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Geopolitical Risk Transmission in Indonesia's Financial and Commodity Markets

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Abstract–This study investigates how geopolitical risk affects Indonesia's macroeconomic stability using a quantitative approach with a Vector Autoregression (VAR) model. The focus is on the Indonesian economy, with quarterly data from 2010Q1 to 2025Q4 as the sample. The variables include the Geopolitical Risk (GPR) index, economic growth (GDP), the Composite Stock Price Index (IHSG), inflation, interest rates, exchange rates, and commodity prices (gold and oil). Data are sourced from secondary sources, including international and national databases. The analysis involves descriptive statistics, stationarity testing with the Augmented Dickey-Fuller (ADF) method, optimal lag selection, VAR estimation, and further analysis with the Impulse Response Function (IRF) and Variance Decomposition (VD). The findings reveal that shocks to geopolitical risk have limited and temporary effects on most macroeconomic variables, which generally return to equilibrium within a few periods. Conversely, financial variables, especially stock prices and gold, show more noticeable responses. Variance decomposition indicates that the impact of geopolitical risk is relatively small in the real sector but more significant in financial markets. These results confirm that Indonesia's economy is fairly resilient to geopolitical shocks, with transmission primarily through financial channels rather than the real economy.
Keywords: Geopolitical Risk; Macroeconomic Stability; Financial Markets; Commodity Prices, Vector Autoregression (VAR)

I. INTRODUCTION

Global dynamics have evolved over recent decades. As a result, geopolitical risk is now a significant source of uncertainty for a country's economic stability. [1] Geopolitical tensions, interstate conflicts, and global policy shifts can trigger financial market volatility and commodity price swings. They also add uncertainty to economic activity. [2] Therefore, geopolitical risk is a critical external factor for macroeconomic analysis, especially in developing countries with high economic openness. [3]

As one of the developing countries with an increasingly integrated economic structure into the global economy, Indonesia is not immune to the impacts of geopolitical risk [4]. Changes in global conditions can affect various domestic economic indicators, such as economic growth, inflation, exchange rates, and financial market stability [5]. Furthermore, global commodity prices, such as gold and oil, can serve as primary transmission channels through which geopolitical risk influences the national economy [6]. In this context, it is important to understand how much geopolitical risk influences these variables, as well as the mechanisms through which such transmission occurs.

Many studies have explored how geopolitical risk affects the economy. The findings remain mixed in both significance and direction. Some studies find a significant impact on economic growth and financial markets. Others suggest the influence is limited and temporary. [7] These differing results indicate that the impact of geopolitical risk depends on a country's economic characteristics. This makes a more context-specific analysis necessary for Indonesia.

Moreover, most previous studies have focused on only one or two economic indicators, thereby failing to provide a comprehensive picture of the dynamic relationship between geopolitical risk and multiple macroeconomic variables. [8] In reality, these variables interact, forming a complex system. Therefore, an approach capable of capturing the dynamic interrelationships among variables is essential.

Given the aforementioned background, this study aims to examine how geopolitical risk affects Indonesia's economy. macroeconomic stability by considering the interactions among economic variables, financial markets, and global commodity prices. This research employs a Vector Autoregression (VAR) approach to identify the dynamic responses among variables and to examine the transmission mechanisms of geopolitical risk within the Indonesian economic system. Therefore, this study is expected to make empirical contributions to understanding the role of geopolitical risk in the domestic economy and to serve as a basis for formulating economic policies that are more responsive to global dynamics.

