MIX: Jurnal Ilmiah Manajemen

Management Scientific Journal
ISSN (Online): 2460-5328, ISSN (Print): 2088-1231
https://publikasi.mercubuana.ac.id/index.php/jurnal_Mix

Capital Structure Policy: The Moderating Role of Equity Market Timing on Profitability and Growth Opportunity

Dessy Adelin[1)*]; Jonnardi Jonnardi[2)]; Sakdiah Binti Md Amin[3)]; Primadonna Ratna Mutumanikam[4)]

[1)] dessy.adelin@perbanas.id, Perbanas Institute, Indonesia
[2)] jonnardi@fe.untar.ac.id, Universitas Tarumanagara, Indonesia
[3)] sakdiah@psa.edu.my, Polytechnic Sultan Salahuddin Abdul Aziz Shah, Malaysia
[4)] primadonnamutumanikam@perbanas.id, Perbanas Institute, Indonesia
**) Corresponding Author*

ABSTRACT

Objectives*: This research endeavors to investigate how profitability and growth opportunities shape firms' capital structure decisions, while also elucidating the moderating influence of equity market timing (EMT) within these associations. The inquiry centers on coal mining enterprises—an industry distinguished by capital-intensive operations and pronounced sensitivity to market fluctuations.*
Methodology: *Adopting a quantitative paradigm, this study utilizes panel data drawn from 23 coal mining firms listed on the Indonesia Stock Exchange (IDX) for the 2019–2023 period. The sample is determined through purposive selection. Moderated regression analysis serves to assess the interplay between profitability, growth opportunities, and capital structure, with EMT incorporated as a moderating construct. All variables are operationalized through financial ratios and processed using* EViews *software to ensure analytical rigor.*
Finding*: Empirical evidence discloses a significant inverse nexus between profitability and capital structure, signifying that more profitable entities exhibit a diminished proclivity toward debt financing, favoring internally generated funds instead. Conversely, growth opportunities manifest a positive and significant relationship with leverage, implying that firms with broader expansion prospects are predisposed to augment their indebtedness. Moreover, EMT intensifies these dual tendencies—fortifying the adverse link between profitability and leverage while concurrently amplifying the positive association between growth opportunities and debt usage.*
Conclusion*: Collectively, the findings underscore that capital structure formation is not solely contingent upon internal financial attributes such as profitability and growth potential but is equally sculpted by external capital market conditions. Firms, therefore, appear to recalibrate their financing configurations strategically, navigating between internal performance dynamics and the temporal advantages presented by favorable market valuations.*

Keywords*: Profitability; Growth Opportunities; Equity Market Timing; Capital Structure; Coal Companies.*

Submitted: 22-04-2025 Revised: 09-10-2025 Accepted: 17-10-2025

Article Doi:
http://dx.doi.org/10.22441/jurnal_mix.2025.v15i3.001

p-ISSN: 2088-1231
e-ISSN: 2460-5328

INTRODUCTION

Indonesia is a resource-rich country, with coal being one of its primary export commodities. The nation ranks as the third-largest coal producer globally, achieving a total production of 770.91 million tons in 2023 (MODI, 2023). However, in recent years, coal prices have experienced significant fluctuations, including a steep decline of 63% from its peak, reaching US$160 per ton (CNBC, 2023). These fluctuations have directly impacted coal companies' stock price volatility, posing challenges for investors in assessing investment potential. Additionally, such market dynamics affect corporate financing strategies, particularly in determining the optimal capital structure to balance profitability and financial risk.

Capital structure occupies a pivotal role in shaping corporate investment strategy, encapsulating the equilibrium between debt and equity employed to underwrite a firm's operations and future expansion (Brealey et al., 2017; Myers, 2001). The trade-off theory articulated by Modigliani & Miller (1963), contends that firms endeavor to attain an optimal configuration by offsetting the fiscal advantages of debt—primarily through tax shields—against the latent costs of financial distress arising from excessive leverage. Yet, this theoretical construct inadequately encompasses the nuanced realities of capital structure formation within fluid and evolving market contexts. Although the framework presupposes that firms rationally balance tax efficiency and financial risk, it overlooks the pervasive influence of external dynamics such as investor sentiment, equity market fluctuations, and macroeconomic volatility that often recalibrate managerial financing preferences.

Profitability, meanwhile, emerges as a principal determinant in delineating capital structure composition (Markonah & Prasetyo, 2022). In alignment with the pecking order theory advanced by Myers & Majluf (1984), firms exhibiting robust profitability generally privilege internally generated capital over external sources, as retained earnings entail minimal financing costs and avert ownership dilution. Conversely, the trade-off theory (Kraus & Litzenberger, 1973). maintains that even profitable enterprises may deliberately employ debt to capitalize on interest-related tax shields. Thus, while strong profitability typically mitigates dependence on external financing, particularly debt, the interplay of tax incentives and market volatility often complicates this relationship—revealing that capital structure decisions are neither purely internally driven nor entirely shaped by external financial pressures.

Similarly, growth opportunities influence financing decisions. Companies with high growth potential often need external funding to expand (Titman & Wessels, 1988). According to agency theory, firms with strong growth prospects avoid taking on too much debt to prevent conflicts between managers and lenders (Jensen & Meckling, 1976). Instead, they prefer equity financing to maintain financial flexibility and reduce financial risk.

