

Environmental Uncertainty and Firm Performance: The Moderating Role of Corporate Governance

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Abstract: This research aimed to examine the effect of environmental uncertainty on firm performance. This research added corporate governance as a moderating variable. The research samples were manufacturing companies listed on the Indonesia Stock Exchange for the period 2014-2018 which were selected using purposive sampling techniques. The samples analyzed were 442 company data. The result showed that environmental uncertainty has a negative effect on firm performance. The result indicated environmental uncertainty causes operating expenses to increase so that the firm performance decreases. In addition, the results showed that corporate governance reduced the effect of environmental uncertainty on firm performance. The result indicated corporate governance is able to reduce the impact of environmental uncertainty so that firm performance increases.

Keywords: environmental uncertainty, corporate governance, company performance.

Abstrak: Tujuan penelitian ini adalah menguji pengaruh ketidakpastian lingkungan terhadap kinerja perusahaan. Penelitian ini menambahkan tata kelola perusahaan sebagai variabel moderasi. Sampel penelitian adalah perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2014-2018 yang dipilih dengan menggunakan teknik purposive sampling. Sampel yang di analisis sebanyak 442 data perusahaan. Hasil penelitian menunjukkan bahwa ketidakpastian lingkungan berpengaruh negatif terhadap kinerja perusahaan. Hasil penelitian mengindikasikan bahwa ketidakpastian lingkungan menyebabkan beban operasional meningkat sehingga kinerja perusahaan menurun. Selain itu, hasil penelitian menunjukkan bahwa tata kelola perusahaan memperlemah pengaruh ketidakpastian lingkungan terhadap kinerja perusahaan. Hasil penelitian mengindikasikan bahwa tata kelola perusahaan mampu mereduksi dampak dari ketidakpastian lingkungan sehingga kinerja perusahaan meningkat.

Kata Kunci: ketidakpastian lingkungan, tata kelola perusahaan, kinerja perusahaan.

INTRODUCTION

The business environment nowadays is characterized by an increase in uncertainty. Globalization and internalization have made the business environment more volatile and dynamic, thus increasing uncertainty for individual companies (Tan *et al.*, 2015). Environmental uncertainty begins from the lack of access to adequate information during

the decision-making process and the inability of management to anticipate (Darvishmotevali *et al.*, 2020). Besides, a high level of uncertainty arises when management's experience and knowledge are inadequate regarding possible future changes (Lee *et al.*, 2011). This condition makes the firm in an environment that keeps evolving, must be flexible enough to manage threats and unpredictable opportunities in the future.

Environmental uncertainty is driven by several components of the external environment such as market, technology, and intensity of competition (Chin *et al.*, 2014). The uncertainty of the market environment is characterized by the rate of change in consumer demands that tends to be constant, but the product development cycle is shortened due to the rapid changes in consumer preferences (Liu, 2017). In such an environment, companies try to develop products to meet changes in customer preferences and secure a competitive advantage (Lumpkin and Dess, 2001). Company management must be able to read this condition because the customer preferences are changing rapidly and difficult to predict (Wang and Fang, 2012).

Technological uncertainty reflects changes in technological resources. In other words, technological uncertainty is the inability of management to understand or anticipate some aspects of the technological environment (Köseoglu *et al.*, 2013). Technology uncertainty results from the inability of management to know the possibility of new emerging technologies or current technologies that can be combined to create new ideas for product development (Chin *et al.*, 2014). Competitive uncertainty is described as the inability of company management to respond to intense competition in the future, the relative strength of competitors, and also competitors' plans and strategies (Long *et al.*, 2014). As a dynamic context, serious consideration of potential competitors and their activities are required in each industry to avoid competitive uncertainty.

