



A STUDY OF INFLUENCE OF LEVERAGE ON PROFITABILITY OF INDIAN FIRMS ACROSS MARKET CAPITALIZATION SEGMENTS

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ABSTRACT :

This study investigates the influence of financial leverage on the profitability of Indian firms across different market capitalization segments—large-cap, mid-cap, and small-cap—within the Nifty multi-cap index. The research evaluates the relationship between leverage and key profitability indicators, namely Return on Assets (ROA), Return on Equity (ROE), and Earnings Per Share (EPS). Using a quantitative research approach and secondary data spanning five years from select representative firms, the study provides comparative insights into how capital structure decisions impact profitability across firm sizes. The findings indicate that while large-cap firms exhibit financial stability and low debt reliance, small and mid-cap firms demonstrate varied leverage strategies, often with higher risk-return implications. This research bridges an existing gap in literature by presenting a comprehensive analysis of leverage-profitability dynamics specific to India's multi-cap firms, offering implications for corporate finance strategy, investment decision-making, and policy formulation.

Keywords : Leverage, Profitability, ROA, ROE, EPS, Capital Structure, Nifty Multi-cap, Market Capitalization, Financial Ratios, Indian Firms, Corporate Finance, Investment Strategy

CHAPTER 1: INTRODUCTION AND REVIEW OF LITERATURE

Rationale for the Study and Motivation

Leverage, or the utilization of debt within a firm's capital mix, is essential in determining financial performance and profitability. Within finance, leverage is divided into operating leverage, financial leverage, and overall leverage. Although financial leverage allows firms to increase size and enhance return on equity (ROE), overreliance on borrowing may result in financial distress and bankruptcy. The risk-return trade-off that comes with leverage requires a thorough analysis to determine its effect on corporate profitability, particularly in the case of Nifty multi-cap firms, which are companies of different sizes and industries.

The research is significant since it seeks to fill the knowledge gap regarding the effect of leverage on profitability among large-cap, mid-cap, and small-cap firms in the Nifty multi-cap index. Various types of firms have varying financial behaviors, appetites for risk, and capital structures. Large-cap companies typically enjoy greater financial stability and simpler access to credit, while mid-cap and small-cap companies have potentially higher borrowing costs and greater financial risks. Examining leverage's function among these types will provide useful information for investors, financial analysts, policymakers, and corporate managers.

Statement of the Research Problem

Leverage is one determinant of the financial performance of a company, though its role in profitability has not been conclusive. Though the use of debt for financing returns on investment with improved financial leverage, high leverage increases the probability of financial distress, hence low profitability. The relationship between profitability and leverage is analyzed in this research in Nifty multi-cap firms and across big, medium, and small-cap companies. Through the examination of major financial indicators, this study aims to offer insights on leverage levels optimal for maximizing profitability while reducing risk to enable investors and corporate decision-makers to make effective financing choices in a fluctuating market landscape.

CHAPTER 2: REVIEW OF LITERATURE

1. Chong-Chuo Chang et al. (National Chi Nan University, National University of Mongolia, Asia University)

This study examines the relationship between capital structure and profitability in four Asian economies: Taiwan, Korea, Hong Kong, and Mongolia. Using correlation, regression, and descriptive analysis, the authors investigate how leverage impacts firm performance. The findings reveal a negative relationship between leverage and profitability, indicating that higher debt levels tend to reduce earnings. However, a positive relationship between growth and leverage is observed in Taiwan, Korea, and Hong Kong, suggesting that firms in these regions use debt to finance expansion. Furthermore, firm size is positively correlated with leverage across all countries, implying that larger firms have better access to external financing. This study contributes to capital structure literature by highlighting regional differences in financial strategies and suggesting that firms must optimize their debt levels for sustainable profitability.

2. Sorana Vălavua

Focusing on Romanian listed companies, this study investigates the impact of capital structure on financial performance using correlation and regression analysis. The research identifies leverage, equity, and liquidity as key determinants of capital structure, with debt levels significantly influencing financial outcomes. The study supports the pecking order theory, where companies prefer internal financing over external debt. It also emphasizes the importance of maintaining an optimal debt-equity ratio to achieve financial stability and profitability. The findings suggest that Romanian firms should carefully manage their debt to enhance financial performance while minimizing risks associated with high leverage.

3. Hirdinis, M.

This study explores the moderating role of profitability on capital structure and firm value, employing multiple linear regression (SPSS 22) for analysis. The findings indicate that capital structure positively impacts firm value, meaning companies with well-managed debt tend to have higher valuations. However, firm size negatively influences firm value, suggesting that larger firms may face challenges in maintaining profitability. Interestingly, the study finds that profitability does not mediate the relationship between capital structure and firm value, contradicting the common assumption that profitable firms can manage leverage more effectively. The study provides useful insights into how firms should balance debt and equity while considering their size and profitability levels.

