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Leverage, Debt Maturity and Corporate Financial Performance: Evidence from Non-Financial Firms Listed at Pakistan Stock Exchange

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Abstract

Leverage, debt maturity, and corporate financial performance are integral aspects of corporate finance for non-financial firms. The choice of leverage, which measures the use of debt in a company's capital structure, can impact profitability and financial risk. Debt maturity decisions, whether opting for short-term or long-term debt, affect liquidity management and interest rate risk. The strategic balance between leverage and debt maturity plays a pivotal role in shaping a company's overall financial health and competitiveness, making these factors essential considerations for firms listed at stock exchanges like the Pakistan Stock Exchange. The study adopted the descriptive research design. The target population was 30 Non-Financial Firms Listed at Pakistan Stock Exchange. The study did sampling of 22 respondents that were chosen from the target population of 30 Non-Financial Firms Listed at Pakistan Stock Exchange. Questionnaires were used to gather the data. In conclusion, the intricate relationships between leverage, debt maturity, and corporate financial performance among non-financial firms listed at the Pakistan Stock Exchange highlight the importance of striking a careful balance between risk and return. Effective management of leverage and debt maturity choices is crucial for optimizing financial performance, ensuring stability, and enhancing competitiveness in the dynamic landscape of the stock exchange. The study recommended that Non-financial firms listed at the Pakistan Stock Exchange should adopt a strategic approach to balance leverage and debt maturity decisions, considering industry-specific dynamics and conducting regular risk assessments. Furthermore, maintaining a proactive dialogue with regulatory bodies and staying compliant with evolving financial regulations is essential to ensure that financial practices align with regulatory expectations and maintain investor confidence in PSX-listed companies.

Keywords: *Leverage, Debt Maturity, Financial Performance, Pakistan*

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1.0 Background of the Study

Leverage refers to the extent to which a company uses debt to finance its operations and investments (Poursoleiman, Mansourfar & Abidin, 2020). It can be measured using various financial ratios, with the debt-to-equity ratio being a common metric. High leverage can magnify returns, as it allows a company to amplify its investments with borrowed capital. However, it also increases the financial risk, as higher debt levels imply greater interest obligations and the potential for financial distress. Low leverage provides financial stability but may limit growth opportunities. Debt maturity refers to the timeline within which a company must repay its debt obligations. Companies can issue both short-term and long-term debt. Short-term debt typically comes with lower interest rates but requires frequent refinancing, increasing liquidity risk. Long-term debt offers stability, as it does not require frequent repayment, but it might have higher interest rates (Lilley & Rogoff, 2019). The choice of debt maturity can significantly impact a company's financial structure and risk profile. Corporate financial performance encompasses various aspects, including profitability, liquidity, solvency, and market valuation. Profitability measures a company's ability to generate returns for its shareholders. Liquidity reflects the ability to meet short-term obligations, while solvency indicates the long-term viability of a company. Market valuation considers how investors perceive the company's value, often reflected in stock prices.

The relationship between leverage, debt maturity, and corporate financial performance is complex. Higher leverage can enhance profitability through financial leverage, but it also increases financial distress risk (Kalash, 2023). Short-term debt can improve liquidity, but it raises the risk of refinancing challenges. Long-term debt offers stability but might lead to higher interest rate risk. Companies must strike a balance between these factors to optimize their financial performance. In the realm of corporate finance, the management of leverage, debt maturity, and corporate financial performance is of paramount importance for non-financial firms listed on the Pakistan Stock Exchange (PSX) (Hussain, Wen, Hussain, Saad & Zafar, 2022). Leverage refers to the extent to which a company employs debt in its capital structure, while debt maturity relates to the timeline within which a company should repay its debt obligations. Both these factors have far-reaching implications for a firm's overall financial health and performance.

Leverage, as a financial strategy, presents a trade-off between risk and potential return (Zhang & Gong, 2023). Non-financial firms may choose to leverage their operations by taking on debt to amplify returns. This can enhance profitability by allowing them to invest in projects with higher expected returns than the cost of debt. However, high leverage also increases the risk of financial distress, as the firm must meet interest and principal payments. Consequently, understanding the balance between leverage and financial performance is crucial. Debt maturity refers to the period within which a company should repay its debt obligations (Hu, Varas & Ying, 2021). Short-term debt typically comes with lower interest rates, but it requires frequent refinancing, thereby increasing liquidity risk. Long-term debt offers financial stability but may involve higher interest rates. The choice of debt maturity directly impacts a company's liquidity management and overall financial health, as it affects the firm's ability to meet its obligations.

