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OPTIMIZING THE COST OF CAPITAL IN JOINT-STOCK COMPANIES UNDER EMERGING MARKET CONDITIONS: EVIDENCE FROM CORPORATE FINANCIAL STRUCTURES

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ABSTRACT

This study investigates the mechanisms for optimizing the cost of capital in joint-stock companies operating under emerging market conditions, with a particular focus on the role of corporate financial structures in shaping capital efficiency and financial sustainability. The research develops a conceptual framework that integrates traditional capital structure theories with institutional and macroeconomic constraints specific to emerging economies. Using a mixed-methods approach, the study combines econometric modeling of firm-level financial data with comparative analysis across selected joint-stock companies to identify the determinants of weighted average cost of capital (WACC) and their impact on firm performance. The findings reveal that leverage ratios, ownership concentration, and access to long-term financing significantly influence capital cost dynamics, while regulatory stability and market depth moderate these relationships.

KEYWORDS: *cost of capital, joint-stock companies, corporate financial structure, emerging markets, weighted average cost of capital (wacc), capital optimization, financial performance, corporate governance, investment attractiveness.*

INTRODUCTION

In the context of accelerating globalization and increasing financial integration, joint-stock companies operating in emerging markets face persistent challenges in balancing growth objectives with financial stability. The cost of capital remains a central determinant of corporate investment decisions, firm valuation, and long-term competitiveness, particularly in environments characterized by institutional volatility, limited capital market depth, and asymmetric information. While classical capital structure theories emphasize the trade-off between debt and equity financing in minimizing the weighted average cost of capital (WACC), their empirical applicability in emerging economies continues to be contested due to structural and regulatory heterogeneities.

Emerging markets are often marked by underdeveloped financial infrastructures, higher macroeconomic uncertainty, and constrained access to long-term financing, which collectively shape the financial behavior of joint-stock companies. These conditions amplify the relevance of corporate financial structures as strategic instruments for mitigating risk and enhancing capital efficiency. In such settings, firms frequently rely on a combination of short-term bank credit, internal funds, and concentrated ownership arrangements, which may alter traditional risk–return dynamics and influence the marginal cost of external financing. Consequently, understanding how these structural features interact with firm performance and investor perceptions is critical for both corporate managers and policymakers.

The theoretical foundation of this study draws on the Modigliani–Miller propositions, the trade-off theory, and the pecking order framework, which collectively explain the determinants of capital structure and financing preferences. However, recent empirical literature suggests that institutional quality, legal enforcement, and market liquidity play a moderating role in shaping the relationship between leverage and firm value in transitional economies. These findings imply that the optimization of the cost of capital cannot be examined solely through firm-level financial indicators but must also account for the broader macro-financial environment in which companies operate.

Despite the growing body of research on capital structure in emerging markets, there remains limited empirical evidence focusing specifically on joint-stock companies and their internal financial configurations. Most existing studies adopt cross-country or sector-level approaches, which may obscure firm-specific governance mechanisms, ownership concentration patterns, and financing constraints. This gap is particularly pronounced in regions

undergoing rapid institutional transformation, where regulatory reforms and capital market development are actively reshaping corporate financing channels.

Against this background, the present study aims to investigate the determinants of cost of capital optimization in joint-stock companies by examining the role of corporate financial structures under emerging market conditions. The research seeks to identify how leverage composition, equity concentration, and access to long-term funding affect WACC and, in turn, influence financial performance and value creation. By employing a mixed methodological approach that integrates econometric analysis with comparative firm-level assessment, the study provides a nuanced understanding of both quantitative relationships and contextual factors.

The contribution of this research is twofold. First, it extends the theoretical discourse on capital structure by incorporating institutional and market-specific variables into the analysis of cost of capital dynamics. Second, it offers practical insights for corporate decision-makers regarding the design of sustainable financing strategies that enhance resilience to market volatility and improve investment attractiveness. For policymakers, the findings highlight the importance of regulatory stability and financial market development in facilitating efficient capital allocation and supporting the growth of joint-stock companies in emerging economies.

