Architecture
Image Studies

Vol.7, Issue 1, pp.2506-2520, 2026
DOI: https://doi.org/10.62754/ais.v7i1.1267

https://journals.ap2.pt/index.php/ais/index

The Role of Financial Performance as A Mediator of the Effects of Financial Flexibility, Capital Structure, and Environmental Social Governance on Firm Value, Moderated by Investment Efficiency

(Study of Mining Companies Listed on the Indonesia Stock Exchange)

La Ode Safarudin[1], La Ode Anto[2], Sudirman Zaid[3], Salma Saleh[4]

Abstract

This study aims to examine and assess the influence of financial flexibility, capital structure, and environmental social governance on financial performance and firm value, as well as the influence of financial performance on firm value. Furthermore, this study examines the role of investment efficiency in moderating the influence of financial flexibility on financial performance, and examines the role of financial performance in mediating the influence of financial flexibility, capital structure, and environmental social governance on firm value. This study uses an ex post facto approach. The population comprised all mining companies listed on the Indonesia Stock Exchange. Purposive sampling was used, with a sample size of nine companies and 90 observations. The research model is structural. The analytical method used in this study is SEM-PLS (Partial Least Squares). The results of the study show that as follows: (1) financial flexibility has a positive and significant effect on financial performance, (2) capital structure has a negative but not significant effect on financial performance, (3) environmental social governance has a positive and significant effect on financial performance, (4) financial flexibility has a negative but not significant effect on company value, (5) capital structure has a negative and significant effect on company value, (6) environmental social governance has a positive but not significant effect on company value, (7) financial performance has a positive and significant effect on company value, (8) investment efficiency has a negative but not significant effect in moderating the effect of financial flexibility on financial performance, (9) financial performance has a positive and significant effect in mediating the effect of financial flexibility on company value, (10) financial performance has a negative but not significant effect in mediating the effect of capital structure on company value, and (10) financial performance has a positive and significant effect in mediating the effect of environmental social governance on company value.

Keywords: *Financial Flexibility, Capital Structure, Environmental Social Governance, Investment Efficiency, Financial Performance, Company Value, Indonesia Stock Exchange.*

Introduction

Companies are established with the primary objective of maximizing corporate value or shareholder welfare, as reflected in stock prices on the capital market (Sudana, 2009). High corporate value indicates market confidence in the company's current performance and future prospects. In the context of mining companies listed on the Indonesia Stock Exchange, corporate value is a crucial issue because this sector is capital-intensive, high-risk, and heavily influenced by fluctuations in global commodity prices. The 2020–2023 period demonstrated significant stock price volatility in mining companies, creating uncertainty about company value and highlighting the importance of fundamental-based analysis.

One fundamental factor thought to influence company value is financial flexibility. Financial flexibility reflects a company's ability to access funding sources and manage liquidity to address

[1] Student, Doctoral Program Management Science, University Halu Oleo, Indonesia., Email: Email: laodesafarudin661@gmail.com, (Corresponding Author)
[2] Lecturer, Doctoral Program Management Science, University Halu Oleo, Indonesia.
[3] Lecturer, Doctoral Program Management Science, University Halu Oleo, Indonesia
[4] Lecturer, Doctoral Program Management Science, University Halu Oleo, Indonesia

business uncertainty. In the mining industry, which is fraught with risks from commodity prices, regulations, and environmental issues, financial flexibility is crucial for maintaining operational stability and supporting investment opportunities. Several studies have shown that financial flexibility has a positive effect on financial performance and company value (Anjum et al., 2020; Arslan et al., 2014; Wu et al., 2023; Erdogan, 2020). However, there are also findings indicating a negative or insignificant effect, particularly when excessive cash holdings actually reduce efficiency and profitability (Le, 2016; Wang, 2002; Rahmaniar & Rizky, 2022). This inconsistency highlights the need to reexamine the role of financial flexibility in the context of the Indonesian mining industry.

In addition to financial flexibility, capital structure is also a crucial determinant. Capital structure reflects the combination of debt and equity used in corporate financing. For mining companies requiring significant investments for exploration and asset development, financing decisions have direct implications for risk, the cost of capital, and profitability. Several studies have shown that an optimal capital structure can improve financial performance and firm value (Aggarwal & Padhan, 2017; Khan et al., 2019; Hirdinis, 2019). However, other studies have found that high debt levels actually reduce firm performance and value due to increased bankruptcy risk and interest expenses (Ahmed & Afza, 2019; Vo & Ellis, 2016). These differing results indicate that the relationship between capital structure and financial performance and firm value is not always linear.

In the mining industry, which is closely linked to sustainability, environmental social governance (ESG) is also becoming an increasingly relevant variable. ESG practices reflect a company's commitment to managing environmental impacts, social responsibility, and good governance. ESG implementation is believed to enhance reputation, reduce non-financial risks, and strengthen investor confidence. Several studies have shown that ESG has a positive impact on financial performance and company value (Aboud & Diab, 2018; Ahmad et al., 2020; Chung & Bayne, 2023). However, several studies have found that ESG has no effect or even a negative impact on company performance and value, particularly in the short term due to increased implementation costs (Huang, 2019; Junius et al., 2020; Rohendi et al., 2024). This suggests that ESG effectiveness is highly dependent on the industry context and company strategy.

In this study, financial performance is positioned as a mediating variable that bridges the influence of financial flexibility, capital structure, and ESG on firm value. Financial performance reflects a company's ability to generate profits, manage assets, and create added value for shareholders. Many studies have shown that financial performance has a positive effect on firm value (Aisyah, 2022; Hasanudin et al., 2020; Farawansyah et al., 2024). However, there are also findings showing a negative or inconsistent effect depending on the proxy used (Jannah & Sartika, 2022; Bidhari & Aisjah, 2013). Thus, the mediating role of financial performance is crucial in explaining how these fundamental variables can increase or decrease firm value.

Furthermore, investment efficiency is considered a moderating variable that can strengthen or weaken the relationship between variables. Investment efficiency reflects a company's ability to allocate funds to projects that provide optimal added value. Investment inefficiency can lead to overinvestment or underinvestment, ultimately impacting company performance and value. Therefore, including investment efficiency as a moderating variable is expected to explain the contradictory results of previous studies.

Based on the theoretical and empirical review, a research gap exists, indicating that the relationship between financial flexibility, capital structure, ESG, financial performance, investment efficiency, and firm value still yields inconsistent findings. Therefore, this study aims to clarify the role of financial performance as a mediating variable in the influence of financial flexibility, capital structure, and ESG on firm value, moderated by investment efficiency, in mining companies listed on the Indonesia Stock Exchange. This research is expected to provide theoretical and practical contributions to understanding the determinants of firm value in the mining sector.

Literature Review

Firm Value

Company value is investors' perception of a company's success in managing its resources, as reflected in its stock price. Husnan (2014) states that company value is the price potential buyers are willing to pay for a sale. For publicly traded companies, company value is often linked to the stock price, particularly the closing price, which reflects the market's assessment of the company's performance and prospects (Fakhruddin & Hadianto, 2001). The higher the stock price, the higher the company's

value and shareholder wealth. Therefore, a company's primary goal is to maximize company value to improve shareholder welfare (Brigham & Gapenski, 1996; Septiyuliana, 2016). Jensen (2001) emphasizes that maximizing company value takes into account not only equity but also the overall financing structure, including debt and preferred stock. Company value is also influenced by investment opportunities and market expectations of future growth. Appropriate investment decisions send positive signals to the market, increasing stock prices and company value. Thus, the company's value not only reflects current performance, but also future prospects and cash flows which are assessed based on the present value concept (Gitosudarmo & Basri, 2000).

