
The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

Syaiful Rizai¹, Tri Ratnawati², Ulfi Pristiana³

^{1,2,3}Universitas 17 Agustus 1945 Surabaya

ABSTRACT: Changes in currency exchange rates have an impact on currency appreciation and depreciation. One alternative that can help in managing risks arising from fluctuations in exchange rates is by utilizing hedging instruments. This research aimed to investigate the empirical evidence regarding the effect of macroeconomics, firm size, asset growth and liquidity on financial distress and hedging with good corporate governance as a moderation variable. The population were manufacturing companies listed on the Indonesian stock exchange and implementing hedging strategy in 2020-2022. Seventeen companies were selected as samples using purposive sampling techniques. Hypothesis testing was carried out by means of Structural Equation Model (SEM) approach based on the Partial Least Square (PLS). Among the 10 analysed hypotheses, 5 were proven to be accepted and the other 5 were rejected. The findings show the followings. The 2 exogenous variables (macroeconomics and asset growth) affected the endogenous variable (hedging), meanwhile the other 3 exogenous variables (firm size, liquidity and financial distress) did not affect it. The 3 exogenous variables (firm size, asset growth and liquidity) were proven to influence the endogenous variable (financial distress), whereas the variable of macroeconomics was not proven as such. Meanwhile, good corporate governance, as a moderation variable, did not provide full support for the causal relationship between financial distress and hedging.

KEYWORDS: macroeconomics, assets growth, liquidity, hedging

I. INTRODUCTION

Needless to say, current global economic and financial conditions tend to be full of uncertainty and fluctuation. Hedging, a strategy for reducing risk or uncertainty, is becoming increasingly relevant in response to risk arising from changes in currency exchange rates, financial market volatility and the complexity of the business environment by which those continue to develop in the current era.

Amidst this uncertainty, hedging concept emerges as a strategy that helps companies to protect themselves from the negative impact of exchange rate fluctuations. Hedging provides a means for companies to manage currency risk by taking positions involving financial instruments, e.g. derivative contracts, to protect the value of their assets and liabilities from constant fluctuation and ultimately detrimental exchange rates.

The importance of Hedging is increasingly evident with the increasing complexity of global financial markets and changes in economic dynamics. Companies involved in international trade both as exporters and importers need a hedging strategy as an effective way to minimize risks and maintain their financial stability amidst continuing uncertainty.

Fluctuations in the exchange rate of a currency are basically a normal thing, but a continuous weakening of the exchange rate will have a negative impact on companies and countries. This impact causes the company's turnover to decrease until it goes bankrupt and eventually it will affect a country's economy. Of course, risk management is needed to minimize losses that can occur due to exchange rate fluctuations. This has been for in every country, particularly in Indonesia, not only do the multi-corporate companies but also the state-owned companies operate using foreign currency.

According to Bramantyo (2008:43), risk management is a structured and systematic process of identifying, measuring, mapping, developing alternative risk treatments, and monitoring and controlling risk management. Implementation of this risk management helps companies to identify risks from the start and helps make decisions to overcome these risks.

One alternative that can help in managing this financial risk is with hedging instruments. This was once conveyed by the former Minister of BUMN, BUMN does the hedging in carrying out exports and imports because it needs and receives foreign exchange in the form of foreign currency.

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

Hedging is an action that can be taken by a company to minimize the exchange rate risk it faces. To anticipate monetary turmoil, companies are expected to have reserves in foreign currencies that are specifically included in the category hedging fund. Hedging is basically transferring risk to another party who is more capable to manage the risk through financial instrument transactions. Hedging can also provide benefits for companies in predicting future cash expenditures and receipts more accurately. This will be useful for achieving financial and macroeconomic stability with good corporate management so that financial markets can develop more.

II. THEORETICAL STUDY

A. Financial Corporate

According to OCBC NISP (2022), corporate finance is all financial activities carried out by the Company, both short and long term. The aim of corporate finance is to increase the company's economic value through planning, developing and controlling the business capital structure. In this case, corporate finance is a process that emphasizes efforts to maximize the financial health of the company and its shareholders.

B. Agency Theory

According to Jensen and Meckling (1976), agency theory is a framework that explains the contextual relationship between principals and agents, involving two or more individuals, a group, or an organization. The principal is the party which has the authority to make decisions for the future of the company and delegates responsibilities to the agent.

The concept of agency theory, according to Hwihanus (2022), assumes that each individual is solely motivated by his own interests, so as it gives rise to a conflict of interest between the principal and the agent. The theory of unequal interests between the principal (investor) and the agent (management) who always try to maximize the utility function they have is on the basis of the principal giving orders to the agent to carry out.

C. Signalling Theory

Signaling theory involves providing a signal, where the sender (information owner) attempts to convey relevant information that can be utilized by the recipient. Then, the recipients adjust their behavior based on their understanding of the signal (Spence, 1973). According to Hwihanus et al. (2019), Signaling theory is related to asymmetry information which shows the existence of information between company management and parties who both have interest in the information. This theory can be used on company value.

D. Macroeconomics

Macroeconomics is a branch of economics that concerns with various important macroeconomic related issues (major macroeconomic issues) and problems faced in everyday life (Dornbusch and Fischer, 1994:3). According to Swari and Pristiana (2021: 113), macroeconomics is an economic activity that studies the overall, where in the field of economics, it explains that economic changes affect many communities, companies, and markets. In this research, macroeconomic variable was measured by two indicators, namely:

$$1. \text{ Inflation (INF}_n) = \frac{\text{IHK}_n - \text{IHK}_{n-1}}{\text{IHK}_{n-1}} \times 100\%$$

Information:

INF_n : Inflation or deflation in the nth month or year

IHK_n : Consumer price index for the nth month or year

IHK_{n-1} : Consumer price index for the n-1st month or year

$$2. \text{ Interest Rate} = \frac{\sum \text{Monthly Interest Rate}}{\sum \text{a Period of 1 Month}}$$

E. Firm Size

Firm size can be assessed by total assets, total sales, total profits, tax burden and others (Brigham and Houston, 2011: 4). According to Ibrahim (2008), firm size is a representation of the largeness or smallness of a company determined based on nominal measures, such as the total wealth and total sales of the company during a sales period, and market capitalization. In this research, firm size was measured using the following indicators: LN (Total Assets) and LN (Total Sales).

F. Assets Growth

Aries Heru Prasetyo (2011: 110) states that Asset Growth is company growth which is always identical to company assets, both physical assets (land and building) and financial assets (cash, receivables and etc). According to Suad Husnan (2012: 9), assets are economic benefits that may arise in the future acquired or controlled by a specific entity as a result of transactions or past events. In this research, the assets growth was measured using the following formula:

$$\text{Assets Growth} = \frac{\text{Total Asset}_n - \text{Total Asset}_{n-1}}{\text{Total Asset}_{n-1}}$$

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

G. Liquidity

Liquidity refers to a company's ability to settle its short-term obligations. The more liquid the company's assets, the less likely the company have short-term liability problems (Brigham & Houston, 2010). According to Sartono (2012:116), liquidity ratio indicates the ability to pay short-term financial obligations on time. The liquidity of a company is indicated by the size of its current assets which can be converted into cash, including cash, securities, receivables, and inventory. The following indicators measure liquidity in this research (Hery, 2015):

1. Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}}$
2. Quick Ratio = $\frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$
3. Cash Ratio = $\frac{\text{Cash and Cash Equivalent}}{\text{Current Liabilities}}$

H. Financial Distress

Ross, et al. (1993) define financial distress as the inability of a company to meet its obligations (insolvency). This inability can be indicated by two methods: stock-based insolvency and flow-based insolvency. According to Sudaryanti and Dinar (2019), financial distress is the condition of a company that the company unable to fulfill its financial obligations as previously determined. The indicator used in this research was the Altman method, as in the following:

$$Z_i = 1,2 X_1 + 1,4 X_2 + 3,3 X_3 + 0,6 X_4 + 1,0 X_5$$

Criteria:

- Unhealthy = if Z-score < 1.81;
- Gray area = if 1.81 < Z-score < 2.99;
- Healthy = if z-score > 2.99

Information:

$$X1 = \frac{(\text{Current Assets} - \text{Current Liabilities})}{\text{Total Assets}}$$

$$X2 = \frac{\text{Retained Earnings}}{\text{Total Assets}}$$

$$X3 = \frac{\text{EBIT}}{\text{Total Assets}}$$

$$X4 = \frac{\text{Total Equity}}{\text{Total Liabilities}}$$

$$X5 = \frac{\text{Sales}}{\text{Total Assets}}$$

I. Good Corporate Governance

According to Lukviarman (2016: 20), the existence of good corporate governance serves as a balancing force among stakeholders in relation to corporations. This ensures that those in power do not excessively wield their authority and do not harm the interests of other parties who are in a relatively weaker position. According to Ulfi (2020), GCG is a pillar of the market economic system for it is related to public trust in companies. Externally, investors trust the company more. Strong corporate governance will maintain investor confidence which can enable effective and efficient capital acquisition, while agent competition, separation of ownership and control and information asymmetry cause problems. Indicators to measure GCG in this research are as follows (Darwis. 2009):

1. Proportion of Independence Commissioners = $\frac{\text{Total Independent Commissioners}}{\text{Total Commissioners Members}} \times 100$
2. Ownership Structure
 - Managerial Ownership = $\frac{\text{Number of Managerial Shares}}{\text{Number of Shares Outstanding}} \times 100$
 - Institutional Ownership = $\frac{\text{Number of Institutional Shares}}{\text{Number of Shares Outstanding}} \times 100$

J. Good Corporate Governance

According to Martono (2002: 386), hedging is a strategy undertaken to limit possible losses due to the risk of changes in currency exchange rates (exposure). Hull (2008: 45) states that perfect hedging involves eliminating all risks, but perfect hedging is extremely rare. Due to limitations in theories regarding indicators for hedging, the author attempts to summarize indicators that can be used in this research based on the understanding of hedging itself. The indicators that the author can conclude are as follows:

1. Exchange Rate Growth = nth year exchange rate – previous rate exchange
2. Hedging Risk
 - Debt to Assets Ratio = $\frac{\text{Total Liabilities}}{\text{Total Assets}}$
 - Debt to Equity Ratio = $\frac{\text{Total Liabilities}}{\text{Total Equity}}$

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

III. CONCEPTUAL FRAMEWORK

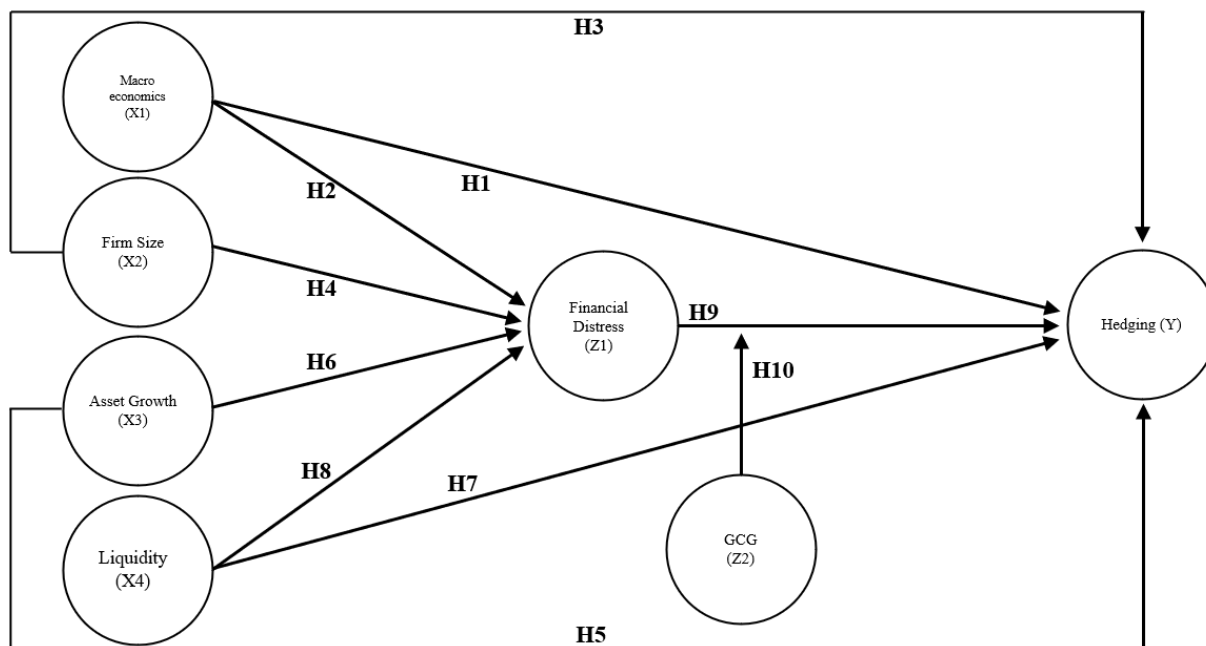


Figure 1. Conceptual Framework

Regarding the research context, problem formulation, literature review, and conceptual framework, then hypothesis that can be formed is as follows:

- H1: Macroeconomics has a significant effect on Hedging in manufacturing companies listed on the Indonesian Stock Exchange.
- H2: Macroeconomics has a significant effect on Financial Distress in manufacturing companies listed on the Indonesian Stock Exchange.
- H3: Firm size has a significant effect on Hedging in manufacturing companies listed on the Indonesian Stock Exchange.
- H4: Firm size has a significant effect on Financial Distress in manufacturing companies listed on the Indonesian Stock Exchange.
- H5: Asset Growth has a significant effect on Hedging in manufacturing companies listed on the Indonesian Stock Exchange.
- H6: Asset Growth has a significant effect on Financial Distress in manufacturing companies listed on the Indonesian Stock Exchange.
- H7: Liquidity has a significant effect on Hedging in manufacturing companies listed on the Indonesian Stock Exchange.
- H8: Liquidity has a significant effect on Financial Distress in manufacturing companies listed on the Indonesian Stock Exchange.
- H9: Financial Distress significant influence on Hedging in manufacturing companies listed on the Indonesian Stock Exchange.
- H10: Good Corporate Governance moderates the relationship between Financial Distress and Hedging in manufacturing companies listed on the Indonesian Stock Exchange.

IV. RESEARCH METHOD

A. Data Types and Sources

The type of this research is a quantitative approach emphasizing on testing theory by measuring variables and analyzing data using statistical procedures. This research used secondary data which were retrieved from October to November 2023.

B. Population

The population were 154 manufacturing companies listed on the Indonesian Stock Exchange and carrying out hedging during the period of 2020-2022. This research applied purposive sampling technique, a sampling technique with certain considerations (Sugiyono, 2016: 85). There were two criteria to select the samples; the first is the companies which have a negative net profit or net income and the second is the companies which have managerial and institutional ownership during the period of 2020-2022. After applying the first criterion, the sample size shrank to 54 companies and after the second, 17 companies were selected.

C. Data Collection

The data retrieval and collection procedure used descriptive analysis by collecting factual data and describing it. Data were obtained by accessing data from annual financial reports through the company's official website and the official website of the Indonesian Stock Exchange.

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

D. Data Analysis Method

Hypothesis testing in this research was carried out using an approach Structural Equation Model (SEM) based Partial Least Square (PLS). PLS is a component or variant-based structural equation model (SEM). Hypothesis testing is carried out to determine whether there is an effect of research variables on the others. This testing is done by analyzing the Regression Weight, i.e. Critical Ratio (CR) and Probability (P) values. The required limits are ≥ 1.96 for the CR value and ≤ 0.05 for the P-value. If the data processing results show a value that meets these requirements, the proposed research hypothesis is accepted.

V. RESULT & DISCUSSION

A. Evaluation of Measurement Model/ Outer Model

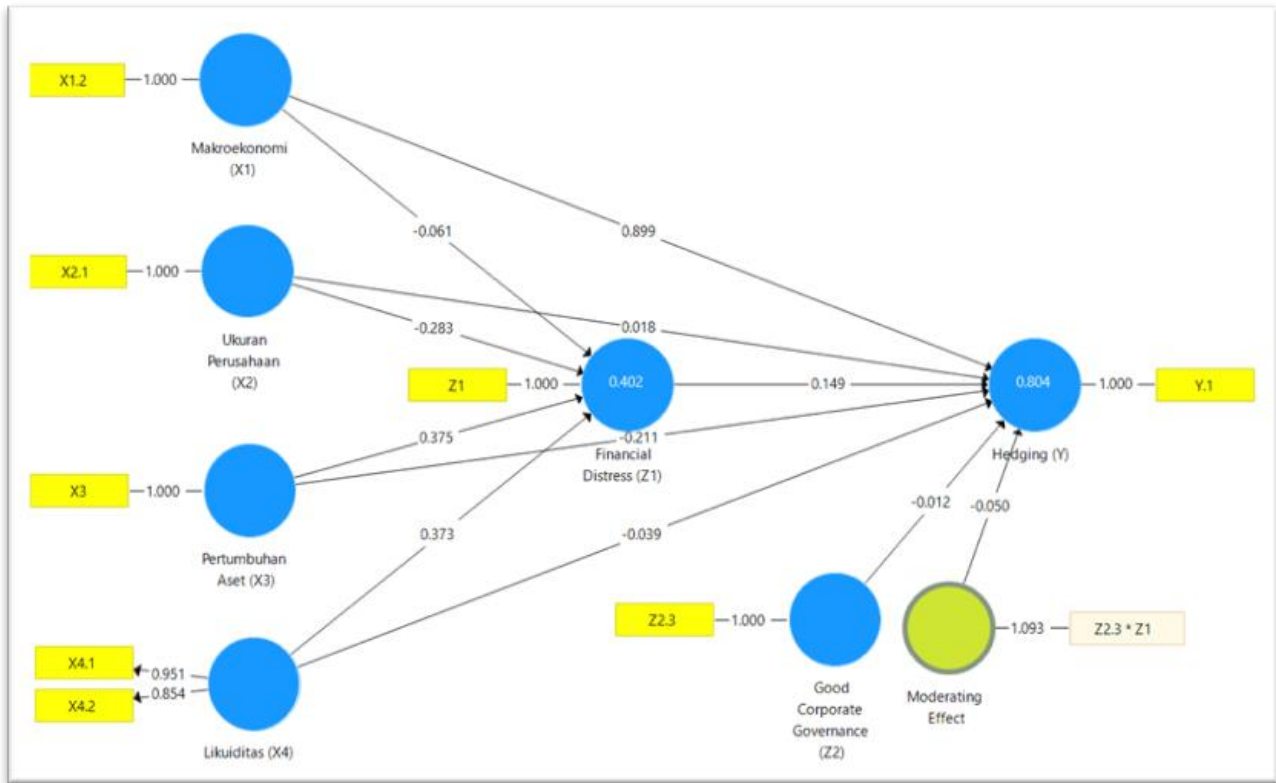


Figure 2. Outer Model

To test convergent validity, Outer Loading and Average Variance Extracted (AVE) are utilized. An indicator is considered to meet convergent validity in the good category if the Outer Loading > 0.7 and the Average Variance Extracted > 0.5 . The following are the Outer Loading and Average Variance Extracted for each indicator in this research variable:

Table 1. Convergent Validity Test - Outer Loading

Variable	Indicator	Outer Loading
Macroeconomics	X1.2	1.000
Firm Size	X2.1	1.000
Assets Growth	X3	1.000
Liquidity	X4.1	0.951
	X4.2	0.854
Financial Distress	Z1	1.000
Good corporate governance	Z2.3	1.000
Hedging	Y.1	1.000
Moderating Effect	Z2.3*Z1	1.093

Source: Data processed by Smart-PLS

Based on the data presented in Table 1 Outer Loading above, showing that there are no indicator variables with outer loading values below 0.5, thus all indicators are considered suitable or valid for use in the study and can be used for further analysis.

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

Table 2. Convergent Validity Test - Average Variance Extracted (AVE)

Variable	Average Variance Extracted (AVE)
Macroeconomics	1.000
Firm Size	1.000
Assets Growth	1.000
Liquidity	0.817
Financial Distress	1.000
Good Corporate Governance	1.000
Hedging	1.000

Source: Data processed by Smart-PLS

Based on the data presented in Table 2, it is known that the Average Variance Extracted values for all variables in this study are > 0.5. Therefore, it can be stated that each variable has good convergent validity.

In the next section, the results of discriminant validity testing will be explained using Fornell-Larcker and Cross Loading values. An indicator is considered to meet discriminant validity standards if the Fornell-Larcker and Cross Loading values for the indicator on its variable are the highest compared to other variables. The following are the Fornell-Larcker and Cross Loading values for each indicator:

Table 3. Discriminant Validity Test - Fornell-Larcker

	X1	X2	X3	X4	Z1	Z2	Y	ME
Macroeconomics (X1)	1.000							
Firm Size (X2)	0.008	1.000						
Assets Growth (X3)	0.123	-0.072	1.000					
Liquidity (X4)	0.097	0.290	0.336	0.904				
Financial Distress (Z1)	0.019	-0.203	0.513	0.411	1.000			
Good Corporate Governance (Z2)	0.006	0.288	-0.133	-0.186	-0.319	1.000		
Hedging (Y)	0.875	-0.023	-0.046	0.033	0.028	-0.009	1.000	
Moderating Effect	-0.058	0.353	0.174	0.250	0.244	-0.085	-0.109	1.000

Source: Data processed by Smart-PLS

Table 4. Discriminant Validity Test - Cross Loading

	Macroeconomics	Firm Size	Assets Growth	Liquidity	Financial Distress	GCG	Hedging	Moderating Effect
X1.2	1,000	0.037	-0.146	-0.000	0.037	0.020	0.175	0.036
X2.1	0.020	0.506	-0.124	0.002	-0.024	1.000	0.172	-0.016
X3	-0.146	-0.109	1,000	0.014	-0.032	-0.124	0.106	0.313
X4.1	0.175	-0.003	0.106	0.006	0.052	0.172	1.000	0.065
X4.2	0.037	1.000	-0.109	-0.059	0.009	0.506	-0.003	-0.007
Z1	0.037	0.009	-0.032	-0.212	1.000	-0.024	0.052	-0.028
Z2.3	-0.000	-0.064	0.015	0.999	-0.222	0.002	0.006	-0.024
Y.1	0.000	0.024	0.007	0.785	-0.015	0.005	0.003	-0.012
Z2.3*Z1	0.036	-0.007	0.313	-0.024	-0.028	-0.016	0.065	1.000

Source: Data processed by Smart-PLS

Based on the data presented in Tables 3 and 4, it can be observed that each indicator on the research variable has the highest Fornell-Larcker and Cross Loading values on the variable it forms compared to the Fornell-Larcker and Cross Loading values on other variables. Based on these results, it can be stated that the indicators used in this study have good discriminant validity in constructing their respective variables.

This section presents the results of reliability testing using composite reliability, rho_A, and Cronbach's alpha values. An indicator is considered to meet reliability standards if the composite reliability values are > 0.6 (Bagozzi & Yi, 1998; Chin & Dibbern, 2010), and the rho_A and Cronbach's alpha values are > 0.7 (Vinzi, Trinchera, & Amato, 2010). The following are the values of composite reliability, rho_A, and Cronbach's alpha for each indicator:

Table 5. Reliability Test - Composite Reliability, rho_A, and Cronbach's Alpha

Variable	Composite Reliability	Rho_A	Cronbach's Alpha
Macroeconomics (X1)	1.000	1.000	1.000
Firm Size (X2)	1.000	1.000	1.000

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

Variable	Composite Reliability	Rho_A	Cronbach's Alpha
Assets Growth (X3)	1.000	1.000	1.000
Liquidity (X4)	0.899	0.947	0.789
Financial Distress (Z1)	1.000	1.000	1.000
Good Corporate Governance (Z2)	1.000	1.000	1.000
Hedging (Y)	1.000	1.000	1.000

Source: Data processed by Smart-PLS

Based on the data presented in Table 5 above, it can be observed that the composite reliability values for all research variables are > 0.6 , and the values for rho_A and Cronbach's alpha are > 0.7 . These results indicate that each variable has met the criteria for composite reliability, rho_A, and Cronbach's alpha. Therefore, it can be concluded that the overall variables have a high level of reliability.

B. Evaluation of Structural Model/ Inner Model

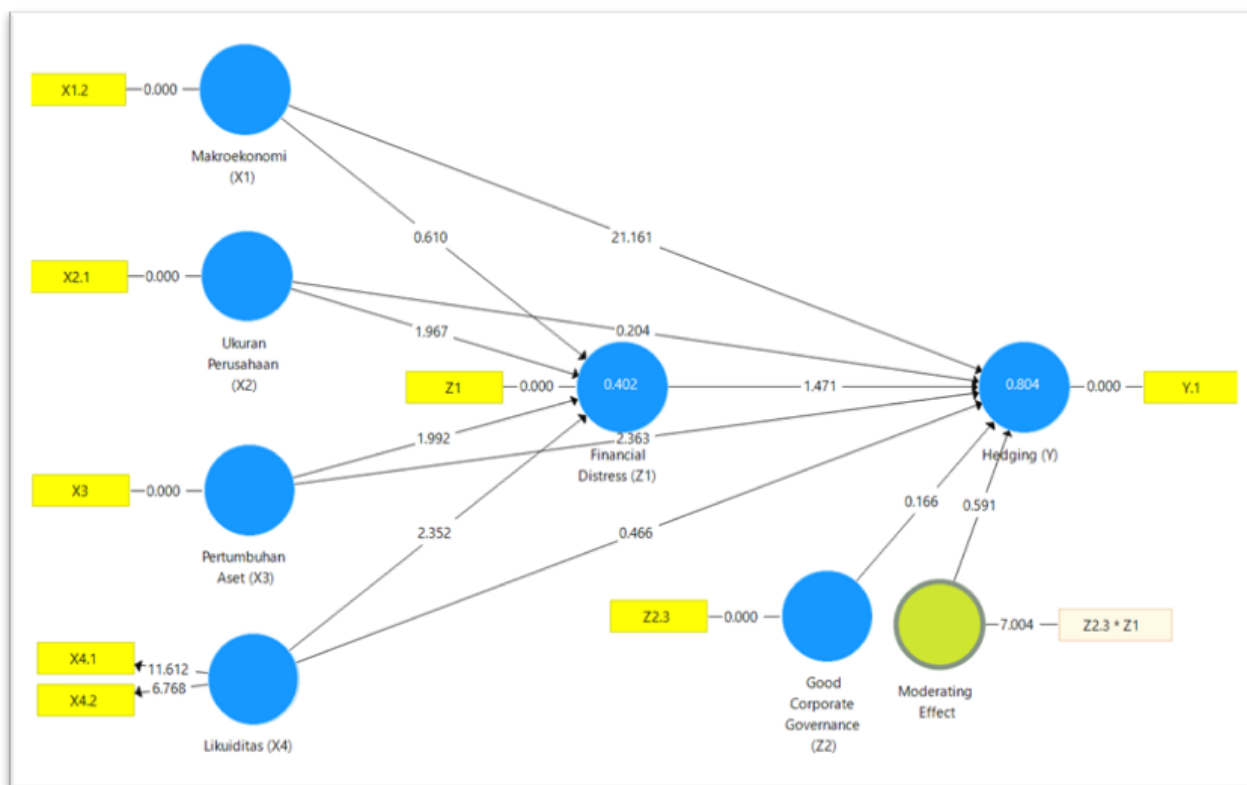


Figure 3. Inner Model

Based on the inner model scheme presented in Figure 3, it can be explained that the largest path coefficient is indicated by the influence of macroeconomic factors on hedging, that the coefficient equals to 21.161, followed by the influence of asset growth on financial distress, equal to 2.363. Meanwhile, the smallest influence is shown by firm size on hedging, equals to 0.204. Based on these descriptions, it is evident that all variables in this model have positive path coefficients. This indicates that the larger the value of the path coefficient for an exogenous variable on an endogenous variable, the stronger its influence.

Table 6. R-Square

	R-Square
Financial Distress	0.402
Hedging	0.804

Source: Data processed by Smart-PLS

Based on the data presented in Table 6, it can be determined that the R-Square value for the Hedging variable is 0.804, this indicates the ability of exogenous variables (Macroeconomic, Firm Size, Asset Growth, Liquidity, and Financial Distress) to explain the endogenous variable (hedging) is 80.4% (strong). The remaining 19.6% represents the influence of other unmeasured exogenous

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

variables in this research. Additionally, the R-Square value obtained for the Financial Distress variable is 0.402. This value explains that Financial Distress as an endogenous variable can be accounted to Macroeconomic, Firm Size, Asset Growth, and Liquidity as exogenous variables by 40.2% (moderate). The remaining 59.8% can be explained by other unmeasured exogenous variables in this research.

Table 7. Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T-Statistics (O/STDEV)	P values	Signification
Macroeconomics (X1) → Hedging (Y)	0.899	0.897	0.0542	21.161	0.000	Significant positive
Macroeconomics (X1) → Financial Distress (Z1)	-0.061	-0.072	0.100	0.601	0.542	Not significant
Firm Size (X2) → Hedging (Y)	0.018	0.027	0.090	0.240	0.838	Not significant
Firm Size (X2) → Financial Distress (Z1)	-0.283	-0.242	0.144	1.967	0.050	Significant negative
Assets Growth (X3) → Hedging (Y)	-0.211	-0.201	0.089	2.363	0.019	Significant negative
Assets Growth (X3) → Financial Distress (Z1)	0.375	0.330	0.188	1.992	0.047	Not significant
Liquidity (X4) → Hedging (Y)	-0.039	-0.062	0.083	0.466	0.641	Not significant
Liquidity (X4) → Financial Distress (Z1)	0.373	0.390	0.158	2.352	0.019	Significant positive
Financial Distress (Z1) → Hedging (Y)	0.149	0.148	0.101	1.471	0.142	Not significant
GCG (Z2) x Financial Distress (Z1) → Hedging (Y)	-0.050	-0.038	0.084	0.591	0.555	Not significant

Source: Data processed by Smart-PLS

The 10 hypotheses processed in this research are acceptable and significant if the t-statistic is > 1.96 . It can be noticed in table 8, there are 4 hypotheses which can be declared significantly positive and 6 hypotheses which can be declared insignificant.

Based on the results of data processing that has been carried out to support the proposed research, information was obtained that of the 10 hypotheses, 5 hypotheses were accepted while the other 5 were rejected. The followings are analysis of the relationship between variables based on our proposed hypothesis.

H1: Macroeconomics influences Hedging

The result implies that macroeconomic has a significant effect on a company's decision to undertake hedging. This indicates that companies respond actively to changes in macroeconomic conditions to protect themselves from the associated potential risks. It also shows that companies recognize the importance of risk management in the context of their financial decisions. The company's active involvement in hedging strategy is in line with careful and proactive risk management. Companies not only respond to market changes, but also take proactive measures to anticipate and manage related risks. This reflects the company's financial maturity in facing volatility and uncertainty in the economic environment. In addition, this result indicates that macroeconomics has great relevance in corporate financial decision making. This finding is in line with the research conducted by Reyad H.M, et al (2022) who also found that macroeconomic variable affects significantly hedging decisions. However, this is not supported by the research by Rachmat A.S, et al (2019), Sofia R, et al (2019), Pernama M.I, (2019) and Ariana T, et al (2021) which stated that macroeconomic variables have not an insignificant influence on hedging decision.

H2: Macroeconomics influences Financial Distress

This finding shows that macroeconomics cannot directly influence the level of financial distress in a company. This explains that in the case of financial distress a company, which has a significant impact is not external factors, but internal factors of the company itself, such as financial management and the strategies and policies implemented. In other words, companies have adopted effective risk management strategies and practices to overcome their potential financial risks, so that company stability is maintained in the face of economic uncertainty caused by several external factors. The results of these findings can also be interpreted as if the company's economic (external) environment is relatively stable so that the company does not experience significant financial

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

symptoms. The results of this research are in line with research conducted by Setyawati I.R, et al (2021), Nilasari A, et al (2021), Heliani et al (2022) and Setiyoharini R, et al (2022) which stated that macroeconomic variables have an insignificant influence on financial distress. Meanwhile, this research is not in line with research conducted by Hendrawan Y, et al (2022) which states that macroeconomics has a significant effect on financial distress.

H3: Firm Size influences Hedging

The results of this positive relationship indicate that firm size may play a role in the decision to commit hedging. Where larger companies tend to be more active in risk management in protecting themselves from market fluctuations. Because the bigger a company, the more resources and financial capacity to implement the strategy hedging also gets higher. However, even though the results of this study show a positive (unidirectional) relationship, firm size does not have a significant impact on the hedging decision. This can be interpreted that there are other factors that also influence the hedging decision and effective strategies will be tailored to each company's risk and financial profile regardless of their size. The results of this research are in line with research conducted by Krisdian N.P.C, et al (2017) and Lestari W.R, et al (2023) which states that the firm size variable has an insignificant influence on hedging decisions. Meanwhile, this research is not in line with research conducted by Ayuningtyas P.S, et al (2019), Yuliani E, et al (2021) and Nanda V, et al (2022) which states that firm size variables have a significant effect on hedging decisions.

H4: Firm Size influences Financial Distress

This finding shows that companies with a larger scale tend to have levels of financial distress the lower one. In this case the size of the company plays an important role in managing financial risks and preventing situations from occurring financial distress. Larger companies have advantages in terms of resources, access to capital, and operational efficiency. This allows them to overcome financial challenges more effectively. Larger scale allows companies to have greater financial flexibility to respond to market fluctuations and maintain financial stability. Large-scale companies also tend to have the ability to manage risk more maturely and have better access to the necessary reserve resources or credit facilities. The results of this research are in line with research conducted by Setyawati W, et al (2019), Putri N, et al (2019), Salim S.N, (2021) and Nilasari A, et al (2021) which states that firm size has a negative and significant effect on financial distress. Meanwhile, this research is not in line with research conducted by Amanda Y, et al (2019) which states that firm size has an insignificant effect on financial distress.

H5: Assets Growth influences Hedging

This result can be interpreted that companies with high asset growth have a lower tendency to implement strategy hedging. Because companies with high asset growth tend to have stronger financial stability. Where the company has the ability to bear the risk of market fluctuations without needing to rely on hedging strategy. This result can also mean that companies are more focused on looking for growth opportunities and potential long-term profits rather than prioritizing protection against market fluctuations through hedging strategy. Some industries tend to require substantial protection against fluctuations, while others tend to be more stable or have more manageable risks. Because in implementing a company strategy it will adapt to their respective unique characteristics and needs.

H6: Assets Growth influences Financial Distress

These findings indicate that companies with high asset growth have a tendency to experience higher levels of financial distress. Where companies with high asset growth tend to face challenges in managing rapid business expansion. Uncontrolled growth can cause pressure on a company's finances and liquidity which will increase risk financial distress. High asset growth often requires additional investment and an increase in the amount of financial liabilities. This can lead to increased financial risk, especially if the Company faces problems in generating sufficient cash flow for these obligations. So companies that experience rapid asset growth need to pay attention to effective financial management and investment policies to avoid the risk of symptoms of financial distress.

H7: Liquidity influences Hedging

These results show a negative relationship direction, which means companies with a high level of liquidity have a low tendency to carry out strategies of hedging. Because companies with a high level of liquidity tend to have the ability to manage their financial risks internally. A high level of liquidity can also reflect that the company has a greater level of risk tolerance. Although liquidity is important in financial management, the research results show that in this case, the level of liquidity does not have a significant impact on the decision to commit hedging. Therefore, companies must consider various factors in making decisions regarding financial risks and the strategies they choose. It can be concluded that liquidity could be a factor in the hedging decision, but not always the dominant or determining factor. The results of this research are in line with research conducted by Dharmiyanti N.M.D, et al (2020), and Triasiwi M.K, et al (2023) which states that the liquidity variable has an insignificant influence on hedging decisions. Meanwhile, this research is not in line with research conducted by Sakti R.A, et al (2020), Yuliani E, et al (2020), and Marhaenis L.G, et al (2020) which states that liquidity has a significant effect on hedging decisions.

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

H8: Liquidity influences Financial Distress

This result can be interpreted that companies that have a high level of liquidity still have a tendency to experience financial distress. This shows a special dynamic, where generally high liquidity is considered a factor that can reduce risk financial distress. However, in this case, there are findings that high liquidity does not always guarantee that a company can avoid risk financial distress. So it can be concluded that it is important to consider other factors. Companies that have high liquidity will still be affected by symptoms of financial distress if they cannot manage their finances more effectively, have a very large debt burden, dependent on unstable income, company's operational costs are very high or there are changes in the market and regulations that can harm the company. So even though it has a high level of liquidity, companies also need to pay close attention to other factors. The results of this research are in line with research conducted by Setyowati W, et al (2019) and Septiani N.M.I, et al (2019) which states that the liquidity variable has a significant influence on financial distress. Meanwhile, this research is not in line with research conducted by Erayanti R, (2019), Amanda Y, et al (2019), and Ayuningtiyas I.S, et al (2019) which states that liquidity has an insignificant effect on financial distress.

H9: Financial Distress influences Hedging

These findings show a significant positive direction when level financial distress increases then the tendency to do so hedging also increased but not significantly. Where companies are facing symptoms of financial distress will look for ways to protect themselves from these financial risks, namely by using hedging strategies. However, it has consequences, such as additional financial challenges. Companies that are already experiencing risk financial distress will have limitations in financial resources. In situations like this, allocating additional funds for expenses hedging can be an additional burden that is difficult to bear. When the company is at risk of financial distress, the company's top priority is to ensure sufficient liquidity to meet obligations and restore financial stability. Companies will also carry out a thorough evaluation of the risks they face and prioritize the use of their funds to overcome this difficult financial situation. Because if it costs to do hedging is considered not commensurate with the expected benefits or protection, companies tend to delay or not implement it.

H10: Good Corporate Governance moderates the relationship between Financial Distress and Hedging

These results indicate that GCG cannot moderate the relationship financial distress and hedging in fully. GCG tends to focus on aspects of organizational structure, reporting transparency and business ethics. Although this is important in the long term, under the circumstances of financial distress, there is a great need for immediate action that is more focused on managing financial risks. Where the company's main priority is to overcome the root causes of the crisis and restore financial stability. So the decision to do hedging will also be one of the many options that the company will still consider. Thus, although GCG is an important factor in good corporate governance, it will depend on the situation financial distress, their influence may not always have a significant impact on the relationship between financial distress and the decision to do hedging. Related decisions hedging may be influenced by other more pressing factors in the specific context of the financial situation faced by the company.

VI. CONCLUSION

Overall, effective financial risk management plays an important role in mitigating risks and maintaining a company's financial stability in various economic conditions. Internal and external factors of a company interact and influence hedging decisions, thus an effective strategy need to be tailored to the unique characteristics and needs of each company. To understand the results of hedging companies, focusing on key macroeconomic variables and industry characteristics. Internal analysis such as capital structure is also important. It is then necessary to consider the impact of fiscal and monetary policy and compare practices across industries and geographies for deeper insight.

RECOMMENDATIONS

The following are suggestions from the author for further research based on our research results.

1. Developing more specific analysis of macroeconomic variables is an important suggestion for future researchers. This can be done by focusing on economic variables that have a direct impact on the market or industry where the company operates. For example, in the manufacturing industry, researchers may consider industrial production indices or raw material price trends which are both particularly relevant.
2. Grouping companies based on characteristics or industry sector is a suggestion that can provide deep insight into the factors that influence decisions hedging in each group. By doing this grouping, researchers can compare and analyze decisions hedging among similar groups. For example, the manufacturing industry can be compared to the services sector or the financial sector, each of which may have different dynamics and risks. This makes it possible to identify factors that are more dominant or crucial in decision making hedging in certain sectors.
3. Conducting comparative analysis across industries and geographies is a strategy that can provide deep insight into the factors that influence decisions hedging in various contexts. By comparing practices hedging between industries, researchers can identify

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

differences in economic factors that influence decisions hedging. For example, industries that depend heavily on exports may be more inclined to do so hedging to overcome the risk of currency fluctuations. Meanwhile, sectors more related to the domestic market may have a different risk approach. In addition, conducting a geographic comparative analysis makes it possible to understand how regional or country economic and policy factors may influence hedging.

REFERENCES

- 1) Agus Sartono. (2012). *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE, Edisi4.
- 2) Amanda, Y., & Tasman, A. 2019. Pengaruh Likuiditas, Leverage, Sales Growth dan Ukuran Perusahaan terhadap Financial Distress pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia periode 2015-2017. *Jurnal Ecogen*, 2 (3), 453-462.
- 3) Ariana, T., & Marlisa, V. 2021. The Effect of Rupiah Exchange Rate, Firm Size, Leverage and Liquidity on Hedging Decision Making Using Derivative Instruments. *International Journal of Social Service and Research*, 1(3), 280-293.
- 4) Aries Heru Prasetyo, 2011, *Valuasi Perusahaan*, PPM, Jakarta Pusat.
- 5) Ayuningtiyas, I. S., & Suryono B. 2019. Pengaruh Likuiditas, Profitabilitas, Leverage dan Arus Kas terhadap Kondisi Financial Distress. *Jurnal Ilmu dan Riset Akuntansi*, e-ISSN: 2460-0585.
- 6) Bagozzi, et al. (1998). *Marketing Management*. New Jersey: Prentice Hall.
- 7) Brigham dan Houston. 2010. *Dasar-dasar Manajemen Keuangan Buku 1 (edisi II)*. Jakarta: Salemba Empat.
- 8) Brigham, Eugene F. dan Houston, Joel F. 2011. *Dasar-dasar Manajemen Keuangan Terjemahan*. Edisi 10. Jakarta: Salemba Empat.
- 9) Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and the USA. In *Handbook of Partial Least Squares* (V. Esposito, pp. 60–72). Berlin: Springer Handbooks of Computational Statistics Commonwealth Fraud Control Guidelines.
- 10) Darwis, Herman. 2009. Corporate Governance terhadap Kinerja Perusahaan. *Jurnal Keuangan dan Perbankan*, Vol. 13, No. 3 September 2009, hal 418-430.
- 11) Dharmiyanti, N. M. D., & Darmayanti, N. P. A. 2020. The Influence of Liquidity, Growth Opportunities, and Firm Size on Non-Finance Companies' Hedging Policy in Indonesia Stock Exchange. *American Journal of Humanities and Social Sciences Research (AJHSSR)* Vol. 4, Issue 1, pp 129.135.
- 12) Dornbusch, R., & Fischer, S. 1994. *Ekonomi makro*. Jakarta: Rineka Cipta.
- 13) Djohanputro, Bramantyo. 2008. *Manajemen Risiko Korporat*. Jakarta: Penerbit PPM.
- 14) Erayanti, R. 2019. Pengaruh Likuiditas, Profitabilitas dan Leverage terhadap prediksi Financial Distress. *Jurnal Riset Akuntansi & Perpajakan (JRAP)*, 6 (01).
- 15) Heliani & Elisah S. 2022. Pengaruh Profitabilitas, Makroekonomi, Firm Size terhadap Financial Distress dengan Nilai Perusahaan sebagai Variabel Moderating. *Owner: Riset & Jurnal Akuntansi*, Vol. 6, No. 4.
- 16) Hendrawan, Y., Moorcy, N. H., Santoso, A. W., & Sukimin, S. 2022. Pengaruh Indikator Makroekonomi dan Kinerja Keuangan terhadap Financial Distress pada Perusahaan Sektor Pertambangan yang terdaftar di Bursa Efek Indonesia. *Jurnal Geo Ekonomi*, 13 (2), 195-210.
- 17) Hery. 2015. *Analisis Laporan Keuangan*. Yogyakarta: CAPS (Center for Academic Publishing Service).
- 18) Hull, Jhon C. (2008). *Fundamentals of Future and Option Market*. Sixth Edition. New Jersey: Pearson Practice Hall.
- 19) Hwihanus H., Ratnawati, T., & Yuhertiana, I. 2019. Analysis of Macro Fundamental and Micro Fundamental Effect on Ownership Structure, Auditor Opinion and Value of the Firm in State-Owned Enterprises Companies in Indonesia Stock Exchange. 214–219. <https://doi.org/10.5220/0008490802140219>.
- 20) Hwihanus, H. 2022. Nilai Perusahaan Badan Usaha Milik Negara selama Pandemi Covid-19. *Owner: Riset Dan Jurnal Akuntansi*, 6, 1127–1136.
- 21) Ibrahim, Hadiusman. (2008). Pengaruh Tingkat Suku Bunga, Peringkat Obligasi, Ukuran Perusahaan, dan DER terhadap Yield to Maturity Obligasi Corporasi BEI Periode 2004 – 2006. Tesis. Universitas Diponegoro Semarang.
- 22) Jensen, M., C., dan W. Meckling, (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Finance Economic* 3:305-360.
- 23) Krisdian, N. P. C., & Badjra, I. B. 2017. Pengaruh Ukuran Perusahaan, Tingkat Hutang, dan Kesulitan Keuangan terhadap Keputusan Hedging pada Perusahaan Manufaktur Indonesia (Doctoral dissertation, Udayana University).
- 24) Lestari, W. R., & Pratiwi, B. N. 2023. Determinants of Hedging Decisions with Derivative Instruments in Foreign Exchange Banks Listed on the Indonesia Stock Exchange. *Sean Institute Jurnal Ekonomi*, Volume 12, No. 01, 2023.
- 25) Lukviarman, N. (2016). *Corporate Governance*. 1st ed. Solo: PT Era Adicitra Intermedia.

The Effect of Macroeconomics, Firm Size, Assets Growth, and Liquidity on Financial Distress and Hedging with Good Corporate Governance as a Moderation Variable in Manufacturing Companies Listed on the Indonesia Stock Exchange

- 26) Marhaenis, L. G., & Artini, L. G. S. 2020. Pengaruh Financial Distress, Growth Opportunities dan Liquidity terhadap Keputusan Hedging pada Perusahaan Pertambangan BEI. E-Jurnal Manajemen Universitas Udayana, 9 (5), 1778.
- 27) Martono. 2002. Bank dan Lembaga Keuangan Lain. Ekonisia. Yogyakarta.
- 28) Nanda, V., Muchtar, D., & Bahri, H. 2022. Pengaruh Leverage, Growth Opportunity dan Firm Size terhadap Keputusan Hedging pada Perusahaan Sektor Consumer Goods Industry yang terdaftar pada BEI. Jurnal Ilmu Manajemen, 10 (4), 1160-1171.
- 29) Nilasari, A., & Ismunawan, I. 2021. Pengaruh Kinerja Keuangan, Risk Based Capital, Ukuran Perusahaan dan Makroekonomi terhadap Financial Distress. Jurnal Ekonomi Bisnis dan Kewirausahaan, 10(1), 55-72.
- 30) Pernama, M. I. 2019. Faktor yang mempengaruhi Pengambilan Keputusan Perusahaan melakukan Hedging (Studi Kasus pada Perusahaan yang terdaftar di JII Periode 2013-2016 (Doctoral Dissertation, Uin Sunan Kalijaga).
- 31) Putri, N., & Mulyani, E. 2019. Pengaruh Rasio Hutang, Profit Margin dan Ukuran Perusahaan terhadap Financial Distress. Jurnal Eksplorasi Akuntansi, 1(4), 1968-1983.
- 32) Rachmat, A. S., & Kustina, L. 2019. The Influence of Rupiah Exchange Rate, Firm Size, Leverage and Liquidity on Hedging Decisions. Journal of Research in Business, Economics, and Education, 1 (1).
- 33) Redaksi OCBC NISP. 2022, Januari 22. Digital Bank: Pengertian, Layanan, Kelebihan & Kekurangannya. Retrieved from OCBC NISP Website: <https://www.ocbcnisp.com/id/article/2022/01/10/digital-bank-adalah>.
- 34) Reyad H. M., Zariyawati, M. A., Ong, T. S., & Haslinah M. 2022. The Impact of Macroeconomic Risk Factors, the Adoption of Financial Derivatives on Working Capital Management, and Firm Performance. MDPI Journals (Basel, Switzerland).
- 35) Ross, SA, Westerfeld R & Jaffe. (1996). Corporate Finance, Third Edition, Chicago: Richard D Irwin, Inc.
- 36) Sakti, R. A., & Suprihadi, H. 2018. Pengaruh Leverage, Financial Distress, dan Likuiditas terhadap Keputusan Hedging pada Perusahaan Manufaktur. Jurnal Ilmu dan Riset Manajemen (JIRM), 7 (4).
- 37) Septiani, N. M. I., & Dana, I. M. 2019. Pengaruh Likuiditas, Leverage, dan Kepemilikan Institusional terhadap Financial Distress pada Perusahaan Property dan Real Estate (Doctoral dissertation, Udayana University).
- 38) Setiyoharini, R., & Taufiqurahman, E. 2022. Pengaruh Rasio Keuangan, Kepemilikan Saham, dan Indikator Makroekonomi terhadap Financial Distress. JESYA (Jurnal Ekonomi dan Ekonomi Syariah), 5 (1), 743-756.
- 39) Setyawati, I. R., & Priantinah, D. 2021. Pengaruh Kinerja Keuangan, Kepemilikan Manajerial, Ukuran Komite Audit, Ukuran Perusahaan, dan Kondisi Makro Ekonomi terhadap Financial Distress pada Perusahaan. Jurnal Profita: Kajian Ilmu Akuntansi, 9 (7), 18-35.
- 40) Setyowati, W., & Sari, N. R. N. 2019. Pengaruh Likuiditas, Operating Capacity, Ukuran Perusahaan dan pertumbuhan Penjualan terhadap Financial Distress (Studi pada Perusahaan Manufaktur yang terdaftar di BEI tahun 2016-2017). Magisma: Jurnal Ilmiah Ekonomi dan Bisnis, 7 (2), 73-84.
- 41) Sofia, R., & Yuneline, M. H. 2019. Determinasi Pengambilan Keputusan Lindung Nilai pada Instrumen Derivatif Valuta Asing Hedging Decision-Making Determination on Exchange Rate as Derivative Instrument. ISEI Business and Management Review, 3 (1), 16-25.
- 42) Spence, M. (1973). Job Market Signaling. The Quarterly Journal of Economics, Vol. 87, No. 3, 355-374.
- 43) Suad Husnan dan Enny Pudjiastuti. (2012). Dasar-Dasar Manajemen Keuangan. Edisi Keenam Cetakan Pertama. Yogyakarta: UPP STIM YPKN.
- 44) Sudaryanti, D., & Dinar, A. 2019. Analisis Prediksi Kondisi Kesulitan Keuangan dengan Menggunakan Rasio Likuiditas, Profitabilitas, Financial Leverage dan Arus Kas. Jurnal Ilmiah Bisnis dan Ekonomi Asia (JIBEKA), 13 (2), 101-110.
- 45) Sugiyono. 2016. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta.
- 46) Swari, A. B., & Pristiana, U. (2021). Pengaruh Makro Ekonomi dan Struktur Modal Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Intervening Pada Perusahaan Sub Sektor Kontruksi Dan Bangunan Yang Terdaftar Di Bei Tahun 2016 - 2018. JEM17: Jurnal Ekonomi Manajemen, 5 (2), 107-127.
- 47) Triasiwi, M. K., & Priantilianingtiasari, R. 2023. Pengaruh Leverage, Likuiditas, Financial Distress terhadap Keputusan Hedging Sektor Industri Barang Konsumsi terdaftar BEI 2019-2021. Economics and Digital Business Review, 4 (2), 96-107.
- 48) Ulfi Pristina, 2020. Analysis of Investment Decisions, Funding Decisions, Financial Risk Management Impacts on Financial Distress with Moderation of Good Corporate Governance in Manufacturing Industry Sectors Listed on the Indonesia Stock Exchange. Ekspektra: Jurnal Bisnis dan Manajemen, Vol. 4, Nomor 2, Hal. 121-135.
- 49) Vinzi, V., Trinchera, L., & Amato, S. (2010). PLS Path Modeling: From Foundations to Recent Developments and Open Issues for Model Assessment and Improvement. V. Esposito Vinzi
- 50) Yuliani, E., & Kristanti, I.N. 2021. Pengaruh Pertumbuhan Perusahaan, Leverage, Ukuran Perusahaan, dan Likuiditas terhadap Keputusan Hedging pada Perusahaan Manufaktur yang terdaftar di BEI periode 2016-2019 (Doctoral Dissertation, Universitas Putra Bangsa).