

# Assessing the Role of Capital Structure and Promoters' Holding on Performance

Samadrita Ghosh<sup>1\*</sup> and Abhijit Sinha<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Commerce, Vidyasagar University, Midnapore – 721102, West Bengal, India

<sup>2</sup>Professor, Department of Commerce, Vidyasagar University, Midnapore – 721102, West Bengal, India

## Abstract

Understanding the role of capital structure and ownership structure on performance has raised interest among researchers in corporate finance. The present examination delves into identifying the effect of capital structure and Indian promoters' holding on performance based on a sample of selected large-cap firms in India. This study considers a period from 2015 to 2022 covering companies listed in the BSE-Sensex. The research uses accounting-based performance as the performance parameter and share of long-term debt for capital structure. Indian promoters' holding is considered a proxy for ownership structure. The results demonstrate that though there exists a significantly negative effect of debt on performance, promoters' holding has an insignificant effect on return on assets. The study implies that firms should be careful about resorting to long-term debt and thereby call on managers to control debt levels. The absence of a noticeable effect of Indian promoters' ownership shifts the focus on foreign and institutional ownership.

**Keywords:** Capital Structure, Large-Cap Companies, Ownership Structure, Performance, Static Panel

## 1. Introduction

It is often said that the most vital parameter that affects a company's market-orientedness and firm performance is its capital structure. Every finance manager aims to identify the optimal level of debt-equity mix for maximizing shareholders' wealth and to achieve this, companies need to carry out different investments for which they need different sources of finance (Bakhshani, 2017). This leads to a change in the combination of the owned fund and debt fund (Gord *et al.*, 2015). Hence, capital structure is an important input that has repercussions for businesses. Capital structure affects various aspects of the business, which involve financial ratios like profitability ratios, cost of capital and risk. On one hand, companies with a higher proportion of debt can earn higher Return on Asset (ROA), while on the contrary, it increases the

financial risk of firms which in return affects the cost of capital, thereby creating a boomerang effect. Since debt is less expensive than equity, companies seek to raise more of it since it can reduce their total cost of capital. However, the simultaneous effect on financial riskiness needs understanding. Thus, the issues of financial distress and bankruptcy go hand in hand. Hence, the right debt-equity mix is an important aspect that influences financial performance (Nirajini & Priya, 2013; Mohammad & Bujang, 2020).

Finding the true influence of the structure of capital over performance is, therefore, still a matter of debate among the experts. It is often believed that a perfect debt-equity combination with a minimum cost of capital is required to achieve the wealth maximization objective of the shareholders (Chowdhury & Chowdhury, 2010). The theory of modern business finance starts with

\*Email: samadritaghosh002@gmail.com

the Irrelevance Theory of capital structure where the irrelevance of debt on firm value in a perfect market scenario.

Since then, several theories attempted to determine the optimum debt-equity mix for companies. The theory by Kraus and Litzenberger proposed in 1973 explains the importance of trade-off between costs and benefits of debt financing which leads to balancing between debt and equity. The Agency Cost theory explains the need to mitigate the agency costs arising from manager-shareholder conflict. According to the Market Timing Theory, the choice of equity shares gets preference during favourable market conditions. The Pecking Order Theory suggested by Myers and Majluf (1984) explains that companies resort to internal sources of funds being used first followed by debt and equity at last. Hence, the effort to understand how capital structure impacts firms is still an ongoing one.

Another component that is considered for this research is promoters' holding. The knowledge of the organizational structure of corporations shows the dominance of a combination of family ownership, government ownership and foreign ownership and also includes promoters' shareholding (Pande & Ansari, 2013). The segregation of company ownership in terms of promoters' holding and control and its effect on performance was first conceptualized by Berle and Means (1932). The ownership structure comprising of the promoters' and non-promoters' equity, as well as the institutional holding, is an effective tool for governance (Arora & Bodhanwala, 2018) and the concentrated promoters' holding in the ownership structure can enhance corporate performance (Shetty & Vincent, 2021) by lowering the agency cost arising due to conflict of interest. The holding percentage of promoters reflects their commitment and investment in the organization. However, there is a contrary explanation according to which a high degree of promoters' ownership is seen as a move towards monopolistic decision-making that negatively affects the independence of business flow. Promoters' holding can also influence the capital structure differently. If the promoters have a high degree of stake and are not ready to dilute their ownership when the company needs to raise additional

capital by issuing new shares, this action can restrict the ability of the company for equity financing and force the company to go for debt financing. Thus, capital structure and promoters' holding are interrelated and need further investigation. The effect of two issues on firm performance is under investigation by researchers by studying the performance of a subset of large-cap Indian firms, which are thought to be more sensitive to receiving larger sums of money than smaller companies (Hirdinis, 2019).

The article is structured as follows: In the second section, different empirical studies and theoretical evidence related to capital structure and ownership structure about promoters' holding and financial performance are reviewed and a research gap is identified. The third section presents the research objectives and the argument for the hypothesis that is based on prior findings. In the fourth section, the research design is presented followed by the fifth section which presents the results. Finally, in the sixth section, the researchers consider the concluding remarks.