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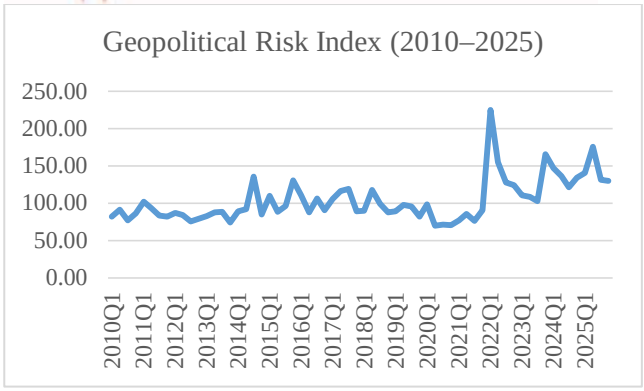
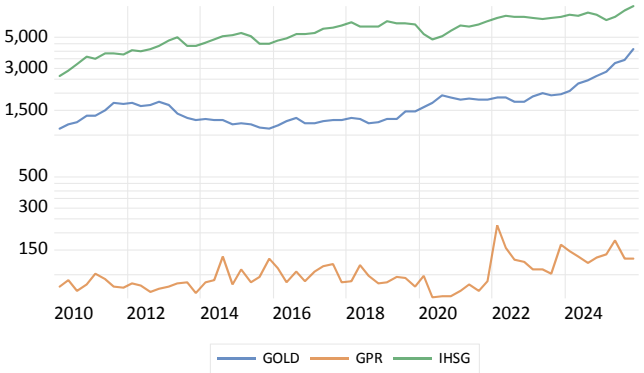


Source: Matteo Iacoviello and Dario Caldara (2022), authors' calculation
Figure 1. Geopolitical Risk (GPR) Index (2010–2025)

Figure 1 shows that global geopolitical risk fluctuated significantly throughout the observation period. Spikes in the index are observed in several periods, reflecting heightened global geopolitical tensions. This indicates that geopolitical risk is a dynamic phenomenon that can affect economic stability.



Source: Matteo Iacoviello and Dario Caldara (2022), Yahoo Finance, and World Gold Council, author's calculation
Figure 2. Geopolitical Risk, IHSG, and Gold Price Movements

Figure 2 presents the movements of geopolitical risk, the Composite Stock Price Index (IHSG), and gold prices over the period 2010–2025. In general, increases in geopolitical risk tend to be followed by fluctuations in financial markets and commodity prices. In several periods, rising geopolitical risk indices are correlated with declines in stock market performance, reflecting heightened uncertainty and negative sentiment in financial markets.

On the other hand, gold prices tend to increase when geopolitical risk experiences spikes. This indicates that gold functions as a safe-haven asset. preferred by investors during periods of global instability. [9] This pattern reinforces the assumption that geopolitical risk is transmitted to the economy not only through the real sector but also through financial markets and commodity prices.

These descriptive findings provide an initial indication of a dynamic relationship among geopolitical risk, the stock market, and gold prices, thereby necessitating further empirical analysis to systematically examine it using an econometric approach.

II. LITERATURE REVIEW

2.1 Geopolitical Risk and Macroeconomic Stability

Geopolitical risk refers to the uncertainty caused by international conflicts, political tensions, and changes in global policies that can impact economic activity. [1] The created geopolitical risk index has been commonly used to measure the impact of geopolitical uncertainty on the economy. [10] An increase in geopolitical risk can trigger economic instability through various channels, including reduced investment, disruptions in international trade, and heightened volatility in financial markets. [11]

In the macroeconomic context, geopolitical risk is often associated with slower economic growth and increased policy uncertainty. [12] However, its impact is not always permanent, as some countries can adapt to external shocks, depending on the strength of their domestic economic fundamentals. [13]

2.2 Financial Market Response to Geopolitical Risk

The financial market is one of the sectors most responsive to changes in geopolitical risk. [14] Global uncertainty can influence investor behavior, increase risk aversion, and lead to fluctuations in stock indices. [15] It shows that political risk significantly affects asset prices and risk premiums. [16]

In developing countries such as Indonesia, stock markets tend to be more sensitive to external shocks due to limited market depth and the dominance of foreign investors. [17] Therefore, increases in geopolitical risk are often followed by downward pressure on stock indices, as reflected in the Composite Stock Price Index (IHSG). [18]

