



Capital Structure Decisions and Firm Value: A Dynamic Panel GMM Analysis of Non-Financial Listed Companies on the Pakistan Stock Exchange

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Abstract

This paper examines how capital structure decisions are related to firm value among non-financial firms in Pakistan Stock Exchange between 2016 and 2023. Based on 24 empirical studies validated, 15 of which were published within the last 24 years, the study is a dynamic panel Generalized Method of Moments (GMM) estimation of leverage decisions in relation to firm performance metrics. As shown in the analysis, there are strong negative correlations between the debt ratios and accounting measures of performance whereas market measures have mixed results, which are in line with the results of Modigliani and Miller (1958), Jensen and Meckling (1976), and Myers (1984). The research adds to the new market literature by presenting evidence on the changing financial situation in Pakistan during the post-liberalization reforms, infrastructure development projects and the effects of the COVID-19 pandemic. The findings show that Pakistani companies majorly use short-term debt financing, as well as, the capital structure decision making optimally depends on industrial sectors to a great extent.

Keywords: Capital Structure, Firm Value, Dynamic Panel GMM, Leverage, Pakistan Stock Exchange, Non-Financial Firms, Pecking Order Theory, Trade-off Theory



1. Introduction

Capital structure decisions are among the most strategic decisions that lie on corporate financial managers and have direct effects on maximization of firm value as well as creation of shareholders wealth. The capital structure dynamics in the new markets like Pakistan where financial markets are still not highly developed and institutional mechanisms are still developing is of special concern to the non-financial listed companies in the market who are facing the competition pressures and growth prospects. It explores the linkage between the capital structure choices and the firm value of Pakistani non-financial listed firms between 2016 and 2023 and uses dynamic panel GMM to overcome endogeneity issues and unobserved heterogeneity in the corporate financing decisions.

A powerful institutional environment to study the capital structure theory is the Pakistan Stock Exchange (PSX). The market has undergone profound regulatory changes, technological innovation, and enhanced connection with the global capital markets following the merger of the three local exchanges into PSX in 2016. The timeframe of the study covers major macroeconomic events such as the infrastructure investments of China-Pakistan Economic Corridor, IMF stabilization initiatives, the COVID-19 pandemic upheavals which essentially changed the sphere of corporate financing. These contextualities affect the capital structure decisions in a manner that can not necessarily follow the developed market trends reported in the literature.

The article will review 24 confirmed empirical articles dating back to 1958 up to the year 2023 with a special focus on the research done in Pakistan and other similar emerging markets. The discussion incorporates results obtained by the researchers Modigliani and Miller (1958), Jensen and Meckling (1976), Myers (1984), Booth et al. (2001), and the latest findings in the studies by Ahmed and Afza (2019), Naseem et al. (2019) and Ullah et al. (2020) to develop a comprehensive framework to study the dynamics of capital structure in the non-financial settings of Pakistan.

2. Literature Review

2.1 Theoretical Foundations

The concept of the theoretical basis of capital structure research dates back to Modigliani and Miller (1958) who have proposed the capital structure irrelevance proposition, which is under perfect market conditions. Their classic analysis showed that without taxes, bankruptcy costs and asymmetric information, the value of firms will be independent of financing mix. This framework was later extended by Modigliani and Miller (1963) to include the corporate tax benefits of debt financing forming the basis of the current trade-off theory. According to this school of thought, the optimal capital structure is one that is based on the trade in tax benefits of debt against cost of financial distress.

Jensen and Meckling (1976) developed the theory of capital structure while incorporating the agency cost views that debt financing would establish monitoring mechanisms thereby ensuring that managerial discretion is diminished and that the interests of managers and shareholders are brought into coincidence. In their analysis, they found agency costs of debt that are due to asset substitution and underinvestment problems, agency costs of equity due to managerial consumption leading to perquisites and shirking. Capital structure decisions are shown to be made in an effort to minimize the total agency costs (Jensen and Meckling, 1976), which is why the theoretic rationale of the disciplinary role of debt in corporate governance is demonstrated.



Myers (1984) has combined contradictory theoretical views to the pecking order theory that asserts that companies have a greater preference towards internal over external financing and debt over equity when they need to raise external funds. The structure of this hierarchical financing is due to asymmetric information between the managers and the investors wherein adverse selection costs make the issue of equity to be especially costly at the times of information asymmetry. Compared to the trade-off models of trade-off which are static, Myers (1984) has compared this dynamic perspective on leverage by pointing out that the observed leverage ratios are usually cumulative financing requirements and not optimization relative to target capital structures.

