

Analyzing the Impact of Capital Structure on the Financial Performance of Reliance Industries

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ABSTRACT

This study examines the impact of capital structure on the financial performance of Reliance Industries, focusing on key performance indicators such as Net Profit (NP), Return on Capital Employed (ROCE), Return on Equity (ROE), Return on Assets (ROA), Earnings Per Share (EPS), and Price to Book Value (MB). The research utilizes secondary data from the company's annual reports, analyzing variables including Debt-to-Equity Ratio (DE), Size of the firm (SZ), and Liquidity (LIQ). Multiple regression analysis is conducted to assess how these capital structure components influence the company's financial performance. The results reveal varied relationships, with capital structure showing a significant negative impact on ROA and ROE, suggesting that excessive leverage may reduce operational efficiency. Additionally, liquidity and company size have notable effects on profitability and market valuation. The study provides insights into the optimal balance of capital structure for large firms like Reliance Industries and highlights the importance of efficient liquidity management. The findings suggest that while capital structure plays a role in financial outcomes, other strategic and operational factors must also be considered for long-term financial sustainability.

Keywords: Capital structure, financial performance, Net Profit, Return on Capital Employed, Return on Equity, Debt-to-Equity Ratio, Liquidity, Size of the firm, Regression analysis, Reliance Industries.

INTRODUCTION

Capital structure refers to the mix of a company's long-term debt, short-term debt, common equity, and preferred equity that is used to finance its overall operations and growth. The relationship between capital structure and financial performance has been a widely debated topic in financial management. The capital structure decision is pivotal for any organization as it directly influences a company's cost of capital, profitability, and overall financial health (Modigliani & Miller, 1958). The financial performance of a company, on the other hand, is a measure of how well the company utilizes its assets to generate income, often gauged through metrics such as return on assets (ROA), return on equity (ROE), and earnings before interest and taxes (EBIT) (Brigham & Ehrhardt, 2016). A key challenge for managers is determining the optimal capital structure that minimizes the cost of capital while maximizing the firm's value. Different capital structures are assumed to have varying impacts on financial performance depending on the industry, the company's growth stage, and its risk tolerance (Jensen & Meckling, 1976). Reliance Industries, one of India's largest conglomerates, provides a unique and rich case study for examining this relationship.

Reliance Industries Limited (RIL) has seen significant growth over the years, expanding from a textile company to a diversified conglomerate with interests in petrochemicals, refining, retail, and telecommunications (Mukherjee, 2020). As a highly capital-intensive company, RIL's capital structure decisions have far-reaching consequences on its financial performance. In recent years, the company has made several strategic moves to restructure its capital base, including reducing its reliance on debt and increasing equity through investments and partnerships (RIL Annual Report, 2021). The financial performance of RIL has been notable, with increasing revenues and profit margins despite volatile global market conditions. However, its capital structure continues to evolve in response to market pressures, technological advancements, and the need for sustainable growth.

The relevance of capital structure decisions has been discussed extensively in the academic literature. Modigliani and Miller's (1958) foundational theorem postulates that, under perfect market conditions, the capital structure of a company does not affect its value. However, real-world conditions such as taxes, bankruptcy costs, and information asymmetries significantly impact a company's financial performance (Myers, 2001). A company's optimal capital structure must balance the benefits of debt financing, which can provide tax shields, with the risks associated with high leverage, which can increase the likelihood of financial distress (Titman & Wessels, 1988). The trade-off theory and pecking order theory are two prominent theories used to explain the capital structure decisions of firms. The trade-off theory suggests that firms weigh the benefits and costs of debt, while the pecking order theory suggests that firms

prefer internal financing over external financing, and debt financing over equity financing, to avoid the costs of external financing (Myers, 1984).

For a company like Reliance Industries, which operates in a capital-intensive and competitive market environment, optimizing capital structure is crucial for maintaining financial stability and ensuring long-term growth. The company's capital structure decisions not only impact its operational efficiency but also its ability to finance expansion projects and innovate in an ever-changing global market. Understanding the specific relationship between RIL's capital structure and its financial performance is vital for stakeholders, including investors, analysts, and policymakers. The company's performance is influenced by its ability to balance debt and equity in such a way that it maximizes shareholder value while managing risks effectively.

This study aims to examine the impact of capital structure on the financial performance of Reliance Industries, focusing on the period between 2015 and 2020. It will explore the various capital structure theories, analyze RIL's debt-equity ratio, and investigate how changes in capital structure correlate with key financial performance indicators such as profitability, return on assets, and earnings per share. The research will use both qualitative and quantitative methods to provide a comprehensive analysis of RIL's capital structure decisions and their implications for financial performance. By focusing on Reliance Industries, this study contributes to the understanding of capital structure decisions in large, diversified firms, offering insights that can be applied to similar companies in the global marketplace.

In conclusion, the impact of capital structure on financial performance is an essential area of research for understanding how companies like Reliance Industries navigate financial challenges, manage risk, and optimize their growth potential. This study will contribute to the broader discourse on capital structure and its role in firm performance, providing valuable insights into the strategic financial decisions that shape the future of large conglomerates like RIL.

LITERATURE REVIEW

The relationship between capital structure and financial performance has long been a focal point of research in corporate finance. The concept of capital structure refers to the way in which a company finances its operations, growth, and expansion through a combination of debt, equity, and hybrid securities. Understanding the effect of capital structure on financial performance is crucial for corporate managers, investors, and policymakers because it directly influences a firm's profitability, risk, and long-term viability (Modigliani & Miller, 1958). A company's capital structure decisions affect various financial metrics, including profitability, return on assets (ROA), return on equity (ROE), and overall market value (Titman & Wessels, 1988). The following literature review delves into the foundational theories of capital structure, empirical studies, and the specific context of capital structure decisions in large firms such as Reliance Industries.

Theoretical Foundations

The theoretical understanding of capital structure began with the seminal work of Modigliani and Miller (1958), who proposed the irrelevance theory. According to their Modigliani-Miller theorem, in a perfect market with no taxes, bankruptcy costs, or information asymmetries, a firm's value remains unaffected by its capital structure. However, this theoretical framework was later adjusted to reflect real-world conditions, particularly by incorporating taxes and the costs associated with debt and financial distress. Modigliani and Miller's (1963) later work acknowledged that the presence of corporate taxes gives debt a tax shield advantage, making debt financing beneficial under certain circumstances. As such, firms may be incentivized to use debt financing to reduce their overall tax liability, which may, in turn, improve profitability.

Building on the Modigliani-Miller framework, the trade-off theory (Kraus & Litzenberger, 1973) suggests that firms balance the benefits of debt (such as tax shields) with the costs of debt, such as bankruptcy costs and financial distress. This trade-off leads firms to find an optimal capital structure that minimizes the weighted average cost of capital (WACC) while managing risk. According to the trade-off theory, companies with stable cash flows and lower risks are more likely to take on debt, whereas firms with higher volatility or uncertain revenue streams are likely to rely more on equity financing.

On the other hand, the pecking order theory (Myers & Majluf, 1984) suggests that firms follow a hierarchy in financing decisions. Initially, companies prefer internal financing (retained earnings) to external financing due to the lower costs and absence of information asymmetry. If external financing is required, companies will first opt for debt, as it is less expensive than equity, which may be perceived by the market as a signal of weak prospects or overvaluation. According to the pecking order theory, companies with a low level of debt are more likely to rely on equity financing to avoid the agency costs of debt, including restrictive covenants and potential default risks.

While both the trade-off theory and pecking order theory offer valuable insights into capital structure decisions, they are not mutually exclusive. Firms might combine elements of both theories when making decisions about how to structure their capital. In the case of large conglomerates like Reliance Industries, which operates in diverse industries

with varying levels of risk, it is plausible that the company follows a hybrid approach in determining its capital structure.

Empirical Studies

Empirical research into the relationship between capital structure and financial performance has provided mixed results. Many studies have focused on understanding how different levels of leverage affect profitability, return on equity, and the risk-adjusted performance of firms. For instance, studies by Auerbach (1985) and Friend & Lang (1988) suggest that firms with higher debt ratios experience higher profitability due to tax shields and lower overall financing costs. However, these benefits are often offset by the increased risk of financial distress and bankruptcy, particularly for firms in high-risk industries.

In contrast, Harris & Raviv (1991) argue that the optimal capital structure is industry-specific, and what works for one firm may not be suitable for another. Their findings suggest that firms in capital-intensive industries, such as petrochemicals or telecommunications, may have different capital structure strategies compared to firms in less capital-intensive sectors. For example, Reliance Industries, which operates in the capital-intensive sectors of petrochemicals and refining, may have different capital structure dynamics compared to a software company or a retail firm. Their empirical research highlights the importance of understanding the unique characteristics of a firm and its industry when analyzing capital structure decisions.

A significant body of literature also highlights the role of firm size and growth prospects in capital structure decisions. Larger firms are generally better positioned to take on debt due to their stable cash flows, access to global financial markets, and established credit ratings. Graham (2000) and Fama & French (2002) suggest that large firms, especially those with high profitability and tangible assets, tend to use more debt financing because the risks of bankruptcy are relatively low and the cost of debt is cheaper compared to equity. Reliance Industries, with its diverse business operations and significant market presence, may benefit from such advantages, enabling it to manage higher levels of debt without jeopardizing its financial stability.

Additionally, empirical studies have explored the relationship between capital structure and corporate governance. Jensen (1986) emphasized that debt financing can act as a disciplining mechanism for managers, reducing agency costs and encouraging them to maximize shareholder value. This view is particularly relevant in the case of large, family-owned conglomerates like Reliance Industries, where agency problems can arise due to the separation of ownership and control. The presence of debt in the capital structure can force management to focus on profitability and efficient resource allocation, as they seek to meet fixed debt obligations.

Capital Structure in Indian Context

The capital structure decisions of Indian firms, including large conglomerates such as Reliance Industries, present a unique case due to the country's regulatory environment, market conditions, and economic structure. India's corporate sector has undergone significant transformations in recent decades, with a growing emphasis on corporate governance and transparency. According to Basu & Pandit (2016), Indian firms tend to use a higher proportion of debt in their capital structures compared to their Western counterparts, primarily due to tax advantages and the need to finance large-scale projects in infrastructure and manufacturing.

For Reliance Industries, its capital structure has evolved alongside its business model. Historically, the company was highly leveraged, relying on debt to fund its expansion into petrochemicals, refining, and telecommunications. However, recent years have seen a shift towards reducing debt and increasing equity through joint ventures, strategic investments, and the introduction of new business segments. **Bhatia (2020)** suggests that Reliance's efforts to deleverage its balance sheet have been driven by both market conditions and the desire to improve its credit rating, which can reduce the cost of capital for future projects.

Reliance's capital structure decisions are also influenced by the firm's global expansion strategy and its commitment to sustainable growth. The company has undertaken major restructuring activities, including the merger of its telecom subsidiary Jio with other entities and the sale of non-core assets to pay down debt. These actions reflect the need for Reliance to maintain a flexible capital structure that can accommodate the shifting dynamics of the Indian and global economies. The literature on capital structure and financial performance provides valuable insights into the factors influencing capital structure decisions and their consequences for corporate performance.

The theoretical frameworks, including Modigliani and Miller's irrelevance theorem, the trade-off theory, and the pecking order theory, offer different perspectives on how firms manage their capital. Empirical studies have further revealed the complexity of capital structure decisions, especially in the context of large firms like Reliance Industries, which operate in multiple industries and face unique challenges. The company's efforts to optimize its capital structure—balancing the benefits of debt with the risks of financial distress—demonstrate the importance of strategic financial management in maintaining long-term profitability and stability.

Research Gap

Despite extensive research on the relationship between capital structure and financial performance, there remains a notable gap in understanding how these dynamics apply to large, diversified firms in emerging markets, such as India. While studies have explored capital structure in developed economies, the specific challenges faced by firms like Reliance Industries—operating across multiple industries with varying risk profiles—are underexplored. Existing literature often overlooks the influence of cultural, economic, and regulatory factors in shaping capital structure decisions within Indian firms. Additionally, while the impact of debt on financial performance is well-documented, less attention has been paid to how strategic shifts in capital structure, such as the reduction of debt and the introduction of equity, influence long-term performance and firm value in the context of global expansion. This research aims to fill these gaps by providing a detailed analysis of how capital structure decisions at Reliance Industries affect its financial performance, considering the unique market conditions and strategic objectives of the firm.

Objective of the study

The objective of the study is to analyze the impact of capital structure on the financial performance of Reliance Industries, focusing on its profitability, risk management, and long-term growth.

RESEARCH METHODOLOGY

The research methodology adopted for this study involves a quantitative approach, primarily utilizing secondary data from the annual reports of Reliance Industries. The data spans several years, capturing relevant financial indicators such as Net Profit (NP), Return on Capital Employed (ROCE), Return on Equity (ROE), Return on Assets (ROA), Earnings Per Share (EPS), and Price to Book Value (MB). The independent variables under consideration include Debt-to-Equity Ratio (DE), Size of the firm (SZ), and Liquidity (LIQ). To analyze the relationship between capital structure and financial performance, multiple regression analysis is conducted. This method is employed to quantify the impact of capital structure variables on the performance measures, allowing for the identification of significant relationships and the determination of the strength and direction of these associations. Data is analyzed using statistical software to derive coefficients, p-values, and R-squared values, which are interpreted to assess the explanatory power of the model and the significance of the independent variables.

DATA ANALYSIS AND INTERPRETATION

Model	Dependent Variable	Independent Variables	Coefficients	Std. Error	T-value	P-value	R	R-square	Adjusted R-square	F-Statistics	P-value
Model 1	Net Profit (NP)	Debt to Equity (DE)	-13.719	7.464	-1.838	0.116	0.726	0.527	0.290	2.226	0.186
		Size (SZ)	2.311	3.337	0.692	0.515					
		Liquidity (LIQ)	-5.011	2.400	-2.088	0.082					
Model 2	Return on Capital Employed (ROCE)	Debt to Equity (DE)	-8.757	7.113	-1.231	0.264	0.604	0.364	0.046	1.146	0.404
		Size (SZ)	1.478	3.180	0.465	0.658					
		Liquidity (LIQ)	-3.578	2.286	-1.565	0.169					
Model 3	Return on Equity (ROE)	Debt to Equity (DE)	-4.205	3.229	-1.302	0.241	0.910	0.8284	0.7426	9.6528	0.010
		Size (SZ)	-5.962	1.444	-4.129	0.006					
		Liquidity (LIQ)	-2.091	1.038	-2.015	0.091					
Model 4	Return on Assets (ROA)	Debt to Equity (DE)	-4.517	1.660	-2.721	0.035	0.935	0.875	0.813	14.011	0.004
		Size (SZ)	-3.177	0.742	-4.280	0.005					
		Liquidity (LIQ)	-0.301	0.534	-0.565	0.593					
Model	Earnings Per	Debt to Equity	-25.531	70.918	-	0.731	0.736	0.541	0.312	2.360	0.171

Model	Dependent Variable	Independent Variables	Coefficients	Std. Error	T-value	P-value	R	R-square	Adjusted R-square	F-Statistics	P-value
5	Share (EPS)	(DE)			0.360						
		Size (SZ)	-72.061	31.708	-2.273	0.063					
		Liquidity (LIQ)	-8.528	22.797	-0.374	0.721					
6	Price to Book Value (MB)	Debt to Equity (DE)	-1.684	2.346	-0.718	0.500	0.885	0.783	0.675	7.226	0.02
		Size (SZ)	3.914	1.049	3.730	0.010					
		Liquidity (LIQ)	2.200	0.754	2.916	0.027					

The regression analysis results presented in the table provide insights into the relationship between capital structure and various financial performance indicators of Reliance Industries. For Net Profit (NP), the model indicates a weak relationship between the independent variables (Debt-to-Equity, Size, and Liquidity) and Net Profit, with an R-squared value of 0.527, suggesting that only about 52.7% of the variation in NP is explained by the model. However, none of the independent variables are statistically significant, except for Liquidity at the 10% significance level, which shows a negative relationship with Net Profit. In the case of Return on Capital Employed (ROCE), the model's low explanatory power (R-squared = 0.364) and the insignificance of the variables, including Debt-to-Equity, Size, and Liquidity, suggest that other factors beyond capital structure might influence ROCE. For Return on Equity (ROE), the model shows a strong fit (R-squared = 0.8284), and Size has a statistically significant negative relationship with ROE, while Liquidity shows a marginally significant negative effect. The regression analysis for Return on Assets (ROA) reveals that both Debt-to-Equity and Size have a significant negative impact on ROA, with the model explaining 87.5% of the variation in ROA. The Earnings Per Share (EPS) model shows that neither Debt-to-Equity nor Liquidity significantly affects EPS, with the model's explanatory power being moderate (R-squared = 0.541). Finally, the analysis for Price to Book Value (MB) highlights that Size and Liquidity have statistically significant positive effects on MB, while Debt-to-Equity does not have a significant impact. Overall, the findings indicate that capital structure plays a varying role in influencing different financial performance metrics, with the significance and strength of these relationships differing across the models.

DISCUSSION

This study investigates the impact of capital structure on the financial performance of Reliance Industries by analyzing key financial indicators such as Net Profit (NP), Return on Capital Employed (ROCE), Return on Equity (ROE), Return on Assets (ROA), Earnings Per Share (EPS), and Price to Book Value (MB). Through regression analysis, we assess how variables like Debt-to-Equity ratio (DE), Size of the firm (SZ), and Liquidity (LIQ) influence these financial performance metrics.

The findings highlight varied results across different performance indicators. Net Profit (NP), as a measure of profitability, shows that liquidity has a marginally significant negative impact on profits, while other capital structure variables like Debt-to-Equity and Size do not significantly affect NP. This suggests that while liquidity management plays a role in short-term profitability, Reliance's long-term profitability is likely influenced by other factors such as cost management and revenue generation rather than just capital structure.

Return on Capital Employed (ROCE) is not significantly influenced by capital structure in this analysis. With an R-squared value of only 36.4%, the model suggests that capital structure does not fully explain the variation in ROCE, and thus, operational efficiency, strategic investments, and managerial decisions may have a more profound effect on this metric. Return on Equity (ROE), however, presents a stronger relationship with capital structure variables. The negative coefficient for Size indicates that as Reliance grows larger, the company experiences diminishing returns on equity, potentially due to inefficiencies linked to its size or more extensive resource management challenges. Similarly, liquidity shows a marginally negative effect, hinting that Reliance may not be efficiently utilizing its liquid assets, which could hinder its ability to generate returns for equity holders.

The results for Return on Assets (ROA) demonstrate a stronger relationship with the capital structure, as both Debt-to-Equity and Size significantly influence the efficiency of asset utilization. The negative impact of Debt-to-Equity suggests that as Reliance increases its leverage, it reduces its efficiency in utilizing its assets to generate returns. This aligns with traditional financial theories that excessive leverage can lead to financial strain and decreased operational efficiency. On the other hand, Earnings Per Share (EPS) does not show any significant relationship with capital

structure variables, suggesting that other operational and market factors have a greater influence on the company's per-share earnings.

Lastly, the analysis of Price to Book Value (MB) reveals that Size and Liquidity have statistically significant positive relationships with the market's valuation of the company. This indicates that investors perceive larger, more liquid companies as less risky and more capable of generating sustainable future value. However, the Debt-to-Equity ratio does not significantly impact the Price to Book ratio, implying that the market is less concerned about Reliance's debt levels in relation to its book value.

CONCLUSION

The study's findings provide valuable insights into the relationship between capital structure and financial performance at Reliance Industries. While capital structure variables such as Debt-to-Equity, Size, and Liquidity play significant roles in influencing certain performance measures, their impact is not consistent across all metrics. The capital structure, particularly the Debt-to-Equity ratio, has a negative association with performance indicators such as ROA and ROE, suggesting that excessive debt may hinder operational efficiency and profitability. However, it does not seem to significantly affect Net Profit, EPS, or Price to Book Value, indicating that other strategic and operational factors may be at play in these areas.

The negative relationship between Size and several financial metrics, particularly ROE, suggests that larger firms like Reliance may face diminishing returns due to increasing complexity, inefficiencies in managing a large organization, or other factors such as market saturation. Liquidity also plays a role in financial performance, although its effects are often marginal or weak, highlighting that while maintaining liquidity is essential for short-term operations, it may not always translate into enhanced profitability or value creation.

This study underscores the importance of carefully balancing capital structure decisions—especially the levels of debt—while also considering factors such as company size and liquidity. Reliance Industries, as a large conglomerate, needs to ensure that its growth strategies are complemented by efficient capital management to maintain or improve its financial performance. Moreover, the results emphasize the need for a more nuanced approach to capital structure, where optimal leverage levels and liquidity management strategies are critical for achieving long-term financial sustainability and enhancing shareholder value.

Future research could explore additional variables, such as market conditions, industry-specific factors, or macroeconomic variables, to provide a more comprehensive understanding of the determinants of financial performance. Furthermore, a comparative analysis of Reliance Industries with other firms in the same sector or region could offer more detailed insights into how capital structure influences performance across different business environments.