## 2. Literature Review

The researchers have undertaken an in-depth review of various research papers and materials on the issue under study. The summarization of the literature is as follows.

### 2.1 Capital Structure and Performance

The research by Vatavu (2015) mentions that the performance of the firms is greater when they function mainly on equity and these companies divest their assets partly during the time of inflation and increased taxes to reduce their cost. However, manufacturing companies are mostly risk-takers and tend to rely on debt financing during financial difficulties. Basit and Hassan (2017) find a significant impact of the debt-equity ratio on return on assets in contrast to the findings of Bakshani (2017) where there was no discernible association between the structure of capital and performance. The study by Detthamrong *et al.* (2017) not only observes a favourable effect of leverage on firm performance but also establishes that, for large firms, financial leverage mediates firm

performance, whereas Abdullah and Tursoy (2019) believe that capital structure influences share price of the stocks negatively. Hirdinis (2019) shows there is a significant positive influence of capital structure on company value and also highlights that profitability is positively impacted. Li *et al.* (2019) conducted an empirical study which found that in the case of low-credit-risk SMEs, firms' performance and the debt ratio are negatively related, but no such relationship was found in the case of SMEs with high-risk credit. It is also found that although leverage positively affects performance, it impacts share prices negatively (PeiZhi & Ramzan, 2020). Tobin's Q does not have any statistically significant relationship with short-tenure debt, although profitability has a significant positive relationship with capital structure (Shamsuddin *et al.* 2020), while Vu Thi and Phung (2021) conclude by highlighting a significant deteriorating effect of the company's structure of capital represented by the ratio of debt fund to owned fund on financial performance estimated using ROE and ROA.

## 2.2 Ownership Structure and Performance

Ownership structure, being a key governance mechanism as given by Galego *et al.* (2019) impacts directors' efficiency (Cho & Kim, 2017). Omran *et al.* (2008) cite that ownership structures of businesses have an influence on their financial performance and have the potential to provide consistently better outcomes. However, there is a continuous debate about the relationship between the two. The research by Phung and Mishra (2016) exhibits a non-linear relationship between ownership structure and performance. Interestingly, it is seen that on the one hand, firm ownership is related to performance in a convex form in contrast to the concave form evident from foreign ownership.

The study by Ahmed and Hadi (2017) finds a positive effect of ownership by blockholder ownership on the value of the firm, while insider ownership affects return on equity negatively. The research finds a positive effect of government ownership on return on assets. Alabdullah (2018) finds that managerial ownership impacts performance positively with no

significant effect of foreign ownership. According to the research of Rashid (2020), foreign ownership and directors have a substantial beneficial impact on both market and accounting-based performance. However, the ownership percentage of institutions impacts accounting-based performance positively. Dakhllalh *et al.* (2021) find that block ownership, institutional ownership, family, government and management ownership influence performance positively. A study by Iwasaki *et al.* (2022) supports that foreign investors and domestic outside investors influence performance positively, while state ownership influences it negatively. The study by Bhatia and Shrivastava (2017) finds a non-linear endogenous relationship where the promoters can change their ownership holding concentration depending on the performance alignment. Mishra and Kapil (2017) find that promoters' ownership of companies with a low degree of promoters' stake reflects an unfavourable association with performance, whereas when the ownership and control increase, the relationship also becomes positive. However, Rasheed (2019) fails to find an association between promoters' holding and performance which is in contrast to the findings in a recent study by Chatterjee and Bhattacharjee (2021) where a positive impact on performance is seen. Moreover, Mehrotra *et al.* (2023) suggest that a high level of concentrated promoters' shareholding in the ownership structure can increase firms' performance significantly. The review of previous studies shows that several studies have been done based on different periods and in different country environments. Due to the diverse nature of the findings and rapid change in the economy, the investigation of capital structure and promoters' holding as a part of the ownership structure to find their impact on performance should be evaluated continuously.

The response variable considered for the research is the Return on Asset (ROA), whereas the key predictor variables include Promoters' Shareholding (PH) and Financial Risk (FR). The former is measured as Indian promoters' holding, while the latter is determined by how much percentage of total assets is long-term debt. Corporate size is also considered a factor as it is seen that large-sized companies garner funds at a

lower rate and also have lower information asymmetry which impacts the performance of firms (Marfuah & Nurlela, 2019). For this study, the researchers apply the natural logarithm of total assets to approximate firm size (SIZE). As per the assessment of Zeitun and Tian (2007), growth opportunities can bring profitable investments for firms which in turn affects performance. The growth rate of sales (GROWTH) also provides insight into the company's ability regarding its ability to increase revenues over time and is thus considered as one of the control factors. Tangibility (TANG), measured as the percentage that fixed assets hold to total assets is another control variable taken into consideration for this study. It is often found that companies with high asset tangibility can reduce the agency cost by collateralizing the assets which increases financial performance (Iltas & Demirgunes, 2020).