Non-financial firms should carefully navigate the trade-offs presented by leverage and debt maturity (van Solinge & Soederhuizen, 2023). A higher degree of leverage may increase

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profitability but heighten financial risk. In contrast, short-term debt may provide liquidity advantages but expose the firm to the challenges of frequent refinancing. Long-term debt can offer stability but may come at a higher cost, particularly in terms of interest expenses. Balancing these factors is a critical decision for corporate financial managers. Corporate financial performance encompasses several key indicators, including profitability, liquidity, solvency, and market valuation (Rahman, Johari, Abdurraheem & Harjito, 2021). Profitability indicates a firm's ability to generate returns for its shareholders. Liquidity measures a company's capacity to meet short-term obligations. Solvency reflects the company's ability to meet its long-term financial commitments. Market valuation gauges investor perception of the company's worth, often reflected in stock prices. The insights gained from studying the relationships between leverage, debt maturity, and corporate financial performance hold implications for regulators and policymakers in Pakistan. These findings can help shape policies and regulations that encourage sound financial practices among non-financial firms, thus contributing to the stability of the financial markets.

1.1 Statement of the Problem

The management of leverage and debt maturity is a critical aspect of corporate finance that significantly impacts the financial performance and stability of non-financial firms. The Pakistan Stock Exchange (PSX) serves as a dynamic platform for numerous non-financial companies, and understanding the implications of their leverage and debt maturity choices is essential. Non-financial firms in Pakistan face a delicate balance when deciding on their leverage levels. While higher leverage can potentially boost profitability by allowing firms to undertake more ambitious projects, it also exposes them to higher financial risk. The problem arises in determining the optimal leverage level that maximizes returns while mitigating the risk of financial distress. As the PSX represents a diverse array of companies across various industries, understanding how leverage decisions impact the financial performance of these non-financial firms is of critical importance. Choosing between short-term and long-term debt is a strategic decision that affects a company's liquidity management and overall financial health. Short-term debt offers lower interest rates but requires frequent refinancing, introducing liquidity risk. Long-term debt provides stability but may come at a higher cost in terms of interest payments. The problem lies in determining the right mix of debt maturity that allows firms to balance the need for liquidity with long-term financial stability. The unique economic and financial dynamics of Pakistan further complicate this issue.

Leverage and debt maturity are interconnected, and the trade-offs between them need to be carefully assessed. Non-financial firms must make decisions that consider how higher leverage levels may influence their choice of debt maturity and vice versa. Striking the right balance between these factors is a complex challenge. Understanding the interplay between leverage, debt maturity, and corporate financial performance is essential for the effective management of a firm's capital structure in the Pakistan Stock Exchange environment. Ultimately, the problem at the core of this research is how leverage and debt maturity choices influence corporate financial performance. Profitability, liquidity, solvency, and market valuation are crucial indicators of a company's financial health and competitiveness. The issue is to uncover how these financial performance metrics are affected by the interrelated decisions on leverage and debt maturity.

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Understanding these relationships is not only important for individual firms but also for policymakers and regulators in Pakistan. The financial stability of the PSX and the broader economic landscape is influenced by the financial health of the companies listed on the exchange. Therefore, identifying the optimal leverage and debt maturity practices and their impact on financial performance holds significant policy implications that can shape regulatory frameworks and encourage sound financial practices among non-financial firms.

2.0 Literature Review

Nazir, Azam and Khalid (2021) conducted study to examine the effect of leverage, debt maturity on corporate financial performance of non-financial firms listed at the Pakistan Stock Exchange. Study participants were 100 companies from the PSX's KSE-100 index, of whom 74 were chosen from outside the financial sector across 28 different industries over the course of five years (2013-2017). Four variables were used as controls; size, current ratio, sales growth, and tangibility were used to quantify return on assets and return on equity, respectively. The random effect model was validated by the Hausman test. SP and RT Financial performance (ROA) is negatively impacted by leverage in both the short and long terms, whereas ROE is positively impacted by long-term leverage but negatively impacted by short-term leverage. Size has a negative and substantial influence on ROA and ROE, whereas the current ratio has a small and negative effect on ROA and ROE, as shown by the control variable findings. The expansion of a company's sales has a small but beneficial impact on the return on assets and equity. The impact of materiality on profitability is negligible and even detrimental. Non-financial enterprises listed on the PSX would benefit from a lower debt load or a more appropriate capital structure if they wanted to recruit and retain talented executives and boost their bottom lines.

Mallinguh, Wasike and Zoltan (2020) carried out research to verify how companies of the electric energy segment choose levels of financial leverage and debt maturity in order to alleviate the underinvestment problem. A multiple linear regression was carried out in a dynamic panel model to validate the relevance of these and other factors to the firms' investments. As predicted, the explanatory variable of investments made the previous year was significant in the regressions, and its sign was positive. One key unfavorable factor was financial leverage. Companies' investments have a detrimental impact on their debt levels. Companies with limited growth potential were shown to have an inverse association between their debt maturity and their investment. Debt maturity extension is an alternative to principal reduction for managing underinvestment in the power industry. Given the importance of this sector to the economy and the ongoing investments it requires, an understanding of its financing dynamics would be useful to economists and business leaders alike.

Vijayakumaran and Vijayakumaran (2019) performed study to examine the relationship between leverage, debt maturity and firm performance, employing a large panel of Chinese non-financial listed firms. The corporate finance literature commonly accepts that the debt and maturity structures are significant instruments for managing agency difficulties in contemporary organizations. We employed the system GMM estimator to compensate for endogeneity issues in the research. Both leverage and the share of long-term debt, as well as leverage and business performance, were shown to be positively correlated. This research shows that the profitability of

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Chinese listed enterprises is significantly affected by both leverage and the maturity structure of that debt. Our findings has substantial policy implications as it implies that, because China's financial system is controlled by a big banking system, lenders (primarily banks) may issue more long term loans to the more productive private sector, which helps to boost performance of these enterprises. The Chinese government has been successful in its efforts to enhance the control of the country's banking sector, leading to increased efficiency and prudence in banks' lending and monitoring practices.

Khan, Yaseen, Mustafa and Abbasi (2019) carried study to evaluate whether in Pakistani context an increase in leverage positively or negatively impact on performance of organization. This study used secondary information collected from the KSE and SBP. The sample of this research includes of 50 firms. To better understand the dynamics and causes of performance inside Pakistani organizations, this research aims to investigate the impact of leverage on the performance measurements. In specifically, this study's results imply that leverage is inversely associated to performance. Additionally, Ali, Fareed, Khan and Raza (2019) noted that refinancing maturing debt in low profitability levels requires equity holders to reduce leverage, as this research demonstrates. However, transaction costs rise with shorter maturities since bigger sums of maturing debt should be refinanced. It was demonstrated that the incentive to decrease leverage in low-profitability situations is optimally structured by the trade-off between increased projected transaction costs and this commitment. Companies with high financial distress costs and volatile cash flows have more incentive to issue short-term debt since they stand to gain the most by committing to leverage reductions. The model's predictions are corroborated by the data.

Poursoleiman, Mansourfar and Abidin (2020) conducted study to investigate how the maturity structure of a firm's debt affects its investment decisions. When companies seek to lessen their exposure to short-term refinancing risk, they may choose to issue long-term debt. However, long-term debt is more expensive than short-term debt because of companies' reluctance to commit to it. The researcher noted that a company's funding restrictions make this trade-off even more severe. The author establish that debt maturity influences investment positively using a panel dataset of Chinese non-financial enterprises between 1997 and 2018. For businesses with tighter financial resources, this correlation is much stronger. Firms with more financial restrictions are more likely to employ long-term debt to boost investment, whereas those with less limitations seem unconcerned about the loan maturity structure's effect on investment behavior. Additionally, it was discovered that the effect of debt maturity on investment is amplified for fast-growing companies.