Financial Flexibility

Financial flexibility is a company's ability to respond effectively to future investment opportunities and to face cash flow shocks, such as financial crises or operational pressures (Byoun, 2007; Bancel & Mittoo, 2011). This flexibility arises from the need to anticipate uncertain financial constraints, with the goal of maintaining business continuity and creating long-term value (Pendar et al., 2019). Conceptually, financial flexibility reflects a company's capacity to access and restructure funding with low transaction costs (Gamba & Triantis, 2005), as well as maintain debt capacity to allow for expansion or avoid financial stress during adverse economic conditions (Graham & Harvey, 2001). Companies with high financial flexibility are generally able to survive periods of crisis and are better prepared to seize investment opportunities, while high debt levels can reduce this flexibility (Alipour et al., 2015). Therefore, financial flexibility is a crucial consideration in capital structure policies and investment decisions (Salehi & Moghadam, 2019; Ferrando et al., 2017). Financial flexibility can be viewed from both internal and external perspectives (Rostami & Rezaei, 2021). Internally, flexibility is often measured through cash holdings and debt capacity. Cash holdings are driven by transaction, precautionary, and speculative motives (Chang & Ma, 2019; Galpin, 2020). According to Hanafi (2016), companies hold cash to meet transaction needs, face uncertainty, and finance future needs. However, there is a trade-off between liquidity and productivity because cash is an asset with a low rate of return. Therefore, companies need to determine the optimal cash balance to remain liquid without sacrificing efficiency.

Capital Structure

Chou and Lee (2010) argue that capital structure is a mix of debt and equity funding sources, including a company's retained earnings. Furthermore, Pratheepkparth (2011) argues that capital structure is the proportion of debt financing and equity. Anake et al. (2014) argue that capital structure is the ratio of long-term debt and equity used to fund a company's activities. Capital structure is crucial in determining a company's financial performance and value. In general, the development of capital structure theory reflects an evolution from highly idealized assumptions toward more realistic and strategic perspectives. Initially, the theory proposed by Franco Modigliani and Merton Miller (1958) argued that capital structure is irrelevant to firm value under perfect market conditions—namely, in the absence of taxes, transaction costs, bankruptcy costs, and information asymmetry. Under these assumptions, a firm’s value is determined solely by its earning power and business risk, not by the proportion of debt and equity it uses. Investors can replicate leverage on their own through arbitrage, making financing decisions neutral with respect to firm value.

However, when corporate taxes were incorporated into the model (1963), the conclusion changed significantly. With the presence of taxes, interest payments on debt become tax-deductible, creating a tax shield benefit. As a result, the use of debt increases firm value. In this framework, capital structure becomes highly relevant, since greater leverage leads to greater tax savings and, theoretically, continuously increasing firm value. Nevertheless, this implication is considered unrealistic because, in practice, firms cannot rely entirely on debt financing without facing substantial financial risk.

To address this limitation, the trade-off theory was developed. This theory balances the tax advantages of debt against the costs associated with higher leverage, such as bankruptcy costs and agency costs. According to the trade-off theory, an optimal capital structure exists where the marginal benefit of the tax shield equals the marginal cost of financial distress and agency conflicts. At this point, firm value is maximized. Thus, capital structure is viewed as the result of a trade-off between benefits and costs rather than an unlimited advantage of debt.

Subsequently, the pecking order theory and information asymmetry theory further expanded the understanding of financing decisions. These theories emphasize that capital structure choices are not solely driven by static cost-benefit considerations but are also influenced by asymmetric information between managers and investors. Firms tend to follow a financing hierarchy: first using internal funds,

then debt, and issuing equity as a last resort. Equity issuance is often interpreted by the market as a negative signal, potentially indicating that the firm's shares are overvalued. Therefore, capital structure decisions in this perspective reflect managerial responses to information gaps and market perceptions rather than attempts to achieve a specific optimal leverage ratio.

Enviromental Sosial Government

Environmental, Social, and Governance (ESG) theory developed in response to the need to assess corporate performance not only from a financial perspective but also from a social and environmental perspective. The initial debate stemmed from Milton Friedman's (1970) perspective, which asserted that a company's primary responsibility is to maximize shareholder profits. This perspective was further developed through R. Edward Freeman's (1984) stakeholder theory, which emphasized the importance of considering the interests of all stakeholders. Subsequently, John Elkington (1994) introduced the Triple Bottom Line concept, which evaluates corporate performance based on three dimensions: economic, social, and environmental. Research by Ioannou and Serafeim (2014) subsequently demonstrated that companies committed to sustainability tend to have better long-term performance. Conceptually, ESG is a non-financial framework used to measure, disclose, and account for a company's impact on stakeholders. ESG also serves as a strategic tool that helps companies adapt to changes in the business environment and opens up opportunities for sustainable investment. In the past two decades, sustainability reporting disclosures have increased significantly globally, reflecting growing investor attention to sustainability factors beyond financial performance. Proper ESG implementation enables companies to manage long-term risks, improve the accuracy of strategic analysis, and strengthen competitiveness. From an agency theory perspective, ESG also plays a role in mitigating conflicts between owners and managers.

Investment Efficiency

Investment theory has evolved through the contributions of various leading thinkers in economics and finance. Harry Markowitz (1952), through modern portfolio theory, emphasized the importance of diversification to maximize returns at a given level of risk. Furthermore, William Sharpe (1964) developed the Capital Asset Pricing Model (CAPM), which explains the relationship between systematic risk and expected return. Eugene Fama (1960), through the Efficient Market Hypothesis (EMH), stated that asset prices reflect all available information, making it difficult to achieve consistent abnormal returns. Meanwhile, John Maynard Keynes (1936) emphasized the role of psychological factors and uncertainty in investment decisions, and Michael Jensen (1964), through agency theory, explained that managerial incentives can influence investment and portfolio performance. Conceptually, investment is the current commitment of funds with the aim of achieving future profits (Tandelilin, 2010). Investment decisions relate to selecting the most profitable investment alternative from among various available options (Sudana, 2011), and involve the allocation and reallocation of resources within a company's projects or assets (David, 2007). These decisions are long-term (capital budgeting decisions) and have strategic consequences for the company's value. Investment decisions can be divided into short-term investments (current assets such as cash, marketable securities, receivables, and inventory) and long-term investments (fixed assets such as land, buildings, machinery, and equipment). Furthermore, investments can be in the form of real assets or financial assets. Financial assets are liquid, easily traded, and their value is sensitive to economic conditions.

Financial Performance

Financial performance is a measure that describes a company's ability to use its assets to generate revenue and reflects the company's financial health over a specific period (Kenton, 2019, cited in Cyril et al., 2020). Financial performance is viewed as an indicator of a company's success and achievements, as well as a signal to investors and stakeholders regarding the company's future prospects. Improved financial performance contributes to the creation of company value and supports management's primary objective, namely maximizing company value (Ivashkovskaya & Stepanova, 2011). According to Kaplan (2009), financial performance can be improved through growth strategies and increased productivity, both through process and product innovation and through efficient asset utilization and working capital management. Financial performance is generally measured by a company's ability to generate profits, which indicates its capacity to meet obligations and create long-term value (Matiin et al., 2018). Brigham and Houston (2007) emphasize that financial performance evaluation is conducted through financial statement analysis, benchmarking with similar companies, and analyzing trends over time. Financial performance is closely linked to other strategic aspects such as management, operations, and stakeholder expectations. Therefore, good financial performance is

an important factor in maintaining the company's sustainability and increasing its attractiveness as an investment instrument.

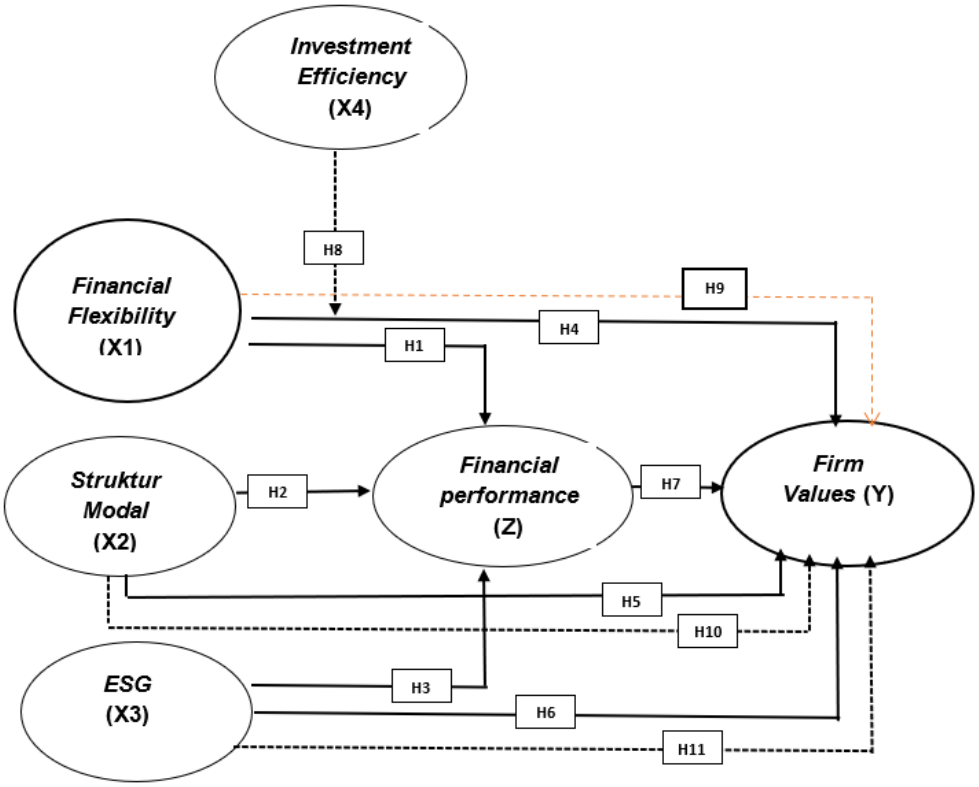

Figure 1 Conceptual Framework

Research Hypothesis

H1: Financial Flexibility has a positive and significant influence on Financial Performance

H2: Capital structure has a negative and significant effect on Financial Performance

H3: ESG has a positive and significant impact on Financial Performance

H4: Financial Flexibility has a positive and significant influence on Company Value

H5: Capital Structure has a negative and significant impact on Company Value

H6: ESG has a positive and significant impact on Company Value

H7: Financial Performance has a positive and significant influence on Company Value

H8: Investment efficiency has a significant effect in moderating the influence of financial flexibility on financial performance.

H9: The Role of Financial Performance in Mediating the Effect of Financial Flexibility on Firm Value

H10: Financial Performance plays a role in mediating the influence of Financial Flexibility on Financial Performance

H11: Financial Performance plays a mediating role in the relationship between Capital Structure and Firm Value

H12: Financial Performance Mediates the Relationship between ESG and Firm Value

Research Methods

This research was conducted at the Indonesia Stock Exchange. This type of research is ex post facto. The population in this study was all mining companies listed on the Indonesia Stock Exchange. The sampling technique used purposive sampling, with a sample size of 9 companies and 90

observations. The research model is structural. Meanwhile, the analytical method used in this study is SEM-PLS (Partial Least Squares).

Research Result

Discriminant Validity

Discriminant validity testing in research uses cross-loading and square root of average (AVE) values to examine (test) whether the research instrument is valid in explaining or reflecting latent variables. Discriminant validity testing can be described in more detail as follows

Convergent validity demonstrates the ability of a reflective construct to adequately accumulate the variance of its indicators. Testing is performed using the Average Variance Extracted (AVE), which reflects the proportion of indicator variance successfully explained by the latent construct. A reflective construct is declared to meet convergent validity if the AVE ≥ 0.50, indicating that the construct explains at least 50% of the indicator variance (Hair et al., 2019).

Table 1 Convergent Validity of Reflective Construct (NP) Based on AVE

Konstruk	AVE	Kriteria	Keterangan
Financial Flexibility	0,931		Valid
Capital Structure	0,785		Valid
Investment Efficiency	0,751		Valid
Financial Performance	0,875		Valid
Company Value	0,936	AVE ≥ 0,50	Valid

Source: PLS data processing results, 2025

Discriminant validity is measured using cross-loading values. If the cross-loading value of each indicator of a latent variable is good, and if it is greater than the cross-loading of other variables, then the indicator is considered valid. The results of the PLS program's cross-loading calculations in this study are presented in the following table.

Table 2 Discriminant Validity based on Cross-Loading

Indicator	Financial Flexibility	Capital Structure	Investment Efficiency	Financial performance	Firm Values
CH	0,971	-0,326	-0,135	0,170	0,138
NETDEBT	0,958	-0,231	-0,060	0,127	0,129
DER	-0,223	0,756	-0,199	-0,043	-0,005
LTDTA	-0,293	0,999	-0,352	-0,383	-0,412
FCFTA	-0,075	-0,388	0,951	0,530	0,361
CFCI	-0,131	-0,152	0,772	0,257	0,124
ROA	0,182	-0,410	0,495	0,953	0,551
ROE	0,098	-0,264	0,419	0,917	0,395
PBV	0,082	-0,324	0,276	0,476	0,963
TBQ	0,179	-0,433	0,334	0,520	0,972

Source: PLS data processing results, 2025

The computational results in Table 2 present the results of the cross loading calculations, showing that overall the cross loading values of the governance variable indicators, managerial behavior, and community empowerment performance are above the cross loading values of other latent variables so that the research instrument is said to be discriminantly valid.

Composite Validity

Reliability testing aims to ensure that the indicators in the reflective construct have adequate internal consistency, ensuring reliable and stable measurement of the construct. In general, a value of ≥ 0.70 indicates adequate reliability for empirical research, while excessively high values (e.g., > 0.95) may indicate indicator redundancy (Hair et al., 2019).

Table 3 Reliability Test Results

Research Variables	Cronbach's alpha	Construct Reliability	Criteria	Results
Financial Flexibility	0,926	0.964	≥ 0,70	Reliable
Capital Structure	0,844	0,878		Reliable
Investment Efficiency	0,701	0,856		Reliable
Financial Performance	0,859	0,993		Reliable
Firm Value	0,932	0.967		Reliable

Based on the table, all reliability measures for the NP construct are above the minimum limit, so the FV construct is declared reliable and suitable for use in the structural model evaluation stage and subsequent hypothesis testing.

Direct Effect Hypothesis Testing

The direct effect hypothesis testing on the structural model was conducted to assess whether the exogenous constructs (Financial Flexibility, Capital Structure, Environmental Social Governance) and the mediating construct (Financial Performance) have a significant direct effect on the endogenous construct (Firm Value) and the mediator (Investment Efficiency). The testing was conducted using a bootstrapping procedure, allowing the significance of each path coefficient (β) to be evaluated using the t-statistic and p-value. The decision criterion used was a p-value <0.05 (α = 5%), indicating a significant direct effect; conversely, a p-value ≥0.05 indicates an insignificant direct effect (Hair et al., 2019).

Table 4 Direct Effect Test

Hypothesis	Relationship Between Variables	Path Coef	t-statistic	p-value	Results
H1	FF -> FP	0,193	2,179	0,029	Significant
H2	CS -> FP	-0,142	1,630	0,103	Not Significant
H3	ESG -> FP	0,298	4,326	0,000	Significant
H4	FF -> FV	0,007	0,058	0,954	Not Significant
H5	CS -> FV	-0,237	2,948	0,003	Significant
H6	ESG -> FV	0,023	0,249	0,803	Not Significant
H7	FP -> FV	0,420	3,777	0,000	Significant

Source: PLS data processing results, 2025

Testing the Hypothesis of Mediation Effect

Methodologically, the indirect effect test was conducted using a bootstrapping procedure within the PLS-SEM framework, which resulted in estimates of the indirect path coefficient (β), t-statistic, and p-value. The decision-making criterion refers to a p-value <0.05 (α = 5%), which indicates that the mediation effect is statistically significant. Conversely, if the p-value ≥ 0.05, the indirect effect is declared insignificant. The complete results of the indirect effect hypothesis test are presented in Table 5, which are then described in detail as follows:

Table 5 Results of Indirect Effect Hypothesis Testing (Bootstrapping)

Hypothesis	Relationship Between Variables	Path Coef	t-statistic	p-value	Results	Hypothesis
H8	FF -> FP -> FV	0,082	2,021	0,005	Full Mediation	Significant
H9	CS -> FP -> FV	-0,060	1,551	0,121	No Mediation	Not Significant

H10	ESG ->FP -> FV	0,119	2,820	0,005	Full Mediation	Significant

Source: PLS data processing results, 2025

Hypothesis Testing of Moderation Effect

Methodologically, the moderation hypothesis testing was conducted using a bootstrapping procedure within the PLS-SEM framework, by forming an interaction term between investment efficiency and the related independent variables. The significance of the moderating effect was evaluated based on the interaction path coefficient (β), t-statistic, and p-value, with a p-value <0.05 (α = 5%) as the basis for drawing conclusions.

Table 6 Results of Hypothesis Testing of Moderation Effect (Bootstrapping)

Hypothesis	Relationship Between Variables	Path Coef	t-statistic	p-value	Results
H11	IE x FF -> FP	-0,054	0,067	0,121	Not Significant

Source: Processed primary data, 2025

Based on Table 6, the results of testing the effect of financial flexibility on financial performance moderated by investment efficiency show an estimated interaction path coefficient value of -0.054 with a negative direction. The negative interaction coefficient indicates that investment efficiency tends to weaken the effect of financial flexibility on company value. However, the results of the significance test show a t-value of 0.067 with a p-value of 0.121 > α = 0.05), so the moderating effect is not significant.

Structural Model Quality Evaluation

The coefficient of determination (R^2) is a statistical measure that indicates how much of the variation in an endogenous construct can be explained by the exogenous constructs influencing it in the structural model. In the context of SEM-PLS, R^2 is used to assess the explanatory power of the model with respect to the main endogenous variables. R^2 values range from 0 to 1, with values closer to 1 indicating a stronger model's ability to explain the variance in the endogenous construct.

Table 7 Coefficient of Determination (R2) of Endogenous ConstructsDiscussion

Endogenous Construct	**R2**	**Interprestasi**
Financial performance	0,395	Weak
Firm Values	0,315	Moderate

Source: Processed primary data, 2025

Based on the coefficient of determination (R2), Q2 can be determined using the following calculation:

$Q2 = 1 – (1 – R1) (1 – R2)$

$= 1 – \{(1 – 0.395) (1 – 0.315)\}$

$= 0.828$

Discussion

Financial Flexibility on Financial Performance

Financial flexibility in this study is measured through cash holdings and net debt, which reflect a company's ability to maintain liquidity and funding capacity. Conceptually, financial flexibility allows companies to maintain operational and investment flexibility, particularly in the mining industry, which is capital-intensive, cyclical, and highly influenced by commodity price volatility. The test results indicate that financial flexibility has a positive and significant effect on financial performance, with a path coefficient of 0.193, a t-statistic of 2.179, and a p-value of 0.029 (<0.05). This means that the higher the financial flexibility, the better the company's financial performance. Descriptively, the average cash holding of 19.18% indicates that companies maintain liquidity reserves as a buffer to meet operational needs such as fuel costs, heavy equipment maintenance, royalty payments, and working capital, thus maintaining production stability during cash flow pressures. Meanwhile, the average net debt of 57%

indicates that companies continue to utilize debt responsibly to support productive spending such as mining infrastructure development and increasing production capacity. As long as the additional debt generates operating cash flow greater than interest expense, profitability will increase, reflected in improvements in ROA and/or ROE. This finding aligns with the Trade-Off Theory (Myers, 1984), which emphasizes that companies achieve optimal flexibility when the benefits of stability and reduced risk of financial distress outweigh the costs of holding cash and debt. The results of this study are also consistent with various empirical studies such as Anjum et al. (2020), Arslan et al. (2014), Mahmood et al. (2018), Slehat (2019), Thu & Doan (2020), Wibawa & Nareswari (2019), Wu et al. (2023), Yun et al. (2020), Kim et al. (2023), Ahmed & Tahir (2024), Vellage et al. (2023), Yu Chang & Ai Ma (2017), and Ozcan (2024), which found that financial flexibility has a positive and significant effect on corporate financial performance.

Capital Structure on Financial Performance

Capital structure reflects the composition of a company's funding from debt and equity. The results show that capital structure has a negative but insignificant effect on financial performance, with a path coefficient of -0.142, a t-statistic of 1.630, and a p-value of 0.103 (>0.05). The negative trend indicates that an increase in the proportion of debt tends to be followed by a decline in financial performance, but this effect is not statistically strong. Descriptively, the average Debt to Equity Ratio (DER) of 55% (maximum 165%) indicates that some companies have high leverage. In the mining industry, high leverage increases interest expenses and principal repayment obligations, which can depress profits, especially when commodity prices weaken or operating costs increase. Furthermore, the average Long-Term Debt to Total Assets (LTDEA) ratio of 14% (maximum 50%) indicates a reliance on long-term debt for capital expenditure financing. However, the investment benefits from such financing often lag, while interest and depreciation expenses emerge first, potentially depressing short-term profitability. Theoretically, this finding can be explained through the Trade-Off Theory (Kraus & Litzenberger, 1973; Scott, 1976; Myers, 1984), which states that debt provides a tax shield, but if it exceeds the optimal level, it will increase the risk of financial distress and funding costs, thereby reducing performance. These results are in line with research by Budianto (2016), Widiyanti & Elfina (2015), Sari (2018), Suitri (2022), Ahmed et al. (2024), and Syofyan & Fitra (2025), which found that capital structure negatively affects a company's financial performance.