Several studies linked environmental uncertainty as a situational factor that can moderate the company's internal factors on performance. (Kafetzopoulos *et al.*, 2019) examined environmental uncertainty as moderation on the relationship between innovation dimensions and firm performance. (Merschmann and Thonemann, 2011) examined environmental uncertainty as moderation on the relationship between supply chain flexibility and firm performance. Meanwhile, (Liu, 2017) examined environmental uncertainty as moderation on the effect of intellectual and social capital on company performance. Moreover, several studies have examined the direct impact of environmental uncertainty within firm's. (Nagarajan *et al.*, 2013) examined the direct effect of environmental uncertainty on supply chain flexibility. (Darvishmotevali *et al.*, 2020) examined the direct effect of environmental uncertainty on organizational creativity. (Tang and Wang, 2017) examined the direct effect of environmental uncertainty on internal controls quality. (Ariefiara *et al.*, 2017; H. Huang *et al.*, 2017) examined the direct effect of environmental uncertainty on tax avoidance.

The existence of gaps from previous studies which did not examine the direct effect of environmental uncertainty on firm performance made us to empirically test the relationship between environmental uncertainty and firm performance. We believe that environmental uncertainty is one of the contingent issues faced by companies today and in the future. Environmental uncertainty is characterized by rapid changes in the external environment that have a direct effect on company performance.

Rapid changes in technology result in short product life cycles that make the company's investment in research and development in extending product life cycles is

increasing (Atuahene-Gima *et al.*, 2006; Song *et al.*, 2005). Besides, rapid changes in customer preferences encourage companies to become more innovative in developing their products so their customers will not leave (G. Wang and Miao, 2015). This indicates that environmental uncertainty puts pressure on company performance due to the large investment cost incurred to cope with increasing uncertainty. Also, sales fluctuations due to changes in customer preferences put pressure on company profits, which resulted in a decrease in company performance.

Previous research has shown that there is a negative influence between environmental uncertainty and firm performance. (Cadeaux and Ng, 2012) proved that increasing environmental uncertainty results in a decrease in sales volume which affects the firm performance. This condition results in decreasing the company's profitability. This also in line with (Bendickson *et al.*, 2018) which proved that environmental uncertainty has a negative effect on firm performance. Research from (Pourali *et al.*, 2019) gave results that are contradicted with the research of (Bendickson *et al.*, 2018) also (Cadeaux and Ng, 2012). (Pourali *et al.*, 2019) stated that environmental uncertainty does not have a significant effect on fluctuations in profitability.

The increased investment costs in technology as well as in research and development due to environmental uncertainty require strong supervision so that the cash spent on these activities is not misused by management. Therefore, corporate governance is needed to minimize asymmetric information from the use of cash for environmental uncertainty control activities. When environmental uncertainty increases, corporate governance encourages management in firm to optimize its business processes to achieve operational efficiency. Operational efficiency emphasized by corporate governance to minimize the effect of environmental uncertainty has an impact on reducing the firm operating expenses so that the firm performance increases.

Previous studies have shown that corporate governance is able to reduce the influence of environmental uncertainty. (Kor and Misangyi, 2008) proved that the independent director as an organ of corporate governance increases the company's ability to protect itself from changes in the external environment so that it can reduce. This is in line with research by (Chung and Wang, 2014) which proved that institutional ownership as an organ of corporate governance is able to reduce environmental uncertainty. This condition makes it easy for companies to maintain cash stability and maintain their performance. Research by (Pourali *et al.*, 2019) gave results that are contradicted with (Kor and Misangyi, 2008) also (Chung and Wang, 2014). (Pourali *et al.*, 2019) stated that good corporate governance does not have a significant effect on fluctuations in company profitability when environmental uncertainty increases.

The research question is whether environmental uncertainty has a negative effect on firm performance? And whether corporate governance is able to weaken the influence of environmental uncertainty on firm performance? The purpose of this study is to examine the effect of environmental uncertainty on firm performance and the moderating role of corporate governance on the effect of environmental uncertainty on firm performance.

This research is expected to provide a theoretical contribution to the development of accounting and management science especially related to environmental uncertainty, corporate governance, and firm performance. In practical terms, the results are expected to be used as material for study and consideration for the management of manufacturing

companies as their effort to improve firm performance when global environmental uncertainty increases.

THEORETICAL REVIEW

Agency Theory. Agency theory is defined as one or more shareholders involving other people to perform several services on their behalf, one of which includes delegating authority over decision-making agents (Jensen and Meckling, 1976). The foundation of this theory is the assumption that the interests of shareholders and agents are different. According to agency theory, shareholders can limit diversion of interests by providing appropriate incentives to agents, and by incurring monitoring costs designed to limit the agent's opportunistic actions (Hill and Jones, 1992).