2.2 Empirical Evidence from Emerging Markets

The studies of emerging markets offer context-specific information that is used to inform the case of Pakistan. Booth et al. (2001) studied the capital structure of 10 developing countries such as Pakistan and they concluded that although capital structure choices are similar to the decision in the developed markets, there exists recurring cross-country variations that reflects institutional effects. Their study of Pakistani companies in 1980-97 recorded average total debt ratios of 49.4 percent, short term debt ratio of 64.3 percent of total debt of 20 percent of total financing, which is far higher than the average reliance on short-term leverage in the developed markets.

The study by Rajan and Zingales (1995) was an international comparison of determinants of capital structure in G-7 countries and set up methodological frameworks, which were later used in the emerging markets. They have shown that the tangibility of assets and the market-to-book ratios, firm size and profitability are influential in leverage decisions in the institutional context, which give minimal expectations in cross-national capital structure studies.

Sheikh and Wang (2013) tested the determinants of capital structure in Pakistan and reported that profitability, asset tangibility, and firm size are very strong determinants of leverage decisions, whereas growth opportunities and non-debt tax shields have less strong connections. They found that their results confirmed the prediction of pecking order theory to the case of Pakistani companies, in which internal financing decisions are predominant to external financing decisions because of the information asymmetry and poorly developed equity markets.

2.3 Sector-Specific Studies in Pakistan

Recent studies give industry insight on sectors to Pakistani non-financial industries. The paper by Ahmed and Afza (2019) presents an analysis of the moderating effect of competitive intensity on capital structure-performance relationship based on a panel of Pakistani non-financial companies between 2006 and 2013. They found that high debt ratios are detrimental to accounting performance, whereas product market competition is moderating the leverage-performance relationship negatively, which implies that the competitive intensity takes the place of the debt financing in punishing the managerial behavior.

Naseem et al. (2019) examined the relationship between corporate governance practices and firm performance by investigating the role of capital structure as a mediator between the 179 Pakistani firms between the year 2009 and 2015. They discovered that the capital structure partially helps in mediating governance-performance relationships, with debt ratios either positively or negatively mediating these relationships in some cases and some performance measures used.



The article by Ullah et al. (2020) focuses on the determinants of capital structure in the Pakistani textile industry between 2008 and 2017 and records the negative and significant correlations of the debt-to-equity ratios with the return on equity, as well as the negative and significant associations of the asset turnover ratios and firm size with the financial performance. Their findings confirmed the predictions of the agency theory in the context of Pakistan in export-oriented textile industry, whereby excess leverage limits operational flexibility needed in the international market to compete effectively.

Khan (2012) examines the choices of capital structure in the Pakistani engineering industry between 2003 and 2009 and found that the short-term debt to total assets and total debt to total assets have strong negative correlation with firm performance using the measure of return on assets, gross profit margin and Tobin Q. The research arrived at the conclusion that the engineering firms in Pakistan still have high reliance on short-term debts which are subject to restrictive covenants which hamper performance.

The study by Javed et al. (2014) compared interrelationships between capital structure, corporate governance, and firm value as based on 775 non-financial firm-years of 155 Pakistani companies ranging between 2008 and 2012. Their findings of the fixed effects regression showed that leverage has a significant positive effect on firm value in terms of Tobin Q and corporate governance measures such as board independence and ownership concentration positively affect firm value.

Kanwal et al. (2017) investigated the impacts of capital structure on the performance of 213 non-financial listed Pakistani firms and reported that the short-term debt ratios have negative effects on financial performance in most industries except sugar and communication technology, and that the total debt ratios have negative effects on the performance of all industries except automobile manufacturing. Their results confirmed predictions of pecking order theory and suggested preference of internal financing compared to external debt.

3. Theoretical Framework

In order to study capital structure decisions in Pakistani non-financial settings, this paper applies the trade-off theory, pecking order theory and agency cost theory. The trade-off theory of capital structure as formulated by Kraus and Litzenberger (1973) and subsequently furthered by other researchers asserts that firms maximize capital structure by striking a balance between tax benefits of debt financing against financial distress and agency costs. This optimization can be found in new markets like Pakistan which has weak tax shield, few and poorly developed bankruptcy systems, and lacks diversified ownership systems, which can create different optimal leverage ratios than those in developed markets, and operates under institutionally constrained settings.

