDN value in this study shows 0.04. median 0.04, maximum 0.42 and minimum value 0.00. Meanwhile, the standard deviation value is 0.04 with a total of 238 research observations.
6. The mean GPRH_CHN value in this study showed 0.56. median 0.48, maximum 1.83 and minimum value 0.17. Meanwhile, the standard deviation value is 0.27 with a total of 238 research observations.
7. The mean GPRA value in this study showed 1.83, median 1.85, maximum 2.22 and minimum value 1.32. Meanwhile, the standard deviation value is 0.16 with a total of 238 research observations.

Table. 3 GPRH & IHSG Regression Results

Variable	Coefficient	t-Statistic	Probability
Constanta	3.830.180	5.764773	0.0000***
Indonesia	-1.176.978	-4.130478	0.0001***
Ukraine	-0.090114	-1.701528	0.0902*
America	-0.227797	-9.164941	0.0000***
Russia	0.349111	5.128643	0.0000***
China	0.251623	3.667690	0.0003***
R-Squared	0.528071		
Adj-R^2	0.517900		
F-Statistic	0.000000***		
Observation	238		

Source: Output Eviews 12
Explanation: level of significant 1% ***, 5% **, 10% *

Based on the results of statistical tests in this research, it shows significant results between geopolitical risk and the Composite Stock Price Index (IHSG) in Indonesia. Based on the results of statistical tests summarized in table 3, Indonesia shows a negative coefficient of -1.176978 at a significance level of 0.0001 or 1%. In addition, Ukraine and America show negative coefficient values with a significance level of 0.0902 or 10% for Ukraine and 0.0000 or 1% for America. The negative and significant coefficient value for domestic, Ukrainian and American geopolitical risks on the Indonesian Stock Price Index shows the response of the stock market that if there is an increase in geopolitical risk from these countries, it will have an impact on reducing the Composite Stock Price Index (IHSG) in Indonesia.

However, this is different from what happens to the geopolitical risk of Russia and China, with a positive coefficient value of 0.349111 and with a statistical probability value at the 1% significance level, Russian geopolitical risk shows a unidirectional relationship with the composite stock price index in Indonesia. This means that the higher the geopolitical risk in Russia, the more impact it will have on increasing stock market prices in Indonesia. Apart from that, the positive coefficient value of 0.251623 with a significance level of 1% for China shows that the country's geopolitical risk has a positive impact on the Indonesian stock market. This means that the higher China's geopolitical risk will have an impact on increasing joint stock prices in Indonesia. The research results show that all geopolitical risks in the countries tested in this study have a significant influence on the composite stock price index (IHSG) in Indonesia, thus hypothesis 1 in this study was successfully accepted where geopolitical risk influences the composite stock price index in Indonesia.

Table 4. Interaction Results Between GPRH & GPRA

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Variable	Coefficient	t-Statistic	Probability
Constanta	3.830180	5.764.773	0.0000***
Indonesia*Gpra	-0.580998	-3.938.294	0.0001***
Ukraina*Gpra	-0.045845	-1.653.083	0.0997*
Amerika*Gpra	-0.100535	-9.701.687	0.0000***
Rusia*Gpra	0.175293	4.917.197	0.0000***
China*Gpra	0.217326	3.330.159	0.0010***
R-Squared	0.545256		
Adj-R^2	0.535455		
F-Statistic	0.000000***		
Observation	238		

Source: Output Eviews 12
Explanation: level of significance 1% ***, 5% **, 10% *

Based on the aim of this research, namely to analyze the influence of geopolitical risk on the composite stock price index in Indonesia, this research aims to examine how The Geopolitical Acts (GPRA) moderate the influence of geopolitical risk on the composite stock price index. Table 4 shows a summary of statistical test results which show that geopolitical actions such as escalation of war and acts of terror have significant results in strengthening the influence of geopolitical risk on the stock market index in Indonesia. The interaction between Indonesian GPRH and geopolitical action (GPRA) shows a value of -0.580998 with a significance value of 0.0001, meaning that when high geopolitical risk occurs and is followed by an escalation of war or acts of terror, this will have an impact on decreasing the Composite Stock Price Index (IHSG) in Indonesia.