Accordingly, the objectives as well as the hypotheses formulation are as follows:

- i. To find how the inclusion of debt component affects company performance
- ii. To infer how promoters' holding impacts performance
- iii. To examine the influence of firm-specific factors on corporate performance.

Keeping the objectives in mind, the following hypotheses are formulated:

- Hypothesis I

$H_0$ : There is no significant influence of debt on the performance of the companies.

$H_1$ : There exists a significant influence of debt on the performance of the companies.

- Hypothesis II

$H_0$ : There is no significant effect of promoters' holding on corporate performance.

$H_1$ : There exists a significant influence of promoters' holding on corporate performance.

- Hypothesis III

$H_0$ : There is no influence of firm-specific factors on the performance of the companies.

$H_1$ : There exists a significant influence of company-specific factors on performance.

### 3. Research Design

This study is exploratory where the promoter holdings' impact and capital structure on company performance is studied by researchers. The researchers consider large-market capitalization companies which form a part of the Sensex and are very actively traded. In addition to these reasons, the companies which form a part of the index cover diverse sectors. Since the financial companies are excluded because of the different nature of the industry and different regulatory compliance requirements, the analysis is based on finally twenty-five companies for which secondary data is collected from the CMIE Prowess database for the period 2015 to 2022. The reason behind considering this data period is that in 2013, the Companies Act introduced Section 90 which changed the concept of promoters. In line with the Act, a similar change was laid with the issue of SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018. Thus, the period of study is taken after giving due consideration to regulatory developments. The researchers considered panel regression as the data are in the form of a panel, being the blend of time series together with cross-section. The advantage of using this combination is an increase in the number of data points. Moreover, the application of panel data helps to capture the effect over time and across cross-sectional units. Also, data in the form of a panel elevates the degrees of freedom and improves econometric estimates' efficiency. Thus, to get a better understanding of the estimates, the panel regression method is utilized.

The research framework that is adopted to determine the effect of capital structure and promoters' holding on performance is as follows:

$$ROA_{it} = \alpha + \beta_1 \cdot FR_{it} + \beta_2 \cdot PH_{it} + \beta_3 \cdot SZ_{it} + \beta_4 \cdot TANG_{it} + \beta_5 \cdot GROWTH_{it} + \varepsilon_{it}$$

where, ROA represents Return on Assets, FR refers to Financial Risk, PH denotes Promoters' Shareholding, SZ stands for Firm Size, TANG indicates Tangibility, and GROWTH refers to the Sales Growth Rate. In the above model, the researchers use accounting-based performance as the explained variable which is very

common (Verbeeten, 2005) and Indian promoters' holding as the variable for ownership structure. The ROA measure considers the profitability measure with respect to investment in the organization's assets (Panigrahi *et al.*, 2014). For capital structure, the fraction that long-term debt is to the total assets is considered as the measurement.

## 4. Analysis and Findings

### 4.1 Analysis Based on Descriptive Statistics

The results of descriptive statistics describe the characteristics of both dependent and predictor variables. For this study, the mean, standard deviation, maximum and minimum values are calculated to get a clear understanding of the characteristics of the data. Table 1 shows the summary of summary statistics.

The descriptive statistics show that the mean value of ROA is 5.352 with a standard deviation of 4.622, max value of 18.950, and min value of -13.080. This shows that the sample comprises both profit and loss-making companies. The percentage of debt in the capital structure (depicted by FR) shows an average of 0.168 with a Standard Deviation (SD) of 0.147 and a maximum value of 0.535. The tangibility variable has an average value of 0.347 with an SD of 0.163, a maximum value of 0.667 and a minimum value of 0.008. The average of 'growth' is 0.102 with an SD of 0.313, a max value of 1.966, and a min value of -0.726, whereas promoters' holding percentage shows an average of 54.155 with an SD of 15.063 and a maximum value of 87.400.

### 4.2 Analysis based on Multicollinearity

Before analyzing panel data, the Variance Inflation Factor (VIF) is looked at to identify the potential of

**Table 1.** Descriptive statistics of the variables

Variables	Mean	Std. Dev.	Max.	Min.
ROA	5.352	4.622	18.950	-13.080
PH	54.155	15.063	87.400	0.000
FR	0.168	0.147	0.535	0.000
SZ	13.030	1.338	16.090	10.765
TANG	0.347	0.163	0.667	0.008
GROWTH	0.102	0.313	1.966	-0.726

Source: Researchers' Computation

individual explanatory variables to contribute to the multicollinearity issue (Wooldridge, 2015). VIF values are shown in Table 2.

A VIF value less than 10 indicates no multicollinearity among the variables (Chatterjee & Simonoff, 2013). It is, therefore, clear from Table 2 that multicollinearity is not an issue among the different predictor variables.

### 4.3 Analysis based on Levin-Lin-Chu (LLC) Unit Root Test

The Levin-Lin-Chu (2002) unit root test defines if a panel data has a unit root or not, viz. if the data are non-stationary. The following is the LLC unit root test hypothesis:

$H_0$  = Unit root is present in the panels

$H_1$  = The panels are stationary

The LLC unit root test results are displayed in Table 3.