Environmental Social Governance on Financial Performance

The results of the study indicate that ESG has a positive and significant effect on financial performance, with a path coefficient of 0.298, a t-statistic of 4.236, and a p-value of 0.000 (<0.05). This means that the better a company's ESG performance, the higher its financial performance. Empirically, this finding is supported by descriptive data: environmental aspects (an average of 78%) contribute to maintaining smooth production and reducing the risk of operational disruptions; social aspects (an average of 86%) help minimize labor and community conflicts, thus maintaining operational stability; and governance aspects (an average of 88%) strengthen compliance, cost control, and risk management. In the high-risk and tightly regulated mining industry, good ESG practices can maintain efficiency, reduce the potential for sanctions and production interruptions, and support profit stability. Theoretically, these results can be explained through Legitimacy Theory (Suchman, 1995), which emphasizes the importance of obtaining and maintaining a "social license to operate" so that companies can operate sustainably without social or regulatory disruption. Furthermore, Stakeholder Theory (Freeman, 1984) explains that good stakeholder relationship management will increase support and trust, thus positively impacting profitability and asset efficiency. This finding is also in line with various empirical studies such as Ahmad et al. (2020), Albitar et al. (2019), Alareeni & Hamdan (2020), Bahadori et al. (2021), Boulhaga et al. (2022), Fu & Li (2023), Giannopoulos et al. (2023), and Cetin et al. (2024), which concluded that ESG has a positive and significant effect on corporate financial performance.

Financial Flexibility Towards Firm Value

Financial flexibility is understood as a company's ability to maintain liquidity and funding capacity through cash holdings and net debt. The results indicate that financial flexibility has a positive but insignificant effect on firm value, with a path coefficient of 0.007, a t-statistic of 0.058, and a p-value of 0.954 (>0.05). This means that although the relationship is unidirectional (the greater the flexibility, the higher the firm's value), statistically, this effect has not been proven significant. Descriptively, the average cash holding of 19.18% (maximum 65.38%, minimum 5%) and the average net debt of 57% (maximum 82%, minimum -65%) indicate a wide variation in financial strategies between companies. This indicates that financial flexibility reflects a precautionary (buffer) policy rather than a direct signal

of increased valuation. Operationally, in the capital-intensive and cyclical mining industry, investors tend to value profitability, cash flow stability, and operational efficiency more than cash levels or net debt positions alone. High cash holdings can be perceived as idle cash that has not yet generated profits, while high net debt can raise concerns about interest expense risks. This finding can be explained by Signaling Theory (Spence, 1973), which states that the market only responds to information perceived as a strong signal regarding profit prospects and risks. Because financial flexibility has an ambiguous meaning for investors, it does not automatically increase firm value. These results align with research by Khoiroh (2020), Rahmaniar & Rizky (2022), Widiasmara (2022), Anta (2023), Hayat et al. (2024), Lestari (2024), Dinarjito (2025), Anugrah & Widyawati (2025), and Oktavian (2025), which found that financial flexibility has a positive but insignificant effect on firm value.

Capital Structure on Firm Value

Capital structure reflects the funding mix between debt and equity. The results indicate that capital structure has a negative and significant effect on firm value, with a path coefficient of -0.237, a t-statistic of 2.948, and a p-value of 0.003 (<0.05). This means that the higher the proportion of debt in the capital structure, the lower the firm's value. Empirically, the average Debt to Equity Ratio (DER) of 55% (maximum 165%) indicates that some companies are highly leveraged. In the capital-intensive and cyclical mining industry, increased debt increases interest expenses and the risk of cash flow pressure, so investors tend to respond by lowering company valuations.Furthermore, the Long-Term Debt to Total Assets (LTDTA) ratio averages 14% (maximum 50%) indicating the use of long-term debt to finance capital expenditures such as pit opening, hauling infrastructure, and heavy equipment procurement. However, the benefits of these investments often take time to increase profits, while interest and depreciation expenses appear first, causing the market to perceive higher risk and lower firm value. This finding aligns with the Trade-Off Theory (Kraus & Litzenberger, 1973; Scott, 1976; Myers, 1984), which states that although debt provides a tax shield, excessive debt use increases the risk of financial distress and lowers firm value. These results are consistent with research by Bui et al. (2023), Chowdhury & Suman (2010), Jiraporn & Liu, and Vo & Ellis (2016), which found that capital structure has a negative and significant effect on firm value.

Environmental Social Governance on Firm Value

The results of the study indicate that ESG has a positive but insignificant effect on firm value, with a path coefficient of 0.023, a t-statistic of 0.249, and a p-value of 0.803 (>0.05). This means that although improvements in ESG tend to be followed by increases in firm value, the effect is not statistically strong enough. This suggests that the market has not yet significantly translated improved ESG performance as a primary factor in determining company valuation. Theoretically, this finding can be explained through Signaling Theory (Spence, 1973), where ESG is viewed as a signal of management quality and risk management. However, in the mining industry, which is heavily influenced by profitability, production prospects, and commodity price cycles, ESG is often perceived as a mandatory compliance standard, rather than a key differentiator between companies. Furthermore, the benefits of ESG tend to be long-term and operate more through risk reduction mechanisms and operational stability, so its impact on firm value is not always immediately reflected in stock prices during the study period. These results align with studies by Prasetyo (2025), Sedyasana & Wijaya (2024), Zulianto (2025), Suharto (2024), Sufina (2024), Fauziah et al. (2024), Nelson & Jeninfer (2025), Djasuli et al. (2025), Junius et al. (2020), and Rohendi et al. (2024), which found that ESG has a positive but insignificant effect on firm value.

Financial Performance on Firm Value

Firm value as reflected in stock prices and indicators such as PBV or Tobin's Q, is strongly influenced by investor perceptions of future earnings and cash flow prospects. The study's results indicate that financial performance has a positive and significant effect on company value, with a path coefficient of 0.420 and a p-value of 0.000 (<0.05). This means that the better the financial performance, the higher the company's value. In mining companies, financial performance is a key indicator because the industry is capital-intensive and highly affected by commodity price cycles. Therefore, profitability and operational efficiency are key considerations for investors in assessing a company's risk and prospects. Empirically, an average ROA of 0.14 indicates a company's ability to generate profits from substantial assets, while an average ROE of around 21% reflects the ability to provide good returns to shareholders. This reinforces the market's positive response to companies that effectively manage assets and capital. These findings align with Signaling Theory (Spence, 1973), which explains that financial performance signals management quality and business prospects to investors. In addition, the

results of this study are consistent with various previous studies which state that financial performance has a positive and significant effect on company value, so it can be concluded that in the mining industry, financial performance is the main factor in forming market valuations.

