



**CORPORATE GOVERNANCE MODERATION ON THE INFLUENCE OF
BUSINESS ENVIRONMENTAL UNCERTAINTY ON CAPITAL STRUCTURE**

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Abstract

The uncertainty of the business environment due to economic dynamics, regulations, and global markets requires companies to be adaptive, including in capital structure decisions. This study examines the effect of business environmental uncertainty on capital structure, as well as the role of corporate governance as a moderating variable. Using a quantitative approach with multiple linear regression and moderated regression analysis (MRA), data were collected from 72 manufacturing companies listed on the IDX for the period 2021–2023. The results show that environmental uncertainty has a significant negative effect on capital structure, while corporate governance is proven to weaken this negative effect. This means that a good supervisory mechanism can help companies manage risk and maintain capital structure stability. These findings strengthen contingency and agency theories and suggest the importance of effective governance as a financial risk mitigation strategy.

Keywords: Business Environment Uncertainty, Structure Capital, Corporate Governance, Moderation



INTRODUCTION

Uncertainty in the business environment is a major challenge faced by companies in the era of globalization and technological disruption. Rapid changes in economic conditions, regulations, and market demand require companies to be able to adjust their business strategies and financial decision-making, including in terms of capital structure (Paryati, 2022; Jhosefine & Holiawati, 2024). The right capital structure can support a company's financial stability and strengthen its competitiveness amid external fluctuations. In this context, it is important to evaluate how environmental uncertainty affects a company's long-term financing decisions.

Several previous studies have found that macroeconomic or business environment uncertainty tends to have a negative impact on debt use decisions because companies are more careful to avoid the risk of default (Chow et al., 2018; Djulianto & Nugroho, 2022). However, some other studies show the opposite results, where companies increase leverage to maintain growth and competitiveness in uncertainty (Triyonowati et al., 2020; Vega-Gutiérrez et al., 2024). The difference in results indicates that there are other factors that moderate this relationship, one of which is corporate governance, which acts as a control mechanism and reduces agency risk (Urban, 2019).

This study aims to examine the effect of business environment uncertainty on capital structure by considering the moderating role of corporate governance. The focus of the study is directed at manufacturing companies because this sector is vulnerable to external fluctuations and has a complex funding structure (Kelvin et al., 2022). By combining contingency theory and agency theory, this study is



expected to provide theoretical and practical contributions in understanding corporate financial strategies in an uncertain business environment.

This study was conducted on manufacturing companies listed on the Indonesia Stock Exchange during the period 2021–2023, using a quantitative approach with secondary data in the form of financial and annual reports. The sample was obtained through a purposive sampling technique with the criteria of high leverage companies, resulting in a total of 216 observations. Data analysis was carried out using multiple linear regression and Moderated Regression Analysis (MRA) to test the moderating effect of corporate governance on the relationship between environmental uncertainty and capital structure.

LITERATURE REVIEW

Uncertainty of Business Environment

Business environment uncertainty describes a condition in which a company experiences difficulties in predicting changes in the external environment that affect operations and strategic decision-making. This uncertainty is caused by factors such as economic fluctuations, regulatory changes, and rapid technological developments (Ghosh & Olsen, 2009; Paryati, 2022). In this study, business environment uncertainty is proxied through the sales variation coefficient as an indicator of income volatility (Ghani et al., 2017).

Capital Structure

Capital structure refers to the composition of debt and equity used by a company to finance its activities. This structure reflects strategic decisions in long-term financing management that will impact the level of risk and financial flexibility of the company (Sugeng, 2017; Nuridah et al., 2023). Generally, capital structure is measured using the ratio of long-term debt to total assets as a



representation of the company's leverage level (Detthamrong et al., 2017; Matemilola et al., 2018).

Corporate Governance

Corporate governance (Good Corporate Governance/GCG) is a system that regulates the relationship between managers, the board of directors, and shareholders with the aim of ensuring that the company is managed transparently, accountably, and responsibly (Hernita & Qustolani, 2022). In uncertain environmental conditions, GCG plays an important role in reducing agency risk and encouraging management to make prudent financial decisions (Urban, 2019). The measurement of GCG in this study refers to the Principal Component Analysis (PCA) approach from several proxies such as independent boards, board size, institutional ownership, and block shareholders (Chow et al., 2018).

Contingency Theory

Contingency theory states that no single decision-making model fits all situations. In this context, the uncertainty of the business environment requires management to adjust financial strategies flexibly and based on relevant and timely information (Otley, 1980; Sri Purwati & Zulaikha, 2018). The higher the uncertainty, the greater the need for companies to improve decision-making processes that are adaptive to external changes.

