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# The Influence of GCG, Leverage, And Profitability on Corporate Investment With Economic Policy Uncertainty As A Moderating Variable

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Abstract: This study examined the influence of good corporate governance, leverage, and profitability on corporate investment, with economic policy uncertainty as a moderating variable. The population consisted of companies classified within the energy sector and listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022, totaling 82 companies. The sample selection process employed purposive sampling, resulting in a final sample of 51 companies. This study utilized secondary data obtained from the Indonesia Stock Exchange (www.idx.co.id). Panel data regression analysis was conducted using EVIEWS 12 software. The results indicated that, collectively, good corporate governance, leverage, and profitability influenced corporate investment. Partially, leverage and profitability had a significant positive effect on corporate investment, whereas good corporate governance and economic policy uncertainty did not have a significant effect. The moderating variable, economic policy uncertainty, did not moderate the relationship between good corporate governance and profitability, while leverage was negatively moderated by economic policy uncertainty.

**Keyword:** Corporate investment, Economic policy uncertainty, Good corporate governance, Leverage, Profitability.

#### **INTRODUCTION**

Investment can take the form of financial assets or investments equivalent to them, or in the form of tangible assets that enable the realization of economic benefits or profits through specific productive business activities (Baresa et al., 2016). Real capital investment involves tangible assets and differs from financial investments, which focus on holding and realizing gains. Instead, investing in tangible assets aims to facilitate productive business operations. Assessing the scale and profitability of such investments is far more complex than evaluating the economic and financial efficiency of financial investments (Baresa et al., 2016). The recent focus on tangible asset investment is closely linked to Indonesia's commitment under the Paris Agreement on December 12, 2015, to reduce greenhouse gas (GHG) emissions by 29% through domestic efforts or by 41% with international assistance by 2030 (Humas EBTKE, 2022).

According to IQAir's air quality reports from 2018 to 2022, Indonesia experienced an improvement in air quality. In 2018, Indonesia ranked 11th among countries with the highest annual average pollution concentration, but by 2022, it had dropped to 26th place (IQAir, 2018, 2019, 2020, 2021, 2022). However, the 2023 IQAir report revealed a deterioration in air quality, with Indonesia rising to 14th place in terms of pollution concentration (IQAir, 2023). The energy sector plays a significant role in Indonesia's greenhouse gas (GHG) emissions, contributing up to 80% of total emissions (Kompas.com, 2024). Companies in the energy sector listed on the Indonesia Stock Exchange (IDX) also face high environmental, social, and governance (ESG) risks, with nine companies classified as having a severe risk level (ESG score above 40) as of November 2023. The three highest-risk companies are PT Bayan Resources Tbk (score 54.6), PT Bumi Resources Tbk (score 48.3), and PT Golden Eagle Energy Tbk (score 47.4) (Kompas.com, 2023).

These environmental concerns have increased pressure on energy companies to allocate higher capital expenditures to reduce pollution levels and develop new renewable energy (NRE) technologies in line with Indonesia's net-zero emissions (NZE) targets. The transition to environmentally friendly energy requires substantial financial investment. Indonesia's Minister of Finance, Sri Mulyani, emphasized that transitioning to NRE will significantly impact capital expenditure, requiring companies to retire certain assets and redirect investments toward renewable energy technology development (Candra, 2023).

Corporate investment decisions regarding capital expenditures (capex) involve multiple stakeholders, including owners (principals) and management (agents). This principal-agent relationship can lead to conflicts of interest, as managers may prioritize their own welfare over shareholders' returns (Jensen & Meckling, 1976). Research by Suman & Singh (2020) supports this agency theory, suggesting that investment decisions can be distorted by managerial conflicts, such as the "quiet life" approach—where managers under-invest to avoid risk—or "empire building," where they over-invest in pursuit of personal gain. Strategic financial decisions regarding value creation are based on financing, distribution, and investment policies, which serve as the key pillars for maximizing firm value (Vengesai & Kwenda, 2018).

Corporate governance plays a crucial role in mitigating opportunistic managerial behavior. It serves as a mechanism to monitor and control management performance, ensuring alignment with shareholder interests (Utami et al., 2020). Strong corporate governance has been found to enhance investment decisions and firm value (Chen et al. in Agyei-Mensah (2023)). However, Suman & Singh (2020) contradicts this view, stating that corporate governance attributes do not significantly influence investment decisions. Similarly, Agyei-Mensah (2023) found that board size, board independence, and the number of board meetings have no significant impact on corporate investment decisions, highlighting inconsistencies in the relationship between corporate governance and investment strategies.

Profitability is a key factor influencing corporate investment decisions, as it reflects a company's ability to generate earnings relative to sales, total assets, and equity (Wahyuni et al., 2020). Profitability is commonly used as a performance indicator to guide corporate investment decisions.