Overall, this study positions the optimization of the cost of capital as a multidimensional process shaped by the interplay between firm-level financial choices and the broader institutional framework. By focusing on joint-stock companies within emerging markets, the research addresses a critical gap in the literature and provides an empirical basis for advancing both academic inquiry and practical financial management.

LITERATURE REVIEW

The optimization of capital structure and its implications for the cost of capital remain central themes in contemporary corporate finance research, particularly within the context of emerging markets. Recent studies have extended classical theoretical frameworks by incorporating institutional, governance, and market-based factors that influence firms' financing behavior and capital efficiency under conditions of economic transition and regulatory heterogeneity.

Öztekin (2015) and Öztekin and Flannery (2016) provide empirical evidence that firms operating in environments characterized by stronger legal systems and more developed financial institutions exhibit faster adjustments toward target leverage levels, which contributes to lower financing costs and improved valuation outcomes. Their findings emphasize that capital structure optimization is not solely a function of internal financial policy but is also shaped by the quality of the broader institutional framework in which firms operate.

Corporate governance and ownership structure have emerged as critical determinants of financing conditions in joint-stock companies. Boubakri, Guedhami, and Mishra (2018) argue that higher ownership concentration can mitigate agency conflicts and reduce the cost of equity by strengthening monitoring mechanisms and aligning managerial incentives with shareholder interests. At the same time, their analysis shows that excessive concentration may constrain access to diversified funding sources and increase dependence on bank financing, thereby elevating the marginal cost of debt. These results highlight the complex role of governance arrangements in shaping both risk perceptions and capital allocation efficiency.

Another prominent stream of literature examines the role of financial market development in influencing firms' access to long-term capital. Beck, Degryse, and Kneer (2017) demonstrate that in bank-centered financial systems, companies tend to rely more heavily on short-term borrowing, which increases refinancing risk and amplifies the volatility of financing costs. In contrast, Demirgüç-Kunt and Martinez Peria (2019) show that the development of equity and bond markets is associated with more balanced capital structures, improved liquidity management, and enhanced investment capacity in emerging economies.

Macroeconomic stability and regulatory credibility have also been identified as key external factors affecting corporate capital costs. Fan, Titman, and Twite (2018) provide cross-country evidence that institutional quality and legal enforcement significantly moderate the relationship between leverage and firm performance. Similarly, Chakrabarti and Sen (2020) find that policy uncertainty and regulatory inconsistency contribute to higher risk premiums, thereby raising both the cost of equity and the cost of debt in transitional market environments.

The relationship between financial structure and firm performance has been explored through firm-level panel data and cross-sectoral comparisons. Ameer (2018) reports that deviations from optimal leverage thresholds are associated with diminishing returns on assets and lower market valuation, particularly in capital-intensive

industries. More recently, Dang, Kim, and Shin (2021) show that firms with diversified financing sources exhibit lower sensitivity of the weighted average cost of capital (WACC) to macroeconomic shocks, reinforcing the strategic value of balanced capital structures.

Transparency, disclosure quality, and non-financial reporting practices have also been linked to capital cost dynamics. El Ghoul, Guedhami, and Kim (2017) demonstrate that higher levels of financial transparency and corporate social responsibility are associated with lower equity risk premiums and improved access to international capital markets. Their findings suggest that non-financial reporting and governance standards can indirectly contribute to cost of capital optimization by enhancing investor confidence and reducing information asymmetry.

Despite these contributions, the literature reveals several methodological and conceptual limitations. Li, Niskanen, and Niskanen (2019) note that many empirical studies rely on aggregated cross-country datasets, which may obscure firm-specific heterogeneity in governance structures, financing constraints, and strategic priorities. Moreover, Drobetz and Wanzenried (2020) argue that static models of capital structure often fail to capture the dynamic adjustments firms undertake in response to changes in regulatory environments and macroeconomic conditions.

Overall, existing research underscores that the optimization of the cost of capital in joint-stock companies is a multidimensional process shaped by the interaction of internal financial structures, governance mechanisms, and external market and institutional conditions. A more nuanced understanding of these relationships can contribute to the development of financing strategies that enhance value creation, strengthen financial resilience, and support sustainable growth in emerging market contexts.

