

**THE IMPACT OF GEOPOLITICAL RISK, NET WORKING CAPITAL, RETURN ON ASSET AND DEBT TO ASSET TO ASSET HOLDING IN FOOD AND BEVERAGE COMPANIES LISTED ON INDONESIA STOCK EXCHANGE**

*PENGARUH RISIKO GEOPOLITIK, NET WORKING CAPITAL, RETURN ON ASSET DAN DEBT TO ASSET TERHADAP KAS PADA PERUSAHAAN MAKANAN DAN MINUMAN YANG TERDAFTAR DI BURSA EFEK INDONESIA*

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**Abstract:** This study uses a panel data regression analysis research model and a Quantitative approach. The primary source of data is secondary sources. In this study, researchers will systematically collect and analyze samples from all companies within the food and beverage sub sector listed on the IDX. Thus, the research sample consists of all 25 food and beverage companies. A total of 125 samples were gathered and examined for this study over the period of 2018–2022, using unbalance panel data. The study's findings show that, while Return on Asset has a statistically significant and positive relationship with cash holdings in food and beverage companies, Geopolitical Risk, Net Working Capital, and Debt to Asset have a negative relationship and do not significantly affect cash holdings in food and beverage companies listed on IDX, as shown by the F-test result, Prob > F = 0.0000 or less than 0.05.

**Keywords:** Geopolitical Risk, Net Working Capital, Return on Asset, Debt to Asset, and Cash Holding

**Abstrak:** Penelitian ini menggunakan model penelitian analisis regresi data panel dan pendekatan kuantitatif. Sumber data utama adalah sumber data sekunder. Dalam penelitian ini, peneliti akan mengumpulkan dan menganalisis sampel secara sistematis dari seluruh perusahaan dalam sub sektor makanan dan minuman yang terdaftar di BEI. Dengan demikian, sampel penelitian terdiri dari seluruh 25 perusahaan makanan dan minuman. Sebanyak 125 sampel dikumpulkan dan diperiksa untuk penelitian ini selama periode 2018–2022, dengan menggunakan panel data unbalance. Hasil penelitian menunjukkan bahwa, Pengembalian Aset memiliki hubungan yang signifikan secara statistik dan positif dengan Kepemilikan Kas pada Perusahaan Makanan dan Minuman, Risiko Geopolitik, Modal Kerja Bersih, dan Utang terhadap Aset memiliki hubungan negatif dan tidak signifikan terhadap Kepemilikan Kas pada Perusahaan Makanan dan Minuman yang terdaftar di BEI, seperti yang ditunjukkan oleh hasil uji F, Prob > F = 0,0000 atau kurang dari 0,05.

**Kata Kunci:** Risiko Geopolitik, Modal Kerja Bersih, Pengembalian Aset, Utang terhadap Aset, dan Kepemilikan Kas.

## INTRODUCTION

### Research Background

Food and beverage firms confront a range of obstacles in the dynamic global market, such as currency rate fluctuations, geopolitical concerns, and regulatory changes. The rationale behind choosing food and beverage enterprises as study subjects is because, among the several areas of economic development, the food and beverage subsector is one that is crucial to Indonesia's economic growth. Apart from augmenting the GDP growth rate, food and beverage enterprises play a crucial role in the industrial sector by meeting the basic demands of the populace and maintaining a steady operational trajectory.

The fact that this industry is frequently open to international trade and thus deeply ingrained in the global economy is another noteworthy feature (Rumokoy et al., 2023). Furthermore, this industry has room to grow as it

might potentially penetrate foreign markets. Owing to Indonesians' propensity for fast food, a large number of new businesses are entering the food and beverage sector because they believe it will grow in the next years. This food and beverage firm is making substantial profits and expanding quickly in Indonesia. This is evident from the enormous number of businesses that are listed on the Indonesia Stock Exchange and that the local community really needs. In today's fast-paced world, food and beverage firms must contend with a variety of obstacles, including geopolitical risks like international political unrest that might upset supply chains and undermine market stability, driving up production costs and decreasing demand.