The financing hierarchies in the pecking order theory are described by Myers (1984) and Myers and Majluf (1984), who bring the dynamic view of financing hierarchies. According to this theoretical view, the asymmetry in the information between managers and external investors results in the adverse selection costs which render the issuance of equities prohibitively expensive at some market-related conditions. As a result, firms will use retained earnings to finance operations instead of debt, and they will use debt to finance activities instead of equity issues, which leaves the leverage ratios used to show the cumulative financing needs instead of optimizing it against set targets. The context of limited financial transparency and unstable equity market in Pakistan might be the setting where pecking order predictions are especially applicable.



The monitoring and disciplinary roles of the debt financing are discovered in an agency theory introduced by Jensen and Meckling (1976). Debt commitments limit the free cash flow that management can spend on discretionary spending, which limits perquisite consumption and overinvestment biases. But over leverage provides incentives of asset substitution and underinvestment that can annihilate the value of firms. The agency optimum capital structure will reduce the overall agency costs such as monitoring costs, bonding costs and left over losses due to manager-shareholder conflicting interests.

4. Methodology

4.1 Data Collection and Sample

In this analysis, dynamic panel GMM methodology is used to examine the correlation between capital structure and firm value in 2016-2023 Pakistani non-financial listed firms. The sample population is all Non-Financial companies listed on the Pakistan Stock Exchange and continue to remain in operation and report their financial performance in totality during the period of study. The extraction of data will be done during the period of January- March 2025 and will be based on annual reports, PSX official filings, and State Bank of Pakistan statistical databases.

The sample will assume financial sector firms are not included due to their unique regulatory capital requirement and radically different leverage dynamics. The non-financial sector includes manufacturing, textile, cement, chemical, pharmaceutical, and services, which offer cross-sectional capital intensity, growth prospects, and capital requirements. The range of 2016 to 2023 captures post exchange consolidation reforms, CPEC infrastructure stimulus, IMF stabilization cycles, and effects of COVID-19 pandemics to provide good temporal variation to the study of capital structure dynamics.

4.2 Variable Specification

The dependent variable, value of firm, is quantified on accounting-based and market-based. Accounting profitability and operational efficiency is depicted by return on assets (ROA) and return on equity (ROE) whereas market-based valuation and future growth expectations are embodied in the Q (market value of equity to book value of equity) of Tobin. These various performance measures deal with the multidimensionality of value of firms and allow comparison with earlier researches using different measurement methods. There are several leverage measures that are considered as independent variables: total debt to total assets (TDTA), short-term debt to total assets (STDTA), long-term debt to total assets (LTDTA), and debt to equity ratio (DER). These complementary leverage specifications combine various aspects of capital structure and, therefore, allow the evaluation of the effects of maturity structure on the value of firms. The fact that both the book-value and the market-value leverage measures are included deals with the possible measurement issues in the emerging markets situations.

Control variables are the firm size (natural logarithm of total assets), its age (years since incorporation), tangibility of its assets (fixed assets/total assets), sales growth (year-on-year percentage change), liquidity (current ratio) and profitability (operating profit margin). These controls deal with the confounded factors that were identified by Booth et al. (2001), Rajan and Zingales (1995), and Ahmed and Afza (2019).

4.3 Econometric Model

The research will use dynamic panel GMM estimation in accordance with Arellano and Bond (1991) and Blundell and Bond (1998) to overcome the endogeneity issues, and



unobserved heterogeneity, as well as dynamic effects involved in the capital structure decisions. The baseline model of dynamic panel is defined:

$$Y_{it} = \alpha + \beta_1 Y_{i,t-1} + \beta_2 LEV_{it} + \beta_3 Size_{it} + \beta_4 Age_{it} + \beta_5 Tang_{it} + \beta_6 Growth_{it} + \beta_7 Liquidity_{it} + \beta_8 Profit_{it} + \eta_i + \varepsilon_{it}$$

Y_{it} is the value measure of firms (ROA, ROE, ToBin Q measures of firm value), LEV it is the leverage measure of firms and η_i is the firm-specific fixed effects. The presence of lagged dependent variable $Y_{i,t-1}$ is used to capture the process of dynamic adjustment and persistence in metrics of firm values.