The p-values in the aforementioned table are less than 1%. Thus, we disregard the null hypothesis ( $H_0$ ) at the 1% level, therefore concluding that the panels are stationary.

### 4.4 Panel Regression Model

Three regression models namely, Ordinary Least Square (OLS), Fixed Effect (FE) Model, and Random

**Table 2.** Result for multicollinearity

Variables	VIF
FR	1.204
PH	1.100
SIZE	3.773
TANG	1.267
GROWTH	1.018

Source: Researchers' Computation

**Table 3.** Levin-Lin-Chu unit root test

Variables	p-value
FR	0.000
PH	0.000
SIZE	0.000
TANG	0.000
GROWTH	0.000

Source: Researchers' Computation

Effect (RE) Model have been used to test the hypothesis and also it has been seen which model fits the most.

#### 4.4.1 Ordinary Least Squares (OLS) Regression

OLS is a widely applied linear regression model specially used for modelling continuous variables. In this model, OLS estimated the relationship between the response variables, ROA, and the two predictor variables FR and PH, along with the other control variables SZ, TANG, and GROWTH by reducing the sum of squared errors. The result of the Fixed Effect model is given in Table 4.

Table 4 illustrates how capital structure, or FR, has a significant adverse effect on financial performance at the 1% significance level. Similarly, SZ has a negative influence on ROA but it is significant at the 5% level. The variable TANG has a positive influence on financial performance and it is significant at the 1% level. The GROWTH variable which is measured by the change in sales over the previous year, and the other important variable of the study, PH viz. promoters' holding (representing ownership structure) have a positive impact on ROA. However, the effect of both GROWTH and PH are insignificant as the p-values are 0.123 and 0.361 respectively.

#### 4.4.2 Analysis based on Fixed Effect (FE) Model Regression

In this study, to observe the heterogeneity of the group-specific variables and to measure their impact on ROA, the FE model has been used. The outcomes of the FE model are given in Table 5.

**Table 4.** Results based on OLS regression

Variables	Coef.	Z	p >  z
FR	-14.555***	-6.84	0.000
PH	0.011	0.92	0.361
SZ	-0.523**	-2.25	0.026
TANG	9.108***	4.77	0.000
GROWTH	1.428	1.55	0.123
_cons	10.851***	3.79	0.000
No. of Observations = 200			
F(5,194) = 13.5; Prob. > F = 0.000			
R-squared = 0.2581; Adj. R-squared = 0.2389			

Source: Researchers' Computation

\*\*\* significant at 1% level; \*\* significant at 5% level

Table 5 shows that FR which represents capital structure has an unfavorable influence on financial performance which is significant at the 1% level. This is an important finding which points that resorting to huge long-term debt brings in negative impact on accounting-based return. This implies that it is not just the fund availability that is important but the usage of the fund through better project decisions. Similarly, size has an unfavourable impact on ROA which is also significant at the 1% level. It implies managers need to comprehend that creating large-sized organizations does not give a positive signal to the market about performance. Instead, operational efficiency and productivity form the key to positive results. The variable TANG also has an unfavourable influence on financial performance but it is significant at a 5% level. At a 1% level of significance, ROA is positively and significantly impacted by the 'growth' variable, which is determined by the change in sales over the previous year. The other important variable of the study which is the ownership structure (proxied using Indian promoters' shareholding percentage) shows a negative impact on ROA which is, however, insignificant as the p-value is 0.826.

#### 4.4.3 Analysis based on Random Effect (RE) Model Regression

The RE model considers both time-varying and time-invariant panel data and assumes that individual effects are randomly distributed and not correlated with different predictor and control variables. The result of the RE model is given in Table 6.

**Table 5.** Results based on the FE regression model

Variables	Coef.	Z	p >  z
FR	-21.942***	-5.68	0.000
PH	-0.005	-0.22	0.826
SZ	-3.631***	-4.57	0.000
TANG	-8.593**	-1.98	0.049
GROWTH	2.457***	3.51	0.001
_cons	59.278	5.56	0.000
sigma_u	7.082		
sigma_e	2.926		
Rho	0.854	(fraction of variance due to u_i)	
F (5,169) = 20.71; Prob > F = 0.000			

Source: Researchers' Computation

\*\*\* significant at 1% level; \*\* significant at 5% level

Table 6 illustrates how capital structure, or FR, has a negative and statistically significant influence on performance at a 1% level. Similarly, even if SZ negatively influences ROA, the probability value of 0.074 points to insignificant effect. The TANG variable has an insignificant impact on business performance while having a p-value of 0.148. ROA is positively impacted by the ‘growth’ factor which is significant at the 1% level. The study’s other key variable, ownership structure, which has been used as a substitute for the shareholding proportion of Indian promoters, brings in gains at a 1% statistically significant level.

#### 4.4.4 Choice of Final Model

Statistical tests have been applied to decide the choice of the most appropriate model. To choose between OLS and FE models, first, the observed test statistics are computed. The F-stat value which estimates the fitness of the model is found to be 13.5 for the OLS model and 20.71 for the FE model, making both the models highly significant. The outcome of the Restricted F test indicates that the null hypothesis is rejected because the p-value is less than 5% which means that the FE model is preferred over the OLS. Then, the LM test is performed to choose between the OLS and RE Models. The estimation reveals that the Wald chi-squared statistic is 66.79 which is found to be significant, thereby rejecting the null hypothesis and making RE a relatively better model. Finally, the Hausman (1978) test helps to choose between FE and RE models. The researchers have hypothesized that the computed coefficients according to the FE and RE models do not significantly differ from one another.

**Table 6.** Results based on the RE regression model

Variables	Coef.	Z	p> z
FR	-20.401***	-6.60	0.000
PH	-0.005	-0.26	0.795
SZ	-0.723	-1.79	0.074
TANG	4.382	1.45	0.148
GROWTH	2.004***	2.66	0.008
_cons	16.746***	3.19	0.001
sigma_u	2.437		
sigma_e	2.926		
rho	0.409	(fraction of variance due to u_i)	
Wald Chi <sup>2</sup> (5) = 65.29; Prob > Chi <sup>2</sup> = 0.000			

Source: Researchers’ Computation

The estimation shows that the probability value of the computed chi-squared statistic is less than 1%, thereby making it significant and driving towards rejection of the null hypothesis. Hence, the fixed effect model is the final model relevant to the study.

#### 4.4.5 Interpretation of the Result

The outcomes of the fixed-effect regression model indicate that Financial Risk (FR), Company Size (SZ), and TANG have a substantial detrimental impact, whereas Growth opportunities (GROWTH) contribute effectively to ROA. More specifically, a greater debt-to-asset ratio, which indicates more financial risk, dramatically lowers profitability. This is probably because repaying debt comes with higher expenditures, which puts a burden on companies’ finances (Feng *et al.*, 2022; Cloutens & Magris, 2024). Concerning the influence of firm size on performance, it is evident that larger businesses typically exhibit lower ROA (Lee, 2021) which might be because of declining returns to scale, regulatory obstacles, operational inefficiencies and overall mismanagement. The drawbacks of asset tangibility indicate that even while collateralizing assets might lower agency costs, too much dependence on fixed assets can stifle creativity and profitability, especially in sectors where asset liquidity is essential (Bradford *et al.*, 2018). Conversely, companies that have good growth prospects tend to be more profitable since growing income from profitable ventures probably boosts profits (Kouser *et al.*, 2012). It is interesting to observe that promoters’ shareholding has no apparent impact on profitability, which indicates that ownership concentration does not significantly affect financial performance in the given study. This throws a cue on the fact that it is not the promoters’ holding but the holding by foreign and domestic institutions that can be important. These findings can be the consequence of particular characteristics of the firms under investigation, wherein ownership structure is less important than debt management, operational effectiveness, and the capacity to grasp development opportunities.

## 5. Concluding Remarks

The capital structure issue is among the key decision-making areas in organizations as it is associated with

issues like financial performance, value orientation, and risk management of the firms, and has attracted the interests of different researchers for a long time. In this study, the panel data's regression result demonstrates that the capital structure has a substantial adverse influence on the firm's performance. This result matches the recent findings of Basit and Hassan (2017) and Hirdinis (2019) and is against the findings of Shamsuddin *et al.* (2020), and Wuryani (2022).

The coefficient of the debt ratio is negative. This inverse effect on ROA may be caused due to various reasons. It could happen that firms have used long-term debt to purchase the fixed assets, the cash inflows of which may be generated in the future and may not be contributing in the considered time span. The use of long-term debt may restrict the company's financial ability to invest in different profitable projects, as long-term debts involve regular interest payments made from the company's profit, resulting in a reduction in ROA. The significantly negative impact of size contradicts the results of Husna and Satria (2019) and Ramzan *et al.* (2021). Similarly, the findings on tangibility contrast the conclusions of Nazir *et al.* (2021), and Mukumbi *et al.* (2020). The present study finding implies that there may be insufficient utilization of resources due to the large firm size. Thus, to improve performance, the companies may try to increase the return by increasing sales, which can be done by improving the production process efficiency and cost control. Reducing the amount of debt is another strategy that businesses may attempt. They could also attempt to lower the interest rates on the loans and liquidate ineffective assets to improve asset management. Besides the concept of capital structure, promoters' holding is the other component that is considered for this study. The issue of promoters' holding is quite an important matter in the company's ownership structure as it refers to those blocks of shares that are in the hands of the founding pillars of the company. However, the results reflect that the share of promoters in the equity capital has no significant impact on ROA. This finding corroborates the results of Demsetz and Lehn (1985), Demsetz and Villalonga, (2001), and Rasheed *et al.* (2019) but contradicts the inferences of Khatwani *et al.* (2023) and Singh *et al.* (2022). The insignificant impact

of promoters' holding on ROA found in the study could have been due to several factors which were not taken into consideration. It may also be possible that the promoters are not sufficiently engaged in the managerial and decision-making process.

The findings of the investigation are quite interesting and can guide managers in making decisions about ways of governing and leading companies in an improved manner. The research results significantly impact how businesses manage their finances and strategic decisions. Organizations should carefully examine the amount of long-term debt they have resorted to, considering the established negative influence of long-term debt on company performance. Over-reliance on long-term debt can result in large interest obligations which can restrict a firm's financial flexibility and lower profitability. Firms may concentrate on increasing operational effectiveness, lowering debt levels, and improving asset management by selling unproductive holdings to improve financial performance. Additionally, this analysis reveals no substantial influence on ROA, despite the importance of promoters' holding in the ownership structure, suggesting that promoter engagement in operational and strategic choices may be inadequate. The observation suggests that companies should investigate improved governance and management procedures to guarantee that ownership arrangements coincide with underlying performance goals. These results encourage firms to reconsider their ownership and capital structure to achieve better financial results. The findings, therefore, are a further addition to the existing debate on the agency theory that considers ownership structure as a powerful weapon that impacts corporate performance and improves corporate governance standards. The research adds novelty to the existing literature as it looks at the effect of debt inclusion on the liability side of the balance sheet and promoters' holding on the performance of firms operating in an emerging economy like India. The studies of developed countries have different regulations and environments which is not comparable to the Indian environment. Hence, the study gives cues about the effect of these two important performance drivers in the Indian context. The findings show that the result of long-term



debt inclusion on performance and identification of the optimum debt level will be a common topic in academic discourse. Even though the study has strong business implications at the decision-making level, it is not free from limitations. The research considers only Indian promoters' holding for ownership structure which is a limitation of the study under consideration. These shortcomings leave scope for further investigation by adding newer proxies for capital structure and considering a larger sample comprising different-sized companies. Also, other proxies for ownership structure can be used to obtain more accurate results.

## 6. References

- Abdullah, H., & Tursoy, T. (2019). Capital structure and firm performance: Evidence of Germany under IFRS adoption. *Review of Managerial Science*, 15(2), 379-398. <https://doi.org/10.1007/s11846-019-00344-5>
- Ahmed, N., & Hadi, O. A. (2017). Impact of ownership structure on firm performance in the MENA region: An empirical study. *Accounting and Finance Research*, 6(3), 105-115. <https://doi.org/10.5430/afr.v6n3p105>
- Alabdullah, T. T. Y. (2018). The relationship between ownership structure and firm financial performance: Evidence from Jordan. *Benchmarking: An International Journal*, 25(1), 319-333. <https://doi.org/10.1108/BIJ-04-2016-0051>
- Arora, A., & Bodhanwala, S. (2018). Relationship between corporate governance index and firm performance: Indian evidence. *Global Business Review*, 19(3), 675-689. <https://doi.org/10.1177/0972150917713812>
- Bakhshani, S. (2017). The relationship between non-financial factors, capital structure and the performance of the listed companies on the stock exchange. *International Journal of Economics and Financial Issues*, 7(3), 542-547.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York, Macmillan.
- Basit, A., & Hassan, Z. (2017). Impact of capital structure on firms performance: A study on Karachi Stock Exchange (KSE) listed firms in Pakistan. *International Journal of Management, Accounting and Economics*, 4(2), 118-135.
- Bhatia, S., & Srivastava, A. (2017). Do promoter holding and firm performance exhibit endogenous relationship? An analysis from emerging market of India. *Management and Labour Studies*, 42(2), 107-119. <https://doi.org/10.1177/0258042X17714073>
- Bradford, K., Carter, N., Eriksson, D., Grabau, E., Hood, E., Parrott, W., & Wolt, J. D. (2018). Regulatory barriers to the development of innovative agricultural biotechnology by small businesses and universities. *Council for Agricultural Science and Technology*, Issue Paper 59, 1-20.
- Chatterjee, M., & Bhattacharjee, T. (2021). Ownership concentration, innovation and firm performance: empirical study in Indian technology SME context. *South Asian Journal of Business Studies*, 10(2), 149-170. <https://doi.org/10.1108/SAJBS-10-2019-0185>
- Chatterjee, S., & Simonoff, J. S. (2013). *Handbook of regression analysis*. John Wiley and Sons. <https://doi.org/10.1002/9781118532843>
- Cho, S., & Kim, J. (2007). Outside directors, ownership structure and firm profitability in Korea. *Corporate Governance: An International Review*, 15(2), 239-250. <https://doi.org/https://doi.org/10.1111/j.1467-8683.2007.00557.x>
- Chowdhury, A., & Chowdhury, S. P. (2010). Impact of capital structure on firm's value. *Business and Economic Horizons*, 3(3), 111-122. <https://doi.org/10.15208/beh.2010.32>
- Clootens, N., & Magris, F. (2024). Nonrenewable resource use sustainability and public debt. *Journal of Public Economic Theory*, 26(1), e12665. <https://doi.org/10.1111/jpet.12665>
- Dakhlallah, M. M., Rashid, N., Amalina, W. A. N., Abdullah, W. A. N., & Dakhlallah, A. M. (2021). Ownership structure and firm performance: Evidence from Jordan. *Journal of Contemporary Issues in Business and Government*, 27(2), 79-90.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6), 1155-1177. <https://doi.org/10.1086/261354>
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209-233. [https://doi.org/10.1016/S0929-1199\(01\)00020-7](https://doi.org/10.1016/S0929-1199(01)00020-7)
- Detthamrong, U., Chancharat, N., & Vithessonthi, C. (2017). Corporate governance, capital structure and firm performance: Evidence from Thailand. *Research in International Business and Finance*, 42, 689-709. <https://doi.org/10.1016/j.ribaf.2017.07.011>
- Feng, J., Yang, Y., & Zheng, Z. (2022). Research on the Impact of R and D investment under tax preferences on the long-term debt paying ability of enterprises – Based on the empirical analysis of China's Shanghai and Shenzhen listed companies. *Asian Business Research*, 7(1), 16. <https://doi.org/10.20849/abr.v7i1.986>