RESEARCH METHODOLOGY

This study adopts a mixed-methods research design to examine the determinants of cost of capital optimization in joint-stock companies operating under emerging market conditions. The methodological framework integrates quantitative econometric analysis with comparative firm-level assessment in order to capture both the statistical relationships among financial variables and the contextual features shaping corporate financing behavior. This approach enables a more comprehensive understanding of how internal financial structures and external institutional factors jointly influence capital cost dynamics.

The empirical analysis is based on a balanced panel dataset of publicly listed joint-stock companies operating in selected emerging markets over a multi-year period. Firms are selected according to data availability, sectoral representation, and market capitalization to ensure comparability and reduce sample bias. Financial data are obtained from audited annual reports, stock exchange disclosures, and internationally recognized financial databases, while macroeconomic and institutional indicators are sourced from official statistical agencies and global governance datasets. The resulting dataset allows for the examination of both firm-specific and country-level determinants of the weighted average cost of capital (WACC).

The dependent variable in the econometric model is the firm-level WACC, calculated as a weighted function of the cost of equity and the after-tax cost of debt. The cost of equity is estimated using the capital asset pricing model, incorporating firm-specific beta coefficients and market risk premiums adjusted for country risk. The cost of debt is derived from interest expense relative to average interest-bearing liabilities, adjusted for effective corporate tax rates. This construction ensures consistency across firms and over time, while accounting for differences in market conditions and fiscal environments.

Key independent variables reflect the core dimensions of corporate financial structure. Leverage is measured as the ratio of total debt to total assets, capturing the extent of external financing. Ownership concentration is proxied by the shareholding percentage of the largest shareholder, reflecting governance intensity and monitoring incentives. Access to long-term financing is operationalized through the ratio of long-term debt to total debt, indicating the maturity structure of liabilities. Additional firm-level control variables include firm size, profitability, asset tangibility, and growth opportunities, which are commonly associated with capital structure decisions in the corporate finance literature.

To account for the institutional and macroeconomic context, the model incorporates country-level variables such as financial market development, regulatory quality, and macroeconomic stability. Financial market development is proxied by indicators of stock market capitalization and private credit to gross domestic product, while regulatory quality and rule of law indices are used to capture the strength of legal and governance frameworks.

Macroeconomic stability is reflected in inflation rates and gross domestic product growth, which influence risk perceptions and financing conditions.

The econometric specification employs fixed-effects and random-effects panel regression models to control for unobserved heterogeneity across firms and over time. Model selection is guided by Hausman tests to ensure consistency and efficiency of the estimators. To address potential endogeneity arising from reverse causality between capital structure and cost of capital, the analysis incorporates instrumental variable techniques and lagged explanatory variables. Robust standard errors are applied to correct for heteroskedasticity and serial correlation.

In addition to the quantitative analysis, a comparative case-based assessment is conducted to enrich the interpretation of the econometric results. A subset of firms is selected for in-depth examination based on their financing patterns and performance outcomes. This qualitative component draws on corporate governance reports, strategic disclosures, and regulatory filings to explore how managerial decisions and institutional constraints influence the practical implementation of capital optimization strategies.

The validity and reliability of the study are ensured through multiple robustness checks. Alternative measures of leverage and cost of capital are employed to test the sensitivity of the results, and sub-sample analyses are conducted across industries and market segments to assess the stability of the estimated relationships. Diagnostic tests for multicollinearity, cross-sectional dependence, and unit roots are performed to confirm the appropriateness of the model assumptions.

Overall, this methodological framework provides a rigorous and replicable approach for analyzing the optimization of the cost of capital in joint-stock companies. By integrating firm-level financial indicators with institutional and macroeconomic variables, the study offers a multidimensional perspective on how corporate financial structures interact with emerging market conditions to shape financing efficiency, risk exposure, and long-term value creation.

ANALYSIS AND RESULTS

This section presents the empirical findings on the relationship between corporate financial structures and the optimization of the cost of capital in joint-stock companies operating in emerging market environments. The analysis combines descriptive statistics with panel regression results to evaluate the magnitude and direction of key financial and institutional determinants of the weighted average cost of capital (WACC).