2.3 Commodity Prices and Safe Haven Assets

Global commodity prices, like the stock market, transmit geopolitical risk. Gold is a safe-haven asset that attracts demand during periods of high

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uncertainty. [11] In such times, investors shift from riskier assets to gold. [19]

While gold reflects investor reactions to uncertainty, oil prices likewise respond to geopolitical dynamics, particularly those related to conflicts in energy-producing regions. [20] Fluctuations in oil prices can affect inflation and economic activity, especially for countries that rely on energy imports. [21]

2.4 Limitations of Single-Equation Models in Macroeconomic Analysis

Most early studies on the impact of geopolitical risk used single-equation models, which have limitations in capturing the dynamic relationships among variables. [22] These models typically identify only one-way relationships without accounting for the simultaneous interactions among macroeconomic variables.

In fact, within a complex economic system, variables such as economic growth, financial markets, and commodity prices influence one another. [23] Therefore, a method that can better capture reciprocal relationships and short-term dynamics is needed.

2.5 Vector Autoregression (VAR) Model in Macroeconomic Analysis

The Vector Autoregression (VAR) model is a commonly used approach in macroeconomic analysis for examining dynamic relationships among variables. [24] VAR enables each variable in the system to be considered endogenous, allowing it to model simultaneous interactions without needing prior assumptions about causal relationships. [25]

Using Impulse Response Function (IRF) and Variance Decomposition (VD) analyses, the VAR model can reveal how a shock, such as a rise in geopolitical risk, impacts other variables within the economic system in the short and medium term. [26]

2.6 Literature Review on Geopolitical Risk in Indonesia

Research on geopolitical risk in Indonesia remains relatively limited, especially studies that analyze the connection between geopolitical risk and various macroeconomic indicators at the same time. [27] Several prior studies have focused more on the impact of global risk on stock markets or exchange rates, thus failing to offer a complete view of the transmission mechanisms within the economic system. [28]

Based on these conditions, this study aims to address the gap in the literature by examining how geopolitical risk affects Indonesia's macroeconomic stability using a VAR approach. By analyzing the interactions among macroeconomic variables, financial markets, and commodity prices, this study is expected to make a more comprehensive contribution than previous research.

III. RESEARCH METHODS

This research employs a quantitative approach to analyze how geopolitical risk affects Indonesia's macroeconomic stability. This method is selected because it allows for empirical analysis of relationships among variables using time series data. [29] The analytical method used is Vector Autoregression (VAR), which enables each variable in the model to influence one another simultaneously without a strict separation between dependent and independent variables. [25] Therefore, the VAR model is deemed suitable for capturing the dynamic relationships among macroeconomic variables and geopolitical risk.

The data used in this study are secondary, consisting of quarterly time series from 2010Q1 to 2025Q4. The variables analyzed include the Geopolitical Risk (GPR) index as a proxy for global uncertainty, Gross Domestic Product (GDP) as an indicator of economic growth, the Composite Stock Price Index (IHSG) representing the financial market, inflation (INF), interest rates (INT), exchange rates (EXC), and global commodity prices such as gold (GOLD) and oil (OIL). The data are collected from various relevant official sources, both national and international.

The data analysis technique is performed in several stages. The first stage involves descriptive statistical analysis to describe the characteristics of the data, such as the mean, standard deviation, and the maximum and minimum values of each variable. [30] Subsequently, a stationarity test is performed using the Augmented Dickey-Fuller (ADF) method to ensure that the data do not contain a unit root, thus preventing the issue of spurious regression. [31]

Next, the optimal lag length is identified using information criteria. such as the Akaike Information Criterion (AIC), Schwarz Criterion (SC), and Hannan-Quinn (HQ). The chosen optimal lag is then used in estimating the VAR model. The VAR model

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is further analyzed using the Impulse Response Function (IRF) to analyze how a variable reacts to shocks in other variables, as well as Variance Decomposition (VD) to identify each variable's contribution to explaining the variation within the system. [32]

All data processing and analysis in this study are performed with EViews software, which is commonly utilized for time-series econometric analysis.