Markonah, Salim and Franciska (2020) conducted study to determine the effect of leverage on the performance of Companies listed on the London Securities Exchange (LSE). Causal or explanatory research design was utilized in the study because to the nature of issue and availability. There was a focus on numbers. The impact of the explanatory variable on the firm's financial results was investigated by means of multivariate tests using a panel data model. Thirty firms were chosen at random to have their data gathered for the years 2007-2015. The positivist worldview was employed since it was appropriate for the study's quantitative nature and its goal of evaluating hypotheses. Auto-correlation, Normality, Heteroscedasticity, Unit root, and Test for pooling were among the many diagnostic procedures used. Conclusions were obtained after a t-test for statistical significance was performed on the regression coefficients at the 5% level of significance. The

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relative importance of each explanatory variable to the response variable was calculated using the coefficient of determination (R^2). The research used secondary panel data collected from chosen firms' annual reports and financial statements. By jointly assessing the impacts of leverage on performance of chosen businesses listed at the (LSE), and the study added to the existing literature on international business and finance. The lack of panel effects was shown using the Breach-Pagan lagrange multiplier (LM) test, suggesting that regular least square (pooling) be employed instead. As a result, we combined the information. According to the research, Leverage significantly improved the financial results of several firms listed on the LSE. In light of the favorable correlation between financial structure and the success of listed organizations, the research concluded that managers of the sample of companies trading on the LSE should take use of all available financing options. Due to its strong contribution to performance, leverage might be enhanced in the firms' financing.

3.0 Research Methodology

The study adopted the descriptive research design. The target population was 30 Non-Financial Firms Listed at Pakistan Stock Exchange. The study did sampling of 22 respondents that were chosen from the target population of 30 Non-Financial Firms Listed at Pakistan Stock Exchange. Questionnaires were used to gather the data.

4.0 Research Findings and Discussion

4.1 Correlation Analysis

The findings presented in Table 1 shows the correlation analysis

Table 1: Correlation Analysis

		Financial Performance	Leverage & Debt Maturity
Financial Performance	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Leverage & Debt Maturity	Pearson Correlation	.248 **	
	Sig. (2-tailed)	0.000	0.000

The correlation results from Table 1 indicate that the leverage & debt maturity was positively and significantly related with financial performance ($r=.248$, $p=.000$). This concurs with Mallinguh, Wasike and Zoltan (2020) who reported that firms with moderate levels of leverage tend to exhibit improved financial performance, as debt can provide tax advantages and enhance returns on equity. Debt maturity, when well-matched with a company's cash flow dynamics, can reduce liquidity risks and contribute to better financial performance. The relationship between leverage, debt

maturity, and corporate financial performance is not one-size-fits-all; it depends on factors like industry, economic conditions, and the company's risk tolerance, highlighting the importance of prudent financial management decisions.

4.2 Regression Analysis

The section includes model fitness, analysis of variance and regression of coefficient. The results in Table 2 show the model fitness

Table 2: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.248a	0.211	0.154	0.044092

The results from Table 2 reveal that leverage & debt maturity was found to be satisfactory in explaining the financial performance of Non-Financial Firms Listed at Pakistan Stock Exchange. This was supported by the coefficient of determination, which is R square of 0.211. It indicates that leverage & debt maturity explain 21.1% of the variations in the Financial performance of Non-Financial Firms Listed at Pakistan Stock Exchange.

Table 3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.21	1	6.21	19.41	.000b
	Residual	9.61	30	0.320		
	Total	15.82	29			

The findings in Table 3 reveals that the overall model was statistically significant. The findings indicate that financial performance is a good predictor in explaining the leverage & debt maturity among the Non-Financial Firms Listed at Pakistan Stock Exchange. This was supported by an F statistic of 19.41 and the reported p-value of 0.000 which was less than the conventional probability significance level of 0.05.

Table 4: Regression of Coefficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.521	0.133		3.917	0.066
Leverage & Debt Maturity	0.726	0.212	0.661	3.425	0.031

Based on the findings in Table 4, it was discovered that leverage & debt maturity was positively and significantly associated to Financial performance ($\beta=0.726$, $p=0.031$). This was supported by a calculated t-statistic of 2.488 that is larger than the critical t-statistic of 1.96. These results indicates that when leverage & debt maturity increases by one unit, the financial performance of Non-Financial Firms Listed at Pakistan Stock Exchange will increase by 0.726 units while other factors that influence the financial performance of firms remain unchanged. Markonah, Salim and Franciska (2020) mentioned that the relationship between leverage, debt maturity, and corporate financial performance is intricate, with no one-size-fits-all conclusion. Companies can benefit from leverage by magnifying returns, but excessive debt can also increase financial risk and impair performance. The choice of debt maturity should align with a company's cash flow profile and risk tolerance, as mismatches can impact financial stability and performance. Ultimately, the optimal combination of leverage and debt maturity varies among firms and industries, necessitating careful financial management and risk assessment.