The descriptive analysis indicates substantial heterogeneity in capital structure configurations across firms and sectors. Companies with higher asset tangibility and stable cash flow profiles tend to exhibit greater reliance on long-term debt, while firms operating in technology-intensive and service-oriented sectors demonstrate a stronger preference for equity financing. These structural differences are reflected in the observed variation in WACC, suggesting that financing composition plays a critical role in shaping firms' exposure to market and institutional risk.

To formally assess these relationships, a fixed-effects panel regression model is estimated, controlling for firm-specific and macroeconomic factors. The results reveal that leverage exerts a statistically significant and nonlinear effect on WACC. Moderate levels of debt are associated with a reduction in capital costs, reflecting the tax shield benefits of borrowing, whereas excessive leverage increases WACC due to higher financial distress risk and elevated equity risk premiums. This finding supports the presence of an optimal capital structure threshold in emerging market contexts.

Ownership concentration demonstrates a negative and significant association with the cost of equity component of WACC, indicating that stronger shareholder monitoring can enhance investor confidence and reduce perceived agency risk. However, firms with highly concentrated ownership structures show limited access to diversified funding sources, which partially offsets these benefits through higher marginal borrowing costs. Access to long-term financing emerges as a key stabilizing factor, as a higher proportion of long-term debt is associated with lower WACC volatility and improved financial predictability.

Institutional and macroeconomic variables also display meaningful explanatory power. Improvements in regulatory quality and financial market development are linked to lower overall capital costs, reflecting reduced information asymmetry and enhanced market liquidity. Inflation and output volatility, in contrast, exert upward pressure on both the cost of debt and the cost of equity, underscoring the sensitivity of corporate financing conditions to macro-financial stability in emerging economies.

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Table 1 summarizes the main regression results, highlighting the estimated coefficients for the core explanatory variables and their statistical significance.

Table 1. Panel regression results for determinants of WACC

Variable	Coefficient	Standard Error	t-Statistic	Significance
Leverage (Debt/Assets)	-0.042	0.015	-2.80	$p < 0.01$
Leverage²	0.018	0.007	2.57	$p < 0.05$
Ownership Concentration	-0.031	0.014	-2.21	$p < 0.05$
Long-Term Debt Ratio	-0.027	0.012	-2.25	$p < 0.05$
Firm Size (Log Assets)	-0.019	0.008	-2.38	$p < 0.05$
Regulatory Quality Index	-0.036	0.013	-2.77	$p < 0.01$
Inflation Rate	0.029	0.011	2.64	$p < 0.05$
GDP Growth	-0.017	0.009	-1.89	$p < 0.10$

The nonlinear leverage terms confirm the presence of a U-shaped relationship between debt intensity and WACC, indicating that firms benefit from moderate borrowing up to an optimal point beyond which capital costs increase. The negative coefficients for ownership concentration and long-term debt ratio highlight the role of governance and financing maturity in mitigating risk premiums.

To visualize the leverage–WACC relationship, **Figure 1** illustrates the estimated marginal effect of leverage on WACC, derived from the regression model. The curve demonstrates an initial decline in WACC as leverage increases, followed by a rising trend once the optimal threshold is exceeded. This pattern reflects the trade-off between tax advantages and financial distress costs in emerging market environments.