IV. RESULT AND DISCUSSION

Result

To analyze the dynamic relationship between geopolitical risk and macroeconomic stability in Indonesia, this study uses a Vector Autoregression (VAR) model. The VAR model is selected because it treats all variables as endogenous, allowing the capture of reciprocal relationships and dynamic interactions among variables simultaneously without needing to specify a priori causal links structures. [33] Generally, the VAR model can be written as follows:

$$Y_t = A_1 Y_{t-1} + A_2 Y_{t-2} + \cdots + A_p Y_{t-p} + \varepsilon_t$$

Where Y_t represents the vector of endogenous variables at time t, A_i denotes the matrix of parameter coefficients, p indicates the optimal lag length, and ε_t is the error term vector assumed to be white noise. [34]

In this study, the vector of endogenous variables includes eight variables: geopolitical risk (GPR), exchange rate (EXC), economic growth (GDP), the Composite Stock Price Index (IHSG), inflation (INF), interest rates (INT), and commodity prices represented by gold (LGOLD) and oil (OIL). Therefore, the VAR model used in this study aims to identify how geopolitical risk shocks are transmitted to various macroeconomic indicators, both through financial market channels and the real sector, in the short to medium-term. [35]

As a first step in the empirical analysis, descriptive statistics are computed to provide an overview of the data characteristics used in this study. Descriptive statistics include the mean, median, maximum and minimum values, standard deviation, as well as distribution measures such as skewness, kurtosis, and the Jarque-Bera normality test.

Table 1. Descriptive Statistics

	GPR	GDP	EXC	IHSG	INF	INT	LGOLD	OIL
Mean	1.036.234	2510330.	13113.48	5.540.387	0.003235	0.056265	7.369.951	7.756.947
Median	9.269.534	2530634.	13880.83	5.496.347	0.002930	0.057500	7.308.038	7.603.167
Maximum	2.245.963	3474481.	16688.67	8.439.843	0.014767	0.075833	8.328.911	1.184.900
Minimum	8.969.140	1642258.	8.569.333	2.645.710	-0.001433	0.035000	7.007.057	2.934.333
Std. Dev.	2.857.655	408243.0	2.413.981	1.289.329	0.002801	0.012139	0.288652	2.370.001
Skewness	1.698.438	0.093213	-0.615582	-0.129820	1.916.252	-0.125881	1.222.085	0.078089
Kurtosis	6.829.861	2.010.274	2.147.462	2.301.004	8.500.741	2.144.102	4.388.473	2.004.995
Jarque-Bera	6.988.429	2.704.833	5.980.228	1.482.689	1.198.586	2.122.521	2.107.155	2.705.137
Probability	0.000000	0.258615	0.050282	0.476473	0.000000	0.346019	0.000027	0.258575
Sum	6.631.899	1.61E+08	839263.0	3545854.	0.207033	3.600.833	4.716.769	4.963.870
Sum Sq. Dev.	51447.02	1.06E+11	3.68E+08	1.06E+08	0.000498	0.009283	5.249.142	35386.49
Observations	64	64	64	64	64	64	64	64

Source: Author's calculation using EViews 12.

Based on Table 1, each variable displays distinct statistical features. The economic growth variable (GDP) has a relatively stable average with a moderate amount of variation, as shown by a standard deviation that is not too large compared to its mean. This suggests that Indonesia's economic growth during the study period tends to stay relatively steady and well-controlled.

The financial market variable, represented by the stock index (IHSG), shows higher volatility compared to other macroeconomic variables. This is clear from its relatively large standard deviation, which reflects the stock market's sensitivity to various factors, including both global and domestic conditions. Meanwhile, the gold price variable (LGOLD) displays a distribution that tends to be asymmetric, with a high positive skewness value, indicating an upward trend in prices during certain periods, especially when global uncertainty rises.