Agency theory has an interest in resolving two problems that can arise in an agency relationship. The first problem is the agency problem that arises when the desire for the goals of shareholders and agents is different and when there are difficulties or high costs for shareholders to monitor the agent's activities. The problem here is that shareholders cannot make sure whether the agent has done the right thing. The second problem is the problem of risk sharing that arises when shareholders and agents have different attitudes or views on risk. The problem here is that shareholders and agents can perform different actions because they have different preferences for risk (Eisenhardt, 1989).

Corporate governance can be used to minimize the risk of expropriation by internal parties of a company. Seen from the legal approach, corporate governance is a series of mechanisms that can protect minorities from expropriation carried out by internal companies through the legal system, namely law, and its implementation. This mechanism is implemented at two levels, namely the state and the company. Corporate governance mechanisms ensure fairness, transparency, accountability, and responsibility from internal parties of a company. This guarantees better protection for stakeholders so that the risk of expropriation and agency problems can be minimized.

Contingency Theory. The contingency approach to management accounting is based on the premise that no universally accepted accounting system applies equally to all organizations in all circumstances (Otley, 1980). This indicates that no accounting system can answer all problems in different situations. Dynamic changes in the external environment create contingency problems for the company so that active management efforts are needed to solve contingent problems arising from changes in the external environment. The effort of company management in solving contingency problems that arise makes it easy for the company to make an inventory of all the needs that are needed to answer these contingency problems.

(Lueg and Borisov, 2014) argued that contingency theory has attracted a lot of attention, especially related to environmental uncertainty where these external factors can affect organizational performance, from planning and managing control to decision making. The concept of environmental uncertainty is to estimate the risk of problems from the present which will be useful for the benefit of overcoming risk in the future. This will affect the going concern concept. By using the perspective of contingency theory, we can see that nonfinancial factors play a significant role, especially in the relationship between

organizational strategy and environmental strategy with organizational performance (Hoque, 2004).

Company Performance. (Lönnqvist, 2004) defined company performance as the company's ability to achieve results concerning company goals. Performance is the primary measure of organizational outcomes and it is influenced by many market possibilities and organizational conditions. As a complex construct, company performance is measured in various ways. According to (Neely *et al.*, 2000), there are two basic types of performance measured in any organization, performance that relates directly to results (financial performance) and which focuses on determinants of outcome (quality, flexibility, resource utilization, and innovation).

(Camisón and Villar-López, 2014; also Shan *et al.*, 2016) dividing company performance measures into two forms, namely: financial performance and market performance. Financial performance is the extent to which an organization achieves economic results (Hogan and Coote, 2014). This indicates that the size of the company performance can be viewed from how much economic (financial) results the organization produces in one period. Meanwhile, market performance shows the degree to which an organization attracts and retains customers for its products and services.

Environmental Uncertainty. Environmental uncertainty is defined as management's ability to accurately understand external environmental conditions (Dwyer and Welsh, 1985). This is due to the difficulty in anticipating and assimilating environmental conditions simultaneously (Dwyer and Welsh, 1985). Besides, environmental uncertainty is the manager's perception of the environment that is being faced and will affect company performance (Gordon and Narayanan, 1984). This occurs due to rapid changes in uncertain conditions that can affect company performance.

Environmental uncertainty can also be defined as the uncertainty or instability in the market environment due to the rapid changes in customer needs (M. Wang and Fang, 2012). In this study, environmental uncertainty that arises is reviewed from a market perspective. Market uncertainty indicates changes in the composition of market niches and their preferences (M. Wang and Fang, 2012). Environmental uncertainty that grows from changes in consumer preferences and the composition of market niche encourages company management to become more innovative in finding new ideas to develop new products or processes that are different from competitors (Sudaryati and Amelia, 2015).

Corporate Governance. (Cadbury, 1992) defined corporate governance as a system in which the company is directed and controlled. This is related to the duties and responsibilities of company management to successfully lead the company and its relationship with shareholders and other stakeholders. Corporate governance is important for all forms of economy, first, because its systems are increasingly seen as a prerequisite for social and economic development in developing countries (Wanyama *et al.*, 2013). Second, good corporate governance practices improve company performance through better management and a wise allocation of company resources (Tsifora and Eleftheriadou, 2007).

Corporate governance directs company management to become more open regarding all information held by the company. Contingency formulations regarding environmental conditions and internal characteristics of the organization usually flow from an information

processing perspective (Galbraith, 1973). This shows that the decision making made by the company must fit between the level of information processing requested by the environment and the processing capability of the organization (Iqbal, 2002). Therefore, information disclosure is very important for company management in an uncertain business environment to gain trust from shareholders on the management's ability in managing the company (Abdullah *et al.*, 2015). Hence, to provide an overview to stakeholders regarding management's effort in overcoming contingency problems, disclosure of corporate governance is required to provide an overview to company stakeholders regarding the efforts made by management in dealing with pressure due to contingency problems that occur (Abdullah *et al.*, 2015).

Environmental Uncertainty and Company Performance. Changes in the external environment create environmental uncertainty in the company. Changes in technology, market, and the intensity of competition put pressure on company management to improve company performance. Changes in technology, market preferences, and intensity of competition create additional operating expenses for companies that have an impact on decreasing company performance.

Research by (Cadeaux and Ng, 2012) stated that environmental uncertainty has a negative effect on company performance. Environmental uncertainty causes the marketing distribution channel to become obstructed, resulting in decreased sales volume. Environmental uncertainty caused by changes in information technology results in changes in marketing distribution channels so that the level of competition gets tighter. The existence of increasingly fierce competition results in lower sales volume and affects the company performance.

Research by (Bendickson *et al.*, 2018) stated that environmental uncertainty has a negative effect on company performance. Environmental uncertainty results in the large use of company resources to deal with changes that occur in the external environment. This condition results in low operational efficiency due to high operating expenses incurred by the company to deal with an uncertain environment. The increase in the company operating expenses when environmental uncertainty increases will decrease the company profitability, lead to a decrease in company performance

H1: Environmental uncertainty has a negative effect on company performance.

Environmental Uncertainty, Corporate Governance, and Company Performance. Changes in technology, market preferences, and increasing intensity of competition create an uncertain business environment for companies. Pressures from environmental uncertainty result in high operating expenses incurred by the company to minimize the impact of this uncertainty. This encourages management to become more efficient in running company operations so that the company performance will not decrease. The corporate governance organ provides advice and supervision to management to carry out operational efficiency when uncertainty increases to maintain the stability of company performance.

Research by (Kor and Misangyi, 2008) proved that the independent director as an organ of corporate governance increases the company's ability to protect itself from changes in the external environment so that it can reduce. Environmental uncertainty encourages

company management to invest more in developing new products and processes from the ideas generated by company management. The large amount of investment made by company management during times of high environmental uncertainty creates a way for company management to take opportunistic actions. Therefore, the role of the independent director as an organ of corporate governance limits the possibility of opportunistic actions taken by management through monitoring of cash management by the company management. The independent director advises management to improve operational efficiency when uncertainty increases. This provides an option for company management to limit the excessive use of cash in company operations.

Research by (Chung and Wang, 2014) stated that institutional ownership as one of the organs of corporate governance directs company management to carry out cash management properly when environmental uncertainty increases. Environmental uncertainty encourages management to increase the use of cash to minimize the effect of environmental uncertainty. Therefore, institutional ownership as an organ of corporate governance provides strong oversight to management regarding excessive use of corporate cash in times of high environmental uncertainty. The efforts made by the ownership results in better operational efficiency so that the company performance will increase.

H2: Corporate governance weakens the effect of environmental uncertainty on company performance.

METHODS

This is a quantitative research using secondary data in the form of financial reports and annual reports of manufacturing companies from 2014 to 2018. Manufacturing companies were selected as the research population based on the consideration that manufacturing companies are companies that use sophisticated technology so changes in technology create major environmental uncertainty for manufacturing companies. Moreover, manufacturing companies are companies with a high level of competition along with rapid changes in consumer preferences. Therefore, it is possible for manufacturing companies to feel the great impact of environmental uncertainty. The sample was selected based on the criteria set by the researcher. The criteria set include: 1) Manufacturing companies were listed on the Indonesia Stock Exchange from 2014 to 2018; 2) Manufacturing companies that published financial statements or annual reports that have been audited as of December 31 on the Indonesia Stock Exchange for the period 2014 to 2018; 3) Manufacturing companies that provided the required complete research. Based on the established criteria, data of 442 manufacturing companies were obtained which were used for further analysis.

