DOI: 10.71317/jgst.2.11.2026.1012
Journal of Global Social Transformation
Journal homepage: https://rjsaonline.org/index.php/JGST

Institutional Ownership and Firm Performance: Panel Evidence from Pakistan's Listed Sugar Companies

Qaisar Ali Khan[1], Saqib Munir Izhar[2]
[1] Institute of Management Sciences, Peshawar.
Email: Qaisarali1616@gmail.com
[2] Institute of Management Sciences, Peshawar.

ARTICLE INFO

Submission:
October 04, 2026
Revised:
October20, 2026
Accepted:
November 01, 2026
Available Online:
November 11, 2026

Keywords:
The subjects of this study are institutional ownership, foreign investors, domestic investors, firm performance and Pakistan sugar industry.

Corresponding author:
Qaisar Ali Khan
Email:
Qaisarali1616@gmail.com

ABSTRACT

Objective: This study aims to explore the relationship of domestic and foreign institutional ownership with firm's performance in the sugar sector of the listed companies in Pakistan. It examines if there is any difference in the ownership–performance relationship based on the institutional shareholders' origin and accounting-based and market-based outcomes.Methods: The materials used in the study were the sugar company lists that were examined in recent five years from 2018–2022 with quantitative non-experimental panel method. The original sample contains 135 firm-year observations, however, for regression model we can have 134 complete observations. ROA, ROE, NPM and Tobin's Q were estimated using pooled ordinary least squares models in Stata, controlling for firms size, liquidity, growth in assets, leverage and asset composition.Results: There was a positive relationship between foreign institutional ownership and ROA (coefficient = 0.580, p = .069) at 10% level of significance but not at 5%. There was a negative relationship between institutional domestic shares and the net profit margin (coefficient = −31.389, p = .036). There was no statistically significant relationship between either type of institutional ownership and ROE and the overall model was not significant (p = .989) when using the Tobin's Q model. There were variations in the pattern of findings for each performance indicator.Conclusion:The findings suggest that the ownership of different kinds of institutions can not be universally considered as financial performance indicator for the sugar industry of Pakistan. The origin and selection of the ownership and outcome variables is important for understanding the associations observed. These results provide insights into each sector, but do not allow for causal implications due to the observational design.

Introduction

Institutional Shareholding and Monitoring in Emerging Economies

Equity held by institutional investors refers to the equity held by various institutional investors including investment funds, insurance companies, pension funds and other financial and corporate institutions. They can be involved in the ownership of the firm and may have some impact on how managers are monitored. Unlike individual shareholders who are spread thin, an institutional shareholder can have the resources, expertise and voting power to assess the management's decisions and challenge financial policies and the need for more accountability. Thus, institutional ownership is not only important in the context of capital formation but also in the context of managerial control and corporate performance (Abedin et al., 2022).

Whether institutional investors offer any positive impact is dependent on their shareholders' actions. Active institutional owners can review the company's business decisions, interact with management and expect a continuous return on investment. Others might be concerned with making short-term changes to their portfolio or may not want to be involved in the day to day governance of the companies they invest in. Wherever ownership is concentrated, and governance varies from firm to firm, the contrasting approaches can yield varying economic results. Thus, it is important to differentiate between institutional investment and institutional monitoring (Chung & Song, 2024). Active oversight is not necessarily reflected in an ownership stake.

Pakistan's Sugar Sector and Ownership Concentration

These questions can be explored in the context of listed sugar companies of Pakistan. Original thesis: a corporate setting where family-owned stake and relatively small institutional holdings can influence the ability of outside investors to influence the management (Hasan et al., 2023). Analysing one manufacturing sector at a time also helps to eliminate some of the differences that would otherwise be found if firms with essentially different manufacturing activities are analysed in combination. Meanwhile, there are variations among members of the industry with regard to size, liquidity, capital structure, asset growth and the value placed on shares.

The sugar sector is useful for the purpose of this study because it has been possible to make an analysis of ownership data and financial indicators for several companies and years. The research spans 27 sugar companies on the list from 2018–2022, enabling to compare among the firms and across the years. In this environment, a valuation of the financial relationships that are observed can be made without necessarily implying that the ownership structure is the same for all firms or that it doesn't change over time.

Research Problem and Knowledge Gap

One of the main problems in the field of ownership research is that, institutional shareholders do not always behave as a homogeneous group. Domestic investors might be subject to different incentives, relations, information constraints and governance conditions than foreign investors (Badhani et al., 2023). Foreign institutional owners might have experience in other markets or more independence from local management, while domestic owners might have more knowledge of the local business conditions. The following are plausible reasons for difference in monitoring, but it cannot be assumed based on investor nationality or location.

This empirical relationship is also dependent on the way in which the performance of the firm is measured. ROA measures profitability as compared to assets used, ROE indicates profitability as compared to shareholder's equity, profit margin measures profitability as compared to sales, and Tobin's Q is a market based valuation measure (Nel et al., 2025). A positive correlation to one does not necessarily mean a positive correlation to the other. An incomplete account of the ownership–performance relationship may, then, be provided by a study that employs only one dependent variable.

The thesis finds that in a sugar-sector context, the dichotomy between foreign and domestic institutional ownership has not been addressed in the Pakistani context and hints at an awareness gap in the industry. In the present article, that problem is tackled by studying the two ownership categories, based on four performance indicators, whilst controlling for some of the key company characteristics. The focus is on the direction and how much of the estimated relationships are, not on the untested assertions that institutional investment directly leads to improved performance or that it is "statistically significant".