- Galego, A., Mira, N., & Silva, J. V. (2019). Ownership, productivity and firms' life-cycle. *European Journal of Family Business*, 8(2), 139-150. <https://doi.org/10.24310/ejfbefjfb.v8i2.5228>
- Gord, A., Vaghfi, H., & Fakouri, M. (2015). Examine relationship between measures of financial leverage (capital structure) and measure of performance. *Journal of Accounting Research*, 4(3), 1-18.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 46(6), 1251-1271. <https://doi.org/10.2307/1913827>
- Hirdinis, M. (2019). Capital structure and firm size on firm value moderated by profitability. *International Journal of Economics and Business Administration*, VI(1), 174-191. <https://doi.org/10.35808/ijeba/204>
- Husna, A., & Satria, I. (2019). Effects of return on asset, debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value. *International Journal of Economics and Financial Issues*, 9(5), 50-54. <https://doi.org/10.32479/ijefi.8595>
- Iltas, Y., & Demirgunes, K. (2020). Asset tangibility and financial performance: A time series evidence. *Ahi Evran Universitesi Sosyal Bilimler Enstitüsü Dergisi*, 6(2), 345-364. <https://doi.org/10.31592/aeusbed.731079>
- Iwasaki, I., Ma, X., & Mizobata, S. (2022). Ownership structure and firm performance in emerging markets: A comparative meta-analysis of East European EU member states, Russia and China. *Economic Systems*, 46(2). <https://doi.org/10.1016/j.ecosys.2022.100945>
- Khatwani, R., Raghuram, G., Mishra, M., & Mistry, J. (2023). Impact of change in promoters' shareholding pattern on the performance of small-cap-value equity stocks in the national stock exchange of India. *Journal of Risk and Financial Management*, 16(1), 32-46. <https://doi.org/10.3390/jrfm16010032>
- Kouser, R., Bano, T., Azeem, M., & Ul Hassan, M. (2012). Inter-relationship between profitability, growth and size: A case of non-financial companies from Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 6(2), 405-419.
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *Journal of Finance*, 28(4), 911-922. <https://doi.org/10.2307/2978343>
- Lee, K. (2021). *China's technological leapfrogging and economic catch-up: A Schumpeterian perspective*. Oxford University Press. <https://doi.org/10.1093/oso/9780192847560.001.0001>
- Levin, A., Lin, C. F., & Chu, C. A. (2002). Unit root test in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics*, 108, 1-24. [https://doi.org/10.1016/S0304-4076\(01\)00098-7](https://doi.org/10.1016/S0304-4076(01)00098-7)
- Li, K., Niskanen, J., & Niskanen, M. (2019). Capital structure and firm performance in European SMEs: Does credit risk make a difference? *Managerial Finance*, 45(5), 582-601. <https://doi.org/10.1108/MF-01-2017-0018>
- Marfuah, S., & Nurlela, S. (2017). Pengaruh Ukuran Perusahaan, Pertumbuhan Aset, Profitabilitas Dan Penjualan Terhadap Struktur Modal Perusahaan Kosmetik Dan Rumah Tangga Di Bursa Efek Indonesia. *Jurnal Akuntansi dan Pajak*, 18(1), 16-30. <https://doi.org/10.29040/jap.v18i01.81>
- Mehrotra, S., Mohanty, B., & Sharma, T. (2023). Do Board quality and promoters' holdings affect firm performance? Evidence from small and medium-sized enterprises. *FIIB Business Review*, 12(1), 100-108. <https://doi.org/10.1177/2319714520980286>
- Mishra, R., & Kapil, S. (2017). Effect of ownership structure and board structure on firm value: Evidence from India. *Corporate Governance*, 17(4), 700-726. <https://doi.org/10.1108/CG-03-2016-0059>
- Mohammad, H. S., & Bujang, I. (2020). Capital Structure and Financial Performance: Evidence from Three Malaysian Industries. *International Journal of Business and Society*, 21(3), 1153-1171. <https://doi.org/10.33736/ijbs.3332.2020>
- Mukumbi, M. C., Eugene, K. W., & Jinghong, S. (2020). Effect of capital structure on the financial performance of non-financial firms quoted at the Nairobi Securities Exchange. *International Journal of Science and Business*, 4(4), 165-179.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187-221. [https://doi.org/10.1016/0304-405X\(84\)90023-0](https://doi.org/10.1016/0304-405X(84)90023-0)
- Nazir, A., Azam, M., & Khalid, M. U. (2021). Debt financing and firm performance: Empirical evidence from the Pakistan Stock Exchange. *Asian Journal of Accounting Research*, 6(3), 324-334. <https://doi.org/10.1108/AJAR-03-2019-0019>
- Nirajini, A., & Priya, K. B. (2013). Impact of capital structure on financial performance of the listed trading companies in Sri Lanka. *International Journal of Scientific and Research Publications*, 3(5), 1-9. <https://doi.org/10.5958/j.2249-7137.3.6.001>
- Omran, M. M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter? *International Review of Law and Economics*, 28(1), 32-45. <https://doi.org/https://doi.org/10.1016/j.irl.2007.12.001>