For the geopolitical risk (GPR) variable, the high values of skewness and kurtosis indicate a non-normal distribution with heavy tails. This implies that geopolitical shocks happen unevenly and are episodic, with notable spikes during specific periods. This aligns with the nature of geopolitical risk, which is usually driven by unpredictable global events.

The results of the Jarque-Bera test indicate that several variables are not normally distributed, as shown by probability values below the 5 percent significance level. [36] However, this condition remains acceptable in time series analysis, especially in VAR models, since this approach does not strictly require the assumption of normality. [37] Overall, the descriptive statistics offer an initial view of differences in characteristics across variables, which will be further explored through stationarity testing and VAR modeling. [38]

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Before making an estimate of the Vector Autoregression (VAR) model, an important the first step is to assess whether the stationarity holds. the data. This test aims to ensure that the data do not contain a unit root, preventing spurious estimation results. [39] This study conducts a stationarity test conducted with the Augmented Dickey-Fuller (ADF) method.

Table 2. Stationarity Test (Augmented Dickey-Fuller)

Variabel	ADF Level	Prob.	ADF First Diff	Prob.
GDP	0.655666	0.9901	-3.076407	0.0338
GPR	-4.197261	0.0014	-	-
IHSG	-0.872467	0.7904	-5.723645	0.0000
EXC	-0.721563	0.8334	-6.778229	0.0000
INF	-4.537832	0.0005	-	-
INT	-2.587056	0.1011	-4.481764	0.0006
LGOLD	1.555598	0.9993	-4.877624	0.0002
OIL	-1.992140	0.2895	-6.016840	0.0000

Source: Author's calculation using EViews 12.

Based on the results of the stationarity test shown in Table 2, it is clear that not all variables are stationary at their levels. The geopolitical risk (GPR) and inflation (INF) variables are stationary at the level, as indicated by their respective p-values of 0.0014 and 0.0005, which are below the 5 percent significance threshold. This indicates that neither variable contains a unit root and is integrated of order zero, or I(0).

In contrast, the other variables—economic growth (GDP), the Composite Stock Price Index (IHSG), exchange rate (EXC), interest rate (INT), gold price (LGOLD), and oil price (OIL)—are not stationary at the level. This is shown by probability values greater than 0.05, suggesting that the null hypothesis of a unit root cannot be rejected.

However, after the initial differencing, all of these variables become stationary. This is supported by significant p-values at the 5 percent level, with all p-values below 0.05. Therefore, the variables GDP, IHSG, EXC, INT, LGOLD, and OIL are integrated of order one, or I(1).

These results suggest that the data in this study show a mixed order of integration, specifically a combination of I(0) and I(1). However, this situation can still be managed within the VAR framework by using differenced data. Therefore, the subsequent VAR model estimation is performed with stationary data to prevent spurious results regression. [40]

Determining the optimal lag length is an essential step in estimating a Vector Autoregression (VAR) model because the number of lags used impacts the model's accuracy and stability. A lag that is too short may cause specification bias, while a lag that is too long can decrease degrees of freedom and estimation efficiency. Therefore, the optimal lag is chosen based on several information criteria, such as the Akaike Information Criterion (AIC), Schwarz Criterion (SC), Hannan-Quinn (HQ), and Final Prediction Error (FPE). [41]

Table 3. VAR Lag Order Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1785.117	NA	3.45E+16	60.78363	61.06533	60.89359
1	-1358.250	723.5038	1.60E+11	48.48304	**51.01834***	49.47272
2	-1281.074	109.8776	1.15E+11	48.03640	52.82530	49.90579
3	-1220.844	69.41687	1.80E+11	48.16422	55.20672	50.91333
4	-1129.183	80.78681	1.43E+11	47.22653	56.52263	50.85535
5	-985.9424	**87.40075***	**4.10E+10***	**44.54042***	56.09012	**49.04896***

Source: Author's calculation using EViews 12

Based on the results shown in Table 3, it is clear that different information criteria suggest different lag recommendations. The Schwarz Criterion (SC) selects lag 1 as the best option, which usually results in a simpler model. However, other criteria such as the Akaike Information Criterion (AIC), Final Prediction Error (FPE), Likelihood Ratio (LR), and Hannan-Quinn (HQ) consistently indicate that lag 5 is the best choice.

The selection of the optimal lag in this study is based on the majority of the information criteria; therefore, lag 5 is chosen as the lag length for estimating the VAR model. Additionally, using a longer lag allows the model to capture the dynamic relationships among variables more comprehensively, especially in the context of geopolitical risk shock

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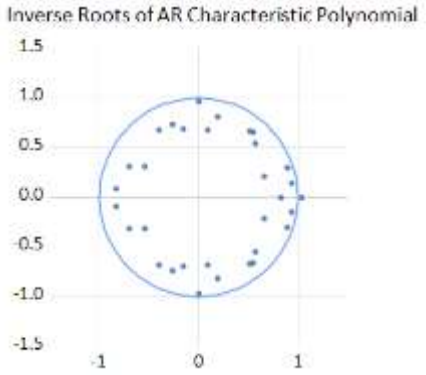
transmission, which may take time to influence other macroeconomic variables. [42]

Accordingly, all subsequent analyses, including the impulse response function (IRF) and variance decomposition (VD), are performed using the VAR model with an optimal lag of five.

Following the determination of the optimal lag length, the next step is to test the stability of the VAR model. The stability test is performed to ensure that the estimated model meets the condition of dynamic stability, so that the analytical results obtained can be interpreted as valid. [39] In this study, the stability test is conducted using the inverse roots of the AR characteristic Polynomial.



Source: Author's calculation using EViews 12

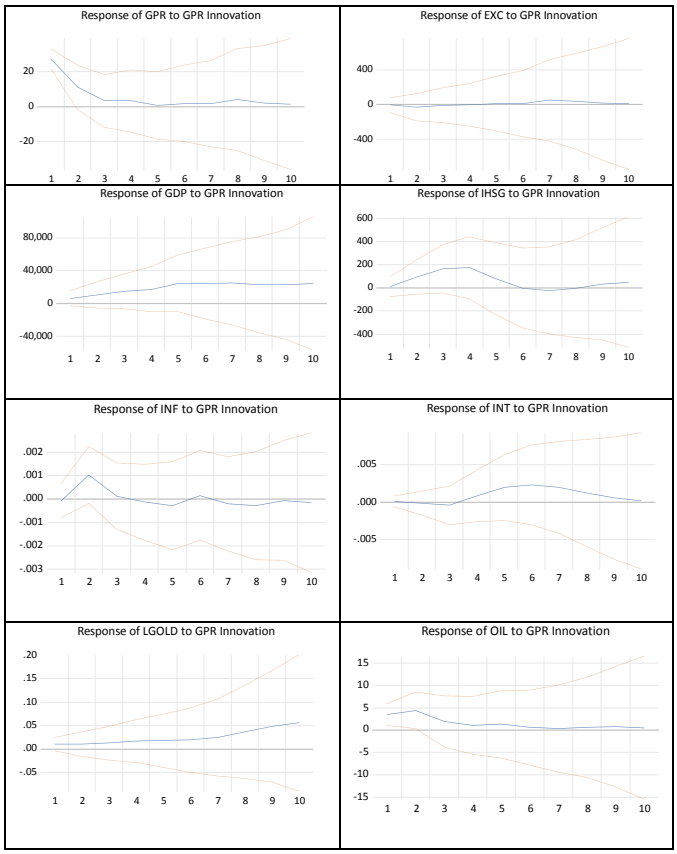
Figure 3. VAR Stability Test (Inverse Roots of AR Polynomial)

Based on the results of the VAR stability test through analysis of inverse roots. the AR characteristic polynomial graph in Figure 2, it can be seen that all characteristic roots are within the unit circle. This shows that the VAR model used meets the stability condition.

