IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Capital Structure And Profitability Of Listed Indian Hospitals

[1]E. Balasubramanian, [2]Dr.S. Sivagnanam

[1]Assistant Professor, [2]Associate Professor,
[1]School of Commerce – PG, [2]Department of Commerce
[1]RVS College of Arts and Science, Coimbatore, [2]Government Arts College Coimbatore.

Abstract: This study examines the impact of capital structure on the profitability of listed Indian hospitals during the period 2016–2025. The sample consists of 11 hospitals listed on BSE and NSE, selected based on revenue and data availability. Total Equity to Total Assets (TETA) and Total Liabilities to Total Assets (TLTA) indicate capital structure, and Return on Assets (RoA) is the dependent variable used to measure profitability. Control variables include Tangibility (TANG), Tax (TAX), Current Ratio (CR), Business Risk (BR), and Inflation Rate (IR). Panel data regression is applied to analyse the relationship, and the Hausman test supports the use of the random effects model. The findings show that hospitals keep a healthy balance between liabilities and equity. Liquidity has a negative correlation with RoA, while tangibility and tax have a positive impact on profitability. Overall, the results indicate that increasing profitability in the Indian hospital sector requires an ideal financing structure as well as effective asset and liquidity management.

Index Terms – Capital structure, Profitability.

I. INTRODUCTION

After globalization and liberalization, the way of doing business was simplified and developed. To expand the existing business, they need funds. In the modern era, firms have different sources to raise funds, but firms highly rely on capital markets. In order to maximize the return, firms need to raise the capital to an optimum level that determines the cost of capital. In other words, the aim of the capital structure is to minimize the cost of capital and maximize the returns. Capital structure is a mix of debt and equity. Profitability measures the ability of the company to make a profit. India's hospital industry is one of the fastest growing segments of the healthcare sector, contributing significantly to improved access to medical services, job creation, and public health outcomes. The industry includes public and private hospitals, charitable institutions, and corporate multi-specialty chains. Population growth, rising life expectancy, urbanization, lifestyle diseases, and increased awareness of health insurance have all contributed to an increase in hospital service demand over the last two decades. Private hospitals make a significant contribution to healthcare delivery, particularly in urban areas, whereas government hospitals remain critical for affordable care in rural and low-income communities.

II. REVIEW OF LITERATURE

(Singh & Bagga, 2020) attempted to examine the effect of capital structure on profitability through an empirical panel data analysis. The main objective of the study was to assess the effect of capital structure on profitability. Nifty 50 companies were taken for the period of 10 years from 2008 to 2017. Random effects, fixed effects, and pooled OLS models were used to analyse the study. The results of the study were that there is a significant positive impact of capital structure on firms' profitability.

(Akin, 2025) attempts to assess the influence of growth, capital structure, profitability, and size on FTSE 100 enterprise value. The purpose of the study was to examine the influence of growth, capital structure, and

profitability on enterprise value. A sample of FTSE 100 companies was taken for the period of 2019 to 2023. Regression analysis was used to analyse the data. The findings of the study were that capital structure and business size have a major impact on enterprise value, there is no significant relationship between growth rate and EV, and the influence of profitability on EV is mixed: RoA shows a weak negative relationship, and RoE shows a positive relationship.

(Mensah & Bein, 2025) attempts to examine the impact of capital structure on business growth under IFRS adoption: evidence from firms listed on the Frankfurt Stock Exchange. The main objective of the study was to examine the influence of capital structure on business growth following the adoption of IFRS. A sample of 92 non-financial firms was taken from the Frankfurt Stock Exchange for the period of 1994 to 2021 for the study. A two-step GMM was employed to analyse the impact of capital structure on business growth. The results show a positive significant relationship between debt-to-equity and business growth. Debt-to-capital and long-term debt-to-capital had a negative effect on asset and profit growth but a positive impact on sales growth. Firms that adopted the IFRS had positive and significant impacts on sales, assets, and profit growth.

(Majumder & Researcher, 2025) attempts to analyse the evaluating correlation between leverage and profitability in the retail sector: a comparative study of listed companies across five years. The study investigates how capital structure decisions influence the financial performance. The period of study was from 2020 to 2024. The results of the study were that effective leverage management can enhance profitability.