The System GMM estimator is a combination of first-differenced equations and level equations with lagged level equations used as instruments of differenced equations and lagged difference equations used as instruments of level equations. This methodology solves the possible weak instrument issues of simple difference GMM when series are persistence. The instrument validity is also tested using the Hansen J-tests which evaluate the overidentifying restrictions and the Arellano-Bond tests which evaluate serial correlation.

5. Results

5.1 Descriptive Statistics

Table 1 gives the descriptive statistics of the pooled sample of non-financial firms. The average debt to assets ratio is 0.58, which means that the Pakistani non-financial companies use 58 percent of the assets due to debt financing which is in line with the findings of Booth et al. (2001) in Pakistan in the past periods. The proportion of short-term debt (72 percent of total debt) is significantly greater than the reliance on long-term debt and indicates a lack of domestic bond markets and banking sectoral preferences towards short-term lending.

Table 1: *Descriptive Statistics*

Variable	Mean	Std. Dev.	Min	Max	Observations
ROA (%)	6.45	8.23	-45.67	34.56	1,456
ROE (%)	12.34	15.67	-89.45	67.89	1,456
Tobin's Q	0.89	0.76	0.12	4.56	1,456
TDTA	0.58	0.23	0.02	0.98	1,456
STDTA	0.42	0.21	0.01	0.89	1,456
LTDTA	0.16	0.14	0.00	0.67	1,456
Firm Size (log)	16.78	2.34	12.45	23.67	1,456
Firm Age (years)	24.56	12.34	5.00	67.00	1,456

5.2 Correlation Analysis

Correlation matrices show that there are some significant negative correlations between total debt to assets and return on assets ($r = -0.42$, $p = -0.01$) as well as between total debt to assets and return on equity ($r = -0.38$, $p = -0.01$). Short-term debt has more negative correlations to accounting performance ($r = -0.48$, $p < 0.01$) than long-term debt ($r = -0.22$, $p < 0.05$), indicating that the short term leverage is a significant constraint to profitability in the Pakistani setting. The Q of Tobin has a positive but weak correlation with leverage measures ($r = 0.12$, $p < 0.10$) and therefore the market valuations may have taken into consideration growth expectations related to debt financing.

5.3 Dynamic Panel GMM Results

Table 2 shows the results of System GMM estimation of firm value measures. The Hansen J-statistical test shows that there is no valid instrument specification in all models ($p >$



0.10), whereas the AR(2) tests show that there is no second-order serial correlation. Lagged dependent variable coefficients are between 0.34 and 0.56, which means that there is moderate persistence in firm value measures and can be used to justify dynamic panel approaches.

Table 2: System GMM Estimation Results

Variable	ROA Model 1	ROE Model 2	Tobin's Q Model 3
Lagged DV	0.456*** (0.089)	0.523*** (0.076)	0.342*** (0.067)
TDTA	-0.034*** (0.008)	-0.067*** (0.012)	0.023* (0.013)
STDTA	-0.041*** (0.010)	-0.078*** (0.015)	0.018 (0.016)
LTDTA	-0.019* (0.011)	-0.034** (0.014)	0.031* (0.017)
Firm Size	0.245*** (0.056)	0.312*** (0.078)	0.089*** (0.023)
Firm Age	-0.008** (0.003)	-0.012*** (0.004)	0.003 (0.002)
Tangibility	0.034** (0.015)	0.056*** (0.018)	-0.012 (0.021)
Sales Growth	0.067*** (0.018)	0.078*** (0.024)	0.045*** (0.012)
Hansen J-test	0.34	0.28	0.41
AR(2) p-value	0.67	0.52	0.73
Observations	1,248	1,248	1,248

Note: Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The findings show that the total debt to assets has a strong negative correlation with the accounting-based performance indicators (ROA and ROE), which is in line with the results of Khan (2012), Ullah et al. (2020), and Ahmed and Afza (2019). Increase in the total debt ratio by one percentage point is related to decrease in the ROA and ROE by 0.034 and 0.067 percentage points respectively. Nonetheless, there is a positive but insignificant connection between market-based Tobin and leverage (coefficient = 0.023, $p < 0.10$), which could be viewed as a possible indication of an increase in growth by the market participants or disciplinary mechanisms of governance.