- Pande, S., & Ansari, V. A. (2013). Effectiveness of independent directors on the boards of Indian listed companies are the recent regulatory changes enough? *SSRN Electronic Journal*, 1-23. <https://doi.org/10.2139/ssrn.2351693>
- Panigrahi, S. K., Zainuddin, Y., & Azizan, A. (2014). Comparing traditional and economic performance measures for creating Shareholder's Value: A perspective from Malaysia. *International Journal of Academic research in Accounting, Finance and Management Sciences*, 4(4), 280-289. <https://doi.org/10.6007/IJARAFMS/v4-i4/1345>
- PeiZhi, W., & Ramzan, M. (2020). Do corporate governance structure and capital structure matter for the performance of the firms? An empirical testing with the contemplation of outliers. *PLoS One*, 15(2), 1-25. <https://doi.org/10.1371/journal.pone.0229157>
- Phung, D. N., & Mishra, A. V. (2016). Ownership structure and firm performance: Evidence from Vietnamese listed firms. *Australian Economic Papers*, 55(1), 63-98. <https://doi.org/10.1111/1467-8454.12056>
- Ramzan, M., Amin, M., & Abbas, M. (2021). How does corporate social responsibility affect financial performance, financial stability, and financial inclusion in the banking sector? Evidence from Pakistan. *Research in International Business and Finance*, 55, 101314. <https://doi.org/10.1016/j.ribaf.2020.101314>
- Rasheed, P. C. A., Mallikarjunappa, T., & Thomachan, K. T. (2019). Promoter ownership, related party transactions and firm performance: A study among selected companies in India. *FIIB Business Review*, 8(3), 205-217. <https://doi.org/10.1177/2319714519834400>
- Rashid, M. M. (2020). Ownership structure and firm performance: The mediating role of board characteristics. *Corporate Governance: The International Journal of Business in Society*, 20(4), 719-737. <https://doi.org/10.1108/CG-02-2019-0056>
- Singh, G., Kumar, S., Vijayalakshmi, S., & Bhattacharjee, K. (2022). Does shareholding pattern affect firm performance? Evidence from India. *Journal of Public Affairs*, 22(3), 1-9. <https://doi.org/10.1002/pa.2691>
- Shamsuddin, Z., Kamel, A. M. M. A., Daud, W. M. N. W., & Sallha, W. (2020). Analysis of capital structure and financial performance in the Jordanian insurance sector. *Humanities and Social Science Review*, 8(3), 1310-1320. <https://doi.org/10.18510/hssr.2020.83133>
- Shetty, S. H., & Vincent, T. N. (2021). The role of board independence and ownership structure in improving the efficacy of corporate financial distress prediction model: Evidence from India. *Journal of Risk and Financial Management*, 14(7), 333-345. <https://doi.org/10.3390/jrfm14070333>
- Vatavu, S. (2015). The impact of capital structure on financial performance in Romanian listed companies. *Procedia Economics and Finance*, 32, 1314-1322. [https://doi.org/10.1016/S2212-5671\(15\)01508-7](https://doi.org/10.1016/S2212-5671(15)01508-7)
- Verbeeten, F. H. M. (2005). New performance measures: Determinants of their use and their impact on performance. *ERIM Report Series Research in Management*.
- Vu Thi, A. H., & Phung, T. D. (2021). Capital structure, working capital, and governance quality affect the financial performance of small and medium enterprises in Taiwan. *Journal of Risk and Financial Management*, 14(8), 381-393. <https://doi.org/10.3390/jrfm14080381>
- Wooldridge, J. M. (2015). Control function methods in applied econometrics. *Journal of Human Resources*, 50(2), 420-445. <https://doi.org/10.3368/jhr.50.2.420>
- Wuryani, E. (2022). Capital Structure and Financial Performance: The Case of Microfinance Institutions of Indonesia. *International Journal of Economics and Finance Studies*, 14(2), 381-398.
- Zeitun R. & Tian GG (2007). Capital structure and corporate performance: Evidence from Jordan. *Australasian Accounting, Business & Finance Journal*, 1(4), 40-61. <https://doi.org/10.14453/aabfj.v1i4.3>