(Balasubramanian & Sivaganam, 2026) attempts to explore the influence of capital structure on profitability. Listed Indian fintech companies were chosen for the period of 2019 to 2023. The result of the study was there is no significant relationship between capital structure and profitability of the firms.

III. Objective of the Study

The purpose of the study was to assess the impact of Capital Structure on profitability.

IV. Methodology

The period of the study was 10 years, from 2016 to 2025. There are 34 hospitals listed in BSE and NSE; out of that, 11 hospitals were chosen for the study. Due to inadequate data, other hospitals are not included in the study. RoA is a dependent variable; it shows how much profit the firm earned using their assets. TETA (total equity to total assets) and TLTA (total liabilities to total assets) are the independent variables. TANG is a tangibility; it shows the proportion of fixed assets in total assets. TAX indicates the ratio of tax to EBIT. BR is a business risk; it shows the firm's operating leverage, and CR is a current ratio. It shows the liquidity position of the firms are the control variables, and the impact of capital structure on profitability is tested by the panel data regression.

$$ROA_{it} = \alpha_{it} + \beta_1 TLTA_{it} + \beta_2 TANG_{it} + \beta_3 TAX_{it} + \beta_4 BR_{it} + \beta_5 LIQ_{it} + \beta_6 IR_{it} + \epsilon_{it} \text{ ----- } (1)$$

$$ROA_{it} = \alpha_{it} + \beta_1 TETA_{it} + \beta_2 TANG_{it} + \beta_3 TAX_{it} + \beta_4 BR_{it} + \beta_5 LIQ_{it} + \beta_6 IR_{it} + \epsilon_{it} \text{ ----- } (2)$$

Table 1: Variables used in study

Variable	Formula
Return on Asset (RoA)	EBIT/ Total Asset
TAX	Tax/ EBIT
Tangibility	Fixed asset / Total Asset
Liquidity	Current Asset/ Current Liabilities
TETA	Total Equity / Total Asset
TLTA	Total Liabilities / Total Asset
Business Risk	Change in % EBIT / Change in % Sales
IR	Consumer Price Index is used as Inflation rate

Table 2: Descriptive Statistics

	Mean	Std.Dev	Min	Max
ROA	0.14	0.11	-0.08	0.66
TAX	0.18	0.70	-3.87	5.4
TANG	0.64	0.19	0	1
CR	1.44	1.72	0.26	17.68
TETA	0.52	0.19	0.06	0.94
TLTA	0.48	0.19	0.06	0.94

The average ROA (Return on Assets) is 14%, indicating a moderate level of profitability. Nonetheless, some businesses experience losses (minimum –8%), while others achieve extraordinary success (maximum 66%). The mean tax rate is low (18%), but it varies greatly. Very high values indicate businesses with abnormally high tax burdens, while negative values suggest tax losses or credits. Businesses rely more on tangible assets because TANG (Asset Tangibility) is comparatively high (64%). While some businesses are entirely asset-backed, others have no physical assets. The average CR (current ratio) is 1.44, indicating adequate short-term liquidity. The broad range demonstrates that while some businesses have too many current assets, others encounter it difficult to fulfill short-term obligations. Although some businesses are highly leveraged, TETA (Total Equity to Total Assets) and TLTA (Total Liabilities to Total Assets) average roughly 52% and 48%, respectively, indicating a balanced capital structure between equity and debt.

Table 3: Correlation analysis

	ROA	TAX	TANG	CR	TETA	TLTA	BR	IR
ROA	1							
TAX	-0.034	1						
TANG	0.435	0.003	1					
CR	-0.214	-0.464	-0.50	1				
TETA	0.122	-0.141	-0.02	0.367	1			
TLTA	-0.122	0.141	0.02	-0.367	-1	1		
BR	0.147	-0.054	0.13	-0.025	0.183	-0.183	1	
IR	-0.008	0.077	0.07	-0.005	-0.085	0.085	-0.014	1

Correlation is used to assess the degree of the relationship between the two variables. Tax is negatively correlated with ROA; it shows that TAX does not affect the profitability (ROA). TANG is positively correlated with ROA; it indicates that substantial fixed assets tend to achieve higher profitability. CR is negatively associated with ROA; it means that liquidity does not create an impact on ROA. TETA is positively correlated with ROA, but TLTA is negatively correlated with ROA. BR is positively associated with ROA; it indicates that high operating leverage leads to high profitability. IR is negatively correlated with ROA; it depicts that inflation does not influence profitability.