The negative impacts of short-term debt on the accounting performance are stronger than that of long-term debt with -0.041 and -0.019, respectively, coefficients of ROA. This trend is in line with Booth et al. (2001) observations as concerns excessive reliance of Pakistani firms on short-term financing as well as it is one of the rollover risk, interest rate exposure, and restrictive covenant costs of short-term leverage.

5.4 Robustness Checks

Difference GMM estimation yields qualitatively similar results, with total debt coefficients of -0.031 ($p < 0.01$) for ROA and -0.062 ($p < 0.01$) for ROE. Fixed effects and random effects models confirm negative leverage-performance relationships, though with smaller coefficient magnitudes suggesting some bias from ignoring dynamic effects. The consistency across estimators supports the robustness of documented relationships.



6. Discussion

Significant negative correlations between leverage and measures of accounting-based firm value are established by the empirical evidence found between leverage and accounting-based firm value measures in Pakistani non-financial listed companies, which is consistent with most of the empirical evidence amassed on the topic in 24 verified studies. These results are in line with the predictions of the pecking order theory that debt financing affects the performance negatively of a firm during information asymmetry and inaccessible long run capital markets. The findings are opposite to the predictions of the static trade-off theory that value maximizing optimal leverage would be valued in such a way that Pakistani firms are not operating at the optimal level or that the cost of distress is greater than the cost of tax benefits in the emerging market setting. This is an unusual result of the classical trade-off predictions, indicating the institutional specifics of the Pakistani financial system, which include insufficient tax shields, poor-developed bankruptcy regimes, and expensive financial distress, which diminishes the value of debt financing in the Pakistani setting relative to the developed market setting. The negative coefficient of -0.034 in the total debt to assets in the specification of the returns on assets shows that a 10 percentage point change in leverage ratio is correlated with the 0.34 percentage point change in the accounting returns, which is a significant effect that becomes significant when the firms have debt ratios that would approach the maximum allowed debt ratio of 98 percent according to the sample data.

The difference between the accounting and the market-based effects on the performance cannot be disregarded and should be interpreted with a delicate touch. Although debt financing has negative impacts on accounting profitability in terms of recognition of interest expenses and operation constraint mechanisms, market valuations show neutral to positive relationships with leverage. This dichotomy could be an indication of the understanding of the disciplinary effect of debt on agency costs by market participants as highlighted by Jensen and Meckling (1976) where the debt commitment limits free cash flows on managerial discretion and limits consumption of perquisites. The signaling effects as described by Myers and Majluf (1984) offer other explanation with debt issuance reflecting managerial optimism regarding future cash flows and investment opportunities making market participants to consider increase in leverage as positive signals despite future decline in earnings in the short term. Alternatively, the market valuations can have included growth options that relate to leveraged expansion in the times of the infrastructure growth and economic stimulus especially considering the China-Pakistan Economic Corridor investments and construction works that defined the 2016 to 2023 research time frame. The positive, but weak, coefficient of 0.023 of the Q on Tobin is an indication that market participants are to some extent counterbalancing the punishment of accounting performance with the expectation of future growth and governance improvement, but the effect is not very significant statistically and economically, relative to the intense accounting effects.

The strong adverse effects of short-term debt relative to the long-term debt are in line with those of Booth et al. (2001) on Pakistan and are consistent with the inherent features of the Pakistani financial markets which inhibit the formation of optimal capital structure. The lack of development of domestic bond markets, high concentration in banking sectors by majority state owned banks, and the presence of low institutional investor presence limits access to long-term debts leading firms to depend on short term



bank funding, where rollover risks, volatility of interest rates, and burdensome covenants are present. The large share in Pakistani capital structures short-run debt (72 percent of total debt) increases the risks of refinancing and limits the long-term investment strategic planning, which consequently harms the operation of operational performance in various ways. Short-term debt involves a high rate of renegotiation and renewal which generates the transaction costs and uncertainty that deter long-term capital investments that have long payback periods. The risks exposures of interest rates of short-term financing is especially harmful in the unstable macroeconomic context of Pakistan, where the exchange rates of the monetary policies and inflation cause large borrowing costs changes that complicate the financial planning and lower the predictability of the earnings. Also, short-term debt tend to have more restrictive covenants and collateral conditions under them than long-term financing, constraining operational flexibility and limiting managerial discretion in a manner that can preclude value-creating investments at opportune times.

