Educational Administration: Theory and Practice
2024, 30(4), 11562-11573
ISSN: 2148-2403
https://kuey.net/

Research Article

Nexus between Ownership and Capital Structure through Firm Performance: A Study of Indian Service Firms

Andleebah Jan[1], Dr. Arfat Manzoor[2*], Dr. Mohd. Ashraf Parry[3]

Ph.D. Research Scholar, Department of Management Studies, Islamic University of Science and Technology, Pulwama, Kashmir-India, Email: andleebjan671@gmail.com.
[2*]Assistant Professor, Department of Commerce, Govt. Degree College Uri, India, Email: shaducom59@gmail.com.
Assistant Professor, Department of Management Studies, Islamic University of Science and Technology, Pulwama, Kashmir-India, Email: parrylive@gmail.com.

***Corresponding Author** Dr. Arfat Manzoor
*Email: shaducom59@gmail.com.

Citation: Dr. Arfat Manzoor, et.al (2024). Nexus between Ownership and Capital Structure through Firm Performance: A Study of Indian Service Firms, *Educational Administration: Theory and Practice*, 30(4) 11562-11573
Doi: 10.53555/kuey.v30i4.11104

ARTICLE INFO

Received: 25-09-2023
Revised: 01-02-2024
Accepted: 15-04-2024
Published: 30-04-2024

ABSTRACT

Purpose: the study aims to investigate the impact of ownership structure on capital structure along with a mediating and a moderating role of firm performance.
Design/Methodology/Approach: this study is purely based on the secondary data which was extracted from the Prowess IQ data base. The sample consists of the 65 Bombay Stock Exchange listed Service firms with a data period consists of 10 years from 2012-2013 to 2021-2022. Panel data regression technique was adopted for the data analysis.
Findings: the outcomes showed a significant and positive impact of institutional ownership on capital structure and in contrast the promoter ownership showed a negative and insignificant impact on capital structure. Earnings per share partially mediates the relationship between capital structure and institutional ownership while no mediating role of earnings per share was found between the relationship of capital structure and promoter ownership. Results further revealed that Tobin'Q acts as a moderator in the relationship between promoter ownership and capital structure while as no moderation was found between institutional ownership and capital structure.
Practical Implications: the study has practical implications for many stakeholders like policy makers, regulators and investors. This study will prove beneficial to policy makers and regulators to promote policies that encourages institutional owners' participation in the service firms. This study will also prove helpful to the investors as they find firm with high profitability under certain ownership pattern may be managed in a better way and are less risky.
Originality: the inclusion of firm performance in a dual analytical role both as a mediator and moderator in the relationship between ownership structure and capital structure offers a novel methodological and theoretical contribution, filling a notable gap in corporate finance literature especially within the context of emerging economies like India.

Keywords: Ownership, Capital Structure, Firm Performance, India

1: Introduction

Business firms required to enlarge viably to grapple successfully and attract shareholders. The diversification is possible by proper financing of their investment and functional operations (Komara et al., 2016). To avail finance from various sources, companies need crucial management of funding activities (Wahidah and Ardiansari, 2019). Capital structure is the critical financial decision for the managers which encompasses the combination of debt and equity along with the preference shares (Indriani and Widyarti, 2013). Companies that have considerable debt financing and greater dependence on equity capital structure make balance between the internal and external capital of these companies (Pujihastuti et al., 2022). In this situation, debt

financing is an important constituent (Azhagaiah and Gavoury, 2011). The apprehension of capital structure is crucial for shareholders, participants, analysts and creditors as it has a significant effect on the operational efficiency of companies (Neves et al., 2020). The major purpose of capital structure is to reduce the cost of capital and enhance the value of shareholders (Lartey et al., 2021). In spite of substantial research on capital structure still its decision making provide challenges to the scholars in accounting and finance. This problem arises in the essence of varied theories and conflicting findings generated by quantitative models (Bajaj et al., 2021; Neves et al., 2020; Hussainey and Aljifri, 2012). To inscribe continuous exploration, the alternative view on capital structure has proposed that is ownership view. It is argued that understanding of capital structure needs cautious investigation of firm's ownership structure. This perspective assumes that capital structure decisions are significantly impacted by its ownership structure, establishing the complex relationship between capital and ownership structure. Furthermore, ownership structure impacts the operational risk which afterwards affects financial leverage. Research shows that equity is important factor of capital structure along with firm specific features like size, age, risk and growth (Wellalage and Locke, 2011; Pindado and Torre, 2011).
Since the seminal work of Modigliani and Miller (1958), the issue of capital structure is a puzzle that lacks a definite solution. Agency theory assumes that financial decisions especially about the capital structure are affected by conflicts of interests between shareholders and mangers Jensen and Meckling (1976). Ownership concentration of promoters can reduce these conflicts by aligning the interests between them. Although it may lead to risk averse behavior, increases the level of debt to maintain control and avert equity dilution. Pecking order theory proposes that firms are in favor of internal funding than external sources and give priority to debt over equity because of lower information asymmetry (Eugene F. Brigham, 2014). Ownership structure may impact these options like institutional investors may stimulate the equity issue to reduce financial risk. Trade-off theory gives stress on the balance between financial distress and tax advantage of debt capital (Kraus and Litzenberger, 1973). Firms with higher institutional ownership espouse more stable capital structure whereas promoter -controlled firms adopt more debt in its capital structure to get optimum tax benefits. Resource dependence theory enhances role of external stakeholders in delivering resources and impacting decisions (Akram and Abrar, 2022). Institutional investors provide valuable guidance and management which may improve the capital structure decisions, and reduces risk concerned with excessive use of debt or equity. The control assumption proposes that shareholders with significant control prefer debt financing to keep their authority stable that leads to potentially higher debt-equity ratios in companies with ownership concentration. Ownership structure has distinctive features in emerging nations like India, such as the greater pervasiveness of promoter ownership and enhancing role of institutional investors. These characteristics make India a perfect place to investigate how different patterns of ownership impacts capital structure decisions. Like the firms with promoter ownership prefer debt to keep control and firms with institutional ownership favor equity to reduce risk. These dynamics must be comprehended by the investors, policymakers, and mangers to maximize the value of firm and financial strategies.
The aim of this paper is to combine these theories using statistical data from the context of Indian companies, giving recognition how ownership patterns influence capital structure decisions. The present research adds to the literature of corporate governance and finance in emerging markets.