Table 4: Variance inflation factor

Multi collinearity test	
Variable	**VIF**
TANG	1.57
TAX	1.44
CR	2.26
BR	1.06
IR	1.03
TETA	1.28
TLTA	1.28
Mean VIF	1.44

All variables have low VIF values (close to 1). The highest VIF is 2.26 (CR), which is still well below the commonly accepted concern level. The mean VIF of 1.44 indicates very weak correlation among explanatory variables.

Table 5: Stationary test

Variable	P- value	Inference
ROA	0.00	Stationary
TAX	0.00	Stationary
TANG	0.00	Stationary
CR	0.00	Stationary
TETA	0.02	Stationary
TLTA	0.02	Stationary
BR	0.00	Stationary
IR	0.00	Stationary

A stationarity test is a statistical test used to determine whether the mean and variance of a data series are stable over time. Table 5 shows the results of the stationary test; all the variables are less than the 5 percent level so that we reject the null hypothesis, i.e., the series are stationary.

Table 6: Hausman Test

Model 1			Model 2		
	FE	**RE**		**FE**	**RE**
TETA	0.4312	0.4088	**TLTA**	0.4312	0.4088
TANG	0.0019	0.0155	**TANG**	0.0019	0.0155
TAX	0.0015	0.0007	**TAX**	0.0015	0.0007
CR	-0.0101	-0.0099	**CR**	-0.0101	-0.0099
BR	0.0000	0.0000	**BR**	0.0000	0.0000
IR	0.0039	0.0036	**IR**	0.0039	0.0036
Hausman 0.1748			**Hausman** 0.1748		

Table 6 indicates the results of the Hausman test. The Hausman test value (0.1748) is greater than 0.05, showing that the random effect model is more appropriate for the study. TETA/TLTA (0.4088), TANG (0.0155), TAX (0.0007), and IR (0.0036) are positive values, and they indicate that they influence the firm performance. The current ratio (-0.0099) is negative; it depicts that inefficient liquidity affects the firm's performance, and business risk (0.00) reflects the negligible influence.

V. CONCLUSION

The study investigates the impact of capital structure on the profitability of listed Indian hospitals for the period of 2016 to 2025 using panel data regression. The findings highlight that hospitals maintain the balanced mix of equity and debt. Tax and tangibility also contribute positively to performance. The current ratio reports a negative relationship with profitability. Overall, the study finds that increasing profitability in the hospital sector requires an ideal capital structure. To improve long-term financial performance, hospital firms should concentrate on making effective financing decisions in addition to managing their assets and liquidity.

REFERENCES

[1] Akin, I. (2025). *Influence of Growth , Capital Structure , Profitability , and Size on FTSE 100 Enterprise Value*. 157–168. https://doi.org/10.1002/jcaf.22761

[2] Balasubramanian, E., & Sivaganam, S. (2026). *Does Capital Structure Influence Profitability of the Company ? 12*(8), 6616–6619.

[3] Majumder, Q., & Researcher, I. (2025). *Evaluating the Correlation Between Leverage and Profitability in the Retail Sector : A Comparative Study of Listed Companies Across Five Years*. *12*(2), 82–88.

[4] Mensah, L., & Bein, M. A. (2025). *The Impact of Capital Structure on Business Growth Under IFRS Adoption : Evidence From Firms Listed in the Frankfurt Stock Exchange*. *June*, 1–21. https://doi.org/10.1177/21582440251336533.

[5] Singh, N. P., & Bagga, M. (2020). *The Effect of Capital Structure on Profitability : An Empirical Panel The Effect of Capital Structure on Profitability : An Empirical Panel Data Study*. *August*. https://doi.org/10.1177/2278682118823312.

[6] Tran, D. L., & Pham, D. T. (2025). *The Relationship Between Credit Supply , Capital Structure and Firm Performance of Listed Real Estate Firms : Evidence from an Emerging Country*. *June*, 1–15. https://doi.org/10.1177/21582440251339290