Research Objective and Research Question

The main aim is to analyse the relationship between domestic and foreign institutional ownership and financial performance of the sugar businesses of Pakistan. A further goal is to check if such relations vary in the assessment of performances with ROA, ROE, net profit margin and Tobin's Q. Control variables include firm size, cash ratio, asset growth, financial leverage and property, plant and equipment ratio.

The main research question is "what relationship between domestic institutional ownership and foreign institutional ownership with accounting based and market based performance of listed sugar companies in Pakistan for the period 2018-2022 exists? This question is designed to have the same content of the original thesis with each performance measure assessed independently.

Contribution and Organization of the Article

This paper contributes to the issue of ownership–performance in three ways closely related to each other. First, it distinguishes between the domestic institutional investment and the foreign institutional investment, instead of simply including them in one ownership measure. This separation allows us to examine if there is a difference between the two groups in terms of estimated association to company outcomes (Caixe et al., 2024). Second, it measures in four different ways, giving a wider spectrum of

comparison between profitability, shareholder return and market valuation than it would do from one dependent variable. Thirdly, it offers insights from the Pakistani sugar industry, providing an industry-specific view on a topic more broadly analyzed for a set of listed companies.

The study relies on company data from the past and on regression analysis; as a result, the estimated coefficients should not be interpreted as evidence of causal mechanisms (Din et al., 2022). Variations in the outcomes measures can still shed light on how ownership patterns may be relevant and what is conclusive or inconclusive from the available evidence. The article then presents a review of theory and research and derives research hypotheses. Subsequently, sample, variables and estimation approach are presented in the methodology section. The results are followed by discussion, limitations, practical and theoretical implications, and a conclusion.

Literature Review and Hypothesis Development

Institutional Ownership and Firm Performance: Conceptual Foundations

Institutional ownership is the percentage of a company's stock held by institutions like mutual funds, pension funds or other organizations instead of individual investors (M. S. Ali et al., 2021). In this paper, domestic institutional ownership is defined as the ownership of locally based institutions and foreign institutional ownership is defined as ownership of institutions located outside Pakistan. These categories are analytically independent from one another, as the investment strategy, incentive to exercise governance, and power to do so do not necessarily have to be the same. In order to explore the relationship between each of the two categories and the performance of the listed sugar companies, the thesis quantifies both categories separately.

The concept of a firm's performance is multi-dimensional. Accounting indicators provide information on results that appear on the financial statements; market indicators provide information on the investor's valuation of the company (Maryanti & Dianawati, 2024). Return on assets measures the performance of the assets, return on equity measures the performance of equity and net profit margin measures the performance of earnings against revenue. Tobin's Q provides a different view of the market valuation. Such measures can be differently responsive to the ownership, financing, operating conditions or future prospects. But viewing all four as being interchangeable misses these points.

The analytical framework thus relates each institutional ownership category with each performance indicator. The control variables observed include firm size, cash holdings, asset growth, leverage, and asset composition, all of which may be related to performance without regard to ownership (Habib et al., 2022).

Agency Perspective and Institutional Monitoring

The thesis starts with a theoretical discussion on the separation of ownership and management. Shareholder's lose their right to make all decisions to managers, which can create conflict of interest between them as managers are not always subject to the same incentives as the owners (Shakri et al., 2022). Addressing these issues is enabled by information gathering, voting and engagement and scrutiny of financial and operational decisions of institutional shareholders (Manan & Amin, 2023). An active-monitoring view, their impact can help to hold management to account and motivate decisions that are designed to maintain or enhance the value of the company.

A passive monitoring/exploitation perspective is also discussed in the thesis. Passive investors might not be engaged and simply hold their shares – for example, if the potential rewards of engaging in management are not worth the effort. The other alternative is for a shareholder to make portfolio changes when it is unhappy with management. A worse scenario is when influential investors have goals that are not in line with those of other shareholders. These alternatives illustrate that there is no necessary link between increased institutional ownership and better performance (Manurung & Wijaya, 2022).

Another view is also allowed in the monitoring perspective: domestic vs. foreign shareholders. Foreign owners might have comparative experience, fewer local business contacts, and so on, and domestic owners might have access to more contextual information. Both considerations are not necessarily a deciding factor. The more-or-less effective performance link is likely to be determined by the interaction between monitoring capability, incentives for investors, ownership structure and the governance framework (Naidu et al., 2022). These explanations provide an impetus to empirical testing for the purposes of the present study rather than proof that these proposed monitoring mechanisms were actually seen.

International Empirical Evidence and Contrasting Findings

In the original thesis report, it was highlighted that empirical studies showed mixed results on the relationship between institutional ownership and companies' performance. Previous studies have linked higher institutional investments to higher profitability or firm value (Boshnak, 2025), and have viewed the trend as sign of more effective monitoring. In this context, very big shareholders might be motivated and able to challenge management, demand transparency and oppose management actions that do not enhance shareholder value. Other studies indicate that institutional investors' presence is weakly or statistically not related, which means that the presence of institutional shareholdings may not say much about the quality of governance practices.

Another kind of evidence points to the negative association (Zhang et al., 2025). The results could reflect passive ownership, the different incentives of investors, the cost of monitoring, or perhaps that institutional investors choose certain firms based on their financial characteristics. Causal direction is particularly challenging as certain owners may be attracted to a profitable or highly valued company first. Thus, observed relationship between ownership and performance may stem from the investors' choice of investee and/or possible influence of investors on the investee after the investing.

Results vary as well depending on the indicator selected (Jurnali et al., 2024). Profitability of accounