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The Effect of Financial Flexibility on Financial Performance: The Moderating Role of Investment Efficiency and Internal Control

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Abstract: The moderating roles of investment efficiency and internal control on the influence of financial flexibility on financial performance are examined among energy firms listed on the Indonesia Stock Exchange (IDX) during the 2020–2024 period. This research employs a quantitative approach, using secondary data collected from the financial statements and annual reports of 56 firms selected via purposive sampling. The sample comprises 253 observations, which are analyzed using SPSS Version 25. Financial flexibility exhibits a positive effect on corporate financial performance. Moreover, internal control reinforces the influence of financial flexibility on financial performance. Conversely, investment efficiency fails to significantly moderate the impact financial flexibility on financial performance.

Keywords: Financial Flexibility, Financial Performance, Internal Control, Investment Efficiency

1. INTRODUCTION

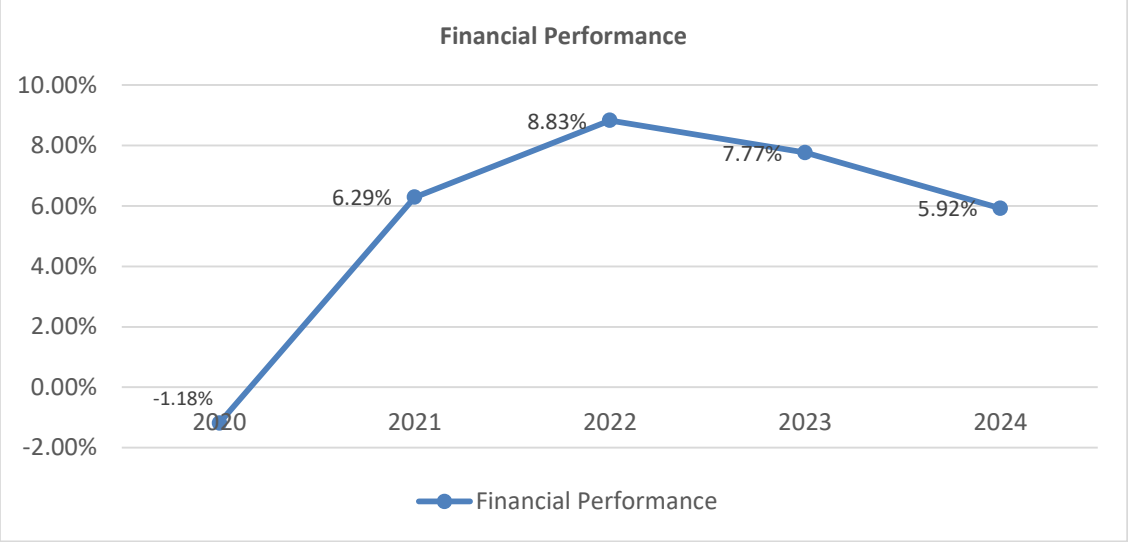
The global economy is currently characterized by rapid and dynamic changes that contribute to increasing complexity as well as uncertainty in the business environment. Economic uncertainty has continued to rise in the post-crisis period, indicating that crises have long-term implications for economic policy (Azqueta-Gavaldón et al., 2023). In recent years, the global economy has faced a range of substantial impediments, encompassing the COVID-19 pandemic, geopolitical frictions, and financial slowdowns in major economies. The COVID-19 pandemic disrupted industrial activities and international trade flows, while geopolitical conflicts, particularly the Ukraine crisis, constrained global energy supply. Furthermore, economic slowdowns in major countries, including China, the United States, and the European Union, which are driven by high inflation and rising interest rates, have weakened global trade. These conditions have adversely affected countries that depend heavily on these economies and have consequently intensified volatility in the global energy market.

Economic instability in Indonesia presents substantial challenges for companies in maintaining business sustainability amid global uncertainty, particularly for energy sector companies operating in a highly volatile business environment. Under such conditions, the development of effective strategies is required by firms to sustain and enhance their financial results (Sihaloho et al., 2024).

A firm's financial performance reflects how effectively its resources are governed and regulated. Therefore, the enhancement of financial performance is still regarded as one of the key objectives of firms. However, efforts to improve financial performance often encounter various obstacles that may adversely affect corporate performance. Furthermore, external uncertainty poses significant challenges for companies operating in the energy sector.

In Indonesia, the COVID-19 pandemic in 2020 led to a decline in coal demand, which adversely affected the financial performance of energy companies. For instance, PT Golden Eagle Energy Tbk recorded a loss of Rp23 billion, accompanied by a decline in sales from Rp250 billion to Rp209 billion. Similarly, PT Dana Brata Luhur Tbk experienced a loss of Rp2.5 billion due to a 47.9% decrease in operating revenue. In contrast, during the 2022 Ukraine crisis, rising energy commodity prices driven by market dynamics and post-pandemic economic recovery contributed to improved corporate performance. This condition was reflected in PT Bayan Resources Tbk, which recorded a 64% increase in revenue and an 81% increase in profit. However, in 2024, the weakening of major economies contributed to another decline in energy demand. Consequently, PT Indo Tambangraya Megah Tbk reported a 23% decline in profit, while PT IMC Pelita Logistik Tbk experienced a 20.69% decrease in revenue and a 65% decline in profit. The financial performance of energy sector companies is indicated to fluctuate as it responds to changes in global economic conditions.

Figure 1.1 Fluctuations in the Financial Performance of Energy Sector Companies During the 2020–2024 Period



Source: Figure created by author

These conditions indicate that external factors significantly influence companies operating in the energy sector. Companies that experience a continuous decline in performance may face the risk of bankruptcy if they are unable to improve their operational and financial conditions. Under such circumstances, meeting capital requirements to support operational activities may place pressure on cash flow and profitability. Therefore, companies are required to adapt to changing economic conditions in order to maintain their financial performance.