Agency Theory

Agency theory explains the relationship between principals (owners) and agents (managers) who often experience conflicts of interest due to differences in goals. In conditions of uncertainty, the risk of opportunistic behavior from managers increases, so a strong governance system is needed to minimize these



conflicts (Jensen & Meckling, 1976). GCG in this case functions as a control mechanism to direct financial decisions to remain in line with the interests of the company's owners (Chow et al., 2018).

RESEARCH METHOD

This study uses a quantitative approach with the aim of testing the effect of business environment uncertainty on capital structure, as well as analyzing the role of corporate governance as a moderating variable. The research design used is causal associative research with secondary data analysis from annual reports and company financial statements.

The study was conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX) during the period 2021–2023. Sample selection was carried out using a purposive sampling technique, with the following criteria: (1) companies consistently listed on the IDX in 2021–2023, (2) have complete financial and annual reports for the period 2017–2023, and (3) are included in the category of companies with high leverage based on the median average long-term debt. Based on these criteria, 72 sample companies were obtained with a total of 216 observation data.

Data were obtained through the official website of the IDX and other credible public sources. Business environment uncertainty is measured using the sales variation coefficient as an indicator of external volatility. Capital structure is proxied through the long-term debt to total assets (LDAR) ratio, while corporate governance is measured through the Principal Component Analysis (PCA) approach on four indicators: the proportion of independent boards, board size, institutional ownership, and block ownership.



Data analysis was performed using SPSS version 25 software. Hypothesis testing used multiple linear regression to see the direct effect, and Moderated Regression Analysis (MRA) to test the moderating effect of corporate governance on the relationship between business environment uncertainty and capital structure. Classical assumption tests such as normality, multicollinearity, heteroscedasticity, and autocorrelation were also performed to ensure the validity of the regression model.

RESULTS AND DISCUSSION

This study investigates the effect of business environment uncertainty on capital structure and the moderating role of corporate governance in this relationship. The analysis is based on 216 firm-year observations from 72 manufacturing companies listed on the Indonesia Stock Exchange during 2021–2023. Panel data regression is used using three models: (1) a basic model with environmental uncertainty, (2) an extended model with corporate governance, and (3) a full model that includes interaction terms to assess moderation. Before the regression test was conducted, a classical assumption test was conducted and showed that the data met the criteria for normality, multicollinearity, heteroscedasticity, and autocorrelation, thus ensuring the validity of the regression results.

Table 1
Regression Results

| Variables | Model 1 | | Model 2 | | Model 3 | |
|-----------|---------|-------|---------|-------|---------|-------|
| | B | Sig | B | Sig | B | Sig |
| Constant | 0.508 | 0.000 | 0.492 | 0.000 | 0.384 | 0.000 |
| KLB | -1.233 | 0.000 | -1.233 | 0.000 | -0.656 | 0.000 |
| GCG | - | - | 0.014 | 0.000 | 0.093 | 0.000 |
| KLB*GCG | - | - | - | - | 0.377 | 0.000 |



| | | | | | | |
|-------------------------|-------|-------|-------|-------|-------|-------|
| PANG | 0.05 | 0.000 | 0.05 | 0.000 | 0.048 | 0.000 |
| FSIZE | 0.02 | 0.000 | 0.02 | 0.000 | 0.019 | 0.000 |
| Adjusted R ² | 0.972 | | 0.975 | | 0.982 | |

Source: SPSS Output. 2025.

Based on the results of data analysis shown in table 1, it can be seen that in model 1 environmental uncertainty has a negative effect and is proven to be significant on capital structure. This is indicated by the value of the KLB regression coefficient which is negative and significant <0.05. In addition, tangible assets and company size have a positive effect and are proven to be significant on capital structure. This is indicated by the regression coefficients of TANG and FSIZE which are positive and significant <0.05. All variables used in model 1 have an influence of 97.2% on capital structure. This is indicated by the adjusted R2 value of 0.972.

Furthermore, model 2 in the table shows a negative and significant influence on the relationship between business environment uncertainty and capital structure. This is indicated by the KL regression coefficient value which is negative and significant <0.05. In addition, tangible assets, company size, and corporate governance have a positive and significant effect on capital structure. This is indicated by the GCG, TANG, and FSIZE regression coefficients which are positive and significant <0.05. All variables used in model 2 have an influence of 97.5% on changes in capital structure. This is indicated by the adjusted R2 value of 0.975.