This stability condition indicates that the VAR system is stable, meaning that any shock will gradually fade and the system will return to equilibrium over time. Therefore, the estimated model is not explosive, and the results can be interpreted in an econometrically valid manner. [43]

Meeting this stability assumption is essential, as it is a key requirement for further analysis, especially in calculating the impulse response function (IRF) and variance decomposition (VD). Therefore, the VAR model used in this study is suitable for examining how geopolitical risk influences macroeconomic variables in Indonesia. [44]

After confirming that the VAR model is stable, the analysis continues with the Impulse Response Function (IRF) to analyze how each variable responds dynamically to shocks in the geopolitical risk (GPR) variable. IRF allows observation of the direction, magnitude, and duration of a shock's impact on other variables over time. [45]



Source: Author's calculation using EViews 12

Figure 4. Impulse Response Functions to Geopolitical Risk Shock

Based on the impulse response function results shown in Figure 3, shocks to geopolitical risk (GPR) generally have a limited impact on Indonesia's macroeconomic variables. Most variables show weak responses and tend to return to their equilibrium levels within a few periods, suggesting that the effects of geopolitical risk are temporary.

The economic growth variable (GDP) exhibits a relatively small response to GPR shocks, with minor fluctuations and a quick return to stability. This indicates that Indonesia's real sector is less sensitive to global geopolitical shocks in the short term. Likewise, inflation (INF) and interest rates (INT) show limited reactions, reflecting the capacity of domestic monetary policy to counter external influences.

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On the other hand, financial market variables, especially the Composite Stock Price Index (IHSG), show more significant fluctuations, though they remain within a relatively controlled range. This suggests that the stock market is more responsive to changes in global sentiment than the real sector. At the same time, the exchange rate (EXC) also reacts to GPR shocks, but the effects are brief and quickly revert to stability.

Interestingly, gold prices (LGOLD) show a more consistent positive response to increases in geopolitical risk. This indicates that gold acts as a safe-haven asset, with investors shifting their investments to safer assets during times of global uncertainty. In contrast, oil prices (OIL) display a relatively moderate response, suggesting that the impact of geopolitical risk on energy prices in the Indonesian context is not very strong.

Overall, the IRF results show that the Indonesian economy is relatively resilient to geopolitical shocks. The effects are mostly short-term and do not cause lasting imbalances in the economy. These findings indicate that the transmission of geopolitical risk mainly occurs through financial market channels rather than the real sector.

Variance decomposition is used to assess the relative contribution of each variable in explaining the variability of shocks within the VAR system. [46] To ensure clarity and efficiency in presentation, the VD results are reported only for the main variables: economic growth (GDP), the Composite Stock Price Index (IHSG), and gold prices (LGOLD), which represent the real sector, financial markets, and safe-haven assets, respectively.

Table 4. Variance Decomposition (Selected Periods)

Panel A. GDP

Period	GPR	EXC	GDP	IHSG	INF	INT	LGOLD	OIL
1	3.89	5.45	90.66	0.00	0.00	0.00	0.00	0.00
5	2.24	8.64	31.24	2.18	1.37	9.62	1.48	3.46
10	3.41	4.52	19.04	2.39	3.32	8.10	3.95	3.06

Panel B. IHSG

Period	GPR	EXC	GDP	IHSG	INF	INT	LGOLD	OIL
1	0.10	2.93	4.22	92.75	0.00	0.00	0.00	0.00
5	2.20	1.49	6.56	85.12	0.45	2.86	1.91	0.11
10	1.91	1.60	5.77	84.37	0.65	3.15	9.16	2.42

Panel C. GOLD

Period	GPR	EXC	GDP	IHSG	INF	INT	LGOLD	OIL
1	4.50	1.98	0.01	0.10	0.04	2.08	91.33	0.00
5	7.38	1.29	1.56	3.97	1.32	3.32	80.23	3.59
10	2.24	9.58	5.82	2.86	2.70	1.44	71.35	3.98

Source: Author's calculation using EViews 12

Based on the variance decomposition results shown in Table 4, it is clear that during the initial periods, each variable's variation is still mainly explained by its own shocks. For the economic growth variable (GDP), the internal contribution reaches about 90.66% in the first period, indicating that in the short term, economic dynamics are primarily driven by domestic factors.