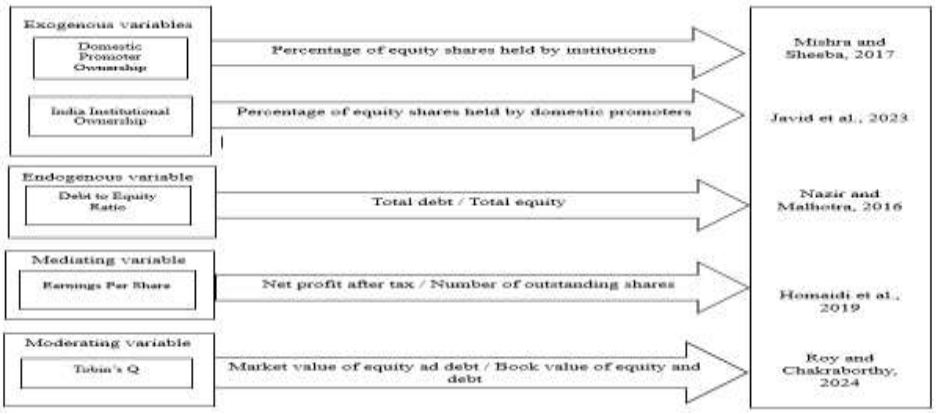


Fig 1: Variable Description

2: Literature Review

2.1: Ownership Structure and Capital Structure

Institutional ownership plays a crucial role in shaping capital structure decisions that impacts overall performance and financial strategy of firms. Institutional investors comprise of mutual funds, pension funds and insurance companies provide considerable experience and a long-term view of investments, affecting firm's financing decisions. These investors normally prefer conservative and viable capital structures that align with their expectations of return and tolerance of risk. Institutional investors may advance firms to lessen the debt to minimize financial risk or to increase debt when it assures the higher returns and tax benefits. In addition,

the active monitoring of capital structure by institutional investors leads to the enhancement of resource allocation and reduces agency conflicts between shareholders and management. Thus, institutional investors are crucial in determining the capital structure decisions primarily influencing the stability of firms and ability to exploit growth opportunities. Hayat et al. (2018) and Maftukhah (2013) posits the positive impact of institutional ownership on capital structure. Institutional investors have capacity of using risky projects, estimate considerable profits, and primarily prefer debt financing to enhance capital structure. Thus, higher institutional ownership is associated with higher debt levels. In contrast, Rossi and Cebula (2016) and Chung and Wang (2014) assert the negative impact of institutional ownership on capital structure as it may not be in favor of debt financing. Consequently, due to increased managerial prudence higher institutional ownership leads to the reduction of debt levels. Susilawati and Tarmidi, D. (2024) shows the minimal negative impact of institutional ownership on capital structure. Javaid et al. (2023) proposes institutional ownership acts as managerial procedure, mitigating agency costs and executive exploitation. According to Laksana and Widyawati (2016), asserts the significant effect of institutional ownership on capital structure and investment strategies. The reliance on debt reduces with the increased institutional ownership that may have an adverse impact on capital structure. Research by Wang and Luo (2024) posits that higher institutional ownership corresponds with reduced capital structure. Furthermore, it is supported by the examination that institutional ownership is important for monitoring decisions relating to capital structure within firms (Hamidullah et al., 2020). Agyei & Owusu (2014) concentrated their study on Ghanaian-listed manufacturing firms and concluded that the composition of ownership and firm's management is crucial for the capital structure decisions with both promoter and institutional ownership finding the significant relationship between these choices. Furthermore, Sun et al. (2016) from a sample of UK firms concluded the positive relationship of institutional ownership with capital structure. In general, in Indian manufacturing firms there is an inverse correlation between institutional ownership and capital structure. Agency theory proposes that, though managers and their families are not formally combined into organisational structure and don't own significant portion of shareholding, they however clasp least equity stake. This holding forces them to serve their self- interest that by exert efforts to increase firm's value. The proportion of promoter ownership impact the firm's wealth significantly and leads to significant negative correlation between promoter ownership and capital structure decisions. Too much concentration of promoter ownership leads to an adverse impact on firm's value (Shing-Ping and Tsung- Hsien, 2009). The negative association between promoter ownership and capital structure indicates the increase in systematic risk of debt with higher promoter ownership whereas the unsystematic risk of ownership structure is likely to reduce this risk. This relationship extends to both publicly listed manufacturing and service firms in India, exhibiting that variations in ownership patterns can significantly influence the capital structure decisions. Furthermore, agency theory supports the view that promoter ownership can improve the management of business operations efficiently, that by reducing the financial distress and debt burdens of firms (Gill et al., 2015; Kaur and Gill, 2009).

2.2: Ownership Structure and Firm Performance

Agency theory gives a thorough assessment of the relationship between ownership structure and firm performance as proposed by Jensen and Meckling in 1976. Shelfer and Vishny (1997) posits that institutional ownership actively monitors the managerial actions that leads to enhanced performance of firms. Conversely, in emerging economies like India promoter ownership provides mixed results. This implies ownership structure either can improve performance by aligning interests or shun from it due to particular structural arrangements. The multiple studies concluded the conflicting findings concerning the influence of ownership structure on firm performance. Research shows that institutional ownership by and large produces the positive and significant influence on EPS (Karasneh et al., 2019; Ali et al., 2019; Al-Homaidi et al., 2019). In contrast the studies produced multiple conclusions: Nazeer and Malhotra (2016) documented the absence of significant influence of ownership structure on EPS. Whereas Lokhande and Doreswamy (2018) identified the significant and negative impact of promoter ownership on EPS. On the basis of the cited literature following hypotheses were developed and later on tested. A study conducted by Lodha and Paliwal in 2024 concerning BSE-listed companies demonstrated that promoter ownership exerts an inverse effect on Tobin's Q. Conversely, Mishra and Kapil identified a positive and statistically significant correlation between promoter ownership and Tobin's Q. Furthermore, Roy and Chakraborty's study in 2024 of publicly listed Indian manufacturing firms indicated that promoter ownership serves as a predictor of firm value, proxied as Tobin's Q. Guo and Platikanov (2019) demonstrated a positive and significant relationship between institutional ownership and Tobin's Q. This result is supported by Abedin et al. (2022) and Mih Ha and Hiep (2019) validating the relationship of these factors. In contrast Lodha and Paliwal (2023) found the absence of significant impact of institutional ownership on Tobin's Q. In addition, Hussain et al. (2020) indicated significant and negative influence of institutional ownership on Tobin's Q.