Next, model 3 in the table shows a negative and significant influence on the relationship between business environment uncertainty and the moderating role of corporate governance on capital structure. This is indicated by the regression coefficient values of KLB and KLB*GCG which are positive and



significant with a calculation of <0.05 . In addition, tangible assets, company size, and corporate governance have a positive and significant effect on capital structure. This is indicated by the regression coefficients of GCG, TANG, and FSIZE which are positive and significant with a calculation of <0.05 . All variables used in model 3 have an influence of 98.2% on capital structure. This is indicated by the adjusted R2 value of 0.982.

Based on the table the results obtained that the uncertainty of the business environment (KLB) has a regression coefficient of -1.242 with a significance value of 0.000 which indicates that the uncertainty of the business environment (KLB) has a negative effect and is proven to be significant on the capital structure. This is indicated by the significance value of the uncertainty of the business environment (KLB) as an independent variable below 0.05 (5%) which means H1 is accepted. This indicates that the higher the uncertainty of the business environment, the weaker the capital structure owned by the company.

In addition, GCG moderates and is proven to weaken the negative influence of business environment uncertainty on capital structure. This is indicated by the interaction regression coefficient of 0.377 and the significance value of the interaction between business environment uncertainty and corporate governance (KLB*GCG) as a moderating variable is below 0.05 (5%), which means H2 is accepted. This indicates that effective corporate governance is able to eliminate the impacts caused by environmental uncertainty so that companies are able to make wiser and more measured funding decisions even in unstable external environmental conditions.

The results of the study indicate that uncertainty in the business environment has a significant negative effect on the company's capital structure,



because in volatile and unpredictable economic conditions, companies tend to avoid debt to minimize the risk of default and maintain financial flexibility. This is consistent with the contingency theory and Pecking Order Theory, which emphasize the importance of adjusting financial strategies to the external environment and the preference for internal funding when uncertainty increases. In this context, corporate governance (Good Corporate Governance/GCG) plays an important role in weakening these negative impacts by increasing transparency, accountability, and the effectiveness of supervision and decision-making. GCG allows companies to be more responsive to external information and encourages managers to choose a more prudent capital structure, strengthen the role of internal funds, and reduce dependence on debt. Thus, GCG functions as a protective mechanism that maintains the company's financial stability amidst uncertainty and is an important strategy in ensuring long-term sustainability.

Synthesis of the Main Discussion

This study aims to analyze the effect of business environment uncertainty on capital structure and to test the moderating role of corporate governance (GCG) in the relationship. Based on the results of data analysis on 216 observations of manufacturing companies in Indonesia, it was found that business environment uncertainty has a significant negative effect on capital structure, meaning that companies tend to reduce the proportion of debt when facing high uncertainty in order to maintain flexibility and avoid the risk of default. This finding is consistent with the Pecking Order Theory and Contingency Theory which suggest the use of internal funding in unstable conditions.



Furthermore, the study also proves that corporate governance is able to weaken the negative influence of uncertainty on capital structure. This means that companies with good GCG mechanisms are still able to maintain rational, transparent, and accountable financial decisions even in the midst of uncertainty. This supports the Agency Theory framework, where effective supervision through GCG reduces the risk of conflicts of interest between managers and capital owners.

Thus, the research objectives have been fully achieved, namely to prove the negative influence of uncertainty on capital structure, and to show that GCG functions as a moderation that stabilizes this influence. No significant obstacles were found in achieving the objectives of this study because all data and analysis methods support valid and reliable results.

As a policy implication, it is recommended for companies to strengthen governance systems as a risk mitigation strategy in dealing with external dynamics, as well as to develop flexible and conservative capital structures during periods of high uncertainty to maintain long-term business continuity.

CONCLUSION

This study concludes that business environment uncertainty has a significant negative effect on the capital structure of manufacturing companies in Indonesia. This finding suggests that in unstable economic conditions, companies tend to reduce the proportion of debt in their capital structure to avoid increasing financial risk and maintain funding flexibility. In addition, corporate governance is proven to moderate the relationship, by weakening the negative impact of uncertainty on capital structure. This indicates that companies with good



governance systems tend to be better able to maintain financial stability and make wiser funding decisions, even in uncertain environmental conditions.

The policy implication of these results is the need to strengthen the implementation of good corporate governance principles systematically. Regulators and policymakers are advised to increase supervision and expand the implementation of GCG policies through regulations that require transparency, accountability, and independence in the company's management structure. The government and capital market authorities also need to support the provision of a credible and accessible macroeconomic information system to help companies respond appropriately to external dynamics. Strong GCG implementation not only functions as a supervisory mechanism but also as an adaptive strategy in responding to economic uncertainty, which ultimately supports the company's long-term sustainability and competitiveness.

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