Financial Flexibility on Financial Performance Moderates Investment Efficiency

Financial flexibility is understood as a company's ability to maintain funding flexibility through cash availability and access to funding sources, thereby enabling it to sustain operations and respond to business opportunities. The results show a negative interaction coefficient of -0.054, indicating that investment efficiency tends to weaken this relationship. However, the t-value of 0.067 and p-value of 0.121 (>0.05) indicate that this moderating effect is insignificant, thus, investment efficiency has not been empirically proven to moderate the influence of financial flexibility on financial performance. Empirically, the average CFCI of 456% indicates that operating cash flow is able to cover investment expenditures more than four times, indicating a surplus of internal funding. Furthermore, the average free cash flow of 9% indicates the availability of free cash after operational needs are met. However, this additional flexibility tends to function as a liquidity buffer and is not immediately converted into productive investments that increase profits. This finding aligns with the Trade-Off Theory (Myers, 1984), which emphasizes that the benefits of having cash reserves must be balanced against the opportunity costs. Thus, financial flexibility does not automatically improve performance without truly efficient investment allocation, and this result is consistent with previous research that suggests that investment efficiency does not moderate the relationship.

Financial Flexibility to Firm Value Through Corporate Performance

Financial flexibility reflects a company's ability to provide cash as a buffer and maintain funding capacity to maintain flexibility in the face of pressures and capitalize on opportunities. However, investors do not assess flexibility solely based on cash levels or debt capacity, but rather on whether such flexibility actually improves performance, such as profitability and cash flow stability. The results of the study show a positive path coefficient of 0.081, a calculated t-value of 2.021, and a p-value of 0.005 (<0.05), thus proving that financial flexibility has a positive and significant effect on firm value through financial performance. This means that financial flexibility indirectly increases firm value by first improving profitability (ROA/ROE). This finding aligns with the characteristics of the sample, which had an average ROA of 14% and ROE of 21%, reflecting the ability of mining companies to effectively utilize capital-intensive assets and shareholder equity. Theoretically, these results are consistent with Signaling Theory (Spence, 1973), where financial performance becomes a signal that is more easily observed by investors to assess whether financial flexibility is truly managed productively and is able to generate sustainable profits, thereby ultimately increasing the company's value.

Capital Structure on Company Value Through Financial Performance

Capital structure reflects the composition of debt and equity, where the use of debt can expand business capacity but also incurs interest expenses and financial risks. Therefore, its impact on firm value depends heavily on how these financing decisions are reflected in the company's profitability. The results of the study indicate an indirect path coefficient of -0.060 with a negative direction, indicating that increasing capital structure tends to depress financial performance and ultimately reduce firm value. However, the calculated t-value of 1.551 and p-value of 0.121 (>0.05) indicate that this effect is insignificant. This means that financial performance is not proven to mediate the relationship between capital structure and firm value. Empirically, the average DER of 55% (maximum 165%) indicates that some mining companies have quite high leverage. In a capital-intensive and cyclical industry, interest expenses and fixed liabilities can depress profits when cash flow weakens due to commodity price fluctuations or operational disruptions. Although debt has the potential to increase capacity and efficiency, if it exceeds the optimal level, distress costs become more dominant, reducing profitability. This finding is consistent with the Trade-Off Theory which emphasizes the balance between the benefits of tax shields and the costs of financial distress, and is in line with various empirical studies which conclude that financial performance does not mediate the effect of capital structure on firm value.

Environmental Social Governance on Firm Value Through Financial Performance

ESG reflects a company's quality in managing environmental, social, and governance aspects. In practice, the market does not necessarily increase valuations solely due to the existence of an ESG program, but rather considers whether ESG implementation can improve a company's profitability, efficiency, and earnings stability. The results of the study indicate a positive path coefficient of 0.125, supported by a t-value of 2.820 and a p-value of 0.005 (<0.05). This means that ESG has a positive

and significant effect on company value through financial performance. This finding indicates that ESG increases company value indirectly by first improving financial performance. Theoretically, these results align with Stakeholder Theory, which emphasizes the importance of managing stakeholder relationships to enhance company sustainability and performance. Good ESG practices can reduce risk, increase operational efficiency, and strengthen stakeholder trust, thereby improving profitability. Furthermore, Signaling Theory explains that improved financial performance serves as a credible signal to investors regarding the quality of management and the company's prospects, which is then responded to through increased market valuation. This finding is also consistent with various previous studies which concluded that financial performance mediates the relationship between ESG and firm value.

Conclusion

Based on the results of the analysis and discussion conducted in order to answer the formulation of the problem or research questions, it is concluded as follows: First, financial flexibility has a positive and significant impact on improving a company's financial performance. This finding indicates that a company's ability to maintain funding flexibility, both through cash management and access to financing sources, is a crucial factor in supporting increased profitability. Financial flexibility provides room to adapt to industry dynamics, particularly in the cyclical and capital-intensive mining sector. Second, capital structure has a negative but insignificant impact on financial performance. Variations in the proportion of debt- and equity-based funding cannot directly explain changes in a company's profitability. In the mining industry, debt is primarily allocated to financing long-term assets and expanding production capacity, which have a relatively long maturity period, so the impact on profits is indirect. Third, Environmental, Social, and Governance (ESG) has a positive and significant impact on financial performance. Companies that consistently manage environmental, social responsibility, and governance aspects tend to have better operational efficiency, more manageable risks, and a stronger reputation. These conditions ultimately support stability and improved financial performance. Fourth, financial flexibility does not significantly impact company value. Even though a company has adequate funding, the market does not necessarily reward this by increasing its valuation. Investors tend to assess the effectiveness of these funds in generating sustainable performance, rather than solely on the size of liquidity reserves. Fifth, Capital structure has a significant negative effect on company value. A higher level of reliance on debt is perceived as increasing financial risk, especially in industries vulnerable to commodity price fluctuations. This perceived risk leads to a decline in market confidence and impacts company value. Sixth, Environmental, Social, and Governance (ESG) does not significantly influence company value. Sustainability practices have not been a primary determinant in market valuation formation during the study period. Investors tend to consider actual financial performance indicators and profit prospects more than ESG scores separately. Seventh, Financial performance has a significant positive effect on company value. A company's ability to generate profits and manage assets efficiently is a fundamental signal that is positively responded to by the market. Stable and sustainable profitability increases investor confidence and strengthens company valuation. Eighth, Investment efficiency neither strengthens nor weakens the relationship between financial flexibility and financial performance. The level of investment allocation accuracy does not significantly alter the effect of financial flexibility on profitability. Therefore, financial flexibility continues to play a role in improving performance regardless of variations in investment efficiency. Ninth, financial performance acts as a full mediator in the relationship between financial flexibility and firm value. Funding flexibility does not directly increase firm value; rather, it is through increased profitability and operational efficiency that the market responds positively in the form of increased valuations. Tenth, financial performance does not mediate the relationship between capital structure and firm value. Changes in funding composition do not operate through increased profits to influence market valuations, so the effect of capital structure on firm value is direct and does not occur through financial performance. Eleventh, financial performance acts as a full mediator in the relationship between Environmental, Social, and Governance (ESG) practices and firm value. ESG practices do not automatically increase market value, but when their implementation improves efficiency, reduces risk, and increases profitability, their impact on firm value becomes significant through financial performance.