2.3: Firm Performance and Capital Structure

Firm performance indicates the ability and potential of companies to use the available resources efficiently and effectively in order to achieve the set objectives (verboncu and Zalman, 2005). This gives the view that optimum capital structure improves firm performance. Consequently, it shows that firm performance is affected by capital structure. Research found firm performance as the crucial determinant of firm's capital structure (Iyoha

and Umro, 2017; Cevhergolu- Acar, 2018). Trade-off theory further explained this notion and assumes that firms with high profitability experience least financial distress costs that by showing a greater willingness of firm to incur debt (Fama and French, 2002). High-performing firms tend to assume more substantial debt levels in pursuit of tax advantages (Frank and Goyal, 2009). In essence, firm performance exerts a positive influence on capital structure (Li and Islam, 2019). On the basis of above cited literature following hypotheses were developed.

H1a: Institutional Ownership has positive and significant impact on Debt-to-equity ratio
H1b: Promoter Ownership has a positive and significant impact on Debt-to-equity ratio
H2a: Tobin's Q moderates the relationship between institutional ownership and Debt-to-equity ratio
H2b: Tobin's Q moderates the relationship between promoter ownership and Debt-to-equity ratio
H3a: Earnings per Share mediates the relationship between institutional ownership and Debt-to-equity ratio
H3b: Earnings per Share mediates the relationship between promoter ownership and Debt-to-equity ratio

2.4: Research Gap

The connection between ownership structure and capital composition has been the subject of extensive research (Anh and Phuong, 2018; Khan and Wasim, 2016; Shehadeh et al., 2022) however, there is limited focus on the mediating and moderating effects of factors such as earnings per share (EPS) and Tobin's Q. Much of the existing research highlights how ownership patterns like promoter and institutional holdings affect financial performance standards such as return on equity (ROE), return on assets (ROA) and earnings per share (EPS), (Abedin et al., 2022); Al-Homaidi et al., 2019). However, a comprehensive analysis of the role of EPS in mediating the relationship between ownership and capital structure remains insufficient. Furthermore, the influence of Tobin's Q, as a measure of market value, in this mediated relationship, as a moderator, especially in developing countries like India, is poorly understood. In the existing literature, numerous studies used Tobin's Q as the dependent variable in ownership structure research, viz, (Banik and Chatterjee, 2021; Nashier and Gupta, 2023). A significant knowledge gap exists regarding how profitability metrics and market valuation affect the ownership-capital structure dynamic, particularly concerning the roles of earnings per share (EPS) as a mediator and Tobin's Q as a moderator. A deeper exploration of these complex relationships is essential for enhancing insight into business performance and decision-making.

3: Research Methodology

3.1: Sample and Data

The current study employed the data of BSE-listed service firms, extracted from the Prowess IQ database. First, the data of 17704 service firms was obtained, but among these firms, only 1398 firms were listed on the BSE. Posterior to the screening of 1398 service firms regarding various aspects, only 65 BSE-listed service firms met the criteria of inclusion in the final sample for the study period of 10 years, viz, 2012-2013 to 2021- 2022. The final dataset became the balanced panel by the exclusion of firms with incomplete data for the period and included 650 observations (t*n).

3.2: Variables

The present study used four types of variables viz endogenous variable, exogenous variable, moderator, mediator variable.

Econometric Models:

For the first set of hypotheses (H1a and H1b)

$DER_{it} = \beta_0 + \beta_1 (Instown)_{it} + (Prown)_{it} + \varepsilon_{it}$

For the second set of hypotheses (H2a and H2b)

$DER_{it} = \beta_0 + \beta_1 (TQ)_{it} + \varepsilon_{it}$

$DER_{it} = \beta_0 + \beta_1 (Instown)_{it} + \beta_2 (Prown)_{it} + \beta_3(TQ) + \varepsilon_{it}$

$DER_{it} = \beta_0 + \beta_1 (Instown)_{it} + \beta_2(Prown)_{it} + \beta_3(Instown \times TQ)_{it} + \beta_4 (Prown \times TQ)_{it} + \varepsilon_{it}$

For testing the third set of hypotheses (H3a and H3b)

$DER_{it} = \beta_0 + \beta_1 (Instown)_{it} + (Prown)_{it} + \varepsilon_{it}$

$EPS_{it} = \beta_0 + \beta_1(Instown)_{it} + \beta_2(Prown)_{it} + \varepsilon_{it}$

$DER_{it} = \beta_0 + \beta_1 (Instown)_{it} + \beta_2 (Prown)_{it} + \beta_3(EPS)_{it} + \varepsilon_{it}$

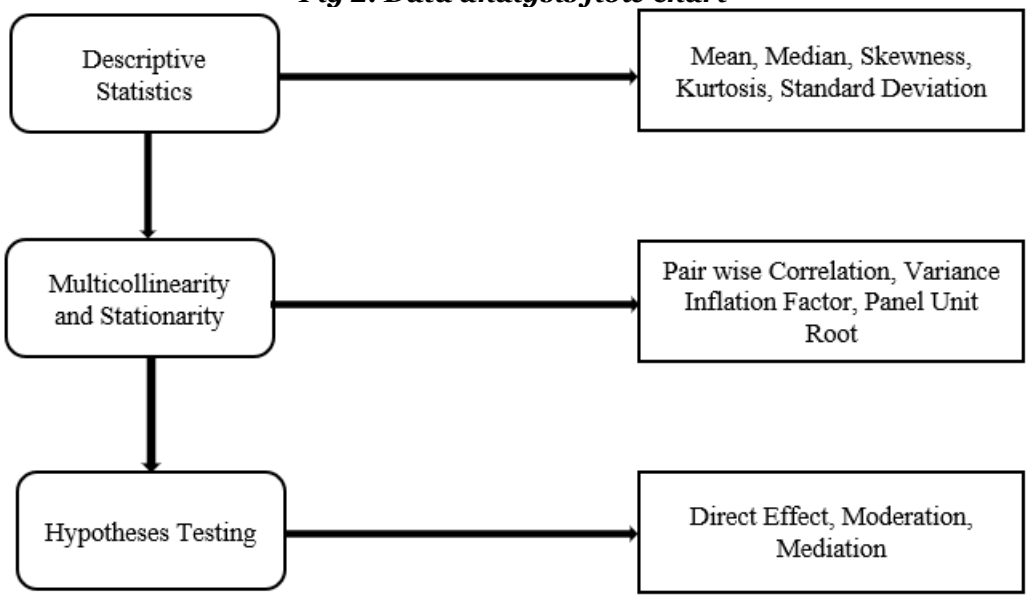
Where,

DER = Debt to Equity Ratio
IIN = Indian Institutional Ownership
DPO = Domestic Promoter Ownership
EPS = Earnings per Share
TQ = Tobin's Q
ε = Error term
I denote entity
T denotes time

4: Data Analysis and Results

To analyse the data three stage analysis technique was adopted (Fig 1). in first stage descriptive analysis was done in second stage multicollinearity and stationarity of data was checked and in the last stage hypotheses were tested.