Given the inherent constraints of both the trade-off and pecking order theories, the equity market timing perspective emerges as a more adaptive explanatory framework. This paradigm contends that firms strategically align their financing behavior with fluctuations in market valuation—issuing new equity during periods of elevated stock prices and repurchasing shares when valuations decline (Baker & Wurgler, 2002). While traditional theories emphasize internal efficiency and tax optimization, the market timing view underscores managerial responsiveness to external price signals. Consequently, when the marginal cost of equity issuance falls below that of debt financing, firms exhibit a discernible preference for equity-based capital, reflecting a pragmatic adaptation to transient market advantages rather than strict adherence to static financing hierarchies (Huang & Ritter, 2009). This indicates that market conditions significantly influence capital structure decisions. In sectors such as coal, where

p-ISSN: 2088-1231
e-ISSN: 2460-5328

stock prices are highly volatile, firms must adapt their financing strategies accordingly. Nonetheless, the extent to which equity market timing modulates the nexus between profitability, growth prospects, and capital structure continues to elude definitive consensus. While prior scholarship acknowledges its potential to recalibrate financing behavior in response to market fluctuations, empirical evidence remains fragmented, suggesting that its influence is neither universally consistent nor entirely negligible.

Many previous studies have explored the factors that affect capital structure, such as profitability, growth opportunities, and financial risk (Khoa & Thai, 2021; Myint et al., 2017). However, most of these studies primarily focused on the direct relationship between profitability and growth opportunities on capital structure, without considering moderating factors like equity market timing (Allini et al., 2018; Zavertiaeva & Nechaeva, 2017). Given the dynamic nature of financial markets, it is crucial to investigate whether firms with specific profitability and growth levels adjust their financing strategies in response to market fluctuations through equity market timing.

While prior studies have established the relevance of firm-specific factors in determining capital structure, they have largely overlooked the role of market dynamics, particularly in industries exposed to extreme volatility such as coal mining. This creates a research gap regarding how firms align their financing decisions with capital market fluctuations through equity market timing mechanisms. Therefore, this study differentiates itself by integrating equity market timing as a moderating variable that connects internal financial performance (profitability and growth opportunities) with external market behavior, offering a more dynamic understanding of capital structure policies under volatile conditions

The unique aspect of this study is the use of equity market timing as a moderating factor in analyzing capital structure. Unlike previous studies that solely examined firm-specific factors, this research explores how capital market fluctuations influence corporate financing decisions, particularly in highly volatile industries. In doing so, this study enhances theoretical insights by broadening the understanding of capital structure determinants in an ever-changing financial environment.

This research aims to: (1) Study how profitability affects a company's capital structure; (2) Understand how growth opportunities impact capital structure decisions; (3) Examine the extent to which equity market timing affects the relationship between profitability and capital structure; and (4) Analyze how equity market timing affects the connection between growth opportunities and capital structure. By adopting this approach, the study not only contributes to the academic development of capital structure theories but also offers practical guidance for managers in capital-intensive sectors, such as coal mining on how to optimize equity market timing strategies amid market volatility to maintain financial stability and enhance firm value.

LITERATURE REVIEW

Trade-Off Theory

The trade-off theory, first articulated by Modigliani & Miller (1963), contends that firms endeavor to strike an equilibrium between the fiscal advantages conferred by debt—chiefly the tax deductibility of interest—and the potential burdens of financial distress that accompany excessive leverage. Expanding on this premise, Kraus & Litzenberger (1973) posit that companies augment their debt ratios only to the extent that the incremental gain from the tax shield does not outweigh the concomitant rise in bankruptcy and agency costs, thereby defining an optimal yet fragile point of capital structure balance. Since interest on debt is tax-deductible,

p-ISSN: 2088-1231
e-ISSN: 2460-5328

debt financing can be less expensive than issuing equity, which dilutes ownership. However, taking on too much debt beyond this optimal level increases the risk of bankruptcy and financial instability, thereby diminishing the firm's overall value. In essence, the trade-off theory asserts that a firm's capital structure embodies a deliberate equilibrium in which the fiscal advantages derived from debt are weighed against the prospective costs of financial distress—suggesting that while leverage enhances tax efficiency, it simultaneously heightens the risk of default when taken beyond its prudent threshold.

Pecking Order Theory

The pecking order theory, articulated by Myers & Majluf (1984), contends that firms arrange their financing choices according to a hierarchy of convenience and cost-efficiency. Within this hierarchy, internally generated funds—such as retained earnings—are favored over external financing through debt or equity issuance, as the latter entails higher transaction costs and potential dilution of ownership. This sequential preference arises from the existence of information asymmetry between corporate managers and external investors, where insiders possess superior knowledge of the firm's value. Consequently, highly profitable firms, endowed with ample internal resources, are less dependent on external borrowing. Hence, this theory predicts an inverse association between profitability and leverage, suggesting that as internal funds increase, the need for debt financing proportionally diminishes.

Market Timing Theory

The market timing theory, advanced by Baker & Wurgler (2002), postulates that firms calibrate their financing choices in response to temporal fluctuations in market conditions. Rather than adhering to a static capital structure, managers strategically issue equity when market valuations are elevated and refrain when shares are undervalued. Such behavior is intended to minimize the overall cost of capital while simultaneously enhancing shareholder wealth. Over extended periods, these timing decisions subtly sculpt a firm's capital structure—firms that capitalize on favorable market windows by issuing equity tend to sustain lower debt ratios thereafter. Within the present study, equity market timing serves as a moderating construct, mediating the influence of internal determinants such as profitability and growth opportunities on capital structure, thereby embodying firms' adaptive response to external financial dynamics.