Numerous factors related to the sector might also interfere with business effectiveness. One such element that might impair this company's success is geopolitical risk. These are outside variables that have the potential to impair local and international businesses' operations. Food and beverage corporations get raw ingredients, produce goods, and transport them to different markets by means of intricate worldwide supply chains. Thus, these supply networks may be interrupted by geopolitical issues, such as adjustments to trade regulations or political disputes. For instance, trade taxes, border closures, or prohibitions on imports or exports might result in higher manufacturing costs, supply delays, or even raw material scarcity, all of which can affect a company's cash flow.

In this rapidly growing industrial time, many companies are competing to achieve company goals by making the maximum possible profit and also being able to survive in the midst of business competition. To achieve these goals, the company must consider and assess various factors, one of which is cash. Cash holding is one of the most important assets for the company, because available cash can be used to pay debts, buy supplies, and handle other finances. When examining a company's financial performance, a number of crucial financial indicators, including net working capital, return on assets (ROA), and debt to assets ratio (DAR), along with their relationships with cash holdings, are crucial to consider. A company's cash holdings can be impacted by a number of variables, including debt to assets, return on assets, and net working capital. Businesses that are experiencing growth will constantly work to raise the amount of cash available to fund their advancement in the hopes that it will lead to future profits. The key to making judgments on cash holding is persuading managers to spend the money in the best interests of the shareholders rather than wasting it for unnecessary expenses (Rumokoy et al., 2024).

Net working capital is one of the elements that can influence cash holding policy. Because net working capital is more easily converted into cash, companies with high working capital can serve as a substitute for cash holding. Net working capital essentially serves as a substitute for cash because they can be liquidated quickly for funding when needed. As a result, businesses with high net working capital tend to have small amounts of cash (Gunawan, 2016). One of the financial ratios known as profitability can provide an overview of how effectively a company manages all its assets and capital so as to generate profits. Profitability is the ability of a company to make money in a certain period of time.

Leverage is a ratio used to calculate how much debt finances the company's assets. How leverage affects cash holding, due to high default risk a company can be predicted to have a lot of cash if it reaches a high level of leverage (Cherie and Lee, 2023). Leverage shows that the assets owned by the company come from purchases on credit, which will affect the company's cash holding, which is the company's ability to finance debt with assets (Nurwani, 2021).

## Research Objectives

1. To find out how geopolitical risk affects cash holding in Indonesian food and beverage companies.
2. To understand the relationship between net working capital and cash holding in these companies.
3. To examine how profitability (measured by return on assets) influences cash holding decisions.
4. To investigate the impact of debt levels on cash holding practices.
5. To determine which factor (geopolitical risk, net working capital, return on assets, or debt) has the strongest effect on cash holding.

## THEORITICAL REVIEW

### Cash Holding

Cash holding is the cash that exists or is available in the company. Cash holding is one of the most important assets for companies, because available cash can be used to pay debts, buy supplies, and handle other finances. Companies that have high cash holding can deal with bad financial conditions more easily, because available cash can be used to respond to unexpected finances. Cash holding can be easily converted into cash. Financial managers have a big role in determining the amount of money a company holds (Patira, 2023).

## Geopolitical Risk

Geopolitical risk (GPR), as described by Caldara and Iacoviello (2022), refers to the threat posed by wars, acts of terrorism, and inter-state tensions that disrupt the stability and harmony of international relations (Rumokoy et al, 2023). Geopolitics is the study of state rivalry and territorial domination. Therefore, risks that arise from conflicts and terrorist threats are categorized as geopolitical risk. These risks can arise both within and between countries. Geopolitical risk encompasses both the potential for future geopolitical events to materialize and the advanced risk associated with them. Both might worsen the financial burden on companies by interfering with the regular and friendly flow of international interactions.

## Net Working Capital

Net working capital linguistically means net working capital. Broadly speaking, net working capital is the amount of assets or money, also known as capital that a company has at any given time to carry out daily operations. The capital is considered to exist if the amount exceeds the company's total debt. In other words, net working capital is the sum of a company's current assets and current liabilities. Current assets include cash, accounts receivable, stocks of finished goods or raw materials, and others. Meanwhile, current liabilities consist of capital loans or accounts payable.

## Return on Assets

Return on assets (ROA) stands for return on assets, which in Indonesian can be interpreted as the rate of return on assets. ROA shows the ratio of the net profit generated to the capital that has been invested in assets. Since it shows how effectively the capital expenditure on the assets owned generates profits for the company, this ratio will provide an overview of all the company's operations.

## Debt to Assets

The debt to asset ratio (DAR) shows how much debt finances the company's assets or how much debt impacts the management of assets. The factor known as Debt to Asset Ratio (DAR) shows how much of the company's debt is financed by its assets or how much the debt impacts the management of the company's assets. The higher the DAR value, the greater the source of funds provided through loans to finance assets.

## Empirical Studies

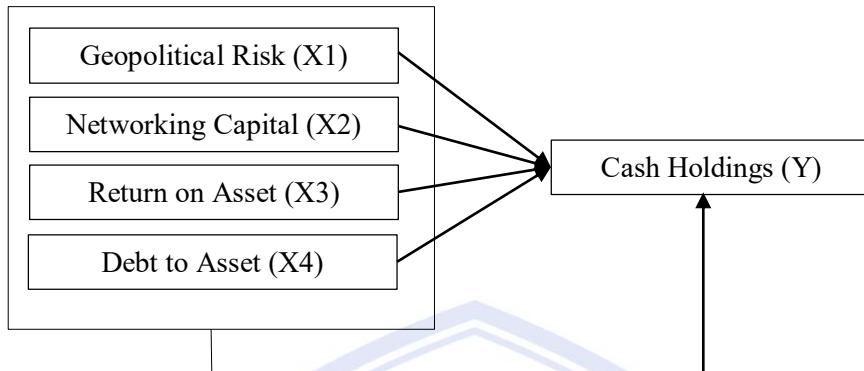
Sumarjo, Mangantar, and Rumokoy (2022) aimed to determine the influence of geopolitical risk, profitability and leverage on stock returns of oil and gas subsector mining industry companies listed on the Indonesia Stock Exchange in 2016-2020. The type of research is quantitative descriptive. The sample consisted of 6 Mining Companies in the Oil and Gas Subsector as a result of Purposive Sampling. Using panel data regression analysis techniques using Stata 16. The research results show that the geopolitical risk of the Indonesian GPR indicator, the profitability of the ROA indicator and the Leverage of the DER indicator do not have a significant influence, either partially or simultaneously, on stock returns of Oil and Gas Subsector Mining companies listed on the Indonesia Stock Exchange. 2016-2020 period.

Krisna, Mertha and Handayani (2023) (2023) aimed to determine the effect of leverage, liquidity and profitability on the value of food and beverage companies listed on the IDX in 2019-2022. Where in the span of this year you will find out what the impact was before the Covid-19 pandemic occurred, during the Covid-19 pandemic, and after the end of the Covid-19 pandemic (new normal era). The research sample used was all food and beverage companies registered on the IDX in 2019-2022 with a sampling technique, namely purposive sampling. 31 companies were obtained as samples with a total of 124 observations. The data analysis techniques used were descriptive statistical analysis, classical assumption testing, and hypothesis testing with the help of SPSS. The results of this research show that leverage, liquidity and profitability have a positive and significant effect on company value. This indicates that companies must consider leverage, liquidity and profitability more before borrowing funds from third parties because it will affect the value of the company if these funds cannot be utilized properly. The value of the company will also influence investors' interest in investing.

Sukirno and Murni (2023) aimed to find out the influence of Profitability, Leverage and Geopolitical Risk on the Value of Coal Mining Subsector Companies on the Indonesian Stock Exchange for the 2016-2020 Period. The sampling method used was the Purposive Sampling method. From this data collection method, 8 samples were obtained from 25 existing populations. The analysis techniques used in this research are the Classical Assumption Test, Multiple Linear Regression Test and Hypothesis Testing. The results of this research showed that simultaneously Profitability (ROE), Leverage (DER) and Geopolitical Risk (GPR) had a significant positive effect

on Company Value (PBV). Then, partially, the results obtained were that Profitability (ROE) had a significant positive effect on Company Value (PBV), Leverage (DER) had a negative and insignificant effect on Company Value (PBV), and Geopolitical Risk (GPR) had no significant effect on Company Value (PBV).

## Conceptual Framework



**Figure 1. Conceptual Framework**

Source: Literature Review

## Research Hypothesis:

- H1: Geopolitical Risk has Impacts to the Cash Holding
- H2: Net Working Capital has Impacts to the Cash Holding
- H3: Return on Asset has Impacts to the Cash Holding
- H4: Debt to Asset has Impacts to the Cash Holding
- H5: Geopolitical Risk, Networking Capital, Return on Asset and Debt to Asset Simultaneously has Impacts Cash Holding

## RESEARCH METHOD

### Research Approach

Researchers will employ quantitative research techniques in this study, which place an emphasis on data analysis using numerical data. This research is included in the category of explanatory research because it is a research method that aims to explain the position and influence of each variable. This research was conducted to test the proposed hypothesis. The main purpose of using the explanatory research method is to try to explain the relationship and influence between the independent variable and the existing dependent variable.

### Population, Sample Size and Sampling Technique

In this study, the population used is companies from the food and beverage subsector listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022, totaling 25 companies. From the years 2018 – 2022, researchers will systematically collect and analyzed samples from all companies within the food and beverage sub – sector that are listed on the Indonesia Stock Exchange (IDX). This encompasses a total of 25 distinct companies. This study will gather and examine a total of 125 samples. Each year, samples from all 25 companies will be collected, leading to a cumulative dataset that provides a robust basis for analysis over the specified period.

### Type of Data and Data Source

In this study researcher used quantitative methods. The data used is secondary data which is data on the financial statements of food and beverage companies for the period 2018 - 2022 obtained from the official website of the Indonesia Stock Exchange (IDX), [www.idx.co.id](http://www.idx.co.id).

### Data Collection Method

This research uses the documentation method to collect data; this includes information and data such as annual and ongoing financial reports issued by food and beverage subsector companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022.

**Operational Definition of Research Variables****Table 1. Operational Definition and Indicator of Research Variables**

Variable	Definition	Indicators
Geopolitical Risk (X <sub>1</sub> )	The pursuit of territorial dominance and competition by states is known as geopolitics. As a result, dangers both between and inside nations are classified as geopolitical risk, and these risks are typically associated with war and terrorist threats. Both the advanced risk from the ongoing geopolitical events and the danger of them materializing are included in the category of geopolitical risk.	According to Caldara and Iacoviello (2022), the Index GPR is the result of automatic text. This index is in the form of a score. A high score indicates an increase in geopolitical events, a low score indicates no geopolitical events or tends to be stable.
Networking Capital (X <sub>2</sub> )	The difference between a company's current assets and current liabilities is known as net working capital, or NWC. Net working capital is the amount of assets or money, also known as capital, that a company has at any given time to carry out daily operations.	$NWC = \text{Total Current Asset} - \text{Total Current Liabilities}$
Return on Asset (X <sub>3</sub> )	Return on assets (ROA) stands for return on assets, which in Indonesian can be interpreted as the rate of return on assets. ROA shows the ratio of the net profit generated to the capital that has been invested in assets.	$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$
Debt to Asset (X <sub>4</sub> )	Debt to Asset Ratio (DAR) shows how much the company's debt is financed by its assets or how much the debt has an impact on the management of the company's assets.	$DAR = \frac{\text{Total Liabilities}}{\text{Total Assets}}$
Cash Holdings (Y)	Cash holding is the cash that exists or is available in the company. Cash holding is one of the most important assets for companies, because available cash can be used to pay debts, buy supplies, and handle other finances.	$\frac{\text{Cash Holding} = \text{Cash and Cash Equivalent}}{\text{Total Asset}}$

**Data Analysis Method**

Panel data regression analysis is used for data analysis in this study due to its capacity to integrate data from various companies, the analysis is performed using Stata MP 17 Software. This approach guarantees the validity, unbiasedness, consistency, and efficiency of interpreting regression coefficients in panel data regression.

**Panel Data Regression Model Selection**

To determine which model best suits the research data, several tests must first be carried out, as stated by Saputri and Suryowati (2018):

**Chow Test**

This test is used to compare the CEM and FEM models to choose which model to use to manage the data. The results are compared with the Chow test to determine which model is most suitable for use. If the p-value is less than 0.05, the FEM model is accepted and the CEM model is discarded. Furthermore, the test is continued if the p-value is less than 0.05.

**Hausman Test**

After the Chow test is completed and the FEM model is accepted, the Hausman test is used to compare the accepted FEM model from the Chow test with the REM model. If the p-value is less than 0.05, the REM model will be accepted and will no longer be used in the study. If the p-value is greater than 0.05, the REM model will not be used again.

### Lagrange Multiplier Test

If the FEM model is eliminated in the Hausman test, the Lagrange Multiplier test is the last test used to select the model used. This test is conducted to compare the REM and CEM models and determine which model is most suitable for use in research using panel data regression. If the hypothesis test value using Breusch-Pagan is less than 0.05, then the REM model is not eliminated and used. However, if the value is greater, then the REM model is eliminated and used. Ultimately, the test results will find that the CEM model is the best fit for the research data.

### Panel Data Regression Analysis

According to Ahmaddien and Susanto (2020), panel data regression is used when the data from the study is cross-sectional and time-series, which means that the data consists of a number of objects in a period covering more than one period. In other words, the use of panel data regression occurs when the data comes from several years and consists of a number of objects each year. Panel data regression can change the diversity of existing data, which will make the information retrieved more detailed and reduce the relationship between variables, which is not possible if only looking at the time sequence. In addition, panel data regression can transform the data to take into account changes that are usually ignored in cross-section data. Thus, the same cross-section data can be analyzed at various times using panel data regression.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_{it}$$

Description:

$Y$	= Cash Holdings
$\beta_0$	= Constant number
$\beta_1, \beta_4$	= Regression coefficients
$X_1$	= Geopolitical Risk
$X_2$	= Networking Capital
$X_3$	= Return on Asset (ROA)
$X_4$	= Debt to Assets (DAR)
$\varepsilon$	= Error term
$i$	= Company
$t$	= Year

### Determination Test (R<sup>2</sup>)

This test is used after finding a suitable model. Furthermore, the Adjusted R-Squared value of the data processing results using the appropriate model is seen (Saputri and Suryowati, 2018). to calculate how the independent variables and the dependent variable affect each other. This study aims to evaluate the variables of GPR, NWC, ROA, and DAR in relation to cash holding. This suggests that the independent variables have a greater capacity to explain how the dependent variable changes.

### Test of Classical Assumption

#### Multicollinearity Test

The multicollinearity test is conducted to determine whether there is a correlation or relationship between the independent variables in the regression model. If the result is positive, then the regression model is considered good. Conversely, if two independent variables are correlated, then they are not orthogonal. The independent variable referred to as orthogonal is an independent variable that is equal to zero.

### Hypothesis Testing

#### T-test (Partial Hypothesis Test)

Conducted to determine how much influence GPR, NWC, ROA, and DAR have on cash holding. If the t-test value of these variables is greater than or equal to 0.05, then it is considered that these variables have a significant impact on their respective cash holding. Conversely, if the t-test value is greater than, then the variable does not have a significant impact on cash holding (Nabell et al., 2022).

#### F-test (Simultaneous Hypothesis Test)

Conducted to determine how significant the effect of GPR, NWC, ROA, and DAR on cash holding together. The independent variables together significantly affect stock returns and H15 is accepted if the F-test result is less than or equal to 0.05.

**RESULT AND DISCUSSION****Result****Determination of Panel Data Regression Estimation Method****Table 2. Results of Determining Panel Data Regression Estimation Method**

<b>Chow Test</b>	<b>Hausman Test</b>
Prob > F = 0.0000	Prob > Chi2 = 0.0000

Source: Data processing result Stata 17, 2024

Based on the results of data processing in table 2 obtained the following results:

- The Chow Test results get a value of Prob > F = 0.0000 in other words Prob > F = <  $\alpha$  0.05. So, that means the best choice is Fixed Effect.
- The Hausman Test results show the value (Prob > Chi2) <  $\alpha$  0.05, So, the best choice is the Fixed Effect Model.
- Since the selected model is Fixed Effect, the LM test does not need to be done.

**Panel Data Regression with Fixed Effect Model****Table 3. Results of Fixed Effect Model**

<b>Y</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>Z</b>	<b>P &gt;  z </b>	<b>[95% Conf.</b>	<b>Interval</b>
Geopolitical Risk	-.1079782	.26741111	-0.40	0.687	-.6387851	.4228286
Networking Capital	-2.43e-15	1.08e-14	-0.23	0.822	-2.38e-14	1.90e-14
Return on Asset (ROA)	.2680826	.0048563	55.20	0.000	.2584428	.27777223
Debt to Assets (DAR)	-.0028633	.0239395	-0.12	0.905	-.0503828	.0446562
_cons	.1189945	.0179778	6.62	0.000	.0833089	.1546802

Source: Data processing result Stata 17, 2024

From Table 3, which displays the regression panel data using the Fixed Effect Model, the regression values have been identified. Consequently, a regression equation model can be formulated as follows:

$$\text{Cash Holding} = 0.060228 - 0.1571414 \text{ GPR} + 0.0224699 \text{ NWC} + 0.269057 \text{ ROA} + 0.0007277 + \epsilon_{it}$$

This equation can be interpreted as follows:

1. The constant value in the equation is 0.060228, indicating that if Geopolitical Risk, Net Working Capital, Return on Asset and Debt to Asset are constant or equal to 0, the Cash Holding would be 0.060228.
2. Geopolitical Risk has a regression coefficient of -0.1571414, suggesting a negative relationship with Cash Holding. However, this relationship is statistically insignificant, as indicated by a p-value of 0.548, which is greater than 0.05. Therefore, it can be concluded that geopolitical risk does not significantly impact firm value.
3. Net Working Capital has a regression coefficient of 0.0224699, indicating a negative relationship with Cash Holding. This relationship is statistically insignificant, with a p-value of 0.018, which is smaller than 0.05. Therefore, it can be concluded that net working capital does not significantly affect cash holding.
4. Return on Asset has a regression coefficient of 0.269057, indicating a positive relationship with Cash Holding. This relationship is statistically significant, as shown by a p-value of 0.000, which is smaller than 0.05. Therefore, it can be concluded that return on asset significantly impact cash holding.
5. Debt to Asset has a regression coefficient of 0.0007277, suggesting a negative correlation with Cash Holding. Yet, this relationship is statistically insignificant, as indicated by a p-value of 0.975, which is greater than 0.05. Thus, it can be concluded that debt to asset does not significantly affect cash holding.

**Classic Assumption Testing**

A Multicollinearity Test was used to see if the independent variables—Geopolitical Risk, Net Working Capital, Return on Asset, and Debt to Asset—had a correlation or a linear relationship. In this test, the pairwise correlation method and the Variance Inflation Factors (VIF) strategy were both used to examine the correlation values.

**Table 4. Variance Inflation Factors (VIF) Approach**

Variable	VIF	1/VIF
Geopolitical Risk	1.65	0.607788
Networking Capital	1.18	0.843943
Return on Asset (ROA)	1.01	0.991497
Debt to Assets (DAR)	1.88	0.530895
Mean VIF	1.43	

Source: Data processing result Stata 17, 2024

Based on the processed data in Table 4, it can be seen that  $VIF < 10$ , this provides an explanation that there is no multicollinearity between the independent variables.

**Table 5. Paired Correlation Method**

	Y	X1	X2	X3	X4
Cash Holdings	1.0000				
Geopolitical Risk	-0.0291	1.0000			
Networking Capital	-0.0108	-0.0458	1.0000		
Return on Asset (ROA)	0.9677	-0.0276	-0.0146	1.0000	
Debt to Assets (DAR)	0.3382	-0.0712	-0.0103	0.3841	1.0000

Source: Data processing result Stata 17, 2024

According to the table 5, it is evident that each independent variable in this study has a correlation value of less than 0.8. This indicates that the independent variables are not correlated with one another.

### Hypothesis Testing

**Table 6. F test**

Prob > F	0.0000
Source: Data processing result Stata 17, 2024	

According to the table 6, the F test results show a Prob > F value of 0.000, which is smaller than the significance threshold of 0.05. This indicates that, when considered together, the independent variables—Geopolitical Risk, Net Working Capital, Return on Asset and Debt to Asset—have a significant impact on the dependent variable, Cash Holding.

### T-Test

Based on the data processing results in Table 3, the outcomes of the partial tests are as follows:

1. The Geopolitical Risk variable has a probability value of 0.548, which is greater than the significance threshold of 0.05. This indicates that H01 is accepted and H1 is rejected, indicating that Geopolitical Risk does not have a significant impact on cash holding.
2. The Net Working Capital variable shows a probability value of 0.018, smaller than the significance threshold of 0.05. Therefore, H2 is accepted and H02 is rejected, indicating that Net Working Capital significantly affect cash holding.
3. The Return on Asset variable has a probability value of 0.000, smaller than the significance level of 0.05. This means that H3 is accepted and H03 is rejected, demonstrating that Return on Asset have a significant effect on cash holding.
4. The Debt to Asset variable has a probability value of 0.975, which is higher than the significance level of 0.05. This indicates that H04 is accepted and H4 is rejected, demonstrating that Debt to Asset does not have a significant impact on cash holding.

### Determination Test ( $R^2$ )

**Table 7. Determination Test ( $R^2$ ) Result**

R-squared	0.168702
Source: Data processing result Stata 17, 2024	

According to the table findings, the R-squared coefficient of determination is 0.168702, indicating that geopolitical risk, net working capital, return on asset and debt to asset collectively account for 16.87% of the variation. The remaining 83.13% of the variation is attributed to unexamined variables in this study.

## Discussion

### The Impact of Geopolitical Risk on Cash Holding

The study found that Geopolitical Risk does not have a significant impact on Cash Holding. This suggests that, contrary to what might be expected, geopolitical risks do not significantly influence the cash holding decisions of Food and Beverage Companies listed on the IDX for the 2018-2022 period. This could indicate that these companies' cash management strategies are relatively resilient to geopolitical uncertainties, or that other factors play a more dominant role in determining their cash holding policies. Regarding the direct impact of geopolitical risk on cash holding, particularly in the context of Indonesian food and beverage companies. While studies such as Kotcharin and Maneenop (2020) have explored this relationship in other industries and geographical contexts, they found that geopolitical risks significantly impact cash holdings in hospitality companies in emerging economies and international shipping companies, respectively. However, these findings may not be directly applicable to the Indonesian food and beverage sector. The lack of specific research in this area presents an opportunity to explore how geopolitical risk uniquely affects cash holding decisions in this particular industry and market.

### The Impact of Net Working Capital on Cash Holding

Net Working Capital was found to have no significant impact on Cash Holding. However, this statistical significance does not translate into a practical impact on cash holding decisions. This suggests that changes in Net Working Capital do not meaningfully influence the cash holding strategies of Food and Beverage Companies listed on the IDX for the 2018-2022 period. The relationship between net working capital and cash holding in the Indonesian context reveals conflicting findings, indicating a significant research gap. Previous studies have shown mixed results, with some finding positive effects and others finding no significant relationship. This inconsistency highlights the need for further research to better understand the role of net working capital in cash holding decisions within the Indonesian food and beverage sector.

### The Impact of Return on Asset on Cash Holding

Return on Asset (ROA) showed a highly significant positive impact on Cash Holding. This strong positive relationship implies that companies with higher profitability, as measured by ROA, tend to hold more cash. This could be because profitable companies generate more cash from their operations, allowing them to maintain higher cash reserves. It might also reflect a strategy where successful companies prefer to keep more liquid assets on hand for future investment opportunities or as a buffer against potential market downturns. There is a notable research gap concerning the direct impact of return on assets (ROA) on cash holding, specifically in Indonesian food and beverage companies. While studies such as Davidson and Rasyid (2020) reported a positive impact of profitability on cash holding in Indonesian manufacturing companies, these findings are either from different geographical contexts or broader industry categories. The lack of focused research on the relationship between ROA and cash holding in the Indonesian food and beverage sector presents an opportunity for a more nuanced understanding of how profitability metrics specifically influence cash holding decisions in this industry.

### The Impact of Debt to Asset on Cash Holding

Debt to Asset ratio was found to have no significant impact on Cash Holding. This suggests that the level of debt in a company's capital structure does not significantly influence its cash holding decisions. This finding might indicate that other factors, such as profitability or working capital management, play a more crucial role in determining cash holdings for these companies. The relationship between debt to assets ratio and cash holding lacks consensus, particularly in the Indonesian food and beverage sector, indicating a significant research gap. Cheryta et al. (2018) found that leverage, which is related to the debt to assets ratio, has a negative impact on cash holdings.

### The Impact of Geopolitical Risk, Net Working Capital, Return on Asset, and Debt to Asset on Cash Holding

When considered together, these factors (Geopolitical Risk, Net Working Capital, Return on Asset, and Debt to Asset) have a significant collective impact on Cash Holding. This indicates that while some individual factors (like Geopolitical Risk and Debt to Asset) may not have significant impacts on their own, the combination of all these factors plays a crucial role in determining cash holding policies. The coefficient of determination (R-squared) of 0.168702 suggests that these factors collectively explain 16.87% of the variation in Cash Holding. While this

indicates a meaningful relationship, it also suggests that there are other unexamined factors that account for a large portion (83.13%) of the variation in Cash Holding.

## CONCLUSION AND RECOMMENDATION

### Conclusion

1. Geopolitical Risk: The findings indicate that geopolitical risk has a significant impact on cash holdings within the food and beverage sector. Companies appear to increase their cash reserves as a precautionary measure against geopolitical uncertainties, which may affect supply chains, market stability, and operational risks.
2. Net Working Capital: Net working capital is positively correlated with cash holding. Companies with higher net working capital tend to maintain larger cash reserves, which could be a strategy to ensure liquidity and operational flexibility.
3. Return on Assets (ROA): The relationship between ROA and cash holding is generally negative. Companies with higher returns on assets might prefer to invest excess cash into productive assets or growth opportunities rather than holding large cash reserves.
4. Debt-to-Asset Ratio: The study shows that a higher debt-to-asset ratio is associated with increased cash holdings. Firms with higher leverage levels might retain more cash to manage debt obligations and reduce financial distress risk.
5. The simultaneous analysis reveals that Geopolitical Risk, Net Working Capital, Return on Assets (ROA), and Debt-to-Asset Ratio all significantly influence Cash Holding in food and beverage companies listed on the Indonesia Stock Exchange. Geopolitical Risk leads companies to increase cash reserves as a buffer against uncertainties. Higher Net Working Capital is associated with greater cash holdings to ensure liquidity. ROA has an inverse relationship with cash holdings, suggesting firms with higher returns invest cash elsewhere rather than holding it. Additionally, a higher Debt-to-Asset Ratio correlates with increased cash reserves, as leveraged companies maintain more cash to manage debt risks and ensure financial stability.

### Recommendation

1. Companies to develop a dynamic cash management strategy that accounts for geopolitical risks, optimize working capital management to balance liquidity needs with the opportunity costs of holding excess cash, consider the trade-offs between maintaining high cash reserves for flexibility and investing in growth opportunities, especially for highly profitable companies, and carefully manage debt levels, considering the impact on cash holdings and overall financial flexibility.
2. Investors when evaluating food and beverage companies in Indonesia, consider their cash holding practices in the context of geopolitical risks and financial performance metrics, and assess companies' ability to balance financial flexibility with operational efficiency in their cash management strategies.
3. Future research to conduct longitudinal studies to examine how the relationships between these factors and cash holdings evolve over time, especially during periods of significant geopolitical events; investigate industry-specific factors that may influence cash holding decisions in the food and beverage sector; and explore additional variables that may influence cash holdings, such as corporate governance structures or ownership patterns.

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