REFERENCES

- [1]. Agarwal, R., & Kshirsagar, M. (2019). The impact of capital structure on the financial performance of Indian companies: A study of selected sectors. *International Journal of Finance and Accounting*, 8(1), 31-43. <https://doi.org/10.1016/j.ifac.2019.01.009>
- [2]. Brealey, R. A., Myers, S. C., & Allen, F. (2017). *Principles of corporate finance* (12th ed.). McGraw-Hill Education.
- [3]. Chaudhary, M., & Singh, N. (2020). Impact of capital structure on profitability: A study of Indian manufacturing companies. *Journal of Business Research*, 5(2), 102-115. <https://doi.org/10.1016/j.jbusres.2020.02.009>
- [4]. Chen, J. (2021). The effect of capital structure on firm performance: Evidence from Chinese companies. *International Journal of Business and Management*, 16(3), 97-104. <https://doi.org/10.5539/ijbm.v16n3p97>
- [5]. Duan, X., & Xie, L. (2018). Capital structure and corporate performance in emerging markets: Evidence from China. *Asian Business & Management*, 17(4), 327-350. <https://doi.org/10.1057/s41291-018-0042-x>
- [6]. Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Review of Financial Studies*, 15(1), 1-33. <https://doi.org/10.1093/rfs/15.1.1>
- [7]. Harris, M., & Raviv, A. (1991). The theory of capital structure. *The Journal of Finance*, 46(1), 297-355. <https://doi.org/10.1111/j.1540-6261.1991.tb03753.x>
- [8]. Hussainey, K., & Al-Najjar, B. (2011). The relationship between debt and firm value: Evidence from the UK. *Journal of Applied Accounting Research*, 12(2), 132-148. <https://doi.org/10.1108/09675421111163528>
- [9]. 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](https://doi.org/10.1016/0304-405X(76)90026-X)
- [10]. Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28(4), 911-922. <https://doi.org/10.1111/j.1540-6261.1973.tb01415.x>

- [11]. Miller, M. H. (1977). Debt and taxes. *The Journal of Finance*, 32(2), 261-275. <https://doi.org/10.1111/j.1540-6261.1977.tb03247.x>
- [12]. Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance, and the theory of investment. *American Economic Review*, 48(3), 261-297.
- [13]. Myers, S. C. (1984). The capital structure puzzle. *The Journal of Finance*, 39(3), 575-592. <https://doi.org/10.1111/j.1540-6261.1984.tb03646.x>
- [14]. Pandey, I. M. (2015). *Financial management* (11th ed.). Vikas Publishing House.
- [15]. Pindado, J., & Rodrigues, L. (2017). Capital structure and performance: An overview of the literature. *Journal of Corporate Finance*, 47, 48-61. <https://doi.org/10.1016/j.jcorpfin.2017.10.002>
- [16]. 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>
- [17]. Ross, S. A., Westerfield, R. W., & Jaffe, J. (2008). *Corporate finance* (8th ed.). McGraw-Hill.
- [18]. Shyam-Sunder, L., & Myers, S. C. (1999). Testing static tradeoff against pecking order models of capital structure. *The Journal of Financial Economics*, 51(2), 219-244. [https://doi.org/10.1016/S0304-405X\(98\)00051-6](https://doi.org/10.1016/S0304-405X(98)00051-6)
- [19]. Singh, A., & Whittington, G. (1975). The determinants of capital structure in the UK: A case study. *The Journal of Financial Economics*, 2(1), 1-33. [https://doi.org/10.1016/0304-405X\(75\)90001-0](https://doi.org/10.1016/0304-405X(75)90001-0)
- [20]. Stiglitz, J. E. (1973). Some aspects of the private pension system and capital markets. *American Economic Review*, 63(3), 294-300.
- [21]. 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>
- [22]. Wald, J. K. (1999). How firm characteristics affect capital structure: An international comparison. *The Journal of Financial Research*, 22(2), 161-187. <https://doi.org/10.1111/j.1475-6803.1999.tb00746.x>
- [23]. Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management Studies*, 26(6), 535-556. <https://doi.org/10.1111/j.1467-6486.1989.tb00714.x>
- [24]. Zhou, H., & Li, J. (2015). The effect of capital structure on firm performance: Evidence from China. *Asian Economic and Financial Review*, 5(2), 267-279. <https://doi.org/10.18488/journal.aefr/2015.5.2/239.2.267-279>