Equity Market Timing

Equity market timing encapsulates the deliberate financial strategy whereby firms issue new equity when their market valuation surpasses intrinsic worth and repurchase shares when valuations retreat (Baker & Wurgler, 2002). This approach presumes that corporate managers possess superior insight into the firm's fundamental value and exploit transient market mispricing to minimize capital costs. Prior studies, including Bolton et al. (2013) and Mahajan & Tartaroglu (2008), affirm that firms are predisposed to favor equity financing when its implicit cost is lower than that of debt. Baker & Wurgler (2002) further assert that equity issuance is not a fixed decision but a dynamic one, contingent upon contemporaneous market conditions. Analytical metrics such as the market-to-book ratio, price-to-earnings ratio, and price-to-cash-flow ratio are often employed to discern whether a firm's stock is overvalued or undervalued. Departing from the traditional notion of a stable optimal capital structure, this perspective advocates for an opportunistic adjustment of financing composition—an approach particularly germane to industries characterized by high volatility, such as coal mining.

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Growth Opportunity

Growth opportunity is the firm's potential to expand operations, increase revenue, and enhance shareholder value in the future. According to Myint et al. (2017), growth opportunities reflect a company's capacity to invest in profitable projects. Hampton (2005) describes it as the yearly percentage change in a company's total assets, revenue, or operating income. Growth-oriented firms often face financing pressures to support expansion, requiring both internal and external capital sources. In capital-intensive industries such as coal mining, access to financing is essential to realize these opportunities. Trade-off theory suggests that high-growth firms may utilize debt to exploit tax advantages, whereas market timing theory posits that they may prefer equity issuance when market conditions are favorable (Bintara, 2018; Febrian & Utiyati, 2022). Therefore, growth opportunity becomes a critical determinant of a firm's capital structure strategy, reflecting how firms balance expansion needs with financing risks.

Profitability

Profitability embodies a firm's capacity to generate earnings from the efficient utilization of its resources and constitutes a primary indicator of organizational performance (Riwayati et al., 2023). Highly profitable firms usually have strong internal cash flows, reducing their reliance on Firms exhibiting superior profitability often enjoy abundant internal cash flows, thereby diminishing their dependence on external financing sources. Consistent with the precepts of the pecking order theory (Myers & Majluf, 1984). such firms typically prioritize the use of retained earnings to sustain operations rather than resorting to debt accumulation or equity issuance, since internal financing not only reduces capital costs but also mitigates information asymmetry between management and investors. Conversely, firms with lower profitability frequently rely on external capital to sustain growth, exposing them to higher financial obligations. Moreover, elevated profitability reflects managerial prudence and operational efficiency, both of which enhance corporate credibility and investor confidence, ultimately increasing firm value. Empirical findings, such as those reported by *Ulandari & Hidayati (2025),* substantiate that profitability exerts a negative and statistically significant influence on leverage across various sectors—most prominently within capital-intensive industries like coal mining. Hence, profitability emerges as a pivotal determinant of capital structure, wherein higher earnings capacity tends to curtail the firm's propensity to employ debt financing.

Hypothesis Development

The formulation of this study's hypotheses is anchored in three foundational financial theories—the Trade-Off Theory, the Pecking Order Theory, and the Market Timing Theory—which collectively furnish a comprehensive framework for interpreting how internal determinants, such as growth prospects and profitability, interact with external market dynamics, particularly equity valuation conditions, to influence a firm's capital structure configuration. The empirical investigation concentrates on coal mining sub-sector firms listed on the Indonesia Stock Exchange over the 2019–2023 period, an industry characterized by high capital intensity and pronounced market sensitivity.

Growth opportunity encapsulates a firm's potential to broaden its operational scope and secure future revenue streams. From the perspective of the Trade-Off Theory, firms exhibiting robust growth trajectories typically demand considerable external capital to finance expansion activities and, in doing so, may strategically elevate their debt ratios to capitalize on the tax deductibility of interest payments. Conversely, insufficient growth potential may disincentivize

p-ISSN: 2088-1231
e-ISSN: 2460-5328

borrowing, as the associated costs outweigh fiscal benefits. Accordingly, the first hypothesis (H1) asserts that growth opportunity exerts a significant influence on capital structure decisions.

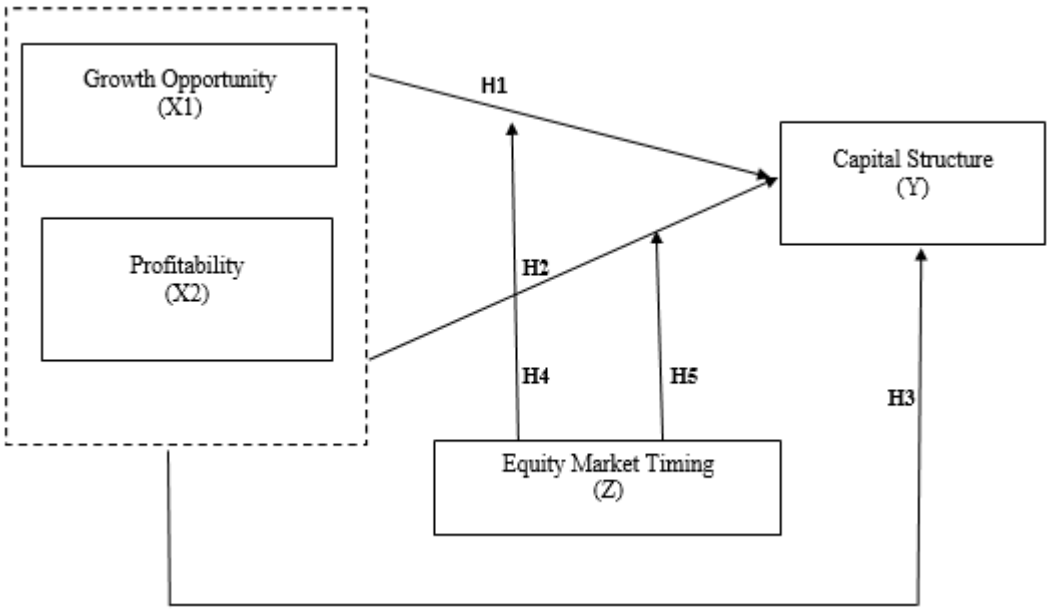
Profitability, conversely, represents a firm's proficiency in generating returns from its operational endeavors. In alignment with the Pecking Order Theory, highly profitable enterprises are predisposed to employ internal funds—such as retained earnings—prior to seeking external financing through debt or equity issuance, thereby minimizing transaction costs and mitigating information asymmetry between management and investors. Less profitable entities, however, are compelled to depend more heavily on external sources, heightening leverage exposure. This reasoning underpins the second hypothesis (H2), which posits that profitability bears a significant and inverse relationship with capital structure.