1.4 Identification of Research Gaps

There is considerable work done on leverage and profitability, yet few studies investigate a comparison among multi-cap firms in the Indian market, especially Nifty multi-cap firms. Much literature typically considers either small-cap or large-cap companies independently without looking into differences in the impact of leverage for varying market capitalizations. Moreover, studies generally revolve around advanced markets, while relatively fewer investigations probe emerging markets such as India. The contribution of industry-specific forces and macroeconomic circumstances to the dynamics of leverage and profitability is not yet fully explored. The present research bridges these gaps by examining how leverage influences profitability for Nifty multi-cap companies, and presenting a holistic viewpoint for policymakers and investors.

1.5 Theoretical Foundations

The connection between profitability and leverage for Nifty multi-cap firms rests on a number of financial theories that describe how debt affects company performance. In this research, the following fundamental theories are referenced:

1. Modigliani and Miller (M&M) Capital Structure Theory (1958, 1963)

Modigliani and Miller Proposition I (1958) is an argument that in an economy where market conditions affect firm value, a firm's value does not depend on its capital structure. Later, in 1963, they modified their theory by introducing corporate taxes and arguing that debt financing provides a tax shield, which can increase firm profitability. The present study assesses the validity of this tax shield benefit proposition for Nifty multi-cap firms with their diverse capital structures.

2. Trade-Off Theory

The Trade-Off Theory postulates that companies weigh the advantages of debt (tax shields) against the disadvantages (financial distress and bankruptcy risk). Large-cap companies with solid financial health can use more debt in order to maximize profitability, whereas small-cap companies, as they are riskier, may suffer from decreasing returns due to over-leverage. This research investigates if multi-cap companies adhere to the theoretical trade-off while choosing their capital structures.

CHAPTER 4: FINDINGS AND RECOMMENDATIONS

4.1 Research Outcome and Findings

- **Low Debt Utilization:** Nearly all companies possess a very low Debt-to-Equity (D/E) Ratio, i.e., between 0.0025 and 0.0043, reflecting negligible dependence on debt and excellent financial solidity.
- **Negligible Debt Financing of Assets:** The Debt-to-Assets Ratio is also highly low (0.0018 to 0.0028), reflecting that companies highly rely on equity and internal sources rather than borrowings.
- **Negative Effect of Debt in IT Industry:** Infosys has a negative relationship (-0.35) between leverage and profitability, which implies that higher debt lowers earnings in IT companies.
- **FMCG Companies Gain from Debt:** ITC has a moderate positive relationship (0.55) between leverage and profitability, which implies that judicious use of debt aids in financial performance.
- **Debt Facilitates Growth in Telecom & Energy:** Indus Towers (0.20) and Suzlon Energy (0.69) indicate a positive correlation, thus indicating that leverage increases profitability in capital-intensive industries.
- **Pharma Industry Depends on Debt:** Glenmark Pharma has an extremely high positive correlation (0.90) with leverage, reflecting the industry's dependence on debt for R&D and expansion.
- **Debt has minimal effect in Consumer Durables:** Blue Star has a very poor correlation (0.03), indicating that its profitability relies more on efficiency of operations rather than debt.
- **Industry-Specific Effect of Debt:** The total average correlation (0.335) indicates that leverage tends to favor profitability but the impact is industry-specific.
- **Conservative Funding Strategy:** Most companies have low D/E ratios (0.0025–0.0043) in order to lower financial risk and provide long-term stability.
- **Sound Debt Management:** A few companies witnessed short-term jumps in D/E ratios, but they promptly serviced borrowings, demonstrating good control over finances.
- **Good ROE Performance:** ROE ranged between 22% and 32%, which suggests that companies are able to effectively generate profits on shareholders' capital.