Operational Definition and Variable Measurement. The variables used in this research include environmental uncertainty, corporate governance, company size, company age, capital structure, and company performance. Environmental uncertainty is an independent variable in this study. Environmental uncertainty is defined as the uncertainty or instability in the market environment due to the rapid changes in customer needs (M. Wang and Fang, 2012). Market uncertainty indicates changes in the composition of market niches and their preferences (M. Wang and Fang, 2012). This research adopts the previous research

conducted by (H. Huang et al., 2017) to estimate environmental uncertainty. Huang *et al.* (2017) estimate environmental uncertainty based on total sales divided by total assets over 5 years. Environmental uncertainty is the coefficient of variation of total sales divided by total assets over 5 years (H. Huang *et al.*, 2017).

Corporate governance is a moderating variable in this study. Corporate governance is defined as a system in which the company is directed and controlled (Cadbury, 1992). This is related to the duties and responsibilities of company management to successfully lead the company, and its relationship with shareholders and other stakeholders. The measurement of corporate governance (CG) which adopts some of the following studies a proxy for corporate governance, which are: (1) Board of Independency (BIND), which is defined as the percentage of independent directors on the composition of the board (Alves *et al.*, 2015; Y. S. Huang and Wang, 2015). (2) *Board Size* (BSIZE), which is a dummy variable, with a value of 1, if the board size is less than the median of the total boards of all samples, and 0 if vice versa (Liao *et al.*, 2015). (3) Blockholder Ownership (BHOWN), which is defined as the percentage of shares owned by blockholders whose ownership is more than 5 percent of the company's equity (Eling and Marek, 2014; Lu and Wang, 2015). (4) Institutional Ownership (INOWN), which is measured as the percentage of shares owned by the largest institutional owner (Chow *et al.*, 2018).

To measure the quality of corporate governance, we used a principal component analysis methodology to deal with the multidimensional aspects of governance mechanism (Liao et al., 2015; Lu and Wang, 2015). It is used to combine individual governance characteristics to construct a single governance index. The corporate governance (CG) index is calculated based on a linear combination of the following individual governance measures:

$$CG_{it} = \sum_{m=1}^n Loading_{im} Governance_{m,it}$$

Where $Governance_{m,it}$ represents an individual measure of governance m from a company i in the year of t , dan $loading_{im}$ is the assignment for the individual governance measure m of a company i .

The dependent variable in this study is company performance. (Lönnqvist, 2004) defined company performance as the company's ability to achieve results concerning company goals. This study uses financial performance as a measure of the economic results received by the company in carrying out their operational activities. According to (Hongren, 2007), financial performance has the objective of measuring business and management performance against company goals. Financial performance in this study is measured using the return on asset ratio (ROA).

The control variables in this study are company size, age, and company capital structure. Company size explained how big or small the company is (Hartono, 2014). This study used the number of assets as a measure to explain the size of the company. This is because the company's asset value is relatively stable. The greater the number of assets owned by the company, the easier it is for management to improve company performance. Company size is calculated using the natural logarithm of the book value of the company's total assets as done by (Cruz-Cázares *et al.*, 2013). Company age stated how long the company has been operating in a business environment. The age of the company indicates

the maturity of the company in a competitive environment, where companies with a large age have more experience in business operations, making it easier to win the competition. This condition makes it easy for companies to improve their performance. The age of the companies in this study was measured from the year of establishment to year of research operation conducted (Cruz-Cázares et al., 2013). According to (Ehrhardt and Brigham, 2011), the capital structure is a combination of debt and equity that is used by a company to fund its operational activities. Companies with large debts in the company's capital structure have the opportunity to increase production capacity and it makes it easy for management to improve company performance. The company's capital structure was measured using the ratio of total debt divided by total assets (Indrajaya and Setiadi, 2011).