Given that both growth opportunity and profitability are key financial indicators, this study also examines their combined influence. The third hypothesis (H3) explores how these two variables jointly affect capital structure, acknowledging that financial decisions often result from the interaction of multiple factors.

To provide deeper insights, the study incorporates equity market timing as a moderating variable. The Market Timing Theory suggests that firms tend to issue equity when market valuations are favorable. Under such conditions, companies may adjust their capital structure strategies in response to internal factors like growth potential and profitability. Consequently, the fourth hypothesis (H4) proposes that equity market timing strengthens the relationship between growth opportunity and capital structure. Similarly, the fifth hypothesis (H5) argues that equity market timing moderates the relationship between profitability and capital structure by reducing firms' reliance on debt when equity issuance becomes a more attractive option.

To enhance clarity, this study also provides a conceptual diagram (Figure 1) that visually illustrates the relationships among variables (H1–H5), highlighting the moderating role of equity market timing between firm-specific factors (profitability and growth opportunity) and capital structure. This visualization strengthens the theoretical framework by depicting the logical flow of hypotheses tested in this research.

Figure 1 Framework of Research



p-ISSN: 2088-1231
e-ISSN: 2460-5328

METHOD

This investigation adopts a quantitative paradigm, deploying moderating regression analysis as the principal analytical instrument to elucidate the interrelations among the examined variables—an approach both empirical in rigor and interpretive in intent (Hartmann & Moers, 2003; Ríos & Campo, 2013). The Fixed Effect Model (FEM) is applied to assess how profitability and growth opportunities influence capital structure policy, with equity market timing serving as a moderating factor (Gujarati, 2021). The FEM is selected as it effectively controls for unobserved heterogeneity in panel data, thereby providing more accurate estimates of factors influencing corporate capital structure (Baltagi, 2021; Sekaran & Bougie, 2016).

This inquiry concentrates on a cohort of 23 coal mining enterprises publicly traded on the Indonesia Stock Exchange (IDX) throughout the 2019–2023 period. The sample selection, conducted through purposive sampling, was neither arbitrary nor exhaustive but rather contingent upon specific qualifications: (1) firms officially listed on the IDX, (2) possession of comprehensive financial disclosures, and (3) the availability of verifiable data concerning growth opportunities, profitability, capital structure, and equity market timing. Based on these criteria, 11 companies are selected, resulting in 55 financial report observations over five years. The purposive sampling technique is employed to ensure that the chosen sample aligns with the research objectives and possesses the relevant characteristics required for in-depth analysis (Etikan, 2016).

This research comprises dependent, independent, and moderating variables. The dependent variable, capital structure, is represented by the Debt-to-Equity Ratio (DER), which indicates the proportion of debt relative to equity used by firms to finance their operations (Frank & Goyal, 2009). The independent constructs in this investigation comprise profitability and growth opportunities, operationalized through the Return on Assets (ROA) and the Asset Growth Ratio (AGR), respectively. While profitability encapsulates a firm's capacity to extract earnings from its total asset base (Myers, 2001), growth opportunities, conversely, signify the firm's latent potential for expansion as reflected in asset accumulation (Titman & Wessels, 1988). Thus, whereas the former mirrors current operational efficiency, the latter delineates prospective advancement and strategic dynamism.

Within the framework of this inquiry, equity market timing serves as a moderating construct, denoting a firm's deliberate maneuver to issue new equity when market valuations are elevated and to repurchase shares when prices decline. This dynamic is operationalized through the Market-to-Book Equity Ratio, a metric contrasting the firm's market valuation with its intrinsic book worth (Baker & Wurgler, 2002). Although this ratio ostensibly quantifies the degree to which a firm's stock may be overvalued or undervalued, it simultaneously reflects managerial discretion in exploiting temporal inefficiencies within capital markets (Huang & Ritter, 2009).

Table 1 Operationalization of Variables

Variable	Definition	Measurement
Capital Structure (DER)	The ratio that shows the proportion of debt used to finance company operations compared to shareholders' equity (Frank & Goyal, 2009).	$DER = \frac{Total\ Liabilities}{Total\ Equity}$
Equity Market Timing (EMT)	A firm's strategic decision to issue equity when market valuation is high and	$EMT = \frac{Market\ Price}{Book\ Value\ Equity}$

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Variable	Definition	Measurement
	repurchase shares when valuation is low (Baker & Wurgler, 2002).	
Growth Opportunity (AGR)	A firm's potential for expansion, reflected by the annual increase in total assets (Titman & Wessels, 1988).	$AGR = \frac{Total\ Assets_t - Total\ Assets_{t-1}}{Total\ Assets_{t-1}}$
Profitability (ROA)	A measure of a company's ability to generate profit from its total assets (Myers, 2001).	$ROA = \frac{Net\ Income}{Total\ Assetz}$

This study uses moderating regression analysis (Hartmann & Moers, 2003) to examine how equity market timing affects the relationship between profitability, opportunities of growth, and structure of capital. The moderation model helps explain whether market conditions make these relationships stronger or weaker. It also shows how external factors, like stock market trends, influence the connection between the main variables (Aiken et al., 1991). By utilizing the Fixed Effect Model, this study accounts for firm-specific factors that cannot be directly observed, ensuring more accurate results in examining the relationships between the studied variables (Wooldridge, 2010). This methodological stance affords a lucid yet nuanced comprehension of the determinants shaping capital structure choices, especially within the coal industry—an arena marked not only by its dynamic expansionary potential but also by pronounced volatility and cyclical vulnerability.