Fig 2: Data analysis flow chart



4.1: Descriptive Statistics

The summary statistics present a concise outline of the relevant constructs' distribution, central tendency, and variability (Table 1). Institutional investors possess over 100% of the outstanding shares within the sample, as indicated by the average institutional ownership ratio of 1.23609. This situation primarily happens when institutional ownership is indicated as a ratio of various holdings across different institutions or reflects the influence of capital structure. Institutional investors' risk evaluation can remarkably form the financial policies, capital structure decisions, and strategies. Furthermore, the mean holdings of promoter ownership surpass the total outstandings of shares as evidenced by the mean value of 2.1573. The higher promoter's equity holdings indicate the least reliance on debt as they prefer retained earnings over the debt to maintain control in the entity. The mean value of 1.0702 (DER) assumes that the firms within the sample mainly maintain a capital structure featured by the higher proportion of debt relative to equity. The sample firms mean of EPS indicates that each share primarily generates 0.87 units of currency approximately. This EPS value proposes moderate profitability, especially as it approaches or falls below the value of 1. Moreover, the sample firms shows that the mean market value of the firms is less than half of their asset replacement cost, Tobin's Q of 0.4794. This outcome might propose that the sample firms are functioning in industries with less growth potential or there is a widespread absence of investors' confidence.

Table 1: Results of Descriptives statistics

Stats	DER	INSTOWN	POWN	TQ	EPS
Mean	1.070	1.264	2.157	0.47	0.872876
Median	1.118	1.376	2.311	0.380659	0.891536
Skewness	-0.081	-0.580	-0.055	1.104744	0.525164
Kurtosis	2.281	2.319	1.568	2.784914	0.176125
SD	0.490	0.552	0.418	0.389161	2.273919
Min	0	0	0.055	0.00122	0.004321
Max	2.306	2.131	2.505	2.016139	2.840802
DER: debt equity ratio, INSTOWN: Institutional ownership, PROWN: promoter ownership, TQ: Tobin's Q, EPS: earnings per share					

4.2: Multicollinearity and Stationarity of Data

The presence of multicollinearity among variables leads to inaccurate and fallacious conclusion. To address this problem, the study employs the pairwise correlation and variance inflation factor (VIF) (refer to table 2) to assess multicollinearity. Both pair wise correlation and VIF posits that the dependent variables are free from multicollinearity. The Correlation shows least and insignificant relationships. In addition, the maximum value is revealed as 1.07 which is below the threshold limit of 10 (Hair et al., 2019 and Ringle et al., 2015) respectively, that by confirming the absence of multicollinearity. To evaluate the stationarity of the data, the study employed the Panel Unit Root test using STATA 17. The proposition of Stationarity is important for conducting dependable regression analysis. The present study used the Levin, Lin and Chu test. The test is significant which shows that the data is stationary while as insignificant outcome requires appropriate measure to achieve stationarity before preceding regression analysis. The results of the study indicates that the relevant variables exhibit stationarity at the level (Table 2).

Table 2: Results of Multicollinearity and Stationarity of Data

	Pair wise Correlation						Panel Unit Root
Variables	INSTOWN	PROWN	DER	EPS	TQ	VIF	Levin, Lin & Chu t (at level)
INSTOWN	1					1.09	-14.423 (p 0.00)
PROWN	0.0078	1				1.01	-10.453 (p 0.00)
DER	0.2054	0.0074	1			-	-12.005 (p 0.00)
EPS	0.2012	0.0234	0.3524	1		1.1	-16.046 (p 0.00)
TQ	-0.1632	-0.0919	0.0446	0.1784	1	1.09	-17.459(p 0.00)
DER: debt equity ratio, INSTOWN: Institutional ownership, PROWN: promoter ownership, TQ: Tobin's Q, EPS: earnings per share, VIF: variance inflation factor							

4.3: Hypotheses Testing

4.3.1: Direct effect:

The study investigates the direct impact of ownership patterns particularly the promoter and institutional ownership on capital structure measured by DER. For analysis, three panel data models were utilized viz Ordinary Least Square (OLS), Fixed Effects Model (FEM) and Random Effects Model (REM). A restricted F test was run to compare OLS and FEM, giving the coefficient of 46.42(0.00), implying FEM is more appropriate. After this a Breusch-pagan (B&P) test was conducted to choose between OLS and REM, a significant chi square value of 1924.5(0.00) confirms the superiority of REM over OLS. At last, Hausman test was performed to choose between FEM and REM, an insignificant chi square value of 1.94(0.3792) indicates that REM is the preferred model over FEM. Therefore, in the present study results of REM were used to conclude the direct relationship between ownership structure and capital structure.

The results revealed in Table 3, REM shows that institutional ownership exerts a positive and significant influence on capital structure (DER) with coefficient of 0.074(0.003). Conversely, promoter ownership indicates the negative and significant impact on DER with coefficient -0.019(0.542)

Table 3: Effect of Ownership structure on DER using OLS, FEM, REM

Variables	**OLS**	**FEM**	**REM**
Intercept	0 .830 (0.000)	1.033(0.00)	1.020(0.00)
INSTOWN	0.182 (0.000)	0.066(0.009)	0.074(0.003)
PROWN	0.006 (0.880)	-0.021(0.510)	-0.019(0.542)
R square	0.0422	0.0530	0.054
F test	F =46.42 p-value=0.000		
B&P test	Chi2 =1924.51, p= 0.00		
Hausman test	chi2= 1.94 P= 0.379		
Wald chi2(2)			9.33(0.009)
OLS; Ordinary Least Squares, FEM: Fixed Effects Model, REM: Random Effects Model, B&P: Breusch-Pagan			

4.3.2: Moderation analysis

The findings of the direct relationship are showed above. In table 4 the results of moderation are focussed. The moderating variable (Tobin's Q) was introduced in the panel regression model along with its interaction term institutional ownership (institutional ownership*Tobin's Q) neither Tobin's Q coefficient (0.181, p- value of 0.151) nor interaction term's coefficient (-0.024, p- value of 0.659) reveal the significant impact on DER. This result shows the absence of moderation in this context. In contrast, when Tobin's Q as a moderator along with the interaction term (Promoter ownership*Tobin's Q), both the moderator's (Tobin's Q) coefficient (0.121, p-value 0.000) and interaction term's (Promoter ownership*Tobin's Q) coefficient (0.064, p- value 0.040)

indicates the significant impact on DER. This finding reveals the presence of moderation impact within this relationship. These results reveal the presence of moderation effects within this relationship.