Financial flexibility denotes the capability of a firm to adapt and react to unexpected shifts in economic circumstances (Suciati et al., 2024). More specifically, it refers to the availability of funds for a company's operational activities and is associated with the optimization of funding sources (Yi, 2020). Furthermore, during a crisis, financial flexibility has been shown to mitigate negative shocks and cash flow shortages that may lead to financial difficulties (Ali & Siddiqui, 2020). Therefore, financial flexibility is extensively acknowledged as a critical determinant that can optimize a firm's financial performance. A multitude of empirical investigations have documented a positive and significant effect of financial flexibility on financial performance (Naz et al., 2024, Teng et al., 2021). On the contrary, alternative empirical evidence indicates that financial performance is not significantly affected by financial flexibility (Erin & Yuniarwati, 2025, Ramdhani et al., 2022).

A firm's investment decisions can be a key determinant of its success, which implies that investments must be managed optimally. Investment efficiency serves as an indicator that demonstrates a firm's capability to allocate investments effectively to its assets. It also contributes to firm growth by optimizing profit generation (Alshowaiman, 2025). In addition, it ensures that financial flexibility is allocated to investments that generate

optimal value added. Wu et al. (2023) present empirical findings suggesting that the impact of financial flexibility on firm performance is moderated by investment efficiency. Conversely, Raza et al. (2021) indicates that investment efficiency does not moderate this relationship.

In a company, internal controls are essential for improving the quality of corporate governance. Internal controls consist of a system of regulations and guidelines designed to safeguard a firm's assets against misappropriation, deliver dependable accounting records, and guarantee compliance with statutory obligations and administrative protocols (Efendi et al., 2018). Internal controls also minimize the misuse of financial flexibility by managers by monitoring opportunistic behavior, thereby enhancing corporate financial performance. Gu et al. (2020) provide evidence that internal control can strengthen financial flexibility's effect towards firm performance.

To address the empirical inconsistencies in prior literature and the ongoing difficulties confronting energy corporations listed on the Indonesia Stock Exchange (IDX), this study investigates how financial flexibility dictates financial performance, while concurrently incorporating investment efficiency and internal control as moderating variables. Empirical data demonstrating the relationship between financial flexibility and financial performance remains scarce in the Indonesian context, specifically when incorporating investment efficiency and internal control as moderating variables. In addition, this study extends prior research by focusing on a different industrial sector and observation period. This research is expected to enrich the existing literature on Indonesian companies while also delivering useful implications for investors, corporate decision-makers, and other relevant stakeholders in making sound economic decisions.

2. LITERATURE REVIEW

2.1 Agency theory

Agency theory defines a contractual relationship involving principals and agents that causes information asymmetry, where agents maintain superior information compared to principal (Jensen & Meckling, 1976). Information asymmetry has the potential to create agency problems that lead to moral hazard. This behavior involves the tendency of an agent to maximize personal benefits by compromising obligations to the principal (Khandelwal et al., 2023). In certain situations, the interests of the agent may not align with those of the principal. When agents make decisions that do not align with owners' interests, agency costs arise that must be borne by the principal. Agency costs are composed of monitoring costs, bonding costs, and residual losses. These costs arise as managerial incentives to misallocate cash flows lead to potential conflicts between principals and agents. As a result, managers assume an important role in resource allocation and corporate strategic decision-making.

2.2 Pecking order theory

The Pecking Order Theory (POT), first introduced by Donaldson (1961) and later developed by Myers (1984), explains how firms finance their operations through a hierarchical order of funding sources. Information asymmetry between managers and investors regarding internal firm conditions leads firms to follow a specific financing hierarchy (Myers, 1984). In this context, managers are responsible for selecting the appropriate sources of financing for the firm. When financing decisions align with the costs associated with information asymmetry, firms tend to prefer lower-cost funding sources. The financing hierarchy consists of internal financing, external financing through debt while maintaining an optimal level of debt capacity, and external financing through equity issuance (Abdullazade, 2020). Internal financing is preferred as it avoids costs such as interest expenses, issuance costs, and ownership dilution. Debt financing is the next option because it involves interest expenses that are tax-deductible and does not dilute ownership. Finally, equity financing is considered the last resort due to ownership dilution and higher expected returns required by investors.

2.3 Financial Performance

Financial performance reflects a firm's current progress and its potential for future growth (Le Thi Kim et al., 2021). It is essential for evaluating the efficiency of asset utilization and revenue generation (Suciati et al., 2024). Measuring financial performance is necessary to determine the extent to which a company achieves its expected results, as well as to support strategic planning and identify areas for improvement. Thus, financial

performance serves as a foundation for managerial decision-making regarding corporate sustainability. Strong financial performance enables a company to remain competitive in the business environment and avoid financial distress.

This study utilizes Return on Assets (ROA) to gauge financial performance. ROA indicates how efficiently a firm utilizes its asset base for earnings generation and mirrors its short-term financial performance.

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

2.4 Financial Flexibility

Ali & Siddiqui (2020) describe financial flexibility as the capacity of a firm to rapidly generate cash when unexpected financial needs arise. Al-Slehat (2019) states that sources of financial flexibility include cash holdings and liquidity, a low debt-to-equity ratio, and debt and equity payment policies designed to maintain the required level of liquidity. Accordingly, financial flexibility is viewed as a firm's ability to access low-cost funding sources (Wu et al., 2023). As a result, firms with higher levels of financial flexibility are more capable of mobilizing financial resources when confronted with uncertainty. In addition, such firms are better able to survive and recover from adverse conditions. Overall, higher financial flexibility is associated with a lower risk of financial failure.

$$Financial\ Flexibility = Cash\ Flexibility\ +\ Debt\ Flexibility$$

This study uses measures of financial flexibility as defined by Teng et al. (2021). Cash flexibility is measured by the ratio of cash and cash equivalents to total assets, whereas debt flexibility is calculated as one minus the corporate debt ratio.

2.5 Investment efficiency

Investment efficiency reflects a firm's effectiveness in allocating investment resources (Moradi et al., 2022). It aims to minimize unnecessary investment-related costs, thereby enhancing firm value and ensuring the achievement of corporate objectives. Investment efficiency is characterized by the absence of both overinvestment and underinvestment. Overinvestment refers to a condition in which a firm's investments exceed optimal levels, which may arise from managerial actions driven by personal interests. In contrast, underinvestment refers to a condition in which a firm's investments fall below optimal levels, often due to financing constraints or excessive managerial risk aversion. Firm performance can be adversely affected by both overinvestment and underinvestment.

$$Investment_{i,t} = \beta_0 + \beta_1 SalesGrowth_{i,t-1} + \varepsilon_{i,t}$$

In this study, investment efficiency is measured following Wu et al. (2023). $\mathrm{Investment}_{i,t}$ is measured by the increase in tangible and intangible assets scaled by total assets in the previous year. $\mathrm{SalesGrowth}_{i,t-1}$ represents the change in a firm's sales from period t−1 to t. Furthermore, investment efficiency is proxied by the negative absolute value of the residuals derived from the regression model ($-|\varepsilon_{i,t}|$).

2.6 Internal Control

The Committee of Sponsoring Organizations (COSO) defines internal control as a process executed by directors, management, and personnel to offer reasonable assurance of attaining organizational objectives. Carolina & Purwantini (2020) further explain that internal control serves to monitor organizational information, thereby guaranteeing the absence of material misstatements within financial reporting. Consequently, internal control aids in safeguarding corporate assets, enhancing accounting information dependability, optimizing resource utilization, and enforcing compliance with management policies. Internal control serves three main functions, preventive, detective, and corrective. It can also be classified into general controls and application controls, as well as financial internal controls and administrative internal controls.

Information on internal control systems is important for owners and stakeholders in assessing a firm's condition. Such information enables stakeholders to evaluate whether the firm operates effectively and in accordance with its objectives. Indonesian Financial Services Authority (OJK) circular Letter No. 16/SEOJK.04/2021 establishes requirements regarding the disclosure of internal control information that must be presented by listed issuers and public companies in their annual reports. In this study, internal control is measured through the Internal Control Disclosure (ICD) index from Deumes & Knechel (2008), subsequently modified to align with OJK Circular Letter No. 16/SEOJK.04/2021. This adaptation ensures alignment with

Indonesian regulatory requirements and the reporting practices of listed firms. Following the approach of Deumes & Knechel (2008), each disclosed internal control item receives a score of 1, while undisclosed items receive a score of 0. The aggregate internal control score is then obtained by summing all item scores.

$$IC = \frac{Score\ Obtained}{Total\ Disclosure\ Elements}$$

2.7 Hypothesis Development

2.7.1 The Effect of Financial Flexibility on Financial Performance

From the perspective of agency theory, financial flexibility enables firms to alleviate the financial pressure faced by managers, thereby reducing the likelihood of actions that may be detrimental to the firm due to conflicts of interest. Financial distress may induce managers to adopt defensive behaviors and make suboptimal financing decisions due to limited alternatives. In contrast, firms with higher financial flexibility are better able to reduce such incentives, as they possess sufficient internal resources to sustain operational activities.

According to pecking order theory, information asymmetry creates a hierarchy of funding sources: internal, debt, and equity. Companies with financial flexibility are able to maintain internal funding and debt capacity to meet company needs without having to seek costly external funding.

Erin & Yuniarwati (2025) suggest that firms with flexible capital structures exhibit lower financial risk and generate more stable profits. Financial flexibility also facilitates access to funding sources for operational activities, innovation, and expansion of production capacity when sales increase (Istan, 2024). This condition provides management with greater opportunities for firm growth, which ultimately enhances financial performance.

H_1: Financial Flexibility has a positive effect on Financial Performance

2.7.2 The Role of Investment Efficiency in Moderating the Influence of Financial Flexibility on Financial Performance

According to agency theory, although financial flexibility has positive implications, it can also create agency problems arising from managers' inefficient use of cash for investment purposes. Investment efficiency refers to managerial efforts to allocate the firm's cash resources to value-enhancing projects.

Based on Pecking Order Theory, greater financial flexibility leads firms to place greater reliance on internal financing as their primary funding source. Investment efficiency enables firms to utilize internal funds effectively and prevents their allocation to unproductive activities that may harm the firm.

According Ardianto & Sulaiman (2024), firms with financial flexibility generally hold higher levels of internal cash. When such cash is inefficiently allocated, it may hinder firm growth. Furthermore, financial flexibility encourages managers to maintain large cash reserves to avoid investment risks that could adversely affect their interests. Investment efficiency serves as a disciplinary mechanism for managers to prevent the misuse and waste of resources. Investment efficiency potentially intensifies the impact of financial flexibility on financial performance by directing resources into value-creating activities, thereby boosting profitability.

H_2: Investment Efficiency moderates the effect of Financial Flexibility on Financial Performance.

2.7.3 The Role of Internal Control in Moderating the Influence of Financial Flexibility on Financial Performance

Based on agency theory, internal controls ensure that managerial actions are properly monitored and transparently reported, thereby preventing managers from concealing information for personal benefit. Internal controls also support the optimal use of financial flexibility within the firm.

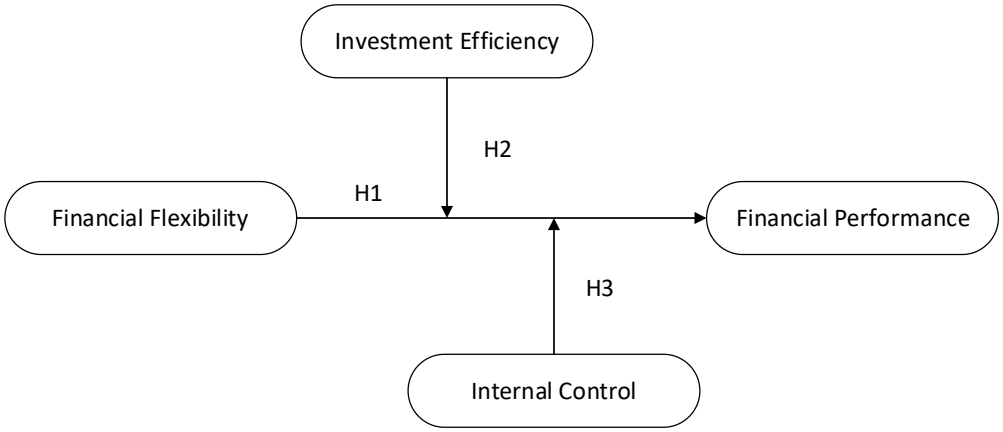
According Pecking Order Theory, a greater reliance on internal funding sources such as cash reserves and liquid assets is typically observed in financially flexible firms, which in turn lowers their need to access external financing. In addition, internal control enhances the efficiency of cash utilization within the firm.

Gu et al. (2020) suggest that strengthening internal control systems can effectively monitor managerial behavior and reduce irrational actions, such as the misuse of cash flows. Furthermore, Zhou et al. (2023) report that effective internal control enhances the efficiency of resource allocation and strengthens credit system functioning, while simultaneously lowering business risk. Firms with high financial flexibility typically exhibit lower leverage, which is associated with reduced external monitoring. Under these conditions, strong

internal control strengthens managerial oversight of resource management and utilization, thereby strengthening the effect of financial flexibility on firm financial performance.

H_3: Internal Control moderates the effect of Financial Flexibility on Financial Performance.

Figure 2.1 Conceptual Framework



Source: Figure created by author

3. RESEARCH METHODOLOGY

A quantitative research approach was applied in this study, with secondary data collected from the official website of the Indonesia Stock Exchange (IDX) and the respective companies' websites. The population consisted of energy sector firms listed on the IDX during the 2020–2024 period. A purposive sampling technique was employed to determine the sample, resulting in 56 companies and 280 observations. In this study, the sample was reduced by 27 observations, comprising 26 observations identified as outliers and 1 observation excluded following the application of the Durbin–Watson d autocorrelation correction method using a lag (1) transformation. Consequently, the final sample consisted of 253 observations used in the analysis.

Data analysis in this study is conducted using descriptive statistics and classical assumption tests. In addition, model fitness is evaluated through the coefficient of determination (R^2) and the F-test, while hypothesis testing is performed using the t-test. Furthermore, Moderated Regression Analysis (MRA) is utilized to assess how investment efficiency and internal control moderate the impact of financial flexibility on financial performance.

To analyze the effect of financial flexibility on financial performance with investment efficiency and internal control as moderating variables, the following two regression equations are specified:

$$FP = \beta_0 + \beta_1 FF + \varepsilon \quad (1)$$

$$FP = \beta_0 + \beta_1 FF + \beta_2 IE + \beta_3 PI + \beta_4 FF * IE + \beta_5 FF * IC + \varepsilon \quad (2)$$

β_0 = Constant

$\beta_1 - \beta_5$ = Regression Coefficient

FP = Financial Performance

FF = Financial Flexibility

IE = Investment Efficiency

IC = Internal Control

ε = Error

4. RESULTS AND DISCUSSIONS

4.1 Data analysis result

4.1.1 Descriptive statistical analysis

Table 4.1 Descriptive Statistics Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Financial Performance (FP)	280	-1,12220	0,61635	0,0550885	0,16411479
Financial Flexibility (FF)	280	-1,39080	7,43749	0,9229249	1,13268053
Investment Efficiency (IE)	280	-0,67953	-0,00011	-0,0681648	0,10550410
Internal Control (IC)	280	0,16667	1,00000	0,8142857	0,25795640
Valid N (listwise)	280				

Source: Table created by author

Table 4.1, the variables of financial performance, financial flexibility, and investment efficiency show a relatively high level of variation, indicating that the data tend to fluctuate and are less homogeneous. In contrast, the internal control variable exhibits a lower level of variation, resulting in more consistent data across firms.

4.1.2 Classical assumption tests

4.1.2.1 Normality test

Table 4.2 Normality Test Results

One-Sample Kolmogorov-Smirnov Test				
			Model (1)	Model (2)
N			253	253
Normal Parameters[a,b]	Mean		0,0000000	0,0000000
	Std. Deviation		0,04888268	0,0000000
Most Extreme Differences	Absolute		0,082	0.078
	Positive		0,077	0,070
	Negative		-0,082	-0,078
Test Statistic			0,082	0,078
Asymp. Sig. (2-tailed)			0,000[c]	0,001[c]
Monte Carlo Sig. (2-tailed)	Sig.		0,065[d]	0,086[d]
	99% Confidence Interval	Lower Bound	0,059	0,079
		Upper Bound	0,072	0,093

Source: Table created by author

The results of the normality test presented in Table 4.2 indicate that the significance levels of Models (1) and (2) are above 0,05, suggesting that the regression models are normally distributed.

4.1.2.2 Multicollinearity test

Table 4.3 Multicollinearity Test Results

Coefficients[a]			
		Collinearity Statistics	
	Model	Tolerance	VIF
(1)	Financial Flexibility (FF)	1,000 > 0,10	1,000 < 10
(2)	Financial Flexibility (FF)	0,720 > 0,10	1,388 < 10
	Investment Efficiency (IE)	0,830 > 0,10	1,205 < 10
	Internal Control (IC)	0,857 > 0,10	1,166 < 10
	FF*IE	0,669 > 0,10	1,495 < 10
	FF*IC	0,723 > 0,10	1,384 < 10

a. Dependent Variable: Financial Performance (FP)

Source: Table created by author

Table 4.3 reports the multicollinearity test results, indicating that Models (1) and (2) are free from multicollinearity problems, with tolerance values above 0,10 and VIF values below 10. In addition, to address the issue of multicollinearity in model (2), the mean-centering method was employed. According to Murniati et al. (2013), mean centering is performed by subtracting the respective means from the independent and moderating variables to address multicollinearity issues in regression analysis.

4.1.2.3 Heteroscedasticity Test

Table 4.4 Heteroscedasticity Test Results

Coefficients[a]		
	Model	Sig.
(1)	Financial Flexibility (FF)	0,204 > 0,05
(2)	Financial Flexibility (FF)	0,377 > 0,05
	Investment Efficiency (IE)	0,156 > 0,05
	Internal Control (IC)	0,259 > 0,05
	FF*IE	0,748 > 0,05
	FF*IC	0,139 > 0,05

Source: Table created by author

Based on Table 4.4, the test results show that the variables in Models (1) and (2) have significance values exceeding 0,05. Accordingly, no indication of heteroscedasticity is detected.

4.1.2.4 Autocorrelation test

Table 4.5 Autocorrelation Test Results

Model	Durbin-Watson	dU	4 - dU	dU < DW < 4 - dU
(1)	1,816	1,804	2,196	1,804 < 1,816 < 2,196
(2)	1,835	1,828	2,172	1,828 < 1,835 < 2,172

Source: Table created by author

In decision-making, the absence of autocorrelation is indicated when dU < DW < 4 − dU. The preliminary autocorrelation test results for models (1) and (2) indicate the presence of autocorrelation. The Durbin–Watson d test is employed in this study to identify potential autocorrelation problems and to ensure that such issues are properly addressed. According to Ghozali (2018), the first step of the Durbin–Watson d method involves transforming each research variable into its natural logarithmic form. Subsequently, the DW value obtained from the natural logarithmic transformation is used to estimate the value of ρ (rho). Thereafter, the

estimated value of ρ (rho) is used to perform a lag (1) transformation. Each transformed variable is then used to determine the DW value following the autocorrelation treatment.

Table 4.5 reports the autocorrelation test results for Models (1) and (2) following the Durbin–Watson test. The DW statistics indicate that no autocorrelation is detected in either model.

4.1.3 Model fit test

4.1.3.1 Coefficient of determination (R^2) test

Table 4.6 Determination Coefficient Test Results (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
(1)	0,268[a]	0,069	0,065	0,04897996
(2)	0,474[b]	0,225	0,209	0,04504095

a. Predictors (1): (Constant), Financial Flexibility (FF)

b. Predictors (2): (Constant), FF*IC, Investment Efficiency (IE), Internal Control (IC), Financial Flexibility (FF), FF*IE

c. Dependent Variable: Financial Performance (FP)

Source: Table created by author

Table 4.6 shows that the adjusted R-squared for Model (1) is 0,065, meaning that financial flexibility accounts for 6,5% of the variation in financial performance, while the remaining 93,5% is explained by other variables not included in this study. For Model (2), the adjusted R-squared increases to 20,9%, indicating higher explanatory power after adding the moderating variables, namely investment efficiency and internal control. The remaining 79,1% is explained by factors outside the model.

4.1.3.2 F-test

Table 4.7 F-Test Results

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
(1)	Regression	0,044	1	0,044	18,509	0,000[b]
	Residual	0,602	251	0,002		
	Total	0,647	252			
(2)	Regression	0,145	5	0,029	14,342	0,000[c]
	Residual	0,501	247	0,002		
	Total	0,647	252			

a. Dependent Variable: Financial Performance (FP)

b. Predictors (1): (Constant), Financial Flexibility (FF)

c. Predictors (2): (Constant), FF*IC, Investment Efficiency (IE), Internal Control (IC), Financial Flexibility (FF), FF*IE

Source: Table created by author

Table 4.7 presents the F-test outcomes for both Model (1) and Model (2). For Model (1), the F-statistic reaches 18,509, exceeding the 3,879 critical value, while its 0,000 significance level falls below 0,05, validating that financial flexibility significantly affects financial performance. Concurrently, Model (2) records an F-statistic of 14,342, surpassing the critical value of 2,250, with a 0,000 significance level, which demonstrates that financial flexibility, alongside the moderating variables of investment efficiency and internal control, simultaneously influences financial performance.

4.1.4 Hypothesis test

4.1.4.1 Parcial t-Test

Table 4.8 Results of Partial t-Test and Regression Analysis of Model (1)

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
(1)	(Constant)	0,244	0,003		79,371	0,000
	Financial Flexibility (FF)	0,064	0,015	0,262	4,302	0,000

a. Dependent Variable: Financial Performance (FP)

Source: Table created by author

The findings from Model (1), as shown in Table 4.8, indicate that financial flexibility significantly influences financial performance. Empirical evidence confirms a significance level of 0,000, which falls below 0,05, and a t-statistic of 4,302, exceeding the 1,969 critical value. The estimated constant of 0,244 suggests that financial performance would stand at 24,4% when financial flexibility is absent. In addition, the regression coefficient of 0,064 implies that a 1% rise in financial flexibility is associated with a 6,4% increase in financial performance, whereas a 1% decrease leads to a 6,4% decline. In conclusion, a positive relationship exists between financial flexibility and financial performance.

4.1.4.2 Regression Model Equation

Table 4.9 Results of Regression Analysis of Model (2)

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
(2)	(Constant)	0,243	0,003		83,845	0,000
	Financial Flexibility (FF)	0,067	0,016	0,275	4,172	0,000
	Investment Efficiency (IE)	0,002	0,035	0,003	0,049	0,961
	Internal Control (IC)	0,106	0,019	0,330	5,458	0,000
	FF*IE	0,413	0,357	0,079	1,158	0,248
	FF*IC	0,258	0,115	0,148	2,243	0,026

a. Dependent Variable: Financial Performance (FP)

Source: Table created by author

Table 4.9 presents the results of Model (2), which applies Moderated Regression Analysis MRA to examine whether investment efficiency and internal control moderate the relationship between financial flexibility and financial performance. The findings reveal that the interaction between financial flexibility and investment efficiency is not statistically significant, indicated by a t value of 1,158 which is lower than 1,969 and a significance level of 0,248 which is greater than 0,05, suggesting that investment efficiency does not function as a moderating variable. In contrast, the interaction between financial flexibility and internal control is statistically significant, shown by a t value of 2,243 which exceeds 1,969 and a significance value of 0,026 which is lower than 0,05, with a positive coefficient of 0,258 indicating that internal control strengthens the the positive influence of financial flexibility on financial performance.

4.2 Discussion

Table 4. 10 Results of Hypothesis Testing

Hypothesis	Testing	Result
H_1	Financial Flexibility has a positive effect on Financial Performance	Accepted
H_2	Investment Efficiency moderates the effect of Financial Flexibility on Financial Performance	Rejected
H_3	Internal Control moderates the effect of Financial Flexibility on Financial Performance	Accepted

Source: Table created by author

4.2.1 The Effect of Financial Flexibility on Financial Performance

The results indicate a positive and significant effect of financial flexibility on financial performance. Financial difficulties lead managers to focus more on protecting their reputation and position, which may result in financial statement manipulation, diversion of productive assets, reduction of strategic costs, and avoidance of risky projects, even those with positive value. The incentive to engage in such actions decreases when a company has financial flexibility to sustain its business operations. Management utilizes financial flexibility to support operational activities, innovation, and increased production capacity during periods of rising sales, which in turn enhances financial performance. Accordingly, financial flexibility allows firms to respond to unexpected needs, thereby supporting corporate sustainability. In conditions of uncertainty, financial flexibility acts as a buffer that helps reduce the adverse effects of unfavorable situations, thereby sustaining operational continuity and lowering the likelihood of business failure.

The results of this study are in line with those reported by Elgayar (2025), Hasyim (2023), Istan (2024), and Teng et al. (2021). Mahmood et al. (2018) further emphasize that higher financial flexibility strengthens a firm's financial position, thereby reducing the likelihood of financial distress. However, these findings contrast with those of Hasana (2024) and Erin (2025), which indicate that financial flexibility does not exert a statistically significant influence on financial performance.

4.2.2 The Role of Investment Efficiency in Moderating the Influence of Financial Flexibility on Financial Performance

Statistical results yield no evidence that investment efficiency moderates the impact of financial flexibility on financial performance. This is because, in this study, investment within investment efficiency is measured by increases in tangible and intangible assets. The economic benefits of these assets can only be realized when the company is able to manage and utilize them effectively in its operational activities. Consequently, the benefits of investment efficiency are not realized in the same period as the investment.

The findings of Grozdic et al. (2020) indicate that investments have an impact on long-term performance, and Winarno et al. (2021) report that investment benefits require a time lag before they are reflected in financial performance. Additionally, Bao (2024) and Fitri et al. (2024) report that investment efficiency does not influence financial performance within the same period. Raza et al. (2021) demonstrate that investment efficiency fails to exert a significant moderating effect on the association between financial flexibility and financial performance. Prior studies suggest that the effects of investment decisions generally require a time lag before being reflected in financial performance. Thus, even when firms possess financial flexibility and allocate investments more efficiently, investment efficiency does not necessarily strengthen the effect of financial flexibility on financial performance. However, Wu et al. (2023) document that investment efficiency plays a moderating role in shaping the relationship between financial flexibility and financial performance.

4.2.3 The Role of Internal Control in Moderating the Influence of Financial Flexibility on Financial Performance

The findings suggest that internal control plays a significant moderating role by reinforcing the positive impact of financial flexibility on financial performance. When managers exhibit high moral hazard, they may use company assets for personal gain. Weak internal control can threaten the security of company assets, lead to

wasteful use of resources, and result in unreliable financial reporting. Consequently, weak internal control reduces the benefits of financial flexibility, which in turn lowers the company's financial performance.

Strong and effective internal controls serve as a monitoring mechanism through policies and procedures that ensure managers remain aligned with the company's objectives. This reduces opportunities for managers to engage in wasteful spending, thereby enabling internal controls to support the optimal use of financial flexibility. Additionally, strong internal controls can protect company assets and wealth from the risk of misuse. Consequently, the positive impact of financial flexibility is maximized, thereby enhancing the company's financial performance.

The results of this study are consistent with those reported by Gu et al. (2020), which found that internal controls effectively monitor managers and reduce irrational behavior related to the misuse of cash flow, thereby maximizing financial flexibility to improve financial performance.

5. CONLUSION

Based on the analysis of energy sector companies during the 2020–2024 period, financial flexibility is found to positively influence financial performance by supporting firm stability and sustainability. Firms with greater financial flexibility generally exhibit stronger financial performance.

The moderating effect of investment efficiency is not supported, as its economic benefits require a longer time horizon to be reflected in improved financial performance, making it less effective in strengthening the relationship between financial flexibility and financial performance in the same period.

Meanwhile, internal control can act as a moderating variable in the relationship between financial flexibility and financial performance because it serves as a monitoring mechanism to minimize the misuse of firm resources and ensure that they are managed optimally.

This study provides empirical evidence regarding the effect of financial flexibility on financial performance. It also extends the literature by incorporating investment efficiency and internal control as moderating variables, offering a more comprehensive understanding of the factors that influence the performance of energy sector companies in Indonesia.

This study has limitations related to several sample firms reporting zero intangible assets. However, these firms are not excluded from the sample, as this condition reflects the investment characteristics of the firms and does not preclude the calculation of investment efficiency. Furthermore, the study covers a five-year period from 2020 to 2024, which implies that the results may differ under different economic environments.

This study may serve as a reference for energy company management in formulating financial policies, particularly in maintaining financial flexibility. In addition, the findings may provide investors with useful analytical insights in making investment decisions by taking firms' internal conditions into account.

In light of the study's findings and its limitations, several recommendations for future research can be put forward. Future studies are encouraged to extend the observation period and to include other industry sectors in order to provide comparative evidence on the effect of financial flexibility on financial performance.

6. REFERENCES

[1] Abdullazade, Z. (2020). Pecking Order Model of Corporate Financing: Review of Literature. SSRN Electronic Journal. https://doi.org/10.2139/SSRN.3506239.

[2] Ali, A., & Siddiqui, D. A. (2020). Exploring the Nexus between Financial Flexibility, Managerial Efficiency, Ownership, and Performance: An Interactive Model for Growth, Mature, and Stagnant Companies in Pakistan. SSRN Electronic Journal. https://doi.org/10.2139/SSRN.3681306.

[3] Alshowaiman, N. S. (2025). Does Leverage Matter? Investigating the Impact of Investment Efficiency On Firm Performance In Saudi Arabia. International Journal of Business & Management Studies, 06(05), 18–24. https://doi.org/10.56734/ijbms.v6n5a4.

[4] Al-Slehat, Z. A. F. (2019). The Impact of the Financial Flexibility on the Performance: An Empirical Study on a Sample of Jordanian Services Sector Firms in Period (2010-2017). International Journal of Business and Management, 14(16)(6), 1–1. https://doi.org/10.5539/ijbm.v14n6p1.

[5] Ardianto, A., & Sulaiman, N. A. (2024). Corporate Cash Holdings and Investment Efficiency: Do Women Directors and Financial Crisis Matter? Journal of Risk and Financial Management, 17(7). https://doi.org/10.3390/jrfm17070311.

[6] Azqueta-Gavaldón, A., Diakonova, M., Ghirelli, C., & Pérez, J. J. (2023). Sources of economic policy uncertainty in the euro area: a ready-to-use database. Banco de Espana Occasional Paper8, 2315. https://doi.org/10.53479/33155.

[7] Bao, Z., & Motlagh, B. P. (2024). How investment efficiency affects firms performance. In Accounting and Auditing with Application (Vol. 1, Number 1). https://doi.org/10.22105/aaa.v1i1.19.

[8] Bursa Efek Indonesia. (2026). Indonesia Stock Exchange. https://www.idx.id/en.

[9] Carolina, V., & Purwantini, anissa H. (2020, August). Pengaruh Pengendalian Internal, Struktur Kepemilikan, Sales Growth, Ketidakpastian Lingkungan, dan Koneksi Politik terhadap Tax Avoidance (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar di BEI Periode 2015-2019). Business and Economics Conference in Utilization of Modern Technology. https://journal.unimma.ac.id/index.php/conference/article/view/4151.

[10] Deumes, R., & Knechel, W. R. (2008). Economic incentives for voluntary reporting on internal risk management and control systems. Auditing, 27(1), 35–66. https://doi.org/10.2308/AUD.2008.27.1.35.

[11] Donaldson, G. (1961). Corporate debt capacity: a study of corporate debt policy and the determination of corporate debt capacity. Division of Research, Graduate School of Business Administration, Harvard University.

[12] Efendi, J., Asak, P. R. A., & Nurhayati, H. (2018). Pengaruh Sistem Pengendalian Internal, Audit Internal, dan Tata Kelola Perusahaan (GCG) Dalam Pencegahan Fraud Terhadap Kinerja Keuangan Pada Pt. Windu Jaya Utama. Jurnal Mitra Manajemen, 15(2), 47–58. https://doi.org/10.24034/J25485024.Y2011.V15.I1.196.

[13] Elgayar, A. H., & Libda, R. E. (2025). The Impact of Financial Flexibility on Financial Performance-The Mediating Role of Financing Mix: Evidence from listed Companies within Industrial and. Scientific Journal for Financial and Commercial Studies and Research, 6(1)(1), 178–131. https://journals.ekb.eg/article_400015.html.

[14] Erin, & Yuniarwati. (2025). Analysis of the Influence of Financial Flexibility, Financial Distress, and Tax Policies on the Performance of Companies on the Indonesia Stock Exchange. Eduvest-Journal of Universal Studies, 5(1), 163–170. https://doi.org/https://doi.org/10.59188/eduvest.v5i1.1762.

[15] Fitri, A. K., Marietza, F., & Fitri, K. A. (2024). The influence of Investment Efficiency on Financial Performance. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis, 12(1). https://doi.org/10.37676/ekombis.v12i1.

[16] Ghozali, I. (2018). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25 (9th ed.). Badan Penerbit Undip.

[17] Grozdic, V., Maric, B., Radišic, M., Šebestová, J., & Lis, M. (2020). Capital investments and manufacturing firms' performance: Panel-data analysis. Sustainability (Switzerland), 12(4). https://doi.org/10.3390/su12041689.

[18] Gu, Y., Series, F. Y.-J. Of P. C., & 2020, undefined. (2020). Internal control, financial flexibility and corporate performance–Based on empirical analysis of listed companies in information technology industry. Journal of Physics: Conference Series, 1607(1), 12118. https://doi.org/10.1088/1742-6596/1607/1/012118/META.

[19] Hanasa, N., & Lubis, A. W. (2024). Financial Flexibility and Health Sector Firm Performance in ASEAN-5 Countries: Moderate Role of Directors with MD Degree. In 7th Global Conference on Business, Management, and Entrepreneurship (GCBME 2022), 112–125. https://doi.org/10.2991/978-94-6463-234-7_12.