RESULTS AND DISCUSSION

Results

The descriptive statistics reveal that the EMT variable records the highest mean of 2.802545, accompanied by the widest dispersion, as evidenced by a standard deviation of 4.332420—signifying not only elevated variability but also pronounced fluctuations within the dataset. Conversely, ROA has the lowest risk level, with a standard deviation of 0.167014. All variables in this study show positive skewness, indicating that the data distribution is skewed toward the right. The kurtosis values for ROA and EMT exceed 3, suggesting a leptokurtic distribution, where data points are more concentrated around the mean compared to a normal distribution.

These results imply that while profitability and growth opportunity data remain relatively stable, the equity market timing variable fluctuates widely, highlighting the volatility of market valuation across firms during the observed period

Table 1 Descriptive Statistics

	AGR	ROA	EMT	DER
Mean	0.163266	0.196244	2.802545	0.750000
Median	0.079634	0.149000	1.550000	0.570000
Maximum	0.801240	0.602600	23.70000	2.100000
Minimum	-0.258787	0.008300	0.490000	0.120000
Std. Dev.	0.261727	0.167014	4.332420	0.521941
Skewness	0.833372	1.104848	4.024215	0.943008
Kurtosis	2.888127	3.070713	19.04478	2.966187
Jarque-Bera	6.395010	11.20110	738.4028	8.154204
Probability	0.040864	0.003696	0.000000	0.016957
Sum	8.979605	10.79340	154.1400	41.25000

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Sum Sq. Dev.	3.699048	1.506267	1013.573	14.71080
Observations	55	55	55	55

The normality assessment reveals that the dataset adheres to a normal distribution, as evidenced by the Jarque–Bera probability value of 0.059023, which surpasses the 0.05 threshold. Likewise, the multicollinearity diagnostic indicates no collinearity concerns, since all independent variables possess VIF scores well below 5. The Glejser heteroscedasticity examination similarly demonstrates the absence of variance instability, with a Probability Chi-Square exceeding 0.05. Moreover, the Durbin–Watson coefficient of 1.548285 resides comfortably within the acceptable interval of 1.5 to 2.5, thereby affirming that autocorrelation does not pose a statistical complication.

Overall, the results of these diagnostic tests confirm that the regression model meets all the classical assumptions, ensuring that the estimations are valid, unbiased, and consistent.

Table 2 Classical Assumption Test Results

Test	Statistic	Probability	Conclusion
Normality Test (Jarque-Bera)	JB = 5.659665	0.0590	Data are normally distributed
Multicollinearity Test (VIF)	VIF (AGR = 1.2579), VIF (ROA = 1.5348), VIF (EMT = 1.2589)	< 5 for all variables	No multicollinearity
Heteroscedasticity Test (Glejser)	Obs*R-squared = 6.0668	0.1084	No heteroscedasticity
Autocorrelation Test (Durbin-Watson)	DW = 1.5880	-	No autocorrelation

The Chow test outcomes suggest that the CEM may initially appear appropriate, as the F-test probability of 0.0000 falls well below the 0.05 benchmark. Nevertheless, the Hausman test demonstrates that the FEM provides a superior fit, given its Chi-Square probability of 0.0000, signifying statistical significance at the 5% level. Furthermore, the Breusch–Pagan Lagrange Multiplier test indicates that the REM performs better than the CEM, since its probability value also lies below 0.05. Despite the REM's relative advantage over the CEM, the combined diagnostic evidence confirms that the FEM represents the most robust and theoretically consistent estimation approach for this study.

Table 3 The Test Results of Panel Data Regression Model

Test	Method	Statistic	d.f.	Probability	Decision
Chow Test	Cross-section F	22.5699	(10,41)	0.0000	FEM is better than CEM
	Cross-section Chi-square	102.9901	10	0.0000	
Hausman Test	Cross-section random	23.0625	3	0.0000	FEM is better than REM
Lagrange Multiplier (LM) Test	Breusch-Pagan (Cross-section)	66.1353	-	0.0000	REM is better than CEM

The estimation results under the Fixed Effect Model (FEM) reveal that the regression equation possesses considerable explanatory strength, evidenced by an R-squared value of 89.70%. This implies that profitability, growth opportunity, and equity market timing collectively elucidate nearly nine-tenths of the variation in capital structure (DER), thereby underscoring the model's robustness and statistical soundness.

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Empirical findings demonstrate that profitability exerts a pronounced inverse effect on capital structure, as indicated by a coefficient of –0.557237 and a probability value of 0.0162, signifying that more profitable firms tend to rely less on debt. However, upon the inclusion of equity market timing, this negative nexus intensifies, with the coefficient declining to –1.156457 and the probability value reaching 0.0002, suggesting that favorable market conditions further dissuade profitable entities from employing debt-based financing.

Conversely, growth opportunities manifest a significant positive association with capital structure, reflected by a coefficient of 0.664200 and a probability value of 0.0026, indicating that firms endowed with greater expansion potential are more predisposed to augment their leverage. Yet, when equity market timing is incorporated, this positive linkage strengthens even further, with the coefficient ascending to 1.035105 and the probability value dropping to 0.0000, implying that buoyant market valuations magnify firms' propensity to finance growth through debt instruments.