Table 4: Moderation results

Dependent variables Independent variables	Model 1 for DER Coefficients	p value	Model 2 interaction Coefficients	p value	Model 3 interaction Coefficients	p value
INSTOWN	0.074	0.000				
PROWN	-0.019	0.542				
TQ			0.181	0.151	0.121	0.000
INSTOWN*TQ			-0.024	0.659		
PROWN*TQ					0.064	0.041
R square	0.054		0.049		0.028	
Wald chi2	9.33(0.00)		11.06(0.00)		19.45(0.00)	
DER: debt equity ratio, INSTOWN: Institutional ownership, PROWN: Promoter ownership, TQ: Tobin's Q,						

The moderation was also shown graphically by using the predictive value.

Fig 3a: Moderating effect of TQ on the relationship between INSTOWN and DER

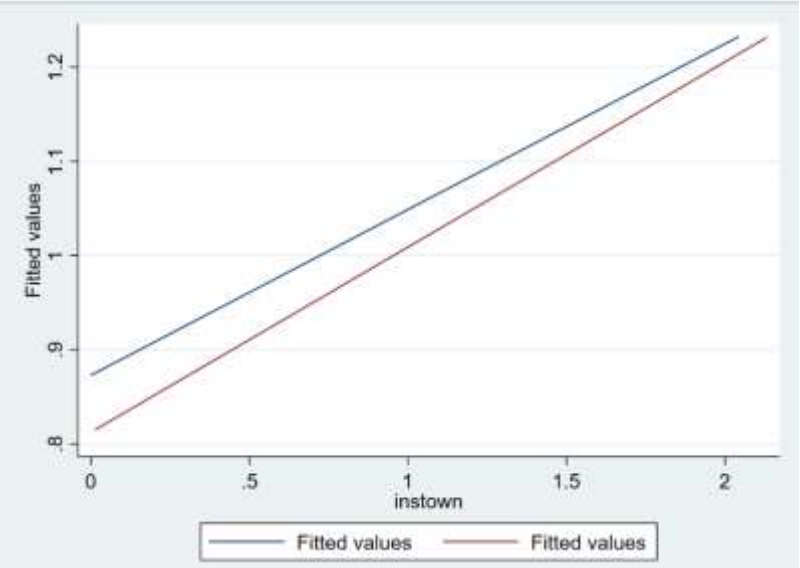
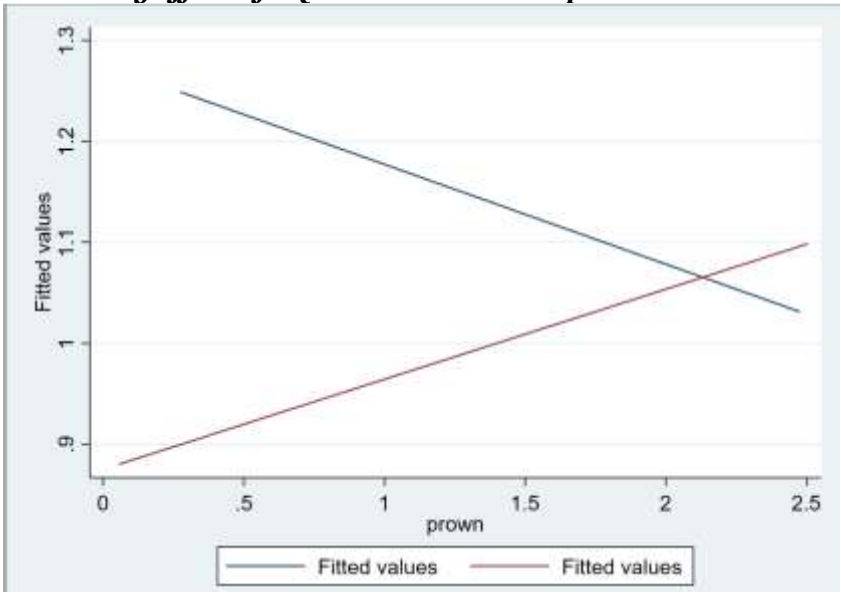


Fig 3b: Moderating effect of TQ on the relationship between PROWN and DER



4.3.3: Mediation Analysis

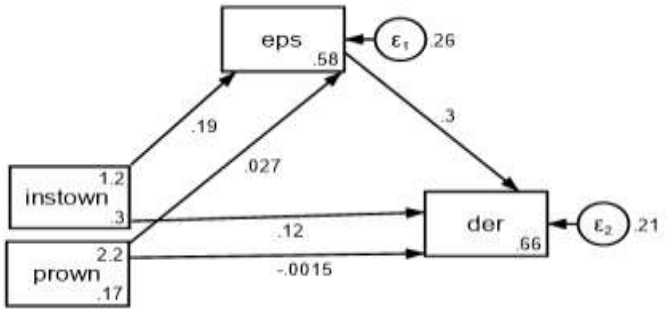
Table 5 demonstrates the mediation effect of EPS in the relationship between ownership and capital structure. The results indicate the positive and significant impact of institutional ownership on DER with coefficient (0.124 and p-value 0.000). with the introduction of mediator (EPS), the influence of institutional ownership on DER through EPS is also [positive and significant indicated by the coefficient of 0.057 and a p- value of 0.000. Also, the overall impact within the institutional ownership, EPS and DER context remained positive and significant indicated by the coefficient of 0.182 and p- value of 0.000. In contrast, there is negative and insignificant direct influence of promoter ownership on DER with coefficient of -0.001and p- value of 0.972. Furthermore, with the incorporation of EPS as a mediator promoter ownership shows the positive and insignificant indirect impact on DER through EPS showed by the coefficient of 0.008 and p- value of 0.571. The total impact within this relationship remained positive and insignificant indicated by the coefficient of 0.006 and p- value of 0.880.