It is recommended to use alternative analytical methods, such as dynamic panel regression or nonlinear models, to examine the possibility of nonlinear relationships, particularly for capital structure variables that exhibit a negative impact on firm value. Further research could specifically compare crisis and non-crisis periods to determine whether the relationships between variables change under unstable economic conditions.

References

[1] Affes, W., & Jarboui, A. (2023). The impact of corporate governance on financial performance: a cross-sector study. International Journal of Disclosure and Governance, 20(4), 374–394. https://doi.org/10.1057/s41310-023-00182-8

[2] Al-ahdal, W. M., Alsamhi, M. H., Tabash, M. I., & Farhan, N. H. S. (2020). The impact of corporate governance on financial performance of Indian and GCC listed firms: An empirical investigation. Research in International Business and Finance, 51(September 2018), 101083. https://doi.org/10.1016/j.ribaf.2019.101083

[3] Al-Hiyari, A., Ismail, A. I., Kolsi, M. C., & Kehinde, O. H. (2023). Environmental, social and governance performance (ESG) and firm investment efficiency in emerging markets: the interaction effect of board cultural diversity. Corporate Governance (Bingley), 23(3), 650–673. https://doi.org/10.1108/CG-03-2022-0133

[4] Aslan-çetin, F., Öztürk, S., & Akarsu, O. N. (2024). The Effect of ESG Data of Companies on Financial Performance: A Panel Data Analysis on The BIST Sustainability Index. Sosyoekonomi, 32(61), 125–146. https://doi.org/10.17233/sosyoekonomi.2024.03.07

[5] Attia, E. F., Ezz Eldeen, H. hany, & Daher, S. said. (2023). Size-Threshold Effect in the Capital Structure–Firm Performance Nexus in the MENA Region: A Dynamic Panel Threshold Regression Model. Risks, 11(2). https://doi.org/10.3390/risks11020023

[6] Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. Borsa Istanbul Review, 22, S119–S127. https://doi.org/10.1016/j.bir.2022.11.006

[7] Bai, X., Han, J., Ma, Y., & Zhang, W. (2022). ESG performance, institutional investors' preference and financing constraints: Empirical evidence from China. Borsa Istanbul Review, 22, S157–S168. https://doi.org/10.1016/j.bir.2022.11.013

[8] Ben Fatma, H., & Chouaibi, J. (2023). The mediating role of corporate social responsibility in good corporate governance and firm value relationship: evidence from European financial institutions. Meditari Accountancy Research. https://doi.org/10.1108/MEDAR-08-2022-1762

[9] Bilyay-Erdogan, S. (2020). Does financial flexibility enhance firm value? A comparative study between developed and emerging countries. Business: Theory and Practice, 21(2), 723–736. https://doi.org/10.3846/btp.2020.12680

[10] Bilyay-Erdogan, S., Danisman, G. O., & Demir, E. (2024). ESG performance and investment efficiency: The impact of information asymmetry. Journal of International Financial Markets, Institutions and Money, 91(December 2023), 101919. https://doi.org/10.1016/j.intfin.2023.101919

[11] Boateng, P. Y., Ahamed, B. I., Soku, M. G., Addo, S. O., & Tetteh, L. A. (2022). Influencing factors that determine capital structure decisions: A review from the past to present. Cogent Business and Management, 9(1). https://doi.org/10.1080/23311975.2022.2152647

[12] Borges Júnior, D. M. (2022). Corporate governance and capital structure in Latin America: empirical evidence. Journal of Capital Markets Studies, 6(2), 148–165. https://doi.org/10.1108/JCMS-03-2022-0010

[13] Bui, T. N., Nguyen, X. H., & Pham, K. T. (2023). The Effect of Capital Structure on Firm Value: A Study of Companies Listed on the Vietnamese Stock Market. International Journal of Financial Studies, 11(3). https://doi.org/10.3390/ijfs11030100

[14] Chen, K. K. (2005). The Influence of Capital Structure on Company Value with Different Growth Opportunities. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.313960

[15] Cheng, R., Kim, H., & Ryu, D. (2024). ESG performance and firm value in the Chinese market. Investment Analysts Journal, 53(1), 1–15. https://doi.org/10.1080/10293523.2023.2218124

[16] Cherkasova, V., & Kuzmin, E. (2018). Financial flexibility as an investment efficiency factor in Asian companies. Gadjah Mada International Journal of Business, 20(2), 137–164. https://doi.org/10.22146/gamaijb.26239

[17] Denis, D. J. (2011). Financial flexibility and corporate liquidity. Journal of Corporate Finance, 17(3), 667–674. https://doi.org/10.1016/j.jcorpfin.2011.03.006

[18] Diana, N., Triana, L., Mardi, M., & Ulum, I. M. (2024). The Influence Of Intellectual Capital On Firm Value. Jurnal Ekonomi Teknologi Dan Bisnis (JETBIS), 3(5), 829–841. https://doi.org/10.57185/jetbis.v3i5.104

[19] Ferrando, A., Marchica, M. T., & Mura, R. (2017). Financial Flexibility and Investment Ability Across the Euro Area and the UK. European Financial Management, 23(1), 87–126. https://doi.org/10.1111/eufm.12091

[20] Ferriswara, D., Sayidah, N., & Agus Buniarto, E. (2022). Do corporate governance, capital structure predict financial performance and firm value?(empirical study of Jakarta Islamic index). Cogent Business and Management, 9(1), 1–16. https://doi.org/10.1080/23311975.2022.2147123

[21] Huang, D. Z. X. (2021). Environmental, social and governance (ESG) activity and firm performance: a review and consolidation. Accounting and Finance, 61(1), 335–360. https://doi.org/10.1111/acfi.12569

[22] Ichwanudin, W., Nurhayati, E., & Anwar, C. J. (2023). Modeling the Relationship between Capital Structure and Company Value in the Perspective of Agency and Trade-Off Theory. WSEAS Transactions on Computer Research, 11, 429–439. https://doi.org/10.37394/232018.2023.11.39

[23] Jensen, M.C. (1986), "Agency costs and free cash flow, corporate finance and takeovers", Am. Econ. Rev, Vol. 76 No. 2, pp. 323-329, available at: www.jstor.org/stable/1818789