These findings confirm that the interaction terms between equity market timing and both independent variables are statistically significant, emphasizing the moderating role of market conditions in shaping financing decisions.

Table 4 Panel Data Regression and Moderating Regression Analysis Results

Independent Variables	Dependent Variable (DER)	Probability
ROA	-0.557237	(0.0162)**
AGR	0.664200	(0.0026)***
EMT	0.635284	(0.0000)***
ROA * EMT	-1.156457	(0.0002)***
AGR * EMT	1.035105	(0.0000)***
Constant	0.253422	(0.0000)
Total of Observer	60	
R-Squared	89.70%	

Significant Level ***Prob< 1%, **Prob< 5%, *Prob<10%

In summary, the fixed effect estimation demonstrates that profitability decreases debt utilization, while growth opportunities encourage higher leverage. Equity market timing significantly amplifies both effects, reinforcing its role as a key contextual determinant of corporate capital structure policy.

Discussion

The results of this study substantiate that equity market timing (EMT) acts as a moderating mechanism in the nexus between profitability and capital structure. Typically, firms with superior profitability exhibit a tendency to minimize their reliance on debt, consistent with the pecking order theory articulated by Myers & Majluf (1984). which posits that companies favor internal sources of financing to curtail agency costs and alleviate information asymmetry. Nevertheless, when EMT is incorporated into the analytical framework, the inverse relationship between profitability and leverage becomes even more pronounced. This suggests that under favorable market conditions, highly profitable firms further restrain their use of debt by capitalizing on equity issuance at a comparatively lower cost of capital. Such a tendency aligns with the evidence presented by Anugrahani & Setiawan (2020) as well as Baker & Wurgler

p-ISSN: 2088-1231
e-ISSN: 2460-5328

(2002), who revealed that firms are more inclined to issue shares during periods of rising stock prices, thereby diminishing their dependence on debt financing. The findings also reinforce the market timing theory, which contends that financing decisions are shaped by prevailing market conditions rather than a rigidly defined target capital structure (Baker & Wurgler, 2002). When a company's stock market valuation exceeds its book value, financial executives are more likely to issue equity instead of assuming additional debt—a conclusion that resonates with Korajczyk & Levy (2003), who observed that firms with better access to equity markets tend to maintain lower leverage. Hence, this study affirms that EMT amplifies the negative association between profitability and capital structure decisions.

The analysis further demonstrates that EMT intensifies the positive linkage between growth opportunities and capital structure. In general, firms possessing substantial growth potential require external capital to sustain expansion. According to trade-off theory (Kraus & Litzenberger, 1973), such firms often increase debt usage to benefit from interest tax shields. Yet, from a market timing standpoint, entities with robust growth prospects may prefer issuing equity when their market valuation surpasses book value, consistent with Rakim (2018), who noted that firms gravitate toward equity when its cost is relatively lower than that of debt. In bullish market conditions, soaring stock prices motivate financial managers to issue new shares rather than assume additional liabilities. Moreover, this outcome corroborates Hovakimian et al. (2001), who found that high-growth firms actively adjust their capital structure through equity issuance during favorable valuation periods. In alignment with the pecking order perspective, when internal funds are insufficient, equity financing becomes a rational choice to maintain liquidity and growth momentum. Consequently, EMT enables firms to secure capital more efficiently, thereby fostering a stronger preference for equity relative to debt in their financing mix.

Empirical evidence also indicates that profitability exerts a significant negative effect on capital structure, implying that as profitability rises, reliance on debt diminishes. This is consistent with the pecking order theory (Myers & Majluf, 1984), which asserts that firms with ample internal cash flow tend to prioritize retained earnings over borrowing or issuing new equity. Supporting evidence from Wijaya & Ardini (2020) and Sunaryo (2019) confirms that profitable firms often finance expansion internally, thereby reducing leverage. Similarly, agency theory Jensen & Meckling (1976) explains that firms with greater internal liquidity opt for lower debt levels to mitigate monitoring costs and agency conflicts with creditors. Nonetheless, contrasting findings exist; for instance, Rajan & Zingales (1995) observed that in capital-intensive industries, even profitable firms may sustain high leverage due to sectoral characteristics and asset tangibility. Thus, within the coal industry, this study reaffirms that profitability is inversely associated with debt levels—an outcome that remains consistent with pecking order principles despite variations across sectors.

The results further reveal that growth opportunities exert a robust positive influence on capital structure. In essence, firms endowed with greater expansion prospects exhibit a stronger inclination to utilize debt financing. This observation supports the trade-off framework (Kraus & Litzenberger, 1973), which maintains that high-growth enterprises require substantial capital and often rely on debt to achieve an optimal financing balance. This finding echoes the results of Amin et al. (2023) and Anggriani et al. (2018), who noted that rapidly expanding firms typically adopt a more aggressive leverage policy due to their attractiveness to creditors and access to external funds. However, divergent views persist. Titman & Wessels (1988), suggested that high-growth entities may prefer equity to preserve flexibility, while Brealey et al. (2017), through the lens of agency cost theory, argued that excessive debt can lead to

p-ISSN: 2088-1231
e-ISSN: 2460-5328

underinvestment risks associated with debt overhang. Consequently, this study concludes that within capital-intensive sectors such as coal mining, firms with stronger growth trajectories generally assume greater leverage, although such financial strategies remain contingent upon prevailing market conditions, internal liquidity, and long-term risk management objectives.