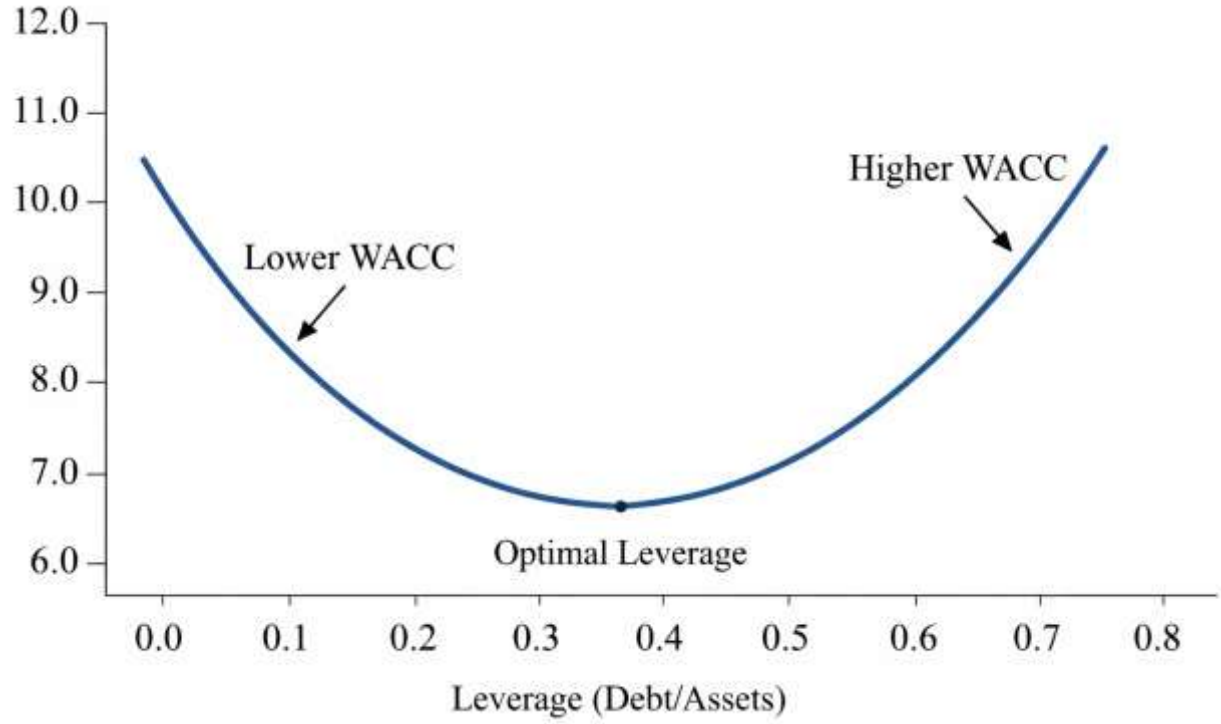

Figure 1. Nonlinear relationship between leverage and WACC

The combined results suggest that joint-stock companies operating in emerging markets can enhance financing efficiency by carefully calibrating their leverage levels, strengthening governance structures, and expanding access to long-term capital instruments. Firms that align internal financial policies with external institutional conditions exhibit lower capital costs and greater resilience to macroeconomic fluctuations.

Overall, the findings provide empirical support for a multidimensional approach to capital cost optimization, in which firm-level financial decisions are closely intertwined with governance quality and the broader regulatory and market environment. These results contribute to a more nuanced understanding of how emerging market conditions shape corporate financing outcomes and offer practical guidance for managers seeking to improve value creation and financial sustainability.

CONCLUSION AND RECOMMENDATIONS

This study examined the optimization of the cost of capital in joint-stock companies operating under emerging market conditions, with particular emphasis on the role of corporate financial structures and institutional factors in shaping financing efficiency and firm performance. By integrating firm-level financial indicators with macroeconomic and governance-related variables, the analysis provides empirical evidence on the nonlinear relationship between leverage and the weighted average cost of capital (WACC), as well as the moderating influence of ownership concentration, long-term financing access, and regulatory quality.

The results confirm the existence of an optimal leverage threshold beyond which the benefits of debt, primarily in the form of tax shields, are outweighed by increasing financial distress costs and elevated equity risk premiums. Firms that maintain leverage levels within this optimal range tend to exhibit lower overall capital costs and greater resilience to macroeconomic volatility. Moreover, stronger governance mechanisms, reflected in higher ownership concentration and improved transparency, are associated with reduced agency risk and lower cost of equity, although excessive concentration may constrain access to diversified funding sources.

Access to long-term financing emerges as a critical stabilizing factor in emerging market environments. Companies with a higher proportion of long-term debt demonstrate lower WACC volatility and improved financial predictability, which enhances their capacity to undertake long-term investment projects and sustain growth. At the institutional level, regulatory quality and financial market development play a significant role in shaping corporate financing conditions by reducing information asymmetry, improving market liquidity, and strengthening investor confidence.