[24] Jensen, M.C. and Meckling, W.H. (1976), “Theory of the firm: managerial behavior, agency costs and ownership structure”, Journal of Financial Economics, Vol. 3 No. 4, pp. 305-360, doi: 10.1016/0304-405X(76)90026-X
[25] Kalle Hirvonen, Elia Machado, A. M. S. (2024). This document is discoverable and free to researchers across the globe due to the work of AgEcon Search . Help ensure our sustainability
[26] Karim, R., Mamun, M. A. Al, & Kamruzzaman, A. S. M. (2024). Cash conversion cycle and financial performance: evidence from manufacturing firms of Bangladesh. Asian Journal of Economics and Banking, 8(1), 67–82. https://doi.org/10.1108/ajeb-03-2022-0033
[27] Karima, T. (2016). The Influence of Internal Factor on Financial Performance and Firm Value: Evidence from Property and Real Estate Companies Listed in Indonesia Stock Exchange. OIDA International Journal of Sustainable Development, 09(03), 89–108. http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html
[28] Keter, C. K. S., Cheboi, J. Y., & Kosgei, D. (2024). Financial performance, intellectual capital disclosure and firm value: the winning edge. Cogent Business and Management, 11(1). https://doi.org/10.1080/23311975.2024.2302468
[29] Kiptoo, I. K., Kariuki, S. N., & Ocharo, K. N. (2021). Corporate governance and financial performance of insurance firms in Kenya. Cogent Business and Management, 8(1). https://doi.org/10.1080/23311975.2021.1938350
[30] Marsha, N., & Murtaqi, I. (2017). the Effect of Financial Ratios on Firm Value in the Food and Beverage Sector of the Idx. Journal of Business and Management, 6(2), 214–226.
[31] Maxwell, O., & Kehinde, F. (2012). Capital Structure and Firm Value: Empirical Evidence from Nigeria. Internatioanl Journal of Business and Social Sciense, 3(19), 252–261.
[32] Meier, I., Bozec, Y., & Laurin, C. (2013). Financial flexibility and the performance during the recent financial crisis. International Journal of Commerce and Management, 23(2), 79–96. https://doi.org/10.1108/10569211311324894
[33] Mohammed, Z. O., & Ani, M. K. Al. (2020). The effect of intangible assets, financial performance and financial policies on the firm value: Evidence from omani industrial sector. Contemporary Economics, 14(3), 379–391. https://doi.org/10.5709/ce.1897-9254.411
[34] Muin, A., Rakuasa, H., & Kunci, K. (2023). Volume 1 ; Nomor 2. Agustus, 1(November), 58–63.
[35] Natsir, K., & Yusbardini, Y. (2020). The Effect of Capital Structure and Firm Size on Firm Value Through Profitability as Intervening Variable. 145(Icebm 2019), 218–224. https://doi.org/10.2991/aebmr.k.200626.040
[36] Olorunlero, S. S. (2023). Capital Structure and Financial Performance of Listed Oil and Gas Firms in Nigeria. International Journal of Social Sciences and Management Research, 9(7), 1–14. https://doi.org/10.56201/ijssmr.v9.no7.2023.pg1.14
[37] Pamungkas, I. D., Purwantoro, Sari, M. P., & Hersugondo. (2023). Corporate Governance and Financial Performance on Firm Value: The Case of Indonesia. WSEAS Transactions on Business and Economics, 20, 92–103. https://doi.org/10.37394/23207.2023.20.10
[38] Panda, A. K., Nanda, S., Hegde, A. A., & Yadav, A. K. K. (2023). Receptivity of capital structure with financial flexibility: A study on manufacturing firms. International Journal of Finance and Economics, 28(2), 1981–1993. https://doi.org/10.1002/ijfe.2521
[39] Putri, I. G. A. P. T. (2020). Effect of capital structure and sales growth on firm value with profitability as mediation. International Research Journal of Management, IT and Social Sciences, 7(1), 145–155. https://doi.org/10.21744/irjmis.v7n1.833
[40] Putro, D. C., & Risman, A. (2021). the Effect of Capital Structure and Liquidity on Firm Value Mediated By Profitability. The EUrASEANs: Journal on Global Socio-Economic Dynamics, 2(2(27)), 26–34. https://doi.org/10.35678/2539-5645.2(27).2021.26-34
[41] Qureshi, M. A., Kirkerud, S., Theresa, K., & Ahsan, T. (2020). The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity. Business Strategy and the Environment, 29(3), 1199–1214. https://doi.org/10.1002/bse.2427
[42] Ramli, N. A., Latan, H., & Solovida, G. T. (2019). Determinants of capital structure and firm financial performance—A PLS-SEM approach: Evidence from Malaysia and Indonesia. Quarterly Review of Economics and Finance, 71, 148–160. https://doi.org/10.1016/j.qref.2018.07.001
[43] Rapp, M. S., Schmid, T., & Urban, D. (2014). The value of financial flexibility and corporate financial policy. Journal of Corporate Finance, 29, 288–302. https://doi.org/10.1016/j.jcorpfin.2014.08.004
[44] Ratri, R. F., & Dewi, M. (2017). The Effect of Financial Performance and Environmental Performance on Firm Value with Islamic Social Reporting (ISR) Disclosure as Intervening Variable in Companies Listed at Jakarta Islamic Index (JII). SHS Web of Conferences, 34, 12003. https://doi.org/10.1051/shsconf/20173412003
[45] Setiawanta, Y., Utomo, D., Ghozali, I., & Jumanto, J. (2021). Financial performance, exchange rate, and firm value: The Indonesian public companies case. Organizations and Markets in Emerging Economies, 11(22), 348–366. https://doi.org/10.15388/OMEE.2020.11.37
[46] Shakil, M. H. (2021). Environmental, social and governance performance and financial risk: Moderating role of ESG controversies and board gender diversity. Resources Policy, 72(May 2020), 102144. https://doi.org/10.1016/j.resourpol.2021.102144

[47] Shin, J., Moon, J. J., & Kang, J. (2023). Where does ESG pay? The role of national culture in moderating the relationship between ESG performance and financial performance. International Business Review, 32(3), 102071. https://doi.org/10.1016/j.ibusrev.2022.102071

[48] Stoiljković, A., Tomić, S., Leković, B., Uzelac, O., & Ćurčić, N. V. (2024). The Impact of Capital Structure on the Performance of Serbian Manufacturing Companies: Application of Agency Cost Theory. Sustainability (Switzerland), 16(2). https://doi.org/10.3390/su16020869

[49] Tanjung, M. (2023). Determinants of corporate governance compliance: what matters and what does not? Journal of Business and Socio-Economic Development, 3(3), 237–252. https://doi.org/10.1108/jbsed-11-2021-0148

[50] Temba, G. I., Kasoga, P. S., & Keregero, C. M. (2023). Corporate governance and financial performance: Evidence from commercial banks in Tanzania. Cogent Economics and Finance, 11(2). https://doi.org/10.1080/23322039.2023.2247162

[51] Tiep Le, T., & Nguyen, V. K. (2022). The impact of corporate governance on firms' value in an emerging country: The mediating role of corporate social responsibility and organisational identification. Cogent Business and Management, 9(1). https://doi.org/10.1080/23311975.2021.2018907

[52] Wu, W., Le, C., Shi, Y., & Alkaraan, F. (2024). The influence of financial flexibility on firm performance: the moderating effects of investment efficiency and investment scale. Journal of Applied Accounting Research, March. https://doi.org/10.1108/JAAR-07-2023-0192

[53] Yun, J., Ahmad, H., Jebran, K., & Muhammad, S. (2021). Cash holdings and firm performance relationship: Do firm-specific factors matter? Economic Research-Ekonomska Istrazivanja , 34(1), 1283–1305. https://doi.org/10.1080/1331677X.2020.1823241

[54] Yung-JangWang. (2002). Liquidity management, operating performance, and corporate value: evidence from Japan and Taiwan. Journal of Multinational Financial Management, 1176–1178.

[55] Zhang, H., Zhang, Z., & Steklova, E. (2020). Do companies need financial flexibility for sustainable development? Sustainability (Switzerland), 12(5), 1–14. https://doi.org/10.3390/su12051811.