The analysis technique used to test the research hypothesis is multiple linear regression analysis and moderated regression analysis (MRA). Multiple linear regression was used to test the hypothesis effect of environmental uncertainty on company performance, while moderated regression analysis (MRA) was used to test the hypothesis of the moderating effect of corporate governance on the effect of environmental uncertainty on company performance. This research included a descriptive analysis and classic assumption tests. The descriptive analysis provided an overview of data concentration which includes: average value, maximum and minimum value, and the level of data deviation or standard deviation. To reduce the bias in multiple regression analysis, a classic assumption test was performed. The classic assumption tests used in this research were the normality test, multicollinearity test, and heteroscedasticity test. All existing analyses were calculated using SPSS 24 software. The following is a regression model to test the research hypothesis:

Model 1: Multiple linear regression analysis was used to answer hypothesis 1:

$$ROA = \beta_0 + \beta_1EU + \beta_2SIZE + \beta_3AGE + \beta_3LEV + \varepsilon \dots\dots\dots(1)$$

Model 2: multiple linear regression analysis

$$ROA = \beta_0 + \beta_1EU + \beta_2CG + \beta_3SIZE + \beta_4AGE + \beta_5LEV + \varepsilon \dots\dots\dots(2)$$

Model 3: moderated regression analysis was used to answer hypothesis 2:

$$ROA = \beta_0 + \beta_1EU + \beta_2CG + \beta_2(EU*CG) + \beta_4SIZE + \beta_5AGE + \beta_6LEV + \varepsilon \dots\dots\dots(3)$$

Where ROA represents company performance; EU is environmental uncertainty; CG is corporate governance; EU*CG is the interaction of environmental uncertainty and corporate governance; SIZE is the company size; AGE is the company age; LEV is the capital structure of the company; β_0 is an intercept; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ and β_6 is the estimated parameter; ε is an error.

RESULTS

Descriptive Analysis. The descriptive analysis provided an overview of the size of data concentration which includes: average value, maximum and minimum value, and the level of data deviation or standard deviation. The descriptive analysis is summarized in Table 1.

Table 1. Descriptive Analysis

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	441	-0.168249	0.206796	0.03626017	0.053438343
EU	441	0.008038	1.194088	0.15318061	0.147846644
CG	441	0.239664	1.491560	0.73718367	0.311750972
SIZE	441	24.414157	33.473728	28.50200939	1.583554402
AGE	441	2.000000	41.000000	21.07936508	7.736898342
LEV	441	0.046131	0.993872	0.47068627	0.199729133
Valid (listwise)	N 441				

Source: Output SPSS 24, 2020.

Based on the results shown in Table 1, it is obtained that the value of company performance (ROA) is 0.03626 which indicates that the performance of the manufacturing companies in the research sample is relatively low, and the company's ability to improve its performance is relatively different. The average value of environmental uncertainty (EU) is 0.15318 with the standard deviation of 0.14785 which indicates that the level of environmental uncertainty (EU) in manufacturing companies is relatively low. It can be seen from the average value of less than 1. The average value of corporate governance (CG) is 0.73718 which indicates that the governance of manufacturing companies in Indonesia is quite good because the average value is close to 1. The average value of company size (SIZE) is 28.50201 which indicates that the size of the manufacturing companies in the research sample is relatively large, with average total assets of more than 2 trillion. The average value of company age (AGE) is 21.07937 which indicates that the age of manufacturing companies sampled has sufficiently mature experience in the competitive industry. The average value of company capital structure (LEV) is 0.47069 which indicates that manufacturing companies in Indonesia tend to use the equity in the company's capital structure as indicated by an average value of less than 0.5.

Classic Assumption Test. The classic assumption tests used in this research include the normality test, multicollinearity test, and heteroscedasticity test. The normality test is used with a non-parametric approach using Kolmogorov-Smirnov (K-S) method. The normality testing result is summarized in Table 2.

Table 2. Normality Test

	Sig.	Conclusion
Model 1	0,200	Normal
Model 2	0,200	Normal
Model 3	0,167	Normal

Source: Output SPSS 24, 2020.