CONCLUSION

This research furnishes compelling empirical evidence that profitability mitigates corporate dependence on debt financing, whereas growth opportunities stimulate a greater propensity toward leveraging among coal enterprises listed on the Indonesia Stock Exchange. Furthermore, it reveals that equity market timing (EMT) substantially intensifies the positive association between growth opportunities and capital structure, while simultaneously accentuating the inverse linkage between profitability and debt utilization. These outcomes are consistent with the foundational premises of the pecking order theory, the trade-off theory, and the market timing theory, collectively suggesting that a firm's capital structure is not solely dictated by internal dynamics such as profitability and expansion potential, but is equally shaped by external market forces. Taken together, the findings underscore that corporate financing behavior emerges from a dual interplay between internal financial strength and the firm's capacity to exploit favorable market windows.

Notwithstanding its valuable theoretical and empirical contributions, this study is not without constraints. The exclusive focus on coal sector firms listed on the Indonesia Stock Exchange confines the external validity of the findings, rendering them less generalizable to industries with distinct financial characteristics or capital structures. Additionally, the omission of macroeconomic determinants—such as inflationary pressures, exchange rate instability, and shifts in monetary policy—may have constrained the model's explanatory breadth, despite their potential influence on corporate financing behavior. Moreover, the reliance on secondary quantitative data precludes the exploration of managerial cognition and behavioral nuances that often underpin strategic financial decisions.

To advance this line of inquiry, future research could extend the scope beyond a single industry to enable comparative analysis across sectors, thereby enriching the generalizability of results. Incorporating mixed-method approaches—by integrating econometric modeling with qualitative techniques such as interviews or case studies—may offer deeper insight into how managers navigate financing decisions amid fluctuating market environments. Furthermore, employing more sophisticated analytical frameworks, such as dynamic panel estimation or structural equation modeling, could enhance the comprehension of causal interdependencies among profitability, growth prospects, market timing behavior, and capital structure—particularly in light of the structural adjustments and financial volatility characterizing the post-pandemic economic landscape.

The policy implications of this study suggest that coal companies should consider both profitability and growth opportunities in their financing strategies while carefully leveraging equity market conditions to optimize their capital structure. Financial managers should adopt a more adaptive approach in selecting optimal funding sources, particularly by timing equity issuance during periods of high valuation to minimize capital costs. For investors and practitioners, this study offers valuable insights into evaluating a company's capital structure policies before making investment decisions. Additionally, from a managerial perspective, companies operating in volatile industries such as coal can apply equity market timing optimization strategies to strengthen financial resilience amid market fluctuations. For

p-ISSN: 2088-1231
e-ISSN: 2460-5328

regulators and policymakers, these findings can serve as a foundation for designing policies that promote financial sector stability and capital market efficiency, including regulations on equity issuance to ensure companies can sustainably optimize their capital structure.

REFERENCES

Aiken, L. S., West, S. G., & Reno, R. R. (1991). Multiple regression: Testing and interpreting interactions. Sage Publications.

Allini, A., Rakha, S., McMillan, D. G., & Caldarelli, A. (2018). Pecking order and market timing theory in emerging markets: The case of Egyptian firms. Research in International Business and Finance, 44, 297–308. https://doi.org/10.1016/j.ribaf.2017.07.098

Amin, M. A. N., Amirah, A., & Azis, L. A. (2023). Pengaruh Growth Opportunity, Pertumbuhan Aset, Profitabilitas, Dan Risiko Bisnis Terhadap Struktur Modal Pada Perusahaan Properti Dan Real Estate. Jurnal Valuasi: Jurnal Ilmiah Ilmu Manajemen Dan Kewirausahaan, 3(1), 132–151. https://doi.org/https://doi.org/10.46306/vls.v3i1.168

Anggriani, F., Mardani, R. M., & Mustapita, A. F. (2018). Pengaruh Profitabilitas, Growth opportunity, Likuiditas Terhadap Struktur Modal (Studi Kasus Perusahaan Manufaktur Yang Terdaftar Di BEI Periode 2016-2018). E-Jurnal Riset Manajemen, 9(14), 16–29.

Anugrahani, A., & Setiawan, R. (2020). Analisis Equity Market Timing dan Struktur Modal. Sketsa Bisnis, 7(1), 45–55. https://doi.org/10.35891/jsb.v7i1.2204

Baker, M., & Wurgler, J. (2002). Market Timing and Capital Structure. The Journal of Finance, 57(1), 1–32. https://doi.org/10.1111/1540-6261.00414

Baltagi, B. H. (2021). Econometric Analysis of Panel Data (6th ed.). Wiley.

Bintara, R. (2018). Pengaruh Profitabilitas, Growth opportunity, dan Struktur Modal Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2012-2015). Profita: Komunikasi Ilmiah Akuntansi Dan Perpajakan, 11(2), 306–328.

Bolton, P., Chen, H., & Wang, N. (2013). Market timing, investment, and risk management. Journal of Financial Economics, 109(1), 40–62. https://doi.org/10.1016/j.jfineco.2013.02.006

Brealey, R. A., Myers, S. C., & Allen, F. (2017). Principles of Corporate Finance (12th ed.). McGraw-Hill Education.

CNBC. (2023). Harga Batu Bara Turun 4 Hari Beruntun, Bantuan China Sia-Sia. CNBC. https://www.cnbcindonesia.com/research/20231002223608-128-477251/harga-batu-bara-turun-4-hari-beruntun-bantuan-china-sia-sia

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1. https://doi.org/10.11648/j.ajtas.20160501.11

Febrian, D., & Utiyati, S. (2022). Pengaruh Profitabilitas, Kebijakan Dividen dan Pertumbuhan Perusahaan terhadap Nilai Perusahaan (Studi pada Perusahaan Transportasi yang Terdaftar di BEI). Jurnal Ilmu Dan Riset Manajemen, 11(5), 1–17. www.idx.co.id

Frank, M. Z., & Goyal, V. K. (2009). Capital Structure Decisions: Which Factors Are Reliably Important? Financial Management, 38(1), 1–37. https://doi.org/10.1111/j.1755-053X.2009.01026.x

Gujarati, D. N. (2021). Essentials of econometrics. SAGE Publications.