Table 5: Mediation results

Structural Model	Coef	P>Z	Coef	P>Z	Coef	P>Z
	Direct Effect		Indirect Effect		Total Effect	
DER						
INSTOWN	0.124	0.000*	0.057	0.000*	0.182	0.000*
PROWN	-0.001	0.972	0.008	0.571	0.006	0.880
EPS	0.027	0.000*	No path		0.302	0.000*
EPS						
INSTOWN	0.191	0.000*	No path		0.191	0.000*
PROWN	0.027	0.570	No path		0.027	0.570

DER: debt equity ratio, INSTOWN: Institutional ownership, PROWN: promoter ownership, EPS: earnings per share

Fig 4: Mediation results



5: Discussion

The study aims to explore the direct relationship ownership and capital structure. In addition, measures of firm performance are employed to examine the moderation and mediation effects within this relationship. An accounting-based measure (EPS) is used as a mediator and market-based measure (Tobin's Q) as a moderator. The outlines of the results proposes that the direct impacts of promoter ownership (Prown) and institutional ownership (Instown) on DER were examined through panel data regression models. The findings showed the positive and significant impact of institutional ownership on DER ($\beta = 0.074$, $p < 0.01$), hence accepting H1a hypothesis. These findings are consistent with (Khafid et al., 2020; Salehi et al., 2016; Sun et al., 2016; Anh and Phuong, 2018) and contrasts with the findings of (Cinko and Kasaboglu, 2017; Choi et al., 2020; Margana and Wiagustini, 2019). This outcome implies that the firms with higher DER have the higher institutional ownership. Institutional ownership encourages firms to use more of debt for attaining optimum capital structure, typically reap the tax benefits of debt financing or aiming to exercise authority in firm's management. Conversely, promoter ownership has negative and insignificant impact on DER indicated by the ($\beta = -0.019$, $p>0.542$), these findings are consistent with (Gurusamy, 2024) and contradicts with (Gill et al., 2015), rejecting the H1b hypothesis. This outcome implies the absence of direct impact of promoter ownership on DER. It may show that the promoter ownership does not enforce the direct impact on financing decisions or that their influence on capital structure is moderated by additional factors that are not considered within this model. In corporate finance, the promoter ownership and institutional ownership structure plays an important role in affecting the capital structure decisions and shaping the financial policies, risk preference and capital allocation strategies. However, different ownership patterns provide varied impact on capital structure across firms based on perception of investors and market valuation. The present study employed Tobin's Q as a moderator to examine the influence of market predictions on the relationship between ownership and capital structure. The

purpose of research is to find whether companies with higher growth potential and intense market confidence show various capital structure dynamics in relation to minimum Tobin's Q. The results of moderation analysis shows that Tobin's Q do not serve as a moderator in the relationship between institutional ownership and DER, hence rejecting H2a hypothesis. While in the relationship of promoter ownership and DER, Tobin's Q serve as a moderator, accepting H2b hypothesis. Theoretical essence proposes that firms with high Tobin's Q prefers external financing leads to different choices of capital structure impacted by ownership structure. Promoters embrace aggressive financing strategies in response of their high market value whereas, institutional investors may favor stable leverage practices in firms with significant growth prospects means the stability of institutional investors regardless of the growth and market value.

The results from Structural equation model (SEM) conducted by utilizing Medsem package elucidate the relationships among ownership structure, capital structure and firm performance. This study analysed how ownership patterns (promoter ownership and institutional ownership) influence earnings per share (EPS) and Debt to equity ratio (DER). The findings show that institutional ownership leads to significant improvement in EPS and DER. There is a direct relationship between institutional ownership and DER which implies that higher debt financing is associated with increased institutional ownership. Furthermore, institutional ownership has positive and significant impact on EPS (0.1911, $p < 0.001$), implies that increased institutional ownership enhances profitability through the maximisation of performance. The mediation analysis indicates the partial mediation of EPS in the relationship of institutional ownership and DER, accepting H3a hypothesis. The indirect significant impact of institutional ownership on EPS (0.057, $p < 0.001$) indicates that institutional ownership not only enhances debt financing but also improves profitability of firms. These results are in align with the earlier studies which revealed that the institutional investors improve financial management and resource utilization (Pirzada et al., 2015; Al- Homaidi et al., 2019; Yasser and Mamun, 2017). In contrast, promoter ownership does not have significant impact either on DER (-0.001, $p = 0.968$) or EPS (0.027, $p = 0.587$). there is insignificant indirect influence of promoter ownership on DER through EPS (0.008, $p = 0.589$), which confirms the lack of mediation within this relationship, rejecting H3b hypothesis. These findings propose that the promoter ownership neither enhances debt financing nor improves profitability of the concern. This implies that promoters give priority to control and long-term returns over short-term returns. These results are in align with (Nazir and Malhotra, 2016; Richter and Chakraborty, 2023), implies that promoter ownership does not always align with the value maximization, particularly in developing nations with pervasive family-owned firms. In addition, there is one more result regarding the relationship of DER and EPS. There is positive and significant influence of DER on EPS (0.302, $p < 0.001$), indicates that higher leverage is associated with higher profitability. Firms with high earning potential prefer debt financing probably due to the lower cost of borrowing and increased lender confidence. This aligns with the pecking order theory, which proposes that profitable firms may choose debt financing to maintain control and minimize dilution.

6: Conclusion

The present study aims to determine the influence of ownership structure on capital structure of Indian service sector firms, encompasses the mediation role of EPS and moderation role of Tobin's Q. ownership structure was studied by the proxies of institutional and promoter ownership structures whereas capital structure is measured by DER. The results indicate that institutional ownership has a significant positive impact on DER. Conversely, promoter ownership has negative and statically insignificant influence on DER. Furthermore, the mediation effect of EPS was examined to explore its impact on ownership-capital structure relationship. Findings show that EPS mediates the relationship between institutional ownership DER, that by underscores the role of firm performance in improving the impact of institutional investors on capital structure decisions. However, EPS does not reveal any mediation effects in the relationship between promoter ownership and DER. In respect of moderation, Tobin's Q significantly moderates the relationship between promoter ownership and DER, indicating the market value impacts how promoter-owned firms decide on their financial mix. Conversely, Tobin' Q does not act as a moderator in the relationship between institutional ownership and DER, suggesting that market- based value is less relevant in shaping debt decisions for firms with strong institutional backing.

Overall, the study contributes to a thorough understanding of how different ownership patterns impact capital structure decisions in the Indian service sector firms and how financial performance and market perception interact within this framework.

7: Implications

The positive influence of institutional ownership on capital structure implies policy makers and regulators to promote policies that encourage institutional owners participation in the service firms.The outcome of the Study widen the theory of corporate finance by incorporating moderation (TQ) as well as mediation(EPS) into Ownership -capital structure association, provides clear comprehension of how accounting performance and market performance link with ownership structure. The higher institutional or promoter ownership can lessen agency costs favouring agency theory. This effect is revealed when improved EPS influences capital structure decision. EPS acts as a transmission channel through which ownership structure impacts capital structure decision so the managers should improve profitability and earnings that inturn will improve capital structure.

The moderation effect of TQ suggest managers to Tailor capital decision on institutional profile and market value. The findings also prove useful to the investors as they find firm with high EPS under certain ownership pattern maybe managed in a better way and are less risky.