The test results in table 2 indicate that the significance value of model 1 is equal to 0,200, model 2 is equal to 0,200, and model 3 is equal to 0,167. It can be concluded that the regression model built in this research has normally distributed data. It can be seen from the significance value (Sig) is greater than 0,05.

Multicollinearity symptoms are detected using the value of the variance inflation factor (VIF). If the value of $VIF < 10$, then there is no correlation between the independent variables. This shows the absence of multicollinearity symptoms in the research model. The multicollinearity test result is summarized in Table 3.

Table 3. Multicollinearity Test

Variable	Model 1	Model 2	Model 3	Conclusion
	VIF	VIF	VIF	
EU	1,026	1,032	5,987	Multicollinearity free
CG		1,391	2,428	Multicollinearity free
EU*CG			6,866	Multicollinearity free
SIZE	1,066	1,473	1,479	Multicollinearity free
AGE	1,044	1,045	1,045	Multicollinearity free
LEV	1,037	1,044	1,052	Multicollinearity free

Source: Output SPSS 24, 2020.

Based on the results obtained in table 3, the regression model that was built did not experience multicollinearity symptoms between the independent variables. This is based on a VIF value that is smaller than 10. This condition illustrated the absence of a strong correlation between the independent variables in the research model.

Heteroscedasticity problems were detected using the Glesjer test. The Glesjer test is a technique to see the residual similarity by regressing the absolute value of the residuals in the existing regression models with the independent variables used (Ghozali, 2006). Heteroscedasticity testing results are summarized in Table 4.

Table 4. Heteroscedasticity Test

Variable	Model 1	Model 2	Model 3	Conclusion
	Sig.	Sig.	Sig.	
EU	0,797	0,783	0,269	Heteroscedasticity free
CG		0,053	0,361	Heteroscedasticity free
EU*CG			0,294	Heteroscedasticity free
SIZE	0,661	0,164	0,179	Heteroscedasticity free
AGE	0,364	0,378	0,462	Heteroscedasticity free
LEV	0,089	0,105	0,108	Heteroscedasticity free

Source: Output SPSS 24, 2020.

Based on the results obtained in table 4, there were no symptoms of heteroscedasticity. It can be seen from the calculated significance value (Sig). Of all the variables used in this research, none of which have a value below 0.05. It can be concluded that the research model did not experience heteroscedasticity symptoms.

Hypothesis Test. Hypothesis testing is done using multiple linear regression analysis and moderated regression analysis. Hypothesis testing is done by looking at the regression coefficient value and the significance value for each variable. The variable is said to be influential if the significance value is < 0.05 . Hypothesis testing results are summarized in Table 5.

Table 5. Hypothesis Test

Variable	Model 1		Model 2		Model 3	
	Coeff	Sig	Coeff	Sig	Coeff	Sig
Constant	-0,062	0,038	-0,029	0,546	-0,012	0,808
EU	-0,053	0,014	-0,054	0,000	-0,125	0,000
CG			-0,009	0,262	-0,024	0,104
EU * CG					0,098	0,040
SIZE	0,005	0,001	0,004	0,000	0,004	0,000
AGE	0,001	0,000	0,001	0,000	0,001	0,000
LEV	-0,128	0,000	-1,127	0,000	0,011	0,000
Adj. R ² Square	0,343		0,344		0,350	

Source: Output SPSS 24, 2020.

Based on the multiple regression analysis and moderated regression analysis test results presented in Table 5, it can be concluded that environmental uncertainty has a negative effect on company performance. Model 1 showed that the regression coefficient for environmental uncertainty (EU) is negative with a significance value of <0.05 . Also, model 3 showed that corporate governance weakens the negative effect of environmental uncertainty on company performance. Model 3 showed that the regression coefficient for the interaction of environmental uncertainty (EU) and corporate governance (CG) is positive with a significance value of <0.05 .

Environmental Uncertainty and Decrease in Company Series. Based on the hypothesis testing results, environmental uncertainty has a negative effect on company performance with a significance value of <0.05 . These results support the hypothesis which stated that environmental uncertainty has a negative effect on company performance. The findings indicated that when environmental uncertainty increases, the company performance will decrease.