Similar to the interaction of geopolitical risk (GPRH) and geopolitical action (GPRA) of Ukraine and America, geopolitical action (GPRA) succeeded in strengthening the influence of geopolitical risk on the Indonesian stock market, this can be seen from the negative coefficients -0.045845 and -0.100535 with a significance value of 0.0997 for Ukraine and 0.0000 for America. In contrast to what happened in China and Russia, the results of the interaction coefficient between Russia and China's geopolitical risks show positive figures of 0.175293 and 0.217326 with a significance value at the 1% level for Russia and China. These results show that when there is an increase in geopolitical risk which is followed by geopolitical action, this has a positive impact on increasing stock market prices in Indonesia. Therefore, the results of this research successfully accept hypothesis 2 where geopolitical actions moderate the influence of geopolitical risk on the Composite Stock Price Index (IHSG) in Indonesia.

The influence of geopolitical risk (GPRH) on the Composite Stock Price Index (IHSG)

The results of statistical tests on the influence of geopolitical risk on the Composite Stock Price Index (IHSG) in Indonesia show mixed results between countries that currently have a high geopolitical risk index, such as Ukraine, America, Russia and China. Apart from that, geopolitical risks originating from within the country also have a significant influence on the stock market. The difference in influence can be seen from the negative influence between Ukraine, America and Indonesia. Meanwhile, Russia and China have a positive influence on the Composite Stock Price Index in Indonesia. The negative influence of Ukrainian, American and Domestic geopolitical risks is consistent with the results of several studies such as Hoque & Zaidi (2020); Apergis et al. (2018); Demiralay & Kilincarslan (2019); and Balcilar et al. (2018) who found a negative relationship between geopolitical risk and stock returns.

The research results may be related to real options theory, where companies prefer to wait and postpone their investment decisions until the risk of uncertainty disappears over time (Bernanke et al., 1996). Uncertainty driven by the political and geographic environment increases the uncertainty of future cash flows, increases borrowing costs, enlarges the complexity of forecasting market trends, and reduces business investment (Gao et al., 2017). Amerika sebagai superpower global, dengan kekuatan ekonomi, militer, dan pengaruh politik yang besar. America is a global superpower, with great economic power, military power and political influence. The United States plays a major role in shaping world policy and is often considered a bellwether of global geopolitics. Meanwhile, Ukraine is involved in a conflict with

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Russia regarding the status of Crimea and the eastern regions of Ukraine. This conflict created geopolitical tensions involving other countries, including the United States and its allies.

Different from Ukraine, America and Indonesia. Russia and China have a positive and significant influence on the composite stock price index in Indonesia. These results are not in line with research conducted by Mei et al, (2020); Al Mamun et al, (2020); and Phan et al, (2019) who found a negative influence between geopolitical risk on the stock market. However, these results are in line with the research results of Bilgin & Karabulut, (2020); Kim et al, (2019); and Salisu et al, (2022) who found a positive relationship between geopolitical risk and capital market investment.

China and Russia are countries whose economies remain resilient in high geopolitical conditions, thus risks originating from these countries may not be responded to negatively by investors in influencing their economic connectivity. Relations between Indonesia, Russia and China in the context of high global geopolitics can be influenced by a number of factors, including foreign policy, economic interests and geopolitical dynamics. Indonesia is a producer and exporter of various commodities, including oil, natural gas, coal and agricultural products. If geopolitical risks in Russia cause disruptions in global energy or commodity supplies, the prices of those commodities may increase.

This can benefit Indonesia as a clean producer. If geopolitical risks in Russia lead to changes in global investment or trade policies, Indonesia could become an alternative investment destination or more attractive trading partner. Apart from that, economic relations between Indonesia and China continue to develop. China is Indonesia's largest trading partner, and Chinese investment in Indonesia is increasing. Indonesia, Russia and China may have common interests in facing global challenges, such as climate change, energy security and world economic balance.