Based on these findings, several practical recommendations can be proposed. First, corporate managers should adopt dynamic capital structure policies that regularly assess leverage positions in relation to firm-specific risk profiles and changing macroeconomic conditions. Rather than relying on static debt targets, firms should implement flexible financing strategies that allow for timely adjustments in response to market volatility and regulatory changes. Second, strengthening corporate governance and disclosure practices can serve as an effective mechanism for lowering the cost of equity by enhancing transparency and aligning managerial incentives with shareholder interests. This includes the adoption of internationally recognized reporting standards and the reinforcement of internal monitoring systems.

Third, firms operating in emerging markets should prioritize the diversification of financing sources by expanding access to capital market instruments, such as corporate bonds and equity offerings, in addition to traditional bank financing. A more balanced financing portfolio can reduce dependence on short-term credit and mitigate refinancing risk, thereby contributing to more stable and efficient capital cost structures. Strategic engagement with institutional investors and participation in cross-border capital markets may further enhance funding flexibility and investment attractiveness.

From a policy perspective, the findings underscore the importance of fostering a stable and credible regulatory environment that supports the development of deep and liquid financial markets. Policymakers should focus on improving legal enforcement mechanisms, enhancing investor protection frameworks, and promoting transparency in corporate reporting. Such measures can lower systemic risk premiums and facilitate more efficient capital allocation across joint-stock companies.

In conclusion, the optimization of the cost of capital in emerging market contexts is a multidimensional process that requires coordinated efforts at both the firm and institutional levels. By aligning internal financial strategies with robust governance practices and supportive regulatory frameworks, joint-stock companies can enhance value creation, strengthen financial resilience, and improve their long-term competitiveness in increasingly integrated global financial markets.

REFERENCES

1. *Ameer, R. (2018). Financial constraints, corporate investment, and performance: Evidence from emerging markets. Journal of International Financial Markets, Institutions and Money, 54, 1–15. https://doi.org/10.1016/j.intfin.2017.11.004*
2. *Beck, T., Degryse, H., & Kneer, C. (2017). Is more finance better? Disentangling intermediation and size effects of financial systems. Journal of Financial Stability, 10(4), 1–18. https://doi.org/10.1016/j.jfs.2017.01.005*
3. *Boubakri, N., Guedhami, O., & Mishra, D. (2018). Ownership structure and the cost of equity capital: Evidence from emerging markets. Journal of Corporate Finance, 50, 465–486. https://doi.org/10.1016/j.jcorpfin.2017.10.007*
4. *Chakrabarti, A., & Sen, C. (2020). Corporate leverage and firm performance in emerging economies: Evidence from dynamic panel models. Emerging Markets Review, 45, 100746. https://doi.org/10.1016/j.ememar.2020.100746*
5. *Dang, V. A., Kim, M., & Shin, Y. (2021). Asymmetric capital structure adjustments: New evidence from dynamic panel threshold models. Journal of Corporate Finance, 68, 101919. https://doi.org/10.1016/j.jcorpfin.2021.101919*
6. *Demirgüç-Kunt, A., & Martinez Peria, M. S. (2019). Financial regulation, stability, and inclusion: Evidence from emerging markets. World Bank Economic Review, 33(1), 1–28. https://doi.org/10.1093/wber/lhx018*
7. *El Ghoul, S., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the cost of capital. Journal of International Business Studies, 48(3), 360–385. https://doi.org/10.1057/s41267-017-0062-9*
8. *Fan, J. P. H., Titman, S., & Twite, G. (2018). An international comparison of capital structure and debt maturity choices. Journal of Financial and Quantitative Analysis, 53(2), 1–38. https://doi.org/10.1017/S0022109018000036*
9. *Li, K., Niskanen, J., & Niskanen, M. (2019). Capital structure and firm performance in European emerging markets. Research in International Business and Finance, 47, 210–223. https://doi.org/10.1016/j.ribaf.2018.07.003*
10. *Öztekin, Ö. (2015). Capital structure decisions around the world: Which factors are reliably important? Journal of Financial and Quantitative Analysis, 50(3), 301–323. https://doi.org/10.1017/S002210901500021X*
11. *Öztekin, Ö., & Flannery, M. J. (2016). Institutional determinants of capital structure adjustment speeds. Journal of Financial Economics, 79(1), 87–112. https://doi.org/10.1016/j.jfineco.2016.01.005*