[20] Hasyim, D., & Budiarta, K. (2023). Competitive Advantage in Mediating The Effect of Financial Flexibility on Financial Performance: Indonesian Sharia Stock Index. Jurnal Aplikasi Bisnis Dan Manajemen (JABM), 9(3), 740–740. https://doi.org/10.17358/JABM.9.3.740.

[21] Istan, M. (2024). Analysis of the Influence of Assets Structure, Earning Volatility, and Financial Flexibility on Capital Structure and Corporate Performance in Manufacturing Sector Companies on the IDX. Economic Studies Journal, (1), 49–65. https://www.ceeol.com/search/article-detail?id=1214271.

[22] Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X.

[23] Khandelwal, V., Tripathi, P., Chotia, V., Srivastava, M., Sharma, P., & Kalyani, S. (2023). Examining the Impact of Agency Issues on Corporate Performance: A Bibliometric Analysis. Journal of Risk and Financial Management, 16(12). https://doi.org/10.3390/jrfm16120497.

[24] Le Thi Kim, N., Duvernay, D., & Le Thanh, H. (2021). Determinants of financial performance of listed firms manufacturing food products in Vietnam: regression analysis and Blinder–Oaxaca decomposition analysis. Journal of Economics and Development, 23(3), 267–283. https://doi.org/10.1108/JED-09-2020-0130.

[25] Mahmood, Y., Rizwan, M. F., & Rashid, A. (2018). Exploring the Relationship between Financial Distress, Financial Flexibility, and Firm Performance: Empirical Evidence from Pakistan Stock Exchange. NICE Research Journal, 1–16. https://doi.org/10.51239/NRJSS.V0I0.68.

[26] Moradi, M., Yazdifar, H., Eskandar, H., & Namazi, N. R. (2022). Institutional Ownership and Investment Efficiency: Evidence from Iran. Journal of Risk and Financial Management, 15(7). https://doi.org/10.3390/jrfm15070290.

[27] Murniati, M. P., Purnamasari, St. V., Ayu, S. D., Advensia, A., Sihombing, R., & Warastuti, Y. (2013). Alat-Alat Pengujian Hipotesis. Unika Soegijapranata Semarang.

[28] Myers, S. C. (1984). The Capital Structure Puzzle. The Journal of Finance, 39(3), 574–592. https://doi.org/10.1111/j.1540-6261.1984.tb03646.x.

[29] Naz, F., Saleem, Q., & Riaz, S. (2024). The Role of Financial Flexibility in the Financial Performance of the Automobile Sector: Asian Perspective. Ournal of Development and Social Sciences, 5(2), 774–792. https://www.ojs.jdss.org.pk/journal/article/view/1124.

[30] Otoritas Jasa Keuangan. (2021). Circular Letter of the Financial Services Authority No. 16/SEOJK.04/2021 regarding the form and content of the annual report of issuers or public companies. https://www.ojk.go.id/id/regulasi/Pages/Bentuk-dan-Isi-Laporan-Tahunan--Emiten-atau-Perusahaan-Publik.aspx.

[31] Ramdhani, D., Hasanah, D. N., Pujangga, A. M., & Ahdiat, D. (2022). Pengaruh Corporate Social Responsibility, Leverage, Inventory Intensity, dan Koneksi Politik Terhadap Agresivitas Pajak Pada Perusahaan Sektor Property dan Real Estate di Bursa Efek Indonesia. STATERA: Jurnal Akuntansi Dan Keuangan, 4(1). https://doi.org/10.33510/statera.2022.4.1.1-16.

[32] Raza, A., Hamid, K., Sajid, M., & Rasheed, A. (2021). Mediating and moderating role of investment efficiency and investment scale between financial flexibility and firm performance: evidence from non-financial. International Journal of Management (IJM), 12(4), 658–672. https://www.academia.edu/download/68348165/IJM_12_04_056.pdf.

[33] Sihaloho, H., Zein, S., Hasibuan, N., & Manodohon, M. A. (2024). Analisis Tantangan dan Peluang Perkembangan Globalisasi Ekonomi Dalam Hukum Bisnis di Indonesia. https://doi.org/https://doi.org/10.25078/vyavaharaduta.v19i1.3170.

[34] Suciati, R., Sumiati, Indrawati, N. K., & Andarwati. (2024). Literature Analysis of Financial Flexibility and Financial Performance: Bibliometric and Scientometric Analysis. Contemporary Economics, 18(2), 248–264. https://doi.org/10.5709/ce.1897-9254.536.

[35] Teng, X., Chang, B. G., & Wu, K. S. (2021). The Role of Financial Flexibility on Enterprise Sustainable Development during the COVID-19 Crisis-A Consideration of Tangible Assets. Sustainability (Switzerland), 13(3), 1–16. https://doi.org/10.3390/SU13031245.

[36] Winarno, W. A., Tjahjadi, B., & Irwanto, A. (2021). Time Lag Effects of IT Investment on Firm Performance: Evidence form Indonesia. Jurnal Ekonomi Malaysia, 55(3), 89–101. https://doi.org/10.17576/JEM-2021-5503-06.

[37] Wu, W., Alkaraan, F., & Le, C. (2023). The moderating effects of corporate governance and investment efficiency on the nexus between financial flexibility and firm performance. Journal of Financial Reporting and Accounting. https://doi.org/10.1108/JFRA-05-2023-0234.

[38] Yi, J. (2020). Financial flexibility, dynamic capabilities, and the performance of manufacturing enterprises. Journal of Research in Emerging Markets, 2(2), 19–33. https://doi.org/10.30585/jrems.v2i2.465.

[39] Zhou, J., Ong, S. T., Ashhari, Z. M., Shah, S. M., & Wen, Z. (2023). Moderating Role of Internal Control between the Gender Diversity and Board of Director for Financial Performance of State-owned Enterprises in China. International Journal of Academic Research in Business and Sosial Sciences, 13(8). https://doi.org/10.6007/IJARBSS/v13-i8/17542.

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