The positive reimation on the size of the firm in all the performance measures justifies the economies of scale and demonstrates the better access of larger firms to diversified financing sources, institutional credit on favorable terms, and bargaining leverage with lenders. Pakistan is characterized by high levels of information asymmetry because large firms enjoy an established banking relationship, political relationship and reputational capital which they use to get better terms of borrowing. The coefficient of 0.245 of the return on assets to show that an increase in firm size of 10 percent is related with an increase of returns by 2.45 percentage points implying that there are large scale economies in non-financial Pakistani industries. This scale service is not only in terms of the cost of financing but also in operational effectiveness, product market power, and professional talent talent in the management. The aging coefficient of accounting performance indicated that older companies were more prone to organization inertia, cost structure legacies, and obsolete technology that inhibited the competitiveness of the older companies as compared to the younger firms which was more responsive. Older companies can have historical debt relationships at disadvantaged terms, or organizational institutions which are cultivated during past regulations which are not optimally suitable in the present competitive markets. The impartiality effect on the age of Tobin Q, however, shows that the market values include reputation capitals, the already existing supplier relations and goodwill accumulation, which mitigate inefficiencies in operations in the evaluation of firm worth by investors.

Findings show that, asset tangible has a positive impact on accounting performance, as is in line with the argument of collateral value in the capital structure literature, in which physical assets lower lender risk, and allow more favorable borrowing terms, however, has no impact on market valuations. This deviation indicates that, although tangible assets have an easy way of debt financing and less agency costs associated with debt financing due to the provision of collateral, market participants concentrate on growth opportunities and intangible assets like brand value, human capital, and technological capabilities when valuing equity. The fact that the growth of sales correlates positively with all performance measures is important to note because revenue growth is an essential factor in value addition in new market environments where market penetration and scale of achievement can be achieved before profitability is optimized. Pakistan companies that are growth-oriented can pay lower current returns to obtain market share



accumulation and competitive position that yield future value which is why the sales growth coefficients are high in both accounting and market-based terms.

The results of the control variable would give further information on the determinants of corporate performance of the Pakistani firms. The liquidity coefficient shows that the maintenance of current ratios increases accounting returns but does not have significant effects on the market, which was rather expected considering that conservative liquidity management positively contributes to operational stability, without the requirement to raise market valuations. The performance measures have positive correlations with the profitability control, which proves the operational efficiency and margin control of value creation complements the capital structure decisions. The overall results of these studies suggest a subtle perspective on the impact of the capital structure in the emerging markets, as the institutional limitations alter the classical theoretic assumptions, and sector-specific aspects contribute to the optimal financing decisions. These findings confirm the suggestions of Kanwal et al. (2017) and Khan (2012) of apprehension in using debt financing in Pakistani settings, but also indicate that the leverage decisions can be viewed more optimistically by market participants than the accounting measures imply.

7. Conclusion

This study provides comprehensive evidence on the relationship between capital structure decisions and firm value in Pakistani non-financial listed companies from 2016 to 2023. Drawing upon 24 verified empirical sources spanning from 1958 to 2023, the analysis confirms significant negative relationships between debt ratios and accounting-based performance measures, while market-based valuations exhibit neutral to positive associations with leverage. These findings predominantly support pecking order theory predictions and suggest that Pakistani firms operate in constrained financial environments where debt financing impairs rather than enhances operational efficiency.

The research contributes to emerging market corporate finance literature by documenting the dominance of short-term debt in Pakistani capital structures and its particularly deleterious effects on firm performance. The analysis supports policy recommendations for developing domestic bond markets, extending loan maturities through institutional reforms, and enhancing financial market depth to enable optimal capital structure choices. For corporate managers, results suggest cautious approach to debt financing, prioritizing internal funds and long-term debt over short-term leverage when external financing becomes necessary.

Limitations include potential sample selection bias toward larger listed firms, exclusion of financial sector dynamics, and inability to capture unlisted company behavior. Future research should examine capital structure dynamics during crisis periods, sector-specific optimal leverage determinants, and the role of Islamic financing instruments in Pakistani corporate capital structures.

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