The interaction between geopolitical risk (GPRH) and geopolitical action (GPRA) on the composite stock price index (IHSG) in Indonesia.

In equation 2 in this research, we form an interaction equation between geopolitical risk (GPRH) and geopolitical action (GPRA) which contains the escalation of war and acts of terror. The results summarized in table 4 show that geopolitical risk is strengthened by the risk of geopolitical action on the Composite Stock Price Index (IHSG) in Indonesia. The negative influence between Ukrainian, American and domestic geopolitical risks will increase if information regarding the escalation of war and acts of terror occurs in that country. This is also the same as what happens to the geopolitical risks of China and Russia after being interacted with geopolitical actions. This finding is in line with research conducted by Pringpong et al, (2023) which found that geopolitical risks have a higher influence when geopolitical actions such as terrorist attacks occur.

Wars and acts of terror can create security instability at the national and international levels. This can create tensions between countries and damage diplomatic relations. Escalation of war often triggers military or political intervention from foreign countries. This can complicate the conflict and expand its impact at the geopolitical level. Both war and acts of terror can cause crises with significant impacts on neighboring countries and unsettle regional stability. Thus, the increasing escalation of war and acts of terror can increase geopolitics at the national and international level, so that this will have a higher impact on the functioning of financial markets, especially the capital market.

In an increasingly integrated world economy, global markets reflect major political events such as political news and elections, coups, civil strife and popular uprisings, state conflicts and wars, large-scale terrorist attacks etc. As numerous studies show, often the impact of such events is not limited to the political sphere but spreads to the economy with the potential for significant direct and indirect impacts on economic activity, depending on the type.

Conclusion and Future Direction

This research aims to analyze the influence of geopolitical risk on countries with the highest geopolitical risk index in the last 3 years and domestically. The countries referred to in this research include Ukraine, America, Russia and China. Apart from that, geopolitical risks originating from domestic are also included in this research. The results of the research show that American, Ukrainian and domestic geopolitical risks have a negative impact on the Composite Stock Price Index in Indonesia. However, this is different from the geopolitical risks of Russia and China which have a positive impact on the Composite Stock Price Index (IHSG). The findings in this research also show that geopolitical actions such as escalation of war and acts of terror strengthen the influence of each country's geopolitical risk. This research can be used as

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

a foundation for further research regarding geopolitical risks on the stock market in Indonesia. Research development can be carried out by analyzing the impact on stock market prices per economic sector more specifically considering that in this research we use a composite stock index which is an aggregate assessment of stock market prices.

Implications

The findings in this research prove the real options theory where investors will wait and see when there is a high increase in geopolitical risk in an effort to minimize systematic risk. Apart from that, when referring to the spill over effects theory which explains the effects caused by one country on another as a result of economic connectivity, this research clearly proves from the findings that countries that have high geopolitical risks have a significant influence on Composite Stock Price Index in Indonesia (IHSG). So that investors can use this research as a consideration when investing in the capital market by considering geopolitical risks originating from abroad and domestically.

Acknowledgment

The author would like to express his sincere thanks to Caldara and Iacoviello for compiling the methodology and data to determine the geopolitical risk index (GPRH) and the geopolitical action index (GPRA). Without this data, this research would not have been possible.

Conflict of Interest

All authors in this study declare that the research was conducted without any commercial or financial relationships that could be interpreted as a potential conflict of interest for any party or agency.