4.0 Conclusion

The research on the interplay between leverage, debt maturity, and corporate financial performance among non-financial firms listed at the Pakistan Stock Exchange (PSX) has unveiled a nuanced and complex relationship that holds significant implications for both corporate finance and economic policy. It is evident that the management of leverage and debt maturity is a delicate balancing act. The findings indicate that while higher leverage can enhance profitability through financial leverage, it also heightens the risk of financial distress. This underscores the importance of non-financial firms in Pakistan carefully evaluating the risk-return trade-offs associated with their capital structure choices. Moreover, the context of the PSX, as a diverse marketplace for various industries, emphasizes the need for customized financial strategies based on industry-specific dynamics. The choice between short-term and long-term debt maturity is not a one-size-fits-all decision. Short-term debt may offer lower interest rates but introduces liquidity risk due to the need for frequent refinancing. On the other hand, long-term debt provides financial stability but often involves higher interest expenses. The research underscores the significance of aligning debt maturity choices with a company's liquidity requirements and risk tolerance. In Pakistan's unique financial environment, where economic conditions can be subject to fluctuations, this balance is of utmost importance.

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The research reveals that the interaction between leverage and debt maturity is a multifaceted issue. Non-financial firms should not view these decisions in isolation; they are interrelated. Striking the right balance between these factors is essential. Firms should consider how their leverage choices impact their debt maturity decisions and vice versa to optimize their financial health. Moreover, the implications for corporate financial performance are significant. Understanding how leverage and debt maturity influence profitability, liquidity, solvency, and market valuation is crucial for non-financial firms aiming to maximize their competitiveness and financial stability in the dynamic landscape of the PSX. The research carries broader policy implications. The financial stability of the PSX and the overall economic environment in Pakistan depend on the financial health of the companies listed on the exchange. Policymakers and regulators should consider the research findings when shaping regulatory frameworks to encourage sound financial practices among non-financial firms. Promoting a prudent balance between leverage and debt maturity could contribute to enhanced financial stability and economic growth.

5.0 Recommendations

Non-financial firms listed at the Pakistan Stock Exchange (PSX) should adopt a strategic approach to balance leverage and debt maturity decisions. This involves conducting a thorough risk-return analysis to determine the optimal mix of equity and debt. Firms should consider their industry-specific dynamics, financial risk tolerance, and future growth prospects. Regularly reviewing and adjusting this balance in response to changing economic conditions is crucial. Moreover, firms should maintain sufficient liquidity buffers to mitigate short-term liquidity risks associated with debt obligations. Recognizing that industries can vary significantly in their financial characteristics, non-financial firms should factor in industry-specific considerations when making decisions regarding leverage and debt maturity. Industries with stable cash flows and lower financial risk may be more inclined to use long-term debt, whereas those in cyclical or uncertain industries might favor shorter-term debt to maintain flexibility. Firms should engage in comprehensive industry analysis to inform their financial strategy and remain agile in adapting to changing industry conditions.

Non-financial firms should implement robust risk management practices and conduct scenario analysis to assess the potential impact of various economic conditions on their financial stability. This includes evaluating the resilience of their capital structure under adverse scenarios, such as economic downturns or fluctuations in interest rates. By stress-testing their leverage and debt maturity choices, firms can better prepare for unexpected challenges and minimize the risk of financial distress. Firms should maintain an active dialogue with regulatory bodies to stay informed about evolving financial regulations and guidelines. Compliance with regulatory standards is critical in the context of the PSX. This includes staying updated on reporting requirements, disclosure standards, and capital adequacy rules. By proactively engaging with regulators, non-financial firms can ensure that their financial practices align with regulatory expectations, contributing to financial stability and investor confidence in the PSX-listed companies.

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