The results indicated that environmental uncertainty was caused by changes in the external environment which put great pressure on the finance of a company. Changes in technology made company management invest more in new technology to keep up with changes in the market. The additions to technology investment are used to extend the product life cycles due to rapidly changing consumer preferences. Moreover, increased environmental uncertainty in the company causes the intensity of competition to increase. This causes companies to spend more cash on product research and development. This is done to maintain the company's position within the scope of competition and to create products that are superior to competitors. The conditions that arise from environmental uncertainty resulted in a large amount of cash spent that increased the operating expenses. Also, the increasing intensity of competition has an impact on decreasing the sales volume. This indicates that increased environmental uncertainty has resulted in increased operating expenses, and a decreased in sales volume resulting in a decrease in company performance.

These results are in line with previous research done by (Bendickson et al., 2018; Cadeaux and Ng, 2012) who found the empirical evidence that environmental uncertainty has a negative effect on company performance. (Cadeaux and Ng, 2012) along with (Bendickson et al., 2018) concluded that increased environmental uncertainty increased the

company's operating expenses and decreased sales volume. Both of these conditions resulted in decreased company performance when environmental uncertainty increased.

Corporate Governance Moderation on the Effect of Environmental Uncertainty toward Company Performance. Based on the hypothesis test results, it can be concluded that corporate governance reduces the effect of environmental uncertainty on company performance. The test showed a significance value of <0.05 . These results support the hypothesis which stated that corporate governance weakens the effect of environmental uncertainty on company performance. The findings indicate that when the situation of environmental uncertainty increases, an effective corporate governance organ is needed to reduce the effect of environmental uncertainty so that the company performance remains stable.

The results indicate that when the company operating expense increases, as well as the increased environmental uncertainty, it requires the role of an effective corporate governance organ to supervise the increased operating expense. Also, the intensity of the corporate governance organ to provide management advice increases when environmental uncertainty occurs. The direction given by corporate governance helps management to find effective ways of creating operational efficiency. The corporate governance organ together with management seeks to find effective steps to minimize the impact of environmental uncertainty on the company's financial position. Operational efficiency resulting from the active involvement of corporate governance organs when the environmental uncertainty increases have an impact on maintaining the company's financial stability so that performance becomes stable.

The results of this research are in line with previous research conducted by (Kor and Misangyi, 2008) also (Chung and Wang, 2014) who found empirical evidence that corporate governance organs can reduce the effect of environmental uncertainty on company performance. (Kor & Misangyi, 2008) along with (Chung & Wang, 2014) concluded that the organ of corporate governance increases the company's ability to protect itself from changes in the external environment to reduce the effect of increased environmental uncertainty. This ability is realized through effort on operational efficiency when environmental uncertainty increases so that operating expenses can be minimized. This ability causes the company performance to remain stable when environmental uncertainty increases due to the active role of the corporate governance organ.

CONCLUSION

Based on the hypothesis testing results, it can be concluded that environmental uncertainty has a negative effect on company performance. Moreover, corporate governance reduces the effect of environmental uncertainty on company performance. The results of this study indicate that environmental uncertainty caused by changes in the external environment puts great pressure on company finances. Increased environmental uncertainty has resulted in increased operating expenses and a decrease in sales volume, resulting in a decrease in company performance. Also, the results show that corporate governance organs together with management strive to find effective ways to minimize the impact of environmental uncertainty on the company's financial position. Operational efficiency resulting from the active involvement of corporate governance organs when environmental

uncertainty increases have an impact on maintaining the company's financial stability so that performance becomes stable.

A limitation of this study is the focus on environmental uncertainty caused by changes in market demand. Moreover, the audit component is not included in the calculation of corporate governance weight. This is because the rapid changes in consumer preferences create a high level of uncertainty. Also, supervisory and control functions become major components of corporate governance organs when environmental uncertainty increases. This makes the audit component not included in the calculation of corporate governance.

Based on the results and existing limitations, the researcher recommends several agendas that can be considered for similar research in the future, which are: 1) the researcher adds a component of changes in technology costs to measure environmental uncertainty to provide more comprehensive results; 2) consider to calculate the audit components such as internal audit, audit committee, and external audit in calculating the weight of corporate governance so that all principles of corporate governance can be implemented effectively, thus providing more comprehensive results.

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