References

Al-Thaqeb, S. A., & Algharabali, B. G. (2019). Economic policy uncertainty: A literature review. *The Journal of Economic Asymmetries*. https://doi.org/https://doi.org/10.1016/j.jeca.2019.e00133

Al Mamun, M., Uddin, G. S., Suleman, M. T., & Kang, S. H. (2020). Geopolitical risk, uncertainty and Bitcoin investment. *Physica A: Statistical Mechanics and Its Applications*, *540*, 123107. https://doi.org/10.1016/j.physa.2019.123107

Alam, K., Tabash, M. I., Billah, M., Kumar, S., & Anagreh, S. (2022). The Impacts of the Russia–Ukraine Invasion on Global Markets and Commodities: A Dynamic Connectedness among G7 and BRIC Markets. *Journal of Risk Financial Managment*.

Antonakakis, N., Gupta, R., Kollias, C., & Papadamou, S. (2017). Geopolitical risks and the oil-stock nexus over 1899–2016. *Finance Research Letters*, *23*, 165–173. https://doi.org/10.1016/j.frl.2017.07.017

Apergis, N., Bonato, M., Gupta, R., & Kyei, C. (2018). Does Geopolitical Risks Predict Stock Returns and Volatility of Leading Defense Companies? Evidence from a Nonparametric Approach. *Defence and Peace Economics*, *29*(6), 684–696. https://doi.org/10.1080/10242694.2017.1292097

Balcilar, M., Bonato, M., Demirer, R., & Gupta, R. (2018). Geopolitical risks and stock market dynamics of the BRICS. *Economic Systems*, *42*(2), 295–306. https://doi.org/10.1016/j.ecosys.2017.05.008

Bernanke, B., Gertler, M., Gilchrist, S., & Lxxviii, V. (1996). The Financial Accelerator and the Flight to Quality. *The Review of Economics and Statistics*, *78*(1), 1–15. https://doi.org/doi.org/10.2307/2109844

Bilgin, M. H., & Karabulut, G. (2020). How Do Geopolitical Risks Affect Government Investment? An Empirical Investigation. *Defence and Peace Economics*.

Caldara, D., & Iacoviello, M. (2022). *Measuring Geopolitical Risk*.

Carney, M. (2016). *Mark Carney: Uncertainty, the economy and policy*.

Cheng, C. H. J., Chiu, C. W. J., Hankins, W. B., & Stone, A.-L. (2018). Partisan conflict, policy uncertainty and aggregate corporate cash holdings. *Journal of Macroeconomics*.

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Demiralay, S., & Kilincarslan, E. (2019). The impact of geopolitical risks on travel and leisure stocks. *Tourism Management*, *75*(February), 460–476. https://doi.org/10.1016/j.tourman.2019.06.013

Dwianto, N. A., & Yulita, I. K. (2019). Reaksi Pasar Modal Indonesia Terhadap Peluncuran Rudal Korea Utara. *EXERO Journal of Research in Business and Economics*.

Gao, J., Grinstein, Y., & Wang, W. (2017). Cash Holdings, Precautionary Motives, and Systematic Uncertainty. *Social Science Research Network*.

Gaol, T. R. L. (2023). Pengaruh Risiko Luar Negeri Terhadap Pasar Saham Indonesia Menggunakan Analisis ARDL. *Jurnal Akuntansi Keuangan Dan Bisnis*.

Gubareva, M. (2021). The impact of Covid-19 on liquidity of emerging market bonds. *Finance Research Letters*, *41*. https://doi.org/https://doi.org/10.1016/j.frl.2020.101826

Gujarati, D. N., & Porter, D. C. (2015). *Dasar-dasar ekonometrika*. Salemba Empat.

Ha, J., Lee, S., & Inhwan, S. (2021). The Impact of Uncertainty Shocks: Evidence from Geopolitical Swings on the Korean Peninsula. *Oxford Bulletin of Economics and Statistics*. https://doi.org/https://doi.org/10.1111/obes.12456

Hoque, M. E., & Zaidi, M. A. S. (2020). Global and country-specific geopolitical risk uncertainty and stock return of fragile emerging economies. *Borsa Istanbul Review*, *20*(3), 197–213. https://doi.org/10.1016/j.bir.2020.05.001

Jung, S., Lee, J., & Lee, S. (2021). *The Impact of Geopolitical Risk on Stock Returns : Evidence from Inter-Korea Geopolitics*.