Leverage, defined as the ratio of debt to assets, also plays a role in investment decisions. It measures the extent to which a company's assets are financed through debt (Pandelaki et al., 2023). Higher leverage indicates greater financial risk but also the potential for higher returns (Hermuningsih et al., 2020). Studies on the relationship between leverage and investment present mixed results. Research by Vengesai & Kwenda (2018) and Tran Thi et al. (2023) found a negative correlation, suggesting that high leverage restricts corporate investment. Tran Thi et al. (2023) further identified that investment activities negatively correlate with leverage across three levels: one-year leverage, average company leverage, and industry-level leverage. However, Pandelaki et al. (2023) found no significant relationship between leverage and

investment decisions. In contrast, Hermuningsih et al. (2020) found a positive relationship, arguing that companies with high leverage rely on external financing for investments, meaning that increased debt levels drive higher investment activity.

Energy companies, which depend heavily on natural resources, are highly sensitive to economic policy changes, particularly during the transition to Net Zero Emissions (NZE). This transition exposes companies to Economic Policy Uncertainty (EPU), which reflects fluctuations in fiscal, political, regulatory, and monetary policies. Increased EPU can lead to delays in corporate financial and investment decisions (Al-Thaqeb et al., 2022) While numerous studies have explored the relationship between EPU and corporate investment Akron et al., 2020; Almustafa et al., 2023; Chen et al., 2019; Farooq et al., 2022; Kurniawan et al., 2023; Montes & Nogueira, 2022; Xie et al., 2021) the debate remains unresolved (Almustafa et al., 2023). Economic theories on investment under uncertainty suggest that entrepreneurs can identify and capitalize on investment opportunities in uncertain environments, generating profits through resource integration (Watkins & Knight, 1922). This suggests that uncertainty itself can serve as a source of economic opportunity.

This study examines corporate investment by utilizing corporate governance (GCG), leverage, and profitability as independent variables, with economic policy uncertainty (EPU) as a moderating variable. The research focuses on energy sector companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022.

# **Hypothesis Development**

Agency theory suggests that agents have their own interests when carrying out their duties. Good corporate governance (GCG) is one of the achievements that managers can pursue to enhance their credibility both internally and externally. According to Fama dan Jensen (1983) in Jafeel et al. (2024) businesses with stronger corporate governance mechanisms help reduce agency problems and lead to more efficient investment decisions.

Fransiskus et al. in Maulina et al., 2021, explains that weak corporate governance makes the relationship between corporate investment and cash flow availability more sensitive and riskier. Investment decisions are a crucial aspect of corporate strategy, as new investment projects fundamentally impact a company's economic performance and long-term sustainability (Agyei-Mensah, 2021). Empirical evidence supports the significant impact of corporate governance on corporate investment. Research by Jafeel et al. (2024) found that GCG significantly influences corporate investment. These findings align with those of Farooq et al. (2022), who demonstrated a positive relationship between GCG and corporate investment. Furthermore, studies by Bimo et al. (2022) and Tran (2019) reinforce these results, suggesting that strong corporate governance contributes to better investment decisions.

H1: Good Corporate Governance positively influences Corporate Investment

Jensen & Meckling (1976) emphasize the importance of debt financing as a mechanism to monitor management and prevent opportunistic behavior. Debt financing can reduce agency conflicts since management has an obligation to repay principal and interest, ensuring that excess cash flow is allocated efficiently rather than being misused (Hersugondo et al., 2020). Empirical research supports this theoretical perspective. Vengesai & Kwenda (2018) found that leverage negatively affects corporate investment. This finding aligns with studies by Danso et al. (2019), Lorenzia & Yanti (2020) and Tran Thi et al. (2023), which also indicate a negative relationship between leverage and corporate investment.

H2: Leverage negatively influences Corporate Investment

Agency theory suggests that principals can bind agents to contracts to reduce agency conflicts. Managers are incentivized to fulfill these agreements through their efforts to generate

profits (Indy et al., 2023). High profitability and cash flow indicate that a company has sufficient funds to cover its expenses and may finance its investments internally rather than relying on external funding Abdeljawad et al. (2024). Wahyuni et al. (2020) found that profitability positively influences corporate investment. These findings are reinforced by research from Agyei-Mensah (2023), Abdeljawad et al. (2024) and Syamsudin et al. (2020), which demonstrate a significant positive impact of profitability on corporate investment.

H3: Profitability positively influences Corporate Investment

Economic policy uncertainty (EPU), driven by changes in fiscal, political, monetary, and regulatory policies, can have broad consequences, including effects on a country's overall economic environment and corporate decision-making (Shams et al., 2022 dalam Kurniawan et al., 2023). Increased uncertainty in economic policies—such as during the transition toward Net Zero Emissions (NZE)—may discourage energy sector companies from making investment decisions. For instance, governments may introduce new regulations affecting the primary revenue streams of energy companies, such as restrictions on the number of wells private-sector energy firms can manage. Akron et al. (2020) found that EPU significantly and negatively affects corporate investment. These findings are corroborated by studies conducted by Almustafa et al. (2023), Chen et al. (2019), Farooq et al. (2022) and Kurniawan et al. (2023), all of which demonstrate a significant negative impact of EPU on corporate investment.

H4: Economic Policy Uncertainty negatively influences Corporate Investment

Economic policy uncertainty (EPU) can motivate companies to become more actively engaged in **Environmental, Social, and Governance (ESG)** initiatives, which, according to agency theory, can facilitate managerial agency behavior. In companies with weak internal governance, managers are more likely to engage in self-serving behaviors (Zhao, 2023). Firms appear to adjust their board size in response to the level of economic policy uncertainty they experience. Specifically, higher levels of EPU tend to result in smaller board sizes (Ongsakul et al., 2021). As economic uncertainty intensifies, agency conflicts become more pronounced, prompting firms to reinforce board governance by reducing board size (Ongsakul et al., 2021). Ongsakul et al. (2021) found that EPU negatively affects good corporate governance, suggesting that heightened uncertainty may weaken governance mechanisms and, in turn, influence corporate investment decisions.

**H5**: Economic Policy Uncertainty negatively moderates the relationship between Good Corporate Governance and Corporate Investment

Economic policy uncertainty (EPU) increases the level of information asymmetry between creditors and firms, which subsequently reduces debt financing availability (Almustafa et al., 2023). Higher levels of EPU force firms to adopt more conservative investment strategies, thus decreasing their need for debt financing (Tran 2019; Akron et al. 2020 dalam Almustafa et al., 2023). Almustafa et al. (2023) found that EPU negatively impacts leverage, suggesting that firms become more risk-averse and less reliant on debt financing under uncertain economic conditions. This reduced access to or utilization of debt financing could, in turn, limit corporate investment activities.

**H6**: Economic Policy Uncertainty negatively moderates Leverage and Corporate Investment

Profitability is a crucial factor in a firm's investment decisions (Arianpoor & Eslami Khargh, 2023). However, high levels of economic policy uncertainty (EPU) have severe adverse effects on firms (Dhole et al., 2021 dalam Arianpoor & Eslami Khargh, 2023), as business operations and environmental uncertainties influence each other. As a key aspect of environmental uncertainty, EPU inevitably impacts firm profitability (Guo et al., 2020 dalam

Arianpoor & Eslami Khargh, 2023). Additionally, economic policy uncertainty has been shown to negatively affect profitability (Çakır & Ova, 2024). When EPU rises, firms may face declining profitability due to increased risks, regulatory changes, and market volatility, leading to more cautious investment behavior. This suggests that the positive impact of profitability on corporate investment may weaken under high EPU conditions.

H7: Economic Policy Uncertainty negatively moderates profitability and Corporate Investment

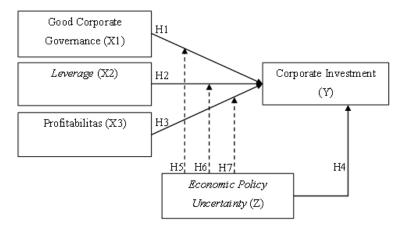


Figure 1. Theoretical Framework

#### **METHOD**

This study's population is based on energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2018-2022 period. The sample selection follows specific criteria, including companies that consistently published audited financial statements from 2018 to 2022, those listed on the IDX before 2018, and companies that provide complete annual financial reports with a fiscal year ending on December 31 for the period 2018-2022. Additionally, the selected companies must have complete data on the studied variables in their financial statements for the specified years.

1 abie	1. Detail	Observ	vations

No	Criteria	No. of Companies
1	Energy sector companies listed on the Indonesia Stock Exchange in 2018-2022	82
2	Energy sector companies listed on the Indonesia Stock Exchange after 2018	(25)
3	Energy sector companies that did not publish a complete Annual Report on the Indonesia Stock Exchange during 2018-2022	(6)
	Samples used	51
	Total Sample (5 years)	255

#### **Empirical Model**

This study uses a panel data regression model. The research model used is as follows:  $CI = \alpha - \beta_1 GCG + \beta_2 LEV + \beta_3 PRF + \beta_4 EPU + \beta_5 GCGEPU + \beta_6 LEVEPU + \beta_7 PRFEPU + \varepsilon$ 

#### Information:

CI = Variable *Corporate Investment* 

 $\alpha$  = Constanta (intercept)

 $\beta$ 1,  $\beta$ 2,  $\beta$ 3,  $\beta$ 4 = Regression coefficient of each independent variable

GCG = Variable GCG

LEV = Variable Leverage

PRF = Variable Profitability

EPU = Variable Economic Policy Uncertainty

GCGEPU = GCG Moderation with Economic Policy Uncertainty

LEVEPU = Leverage Moderation with Economic Policy Uncertainty

PRFEPU = Moderating Profitability with Economic Policy Uncertainty

 $\varepsilon = Error term$ 

## **Dependent Variable**

The dependent variable in this study is corporate investment. Corporate Investment in this study is measured by dividing capital expenditure (fixed assets) by the total assets of the previous year (*Lagged Total Asset*) (Almustafa et al. (2023); Akron et al. (2020).

# **Independent Variable**

In this study, the independent variables are GCG, leverage and profitability. GCG is measured using a four-dimensional factor score (Wahidahwati, 2012 (based on Klapper & Love, 2002 and Zulfiqar, 2009). Leverage is measured by the Debt to Asset Ratio (DAR), which is total debt divided by total assets (Hermuningsih et al., 2020). Profitability is measured by Return on Assets (ROA), which is net profit divided by total assets (Agyei-Mensah, 2023).

**Table 2. GCG Scoring Measurement** 

	Table 2. Geo Scotting Measurement										
	BOC (45	%)		AUD (20	9%)		MGT (20	)%)		SHRLD (1	5%)
a	COM_SIZE		a	AUD_SIZE		a	DIR_SIZE		a	INST_OWN	
	Range:	Score:		Range:	Score:		Range:	Score:		Range:	Score:
	0-3	2		0-3	2		0-3	2		0% - 20%	10
	4-5	4		4-5	4		4-5	4		21% - 40%	8
	6-8	6		6-8	6		6-8	6		41% - 60%	6
	9-11	8		9-11	8		9-11	8		61% - 80%	4
	>11	10		>11	10		>11	10		81 and above	2
b	COM_IND		b	AUD_IND		b	M_OWN				
	Range:	Score:		Range:	Score:		Range:	Score:			
	0% - 20%	2		0% - 20%	2		0% - 20%	2			
	21% - 40%	4		21% - 40%	4		21% - 40%	4			
	41% - 60%	6		41% - 60%	6		41% - 60%	6			
	61% - 80%	8		61% - 80%	8		61% - 80%	8			
	81 and above	10		81 and above	10		81 and above	10			
	%COMOW			FINEXPER							
<u>c</u>	N		c	T		c	FAMILY				
	Range:	Score:		Range:	Score:		Range:	Score:			
	0% - 20%	2		Ya	5		Ya	5			
	21% - 40%	4		Tidak	0		Tidak	0			
	41% - 60%	6									
	61% - 80%	8									
	81 and above	10									
d	BF										
	Range:	Score:									
	Ya	5									
	Tidak	0									

# **Moderating Variable**

Moderating variables are types of variables that can affect the relationship between dependent and independent variables. Its effects can strengthen, reduce, eliminate, or change the relationship between independent and dependent variables. The moderating variable in this study is economic policy uncertainty (EPU) which is measured using three-quarter weighted moving average data from the WUI Index which can be accessed through the website <a href="https://www.policyuncertainty.com/index.html">https://www.policyuncertainty.com/index.html</a> developed by Ahir et al. (2018) in one year budget.

No	Variable	Table 3. Operational Variable Indicator	Scale
1	Independent		
	a. Good Corporate Governance	Four Dimension Factor Score $GCG = BOC + AUD + MGT + SHRLD$ Description: $GCG = Good Corporate Governance Score$ $BOC = Board of Commissioner Score$ $MGT = Management Score$	Ratio
		AUD = Audit Committee Score SHRLD = Shareholder Score	
	b. <i>Leverage</i>	Debt to Asset Ratio $DAR = \frac{TD}{TA}$ Description:	Ratio
	<u> </u>	DAR = Debt to Asset Ratio TD = Total Debt TA = Total Asset	
	c. Profitability	Return on Asset Ratio $ROA = \frac{NP}{TA}$ Description: $ROA = Return \ on \ Asset$ $NP = Net \ Profit$ $TA = Total \ Asset$	Ratio
2	Moderating		
	a. Economic Policy Uncertainty	The three-quarter weighted moving average value of the WUI Index which can be accessed through the website <a href="https://www.policyuncertainty.com/index.html">https://www.policyuncertainty.com/index.html</a> developed by Ahir et al. (2018) in one budget year.	Ratio
3	Dependent		
	a. Corporate Investment	$CI = \frac{Capital\ Expenditure}{Lagged\ Total\ Asset}$ Corporate Investment in this study is measured by dividing capital expenditure by the total assets of the previous year (Lagged Total Asset) (Almustafa et al. (2023); Akron et al. (2020))	Kano

#### RESULTS AND DISCUSSION

Table 4 - presents the results of the descriptive analysis. Good corporate governance (GCG), measured in score units, has a minimum score of 29.09 and a maximum score of 52.03, with an average of 39.34 and a standard deviation of 5.87. Leverage (LEV), measured in percentage units, has a minimum value of 0.02% and a maximum value of 241.84%, with an average of 53.17% and a standard deviation of 32.74%. Profitability (PRF), also measured in percentage units, has a minimum value of -112.20% and a maximum value of 61.63%, with an average of 2.88% and a standard deviation of 16.63%. Economic policy uncertainty (EPU), measured in percentage scores, has a minimum score of 5.97% and a maximum score of 26.48%, with an average of 15.29% and a standard deviation of 8.97%. Corporate investment (CI), measured in percentage units, has a minimum value of 42.33% and a maximum value of 264%, with an average of 106% and a standard deviation of 25.97%.

**Table 4 Descriptive Statistics** 

Variable	N	Minimum	Maximum	Mean	Std. Dev
CI	255	0.423337	2.649513	1.060803	0.259769
GCG	255	29.08571	52.02857	39.33535	5.870582
LEV	255	0.001709	2.418443	0.531732	0.327380
PRF	255	-1.122196	0.616346	0.028862	0.166284
EPU	255	0.059712	0.264854	0.152999	0.089726

Source: Data processed, 2024

# **Regression Model Selection**

The Chow test determines whether the common effect model or the fixed effect model is more appropriate. Based on the results in Table 5, the Prob. Cross-section Chi-square value is greater than 0.05, indicating that the common effect model is preferable over the fixed effect model.

**Table 5 Chow Test** 

Model	Prob	Result	Notes
Cross-Section F	0.8698	H0 Accepted	Common Effect
Cross-Section Chi-	0.6675		Model
square			

Source: Data processed, 2024

The Hausman test compares the random effect model with the fixed effect model. As shown in Table 6, the test result indicates a value of less than 0.05, suggesting that the fixed effect model is superior to the random effect model.

**Table 6 Hausman Test** 

Model	Prob	Result	Notes
Cross-section random	1.0000	H0 Rejected	Fixed Effect
		_	Model

Source: Data processed, 2024

Since both the Chow and Hausman tests indicate the selection of the random effect model, an LM test is conducted to determine whether the common effect model or the random effect model is more suitable. According to the results in Table 7, the LM test yields a value

greater than 0.05, confirming that the common effect model is preferable to the random effect model.

**Table 7 Lagrange Multiplier Test** 

Model		Result	Notes
Breush-Pagan	0.0652	H0 Accepted	Common Effect
_		_	Model

Source: Data processed, 2024

#### **Classical Assumption Test**

The multicollinearity test aimed to determine whether there was a correlation among independent variables. The correlation coefficients between variables were all below 0.8, indicating no multicollinearity issues.

**Table 8 Multicollinearity Test** 

	GCG	LEV	PRF	EPU
GCG	1	0.046805	0.145028	-0.024161
LEV	-0.028724	1	-0.365598	-0.027503
PRF	0.220460	-0.365598	1	0.082122
EPU	0.046805	0.145028	-0.024161	1

Heteroskedasticity was tested using the Glejser test. The probability significance values for all independent variables were greater than 0.05, indicating no heteroskedasticity issues in the data.

**Table 9 Heteroscedasticity Test** 

	Table 7 Heteroscedasticity Test					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	0.216442	0.110923	1.951292	0.0522		
GCG	-0.004473	0.002784	-1.606903	0.1094		
LEV	0.092268	0.051190	1.802458	0.0727		
PRF	0.094302	0.106066	0.889085	0.3748		
EPU	-0.203066	0.621263	-0.326859	0.7441		
GCGEPU	0.009496	0.015538	0.611133	0.5417		
LEVEPU	-0.171469	0.294200	-0.582831	0.5605		
PRFEPU	0.171414	0.581779	0.294637	0.7685		

Source: Data processed, 2024

Based on the regression results from Table 10, the following equation was obtained: CI = 0.904543 - 9.776662\*GCG + 0.208483\*LEV + 0.774323\*PRF + 0.441166\*EPU + 0.009005\*GCGEPU - 1.149778\*LEVEPU - 0.369677\*PRFEPU

Based on the regression equation above, the constant value is 0.904543. The sign of the regression coefficients for the independent variables indicates the direction of their relationship with corporate investment. The regression coefficient for good corporate governance (GCG) is negative at -9.776662. The regression coefficient for leverage (LEV) is positive at 0.208483, while the coefficient for profitability (PRF) is also positive at 0.774323. Similarly, the regression coefficient for economic policy uncertainty (EPU) is positive at 0.441166. Regarding the moderating variables, the regression coefficient for the interaction between good corporate governance and economic policy uncertainty (GCGEPU) is positive at 0.009005. The regression coefficient for the interaction between leverage and economic policy uncertainty (LEVEPU) is negative at -1.149778, and the regression coefficient for the interaction between profitability and economic policy uncertainty (PRFEPU) is negative at -0.369677.

**Table 10 Panel Data Regression** 

	Table 10 I and Data Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.	
C	0.904543	0.197532	4.579230	0.0000	
GCG	-9.78E-05	0.004957	-0.019721	0.9843	
LEV	0.208483	0.091159	2.287014	0.0230	
PRF	0.774323	0.188884	4.099467	0.0001	
EPU	0.441166	1.106350	0.398758	0.6904	
GCGEPU	0.009005	0.027669	0.325442	0.7451	
LEVEPU	-1.149778	0.523914	-2.194594	0.0291	
PRFEPU	-0.369677	1.036037	-0.356818	0.7215	

Source: Data processed, 2024

The adjusted R-squared value was 0.200562 (20.05%), indicating that 20.05% of corporate investment variability was explained by GCG, leverage, profitability, and economic policy uncertainty, while the remaining 79.95% was explained by other factors.

Table 11 Results of the Determination Coefficient (R2)

F-statistic	10.10333
Prob(F-statistic)	0.000000

The F-statistic value was 10.10333, greater than the F-table value of 2.407751125, with a significance value of 0.00000 (<0.05). This result indicated that GCG, leverage, profitability, and EPU jointly influenced corporate investment.

**Table 12 F-test Results** 

R-squared	0.222594
Adjusted R-squared	0.200562

The t-test results for good corporate governance (GCG) indicate a t-value of 0.0197, which is smaller than the critical t-table value of 1.9694, with a significance value (p = .9843) greater than .05. Therefore, GCG does not significantly affect corporate investment (CI). For leverage (LEV), the t-value is 2.2870, which exceeds the t-table value of 1.9694, and the significance value (p = .0230) is less than .05, suggesting that leverage significantly influences corporate investment. Regarding profitability (PRF), the t-value is 4.0995, greater than 1.9694, with a significance value (p = .0001) below .05, indicating that profitability has a significant effect on corporate investment.

For economic policy uncertainty (EPU), the t-value is 0.3988, smaller than 1.9694, with a significance value (p = .6904) greater than .05, suggesting that EPU does not significantly affect corporate investment. The moderation effect of good corporate governance (GCGEPU) shows a t-value of 0.3254, smaller than 1.9694, with a significance value (p = .7451) greater than .05, indicating no significant moderating effect of GCG on corporate investment. The moderation effect of leverage (LEVEPU) yields a t-value of 2.1946, greater than 1.9694, and a significance value (p = .0291), suggesting that leverage significantly moderates the relationship with corporate investment. Finally, for the moderation effect of profitability (PRFEPU), the t-value is 0.3568, smaller than 1.9694, with a significance value (p = .7215), indicating no significant moderating effect of profitability on corporate investment.

**Table 13 t-Test Results** 

	- **** - * * - *** - ****					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
C	0.904543	0.197532	4.579230	0.0000		
GCG	-9.78E-05	0.004957	-0.019721	0.9843		
LEV	0.208483	0.091159	2.287014	0.0230		

PRF	0.774323	0.188884	4.099467	0.0001
EPU	0.441166	1.106350	0.398758	0.6904
GCGEPU	0.009005	0.027669	0.325442	0.7451
LEVEPU	-1.149778	0.523914	-2.194594	0.0291
PRFEPU	-0.369677	1.036037	-0.356818	0.7215

Source: Data processed, 2024

# **Good Corporate Governance does not influence Corporate Investment**

The regression results indicate that Good Corporate Governance (GCG) does not influence Corporate Investment. This finding aligns with previous studies by (Agyei-Mensah, 2023) and (Suman & Singh, 2020), which also found no significant relationship between GCG and Corporate Investment.

In this study, the GCG score measurement refers to the GCG Scoring Measurement developed by Wahidahwati (2012), which is based on Klapper & Love (2002) and Zulfiqar et al. (2009). This measurement includes various GCG elements such as the size of the board of commissioners, the percentage of independent commissioners, share ownership by commissioners, the use of Big Four auditors, the size of the audit committee, the percentage of independent audit committee members, the presence of financial experts, the size of the board of directors, share ownership by directors, the presence of family relationships, and the percentage of institutional ownership. As a result, the GCG score in this study comprehensively covers the corporate governance mechanisms. Due to the extensive and diverse mechanisms analyzed, the findings of this study contradict the agency theory proposed by (Fama and Jensen (1983) in Jafeel et al., 2024), which suggests that stronger governance mechanisms help mitigate agency problems and lead to more efficient investment decisions.

The insignificance of GCG's effect on Corporate Investment in this study suggests several possible explanations: (1) the relatively high level of institutional ownership and the concentration of shares among institutional investors may lead to financial information being prepared in favor of majority shareholders' interests; (2) a relatively large board of commissioners may not always benefit investors, as a larger board could complicate investment decision-making processes; and (3) the appointment of independent commissioners may be conducted merely to comply with regulations rather than to reinforce GCG principles.

# Leverage positively influences Corporate Investment

The regression results indicate that leverage has an influence on Corporate Investment. This finding is supported by studies conducted by Hermuningsih et al. (2020) and Lorenzia & Yanti (2020), which also found that leverage affects Corporate Investment. This suggests that the level of debt in energy sector companies influences their level of corporate investment.

These results indicate that companies require additional external funding to finance their investments. This finding aligns with agency theory proposed by Jensen & Meckling (1976), which states that debt financing can reduce agency conflicts since management has an obligation to repay the principal and interest on loans. With the Indonesian government pushing the energy sector toward Net Zero Emissions (NZE) by 2030, massive funding is required to support investments aligned with this goal. As stated by the Minister of Finance, Sri Mulyani, the transition to renewable energy (EBT) carries significant fiscal budget and investment demands (Candra, 2023). Leverage, as an external funding source, serves as a critical solution for companies undergoing the energy transition in Indonesia.

# Profitability positively influences Corporate Investment

The regression results indicate that profitability has a significant positive effect on Corporate Investment. This finding is supported by studies conducted by Agyei-Mensah

(2023), Abdeljawad et al. (2024) and Wahyuni et al. (2020), which also found a positive relationship between profitability and Corporate Investment.

The regression coefficient in this study also shows a positive relationship between profitability and corporate investment, indicating that higher profitability leads to a higher level of corporate investment. Agency theory explains that agents act in their own interests when performing their duties. The findings of this study support this notion, as managers, acting as agents, tend to increase corporate investment when profitability rises in order to achieve better future performance.

These results suggest that profitability is one of the key indicators used by companies when making investment decisions. High profitability indicates that a company is in a stable financial position and has a strong level of sustainability. Additionally, higher profitability enhances managerial confidence and fosters optimistic growth expectations, ultimately leading to increased investment.

# Economic Policy Uncertainty does not influence Corporate Investment

The regression results indicate that economic policy uncertainty (EPU) has an insignificant positive effect on Corporate Investment. This finding is a new discovery and is not supported by the previous studies referenced in this research, which found that EPU does not influence Corporate Investment.

According to agency theory, when there is uncertainty in economic policies or unexpected shocks, information asymmetry issues arise between borrowers and creditors. An increase in information asymmetry leads to higher agency costs. The findings of this study may be attributed to the fact that the energy sector is under additional pressure to reduce pollution levels, and Indonesia is currently undergoing a transition toward Net Zero Emissions (NZE). As a result, energy companies in Indonesia are required to make continuous investments to support this transition.

Another possible explanation is that the EPU index used in this study is derived from global data, with Indonesia being one of the countries included in the index. In theory, higher EPU should discourage companies from making investments due to the uncertainty of future economic conditions. However, in this study, the specific subject and time frame suggest that investments must continue in the long run despite the prevailing uncertainty.

The regression coefficient also shows a positive relationship between economic policy uncertainty and Corporate Investment, indicating that as economic policy uncertainty increases, Corporate Investment also rises. In this study, EPU represents Indonesia's transition toward NZE by 2030. However, due to the necessity of supporting this transition, companies continue to invest despite the potential uncertainties regarding future economic conditions.

# **Economic Policy Uncertainty does not moderate Good Corporate Governance on Corporate**

The regression results indicate that the moderating variable of Good Corporate Governance (GCG) has an insignificant positive effect on Corporate Investment. The regression coefficient of the GCG moderation variable shows a positive relationship between GCG moderation and Corporate Investment, suggesting that higher GCG moderation is associated with a higher level of Corporate Investment. However, due to the lack of statistical significance, this relationship is not meaningful.

The presence of Economic Policy Uncertainty (EPU) requires companies to be more cautious in making economic decisions, particularly investment decisions. The effectiveness of a company's investment decisions may be influenced by the quality of its corporate governance. However, the insignificance of GCG moderation on Corporate Investment may be

due to companies already having projected investment plans. The presence or absence of EPU does not hinder their investment activities.