As the time horizon extends, the influence of other variables increases, although the impact of geopolitical risk (GPR) on GDP remains relatively small. By the 10th period, GPR's contribution is only about 3.41%, indicating that geopolitical risk is not a major factor in explaining variations in Indonesia's economic growth. In contrast, variables such as interest rates (INT) and exchange rates (EXC) have larger contributions, highlighting the significance of domestic policy and external conditions in shaping economic growth.

For the financial market variable, specifically the Composite Stock Price Index (IHSG), internal shocks remain predominant; however, the impact of other variables grows stronger over the medium to long term. The contribution of GPR to IHSG is relatively small, approximately 1.91% in the 10th period, indicating that the Indonesian stock market is quite resilient against geopolitical uncertainties. Nonetheless, the contribution of gold prices (LGOLD) increases notably to about 9.16%, implying a shift in investor preferences toward safer assets.

Meanwhile, for the gold price variable (LGOLD), internal shocks continue to dominate, but the impact of other variables, including GPR, becomes clearer in the medium term. By the 5th period, GPR's contribution reaches about 7.38%, showing that rising geopolitical risks increase demand for gold as a safe-haven asset. Although this contribution decreases over the long term, gold's role as a hedge remains clear, as seen in the rising contributions of other variables such as exchange rates and economic growth.

Overall, the variance decomposition results indicate that geopolitical risk has a limited, non-

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dominant effect on the Indonesian economy, particularly in the real sector. However, its impact is more noticeable in financial markets and commodity trends, particularly in gold, a safe-haven asset. These findings support the impulse response function results, which indicate that the transmission of geopolitical risk in Indonesia is mainly indirect and occurs more through financial channels rather than the real sector.

Discussion

The findings suggest that geopolitical risk has a limited and transient impact on Indonesia's macroeconomic conditions and stability [47]. The brief and fleeting responses of economic growth, inflation, and interest rates indicate that the domestic economy remains relatively resilient to external shocks [48]. This aligns with studies such as [49], which show that the macroeconomic impact of geopolitical risk is typically modest in emerging economies with stable domestic policies [50].

In contrast, the stronger responses seen in financial market variables confirm that geopolitical risk mainly spreads through financial channels. [51] Financial markets are naturally more responsive to new information and uncertainty, as the efficient market hypothesis posits that asset prices rapidly reflect global risk signals. [52]. Geopolitical risk has been shown to greatly impact stock market volatility and investor sentiment. [53]

Furthermore, the positive response of gold prices to geopolitical shocks reinforces its role as a safe-haven asset. According to [54], gold tends to maintain or increase its value during times of market stress and uncertainty. This behavior reflects a typical "flight-to-safety" phenomenon, where investors shift their portfolios toward low-risk assets in response to heightened geopolitical tension tensions [51].

Overall, these findings support the view that while the real sector remains relatively insulated, financial markets act as the primary channel through which global geopolitical risk affects the Indonesian economy [55].

V. CONCLUSION AND SUGGESTION

Geopolitical risk has a limited and short-term effect on Indonesia's macroeconomic stability, as key variables respond weakly and quickly revert to equilibrium. In contrast, financial market variables, especially stock prices and gold, are more sensitive, indicating that the transmission of geopolitical risk mainly occurs through financial channels. Overall, the Indonesian economy demonstrates relative resilience, with impacts concentrated in the financial sector.

Policymakers should enhance financial market stability and risk management to reduce the impact of external shocks. Maintaining strong domestic economic fundamentals remains crucial. For investors, gold can act as a hedge during times of geopolitical uncertainty. Future research should include additional variables, employ alternative econometric methods, and conduct cross-country analyses to provide broader insights.

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