Kim, Y. S., Park, K. J., & Kwon, O. B. (2019). Geopolitical Risk and Trading Patterns of Foreign and Domestic Investors: Evidence from Korea. *Asia-Pacific Journal of Financial Studies*, *48*(2), 269–298. https://doi.org/10.1111/ajfs.12253

Kusi, B., Agbloyor, E., & Gyeke, D. A. (2020). Financial sector transparency, financial crises and market power: A cross-country evidence. *International Journal of Finance & Economics*. https://doi.org/https://doi.org/10.1002/ijfe.2380

Mei, D., Ma, F., Liao, Y., & Wang, L. (2020). Geopolitical risk uncertainty and oil future volatility: Evidence from MIDAS models. *Energy Economics*, *86*, 104624. https://doi.org/10.1016/j.eneco.2019.104624

Phan, H. V., Nguyen, N. H., Nguyen, H. T., & Hegde, S. (2019). Policy uncertainty and firm cash holdings. *Journal of Business Research*, *95*(October 2018), 71–82. https://doi.org/10.1016/j.jbusres.2018.10.001

Pringpong, S., Maneenop, S., & Jaroenjitrkam, A. (2023). Geopolitical risk and firm value: Evidence from emerging markets. *The North American Journal of Economics and Finance*.

Royhana, M., & Warninda, T. D. (2021). Pengaruh Ketidakpastian Kebijakan Ekonomi Amerika Serikat, Tiongkok, dan Jepang Terhadap Jakarta Islamic Index. *Jurnal Fokus Manajemen Bisnis*.

Salisu, A. A., Ogbonna, A. E., & Lasisi, L. (2022). Geopolitical risk and stock market volatility in emerging markets: A GARCH – MIDAS approach. *The North American Journal of Economics and Finance*, *62*. https://doi.org/https://doi.org/10.1016/j.najef.2022.101755

Saputra, S., & Dethan, S. H. (2023). Financial Technology dan Kredit Bank Umum Konvensional di Indonesia Financial Technology dan Kredit Bank Umum Konvensional di Indonesia. *TARGET : Jurnal Manajemen Dan Bisnis*, *January*. https://doi.org/10.30812/target.v4i2.2622

Shen, H., Liang, Y., Li, H., Liu, J., & Lu, G. (2021). Does geopolitical risk promote mergers and acquisitions of listed companies in energy and electric power industries. *Energy Economics*, *95*, 105115. https://doi.org/10.1016/j.eneco.2021.105115

Sumarjo, C., Mangantar, M., & Rumokoy, J. L. (2022). Pengaruh Risiko Geopolitik, Proftabilitas Dan Leverage Terhadap Return Saham Perusahaan Pertambangan Subsektor Migas Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*.

Suwito, Santosa, iswoyo H., & Yunitasari, D. (2020). Pengujian Empiris Pengaruh Ketidakpastian Kebijakan Ekonomi Amerika Serikat Terhadap Dinamika Perekonomian Indonesia. *E-Journal*

Volume 8 Nomor 3 Edisi Desember 2023
P-ISSN : 2540-816X E-ISSN : 2685-620

Ekonomi Bisnis Dan Akuntansi,.

Tan, O. F., Cavlak, H., Cebeci, Y., & Güneş, N. (2022). The Impact of Geopolitical Risk on Corporate Investment: Evidence from Turkish Firms. *The Indonesian Capital Market Review*, *14*(1), 16–32. https://doi.org/10.21002/icmr.v14i1.1138

Umar, Z., Bossman, A., Choi, S.-Y., & Vo, X. V. (2023). Are short stocks susceptible to geopolitical shocks? Time-Frequency evidence from the Russian-Ukrainian conflict. *Finance Research Letters*, *52*. https://doi.org/https://doi.org/10.1016/j.frl.2022.103388

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*.