Hampton, M. P. (2005). Heritage, local communities and economic development. Annals of Tourism Research, 32(3), 735–759. https://doi.org/10.1016/j.annals.2004.10.010

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Hartmann, F. G. H., & Moers, F. (2003). Testing contingency hypotheses in budgetary research using moderated regression analysis: a second look. Accounting, Organizations and Society, 28(7–8), 803–809. https://doi.org/10.1016/S0361-3682(03)00019-9

Hovakimian, A., Opler, T., & Titman, S. (2001). The Debt-Equity Choice. The Journal of Financial and Quantitative Analysis, 36(1), 1–24. https://doi.org/10.2307/2676195

Huang, R., & Ritter, J. R. (2009). Testing Theories of Capital Structure and Estimating the Speed of Adjustment. Journal of Financial and Quantitative Analysis, 44(2), 237–271. https://doi.org/10.1017/S0022109009090152

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

Khoa, B. T., & Thai, D. T. (2021). Capital Structure and Trade-Off Theory: Evidence from Vietnam. The Journal of Asian Finance, Economics and Business, 8(1), 45–52. https://doi.org/https://doi.org/10.13106/jafeb.2021.vol8.no1.045

Korajczyk, R. A., & Levy, A. (2003). Capital structure choice: macroeconomic conditions and financial constraints. Journal of Financial Economics, 68(1), 75–109. https://doi.org/10.1016/S0304-405X(02)00249-0

Kraus, A., & Litzenberger, R. H. (1973). A State-Preference Model of Optimal Financial Leverage. The Journal of Finance, 28(4), 911. https://doi.org/10.2307/2978343

Mahajan, A., & Tartaroglu, S. (2008). Equity market timing and capital structure: International evidence. Journal of Banking & Finance, 32(5), 754–766. https://doi.org/10.1016/j.jbankfin.2007.05.007

Markonah, M., & Prasetyo, J. H. (2022). The Effect of Corporate Governance on Financial Performance: Evidence from Islamic Banks in Indonesia. Journal of Asian Finance, Economics and Business, 9(6), 45–52. https://doi.org/10.2991/aer.k.201221.098

MODI. (2023). Summary 2023. MODI. https://modi.esdm.go.id/filter?tahun=2023

Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital : A Correction. The American Economic Review, 53(3), 433–443.

Myers, S. C. (2001). Capital structure. Journal of Economic Perspectives, 15(2), 82–102. https://doi.org/10.4324/9781003073796-9

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

Myint, S., Lupi, A., & Tsomocos, D. P. (2017). How Investment Opportunities Affect Optimal Capital Structure. Journal of Applied Corporate Finance, 29(4), 112–124. https://doi.org/10.1111/jacf.12266

Rajan, R. G., & Zingales, L. (1995). What Do We Know about Capital Structure? Some Evidence from International Data. The Journal of Finance, 50(5), 1421–1460. https://doi.org/10.1111/j.1540-6261.1995.tb05184.x

Rakim, A. A. (2018). Peran Market Timing Ekuitas, dan Strategi Korporasi dalam Menentukan Struktur Modal Perusahaan. Jurnal Sosial Humaniora Dan Pendidikan, 2(2), 143. https://doi.org/10.32487/jshp.v2i2.480

Ríos, V. R., & Campo, E. P. del. (2013). Business research methods: Theory and practice. ESIC Editorial.

Riwayati, H. E., Markonah, M., & Sholeha, M. (2023). The Effectiveness of Liquidity, Solvency, and Profitability Ratios against the Stock Returns of the Company. MIX : Jurnal Ilmiah Manajemen, 13(3), 600–613. https://doi.org/10.22441/jurnal

p-ISSN: 2088-1231
e-ISSN: 2460-5328

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach (7th ed.). John Wiley & Sons.

Sunaryo, D. (2019). Pengaruh Resiko Bisnis Dan Growth Opportunity Terhadap Struktur Modal Pada Perushaan Manufaktur Sub Sektor Kosmetik Dan Barang Keperluan Rumah Tangga Yang Terdaftar Di Bursa Efek Indonesia Priode 2012-2017. Jurnal Riset Akuntansi Terpadu, 12(1), 22–40. https://doi.org/10.35448/jrat.v12i1.5193

Titman, S., & Wessels, R. (1988). The Determinants of Capital Structure Choice. The Journal of Finance, 43(1), 1–19. https://doi.org/10.1111/j.1540-6261.1988.tb02585.x

Ulandari, S., & Hidayati, N. (2025). Determination of profitability of coal mining companies : the role of leverage , liquidity , and sales growth. Daengku: Journal of Humanities and Social Sciences Innovation, 5(1), 9–16 to.

Wijaya, B. S., & Ardini, L. (2020). Pengaruh Profitabilitas, Growth Opportunity Dan Firm Size Terhadap Struktur Modal. Jurnal Ilmu Dan Riset Akuntansi, 9(2), 1–14.

Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. MIT Press.

Zavertiaeva, M., & Nechaeva, I. (2017). Impact of Market Timing on the Capital Structure of Russian Companies. Journal of Economics and Business, 92, 10–28. https://doi.org/10.1016/j.jeconbus.2017.04.001