8: Limitations

The present study is limited in several ways. First, it focuses exclusively on the non-financial service sector, thereby excluding both the manufacturing and financial service sectors from its scope. Second, the study considers only two proxies for ownership structure—domestic institutional ownership and domestic promoter ownership—while overlooking other indicators such as foreign ownership, family ownership, and other variants. Third, capital structure is measured solely using the debt-to-equity ratio (DER), ignoring other measures. Similarly, to examine the mediating and moderating relationships between exogenous and endogenous variables only two metrics of firm performance Earnings Per Share (EPS) and Tobin's Q are adopted.

Refrences:

1. Abedin, S. H., Haque, H., Shahjahan, T., & Kabir, M. N. (2022). Institutional ownership and firm performance: evidence from an emerging economy. *Journal of Risk and Financial Management*, *15*(12), 567.
2. Agyei, A., & Owusu, A. R. (2014). The effect of ownership structure and corporate governance on capital structure of Ghanaian listed manufacturing companies. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *4*(1), 109-118.
3. Akram, F., & Abrar Ul Haq, M. (2022). Integrating agency and resource dependence theories to examine the impact of corporate governance and innovation on firm performance. *Cogent Business & Management*, *9*(1), 2152538.
4. Al-Homaidi, E. A., Almaqtari, F. A., Ahmad, A., & Tabash, M. I. (2019). Impact of corporate governance mechanisms on financial performance of hotel companies: Empirical evidence from India. *African Journal of Hospitality, Tourism and Leisure*, *8*(2), 1-21.
5. Alı, M. H., Hossaın, R., Mazumder, R., & Hasan, M. (2023). Does the extent of ownership by different shareholders enhance firm financial performance? Empirical evidence from an emerging economy. *Journal of Business Economics and Finance*, *12*(4), 163-174.
6. Anh, T. T. X., & Phuong, B. N. (2018). Impact of ownership structure on capital structure-empirical evidence from listed firms in Vietnam. *DLSU Business & Economics Review*, *28*(1).
7. Azhagaiah, R., & Gavoury, C. (2011). The Impact of Capital Structure on Profitability with Special Reference to IT Industry in India. *Managing Global Transitions: International Research Journal*, *9*(4).
8. Bajaj, Y., Kashiramka, S., & Singh, S. (2021). Application of capital structure theories: a systematic review. *Journal of Advances in Management Research*, *18*(2), 173-199.
9. Banik, A., & Chatterjee, C. (2021). Ownership pattern and governance–performance relation: Evidence from an emerging economy. *Global Business Review*, *22*(2), 422-441.
10. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, *51*(6), 1173.
11. Brigham, E. F., & Daves, P. R. (2014). *Intermediate financial management*. Cengage Learning.
12. Cevheroglu-Acar, M. G. (2018). Determinants of capital structure: Empirical evidence from Turkey. *J. Mgmt. & Sustainability*, *8*, 31.
13. Choi, P. M. S., Choi, J. H., Chung, C. Y., & An, Y. J. (2020). Corporate governance and capital structure: Evidence from sustainable institutional ownership. *Sustainability*, *12*(10), 4190.
14. Chung, C. Y., & Wang, K. (2014). Do institutional investors monitor management? Evidence from the relationship between institutional ownership and capital structure. *The North American Journal of Economics and Finance*, *30*, 203-233.
15. Çinko, M., & Kasaboğlu, O. T. (2017). KURUMSAL SAHİPLİK İLE SERMAYE YAPISI ARASINDAKİ İLİŞKİ ÜZERİNE BİR ÇALIŞMA: TÜRKİYE ÖRNEĞİ. *Marmara İktisat Dergisi*, *1*(2), 155-170.
16. Fama, E. F., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Review of financial studies*, 1-33.
17. Gill, A., Obradovich, J. D., & Mathur, N. (2015). Promoter ownership and corporate leverage: Evidence from Indian firms. *Corporate Ownership & Control*, *12*(3), 513-521.
18. Guo, L., & Platikanov, S. (2019). Institutional ownership and corporate governance of public companies in China. *Pacific-Basin Finance Journal*, *57*, 101180.
19. Gurusamy, P. (2024). Corporate ownership structure and its effect on capital structure: evidence from BSE listed manufacturing companies in India. *IIM Kozhikode Society & Management Review*, *13*(2), 135-153.
20. Ha, N. M., & Hiep, P. (2019). The effect of institutional ownership on listed companies' performance in Vietnam. *International Journal of Economics and Business Research*, *17*(3), 317-332.

21. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, *31*(1), 2-24.
22. Hayat, M., Yu, Y., Wang, M., & Jebran, K. (2018). Impact of managerial and institutional ownership on capital structure: A comparison between China & USA. *European journal of business and management*, *10*(24), 69-80.
23. Hussain, M., Abid, F., Ambreen, S., Usman, A., & Rahman, A. U. (2022). The role of institutional ownership structures on corporate performance. *Journal of Public Affairs*, *22*(1), e2296.
24. Hussainey, K., & Aljifri, K. (2012). Corporate governance mechanisms and capital structure in UAE. *Journal of Applied Accounting Research*, *13*(2), 145-160.
25. Indriani, A., & Widyarti, E. T. (2013). Penentu-penentu struktur modal perusahaan yang sahamnya masuk jakarta islamic index. *JDM (Jurnal Dinamika Manajemen)*, *4*(1).
26. Javaid, A., Nazir, M. S., & Fatima, K. (2023). Impact of corporate governance on capital structure: mediating role of cost of capital. *Journal of Economic and Administrative Sciences*, *39*(4), 760-780.
27. Karasneh, H., Bataineh, A., & Bshayreh, M. M. (2019). Role of Capital Structure and Institutional Ownership to Improve the Financial Performance: Evidence from Jordan. *Journal of Business & Economic Policy*, *6*(3), 65-72.
28. Kaur, P., & Gill, S. (2009). Patterns of corporate ownership: Evidence from BSE-200 index companies. *Paradigm*, *13*(2), 13-28.
29. Khafid, M., Prihatni, R., & Safitri, I. E. (2020). The effects of managerial ownership, institutional ownership, and profitability on capital structure: Firm size as the moderating variable. *International Journal of Financial Research*, *11*(4), 493-501.
30. Khan, I., & Wasim, F. (2016). Impact of corporate governance and ownership structure on capital structure. *International Journal of Management Sciences and Business Research*, *5*(11).
31. Komara, A., Hartoyo, S., & Andati, T. (2016). Analisis pengaruh struktur modal terhadap kinerja keuangan perusahaan. *Jurnal keuangan dan perbankan*, *20*(1), 10-21.
32. Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The journal of finance*, *28*(4), 911-922.
33. Laksana, I. F., & Widyawati, D. (2016). Pengaruh kepemilikan saham, kebijakan dividen, tangibility, size, dan profitabilitas terhadap struktur modal. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, *5*(4).
34. Lartey, T., Danso, A., & Boateng, A. (2021). Co-opted boards and capital structure dynamics. *International Review of Financial Analysis*, *77*, 101824.
35. Li, L., & Islam, S. Z. (2019). Firm and industry specific determinants of capital structure: Evidence from the Australian market. *International Review of Economics & Finance*, *59*, 425-437.
36. Lokhande, M., & Doreswamy, H. Listed Companies and High Promoter Holding-Boon or Bane?: A Study on Shareholding Pattern and Firm Performance of Indian Companies on the Sensex.
37. Maftukhah, I. (2013). Kepemilikan manajerial, kepemilikan institusional, dan kinerja keuangan sebagai penentu struktur modal perusahaan. *JDM (Jurnal Dinamika Manajemen)*, *4*(1).
38. Margana, M. Y. R., & Wiagustini, N. L. P. (2019). The effect of institutional ownership, managerial ownership, and firm age on capital structure of consumer goods companies listed on Indonesia Stock Exchange. *American Journal Humanities and Social Sciences Research*, *3*(11), 167-175.
39. Meckling, W. H., & Jensen, M. C. (1976). Theory of the Firm. *Managerial behavior, agency costs and ownership structure*, *3*(4), 305-360.
40. Mishra, R., & Kapil, S. (2017). Effect of ownership structure and board structure on firm value: evidence from India. *Corporate Governance: The international journal of business in society*, *17*(4), 700-726.
41. Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American economic review*, *48*(3), 261-297.
42. Naidu, D. (2024). Ownership structure and capital structure dynamics in South African firms. *South African Journal of Economic and Management Sciences*, *27*(1), 5756.
43. Nashier, T., & Gupta, A. (2023). Ownership concentration and firm performance in India. *Global Business Review*, *24*(2), 353-370.
44. Nazir, N., & Malhotra, A. K. (2016). The effect of ownership structure on firm profitability in India: A panel data approach. *International Journal of Economics and Finance*, *8*(6), 237-249.
45. Neves, M. E., Serrasqueiro, Z., Dias, A., & Hermano, C. (2020). Capital structure decisions in a period of economic intervention: Empirical evidence of Portuguese companies with panel data. *International Journal of Accounting & Information Management*, *28*(3), 465-495.
46. Olson, B. J., Parayitam, S., & Bao, Y. (2007). Strategic decision making: The effects of cognitive diversity, conflict, and trust on decision outcomes. *Journal of management*, *33*(2), 196-222.
47. Pindado, J., & De La Torre, C. (2011). Capital structure: New evidence from the ownership structure. *International Review of Finance*, *11*(2), 213-226.
48. Pujihastuti, I., Maman, U., Aminudin, I., Hadi, K., & Nurlatifah, H. (2022). Manufacturing Company Debt and Its Moderation Effect on Capital Structure: The Case of Public Company in Indonesia.
49. Richter, A., & Chakraborty, I. (2023). Promoter ownership and performance in publicly listed firms in India: does group affiliation matter?. In Indian Business Groups and Other Corporations: Comparative

Organisational Perspectives on Indian Corporate Firms (pp. 175-206). Singapore: Springer Nature Singapore.
50. Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS. *Bido, D., da Silva, D., & Ringle, C.(2014). Structural Equation Modeling with the Smartpls. Brazilian Journal Of Marketing*, *13*(2).
51. Rossi, F., & Cebula, R. J. (2016). Debt and ownership structure: evidence from Italy. *Corporate Governance: The international journal of business in society*, *16*(5), 883-905.
52. Salehi, A. K., Baharipour, A., & Mohammadi, S. (2016). The impact of institutional ownership on the relationship between tax and capital structure. *Advances in Mathematical Finance and Applications*, *1*(2), 57-67.
53. Shehadeh, M., Alharasis, E. E., Haddad, H., & Hasan, E. F. (2022). The impact of ownership structure and corporate governance on capital structure of Jordanian industrial companies. *Wseas Transactions on Business and Economics*, *19*, 361-375.
54. Shin-Ping, L., & Tsung-Hsien, C. (2009). The determinants of corporate performance: A viewpoint from insider ownership and institutional ownership. *Managerial Auditing Journal*, *24*(3), 233-247.
55. Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, *52*(2), 737-783.
56. Sun, J., Ding, L., Guo, J. M., & Li, Y. (2016). Ownership, capital structure and financing decision: Evidence from the UK. *The British Accounting Review*, *48*(4), 448-463.
57. Susilawati, E., & Tarmidi, D. (2024). The Influence of Institutional Ownership and Foreign Ownership on Tax Avoidance with Audit Quality as a Moderating Variable. *Asian Journal of Economics, Business and Accounting*, *24*(5), 1-11.
58. Ullah, H., Shah, S. H. A., Hussain, A., & Khan, S. A. (2020). Value Relevance of Earnings Quality: Importance of Corporate Governance, Ownership Structure and Group Affiliations in the Listed Firms of Pakistan. *Abasyn University Journal of Social Sciences*, *13*(2).
59. UMORU, P. D. D. (2017). Capital structure and firm financial performance in Nigeria: Empirical evidence of the causal link. *The Journal Contemporary Economy*, *131*.
60. Verboncu, I., & Zalman, M. (2005). Management si performanþe. *Universitara House of Publishing, Bucharest*.
61. Wahidah, S. A., & Ardiansari, A. (2019). The effect of board of commissioners and independent commissioners on agency cost through capital structure. *Management Analysis Journal*, *8*(1), 13-24.
62. Wang, B., & Luo, Y. (2024). Institutional investors, heterogeneity, and capital structure decisions: Evidence from an emerging market. *Research in International Business and Finance*, *68*, 102188.
63. Wellalage, N. H., & Locke, S. (2011). Agency Costs, Ownership Structure and Corporate Governance Mechanisms. *Journal of Law and Governance*, *6*(3), 53-70.
64. Yasser, Q. R., & Mamun, A. A. (2017). The impact of ownership concentration on firm performance: Evidence from an emerging market. *Emerging Economy Studies*, *3*(1), 34-53.
65. Zanoli, R., Naspetti, S., Janssen, M., & Hamm, U. (2015). Mediation and moderation in food-choice models: a study on the effects of consumer trust in logo on choice. *NJAS-Wageningen Journal of Life Sciences*, *72*, 41-48.