Additionally, the partial regression results of GCG on Corporate Investment also show an insignificant effect. This may suggest that in an environment with high institutional ownership, managerial confidence in investment decisions remains unaffected by EPU. The presence of additional control from majority shareholders may pressure managers to continue generating returns, even in uncertain economic conditions, by making investment decisions aimed at securing future profitability.

# Economic Policy Uncertainty negatively moderates Leverage on Corporate Investment

The regression results indicate that the moderating variable of leverage has a significant negative effect on Corporate Investment. The regression coefficient shows a negative relationship between leverage moderation and Corporate Investment, suggesting that higher leverage moderation leads to lower Corporate Investment. This finding contrasts with the partial regression results, which showed a positive relationship between leverage and Corporate Investment. The negative effect of the moderating variable suggests that the impact of leverage on Corporate Investment in Indonesian energy companies is influenced by the level of Economic Policy Uncertainty (EPU).

This finding aligns with agency theory, which states that leverage can reduce agency conflicts by imposing obligations on management to repay debt principal and interest. However, excessive debt can lead to underinvestment problems (Surasmi et al., 2021). The results further emphasize that high leverage during uncertain periods can decrease managerial confidence in making investment decisions.

During periods of high EPU, investment costs increase due to greater information asymmetry. Higher EPU reduces the expected returns from investments as lower sales volumes lead to decreased capital reserves, ultimately resulting in fewer funds available for future investments (Farooq et al., 2022).

#### Economic Policy Uncertainty does not moderate Profitability on Corporate Investment

The regression results indicate that the moderating variable of profitability has an insignificant negative effect on Corporate Investment. The regression coefficient shows a negative relationship between profitability moderation and Corporate Investment, suggesting that higher profitability moderation leads to lower Corporate Investment. This finding contrasts with the partial regression results, which showed a positive relationship between profitability and Corporate Investment. The negative effect of the moderating variable suggests that the impact of profitability on Corporate Investment in Indonesian energy sector companies is influenced by the level of Economic Policy Uncertainty (EPU), although its effect on Corporate Investment is not significant.

The uncertainty caused by EPU regarding future economic conditions leads highly profitable companies to prefer retaining cash from their earnings rather than reinvesting it. A decline in managerial confidence due to future uncertainties makes companies more cautious in making investment decisions, ultimately resulting in a lower level of Corporate Investment.

The moderating variable, good corporate governance (GCG), is classified as a homologiser moderation because economic policy uncertainty (EPU) alone is insignificant, and its interaction with the explanatory variable (GCG  $\times$  EPU) also does not significantly affect corporate investment. Conversely, the moderating variable leverage (LEV) is categorized as a pure moderation since EPU alone is insignificant; however, when interacting with leverage (LEV  $\times$  EPU), it has a significant impact on corporate investment. Lastly, the moderating variable profitability (PRF) is also identified as a homologiser moderation, as EPU alone

remains insignificant, and its interaction with profitability (PRF × EPU) does not significantly influence corporate investment.

 Moderation
 Test Results
 Types of Moderation

 1
 B4 is not significant B5 is not significant
 Homologizer Moderation

 2
 B4 is not significant B6 is significant
 Pure Moderation

 3
 B4 is not significant B5 is not significant
 Homologizer Moderation

**Table 14 Results of Moderation Type Test** 

Source: Data processed, 2024.

#### **CONCLUSION**

The findings of this study indicate the influence of good corporate governance (GCG), leverage, and profitability on corporate investment, with economic policy uncertainty (EPU) as a moderating variable among energy sector firms listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. The results show that GCG does not have a significant positive effect on corporate investment, while leverage and profitability both have significant positive effects. Additionally, EPU does not have a significant negative effect on corporate investment. In terms of moderation effects, EPU does not moderate the relationship between GCG and corporate investment. However, EPU negatively moderates the relationship between leverage and corporate investment, indicating that higher levels of leverage in times of economic uncertainty may lead to lower corporate investment. Lastly, EPU does not moderate the relationship between profitability and corporate investment.

# Limitation and Suggestion

For future researchers, it is recommended that the measurement of good corporate governance (GCG) as an independent variable influencing corporate investment be focused on specific mechanisms, such as institutional ownership, board size, and the proportion of independent commissioners, rather than relying on an overall score as in this study. Additionally, future studies on leverage as an independent variable should consider alternative measures beyond the debt-to-asset ratio (DAR) to obtain more varied results. Similarly, profitability should be measured using alternatives to return on assets (ROA) to provide a broader perspective. Expanding the observation period beyond five years and increasing the sample size could enhance the generalizability of findings.

For entities experiencing economic policy uncertainty, as observed during the study period, it is advisable to carefully consider leverage and profitability levels to maximize the effective use of funds for investment. Companies should also strive to maintain strong corporate governance practices to facilitate sound investment decision-making during periods of economic uncertainty.

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