4.2 Theoretical Implication

- **Evidence for the Trade-Off Theory:** The results show that companies in capital-intensive industries such as telecom (Indus Towers, 0.20), energy (Suzlon, 0.69), and pharma (Glenmark, 0.90) are positively impacted by leverage, consistent with the Trade-Off Theory that predicts companies offset tax advantages of debt against costs of financial distress.
- **Support for the Pecking Order Theory:** Infosys (-0.35 correlation) uses less debt, validating the Pecking Order Theory, as per which successful companies prefer financing from within instead of using debt to evade financial risk and information asymmetry.
- **Industry-Specific Capital Structure Choices:** The research supports that capital structure choices are different across industries, with FMCG companies such as ITC (correlation of 0.55) being aided by moderate leverage, whereas consumer durables companies such as Blue Star (0.03 correlation) use less debt, favoring sector-specific financial planning.
- **Leverage's Two-Faced Effect on Profitability:** Overall moderate positive relationship (0.335) implies that though in certain industries, leverage is positively related to profitability, overindulgence in debt could prove dangerous, supporting both elements of the Trade-Off as well as the Pecking Order Theories under varying conditions.
- **Risk-Return Trade-Off in Capital Structure:** Companies with Low Debt-to-Equity Ratio (0.0025–0.0043) pursue conservative funding practices, avoiding risk while possibly constraining growth, consistent with principles of financial stability in the Agency Theory, based on the argument that managers prefer risk-averse financing for the purpose of safeguarding shareholder interests.
- **Effective Debt Management and Firm Value:** Firms' capacity for rapid repayment of short-term debt is indicative of sound financial restraint, upholding theories that propose optimal debt management as critical in sustaining profitability as well as the confidence of shareholders.

4.3 Managerial Implication

1. **Industry-Specific Capital Structure Planning:** Managers should tailor their debt strategies based on industry needs. IT firms (Infosys: -0.35 correlation) should rely more on equity, while capital-intensive sectors (Suzlon: 0.69, Glenmark: 0.90, Indus Towers: 0.20) can benefit from moderate debt for growth.
2. **Optimizing Debt Utilization:** Companies with low Debt-to-Equity Ratios (0.0025–0.0043) should explore strategic borrowing to fund expansion without increasing financial risk, particularly in sectors where leverage supports profitability.

3. Risk Management in Financial Decisions: Firms should carefully balance debt and equity to avoid financial distress while leveraging growth opportunities, as seen in FMCG (ITC: 0.55 correlation) benefiting from moderate debt and consumer durables (Blue Star: 0.03) being less affected by leverage.
4. Maintaining Strong Financial Discipline: Companies that quickly repay short-term debt spikes demonstrate effective financial control, which should be a best practice to maintain investor confidence and avoid long-term liabilities.
5. Enhancing Shareholder Value: ROE fluctuating between 22%–32% suggests that profitability can be improved by efficient capital allocation, cost control, and investment in high-return areas rather than relying solely on debt.
6. Strategic Debt Management for Expansion: Sectors with strong debt-profitability links (Glenmark, Suzlon, ITC) should use debt strategically for expansion, while risk-sensitive sectors should maintain conservative leverage strategies to ensure long-term sustainability.
7. Investor-Friendly Financial Strategies: Firms maintaining low financial risk (low D/E and Debt-to-Assets ratios) attract risk-averse investors, while those managing leverage well can appeal to investors seeking higher returns with controlled risk.
8. Ensuring Sustainable Profitability: The moderate positive correlation (0.335) between leverage and profitability suggests that managers should adopt a balanced approach, ensuring debt is used efficiently without excessive risk exposure.

4.4 Limitations of the Study

- Only six Nifty multi-cap companies are analyzed, which may not fully represent the market.
- Results may vary across sectors, limiting generalization.
- A longer study period could provide deeper insights.
- Data from company reports may have limitations or biases.
- Economic conditions, policies, and market trends that affect leverage and profitability are not included.

4.5 Conclusions

This study analyzes the impact of leverage on profitability across six Nifty multi-cap companies, capturing sectoral differences in capital structure decisions. The findings reveal that IT companies (Infosys: -0.35 correlation) opt for less debt in terms of financial stability, whereas capital-consuming industries such as energy (Suzlon: 0.69) and pharma (Glenmark: 0.90) favor more leverage. FMCG (ITC: 0.55) is able to capitalize on moderate debt, whereas consumer durables (Blue Star: 0.03) depend more on efficiency than debt funding.

The overall moderate positive relationship (0.335) indicates that leverage can increase profitability, but its effect is industry-specific. Firms with low Debt-to-Equity Ratios (0.0025–0.0043) are financially stable but curtail growth prospects. Proper management of debt, careful borrowing, and financial prudence are required in order to maximize return while minimizing risk.

These observations assist managers, investors, and policymakers to make sound monetary decisions by making debt and equity choices in a manner that accommodates industry demands and risk aversion.

4.6 Scope for Future Research

- Future research can include more Nifty multi-cap companies for a broader market perspective.
- A longer study period can help analyze long-term trends in leverage and profitability.
- Sector-specific studies can provide deeper insights into how leverage affects different industries.
- Exploring the impact of economic conditions, interest rates, and government policies on leverage can enhance understanding.
- A comparative study across countries can highlight regional differences in capital structure strategies.
- Qualitative research through interviews or surveys can offer management insights on leverage decisions.
- Examining the relationship between leverage, financial risk, and stock performance can provide investor-focused insights.
- Advanced financial models like machine learning or econometric techniques can improve accuracy in predicting leverage effects.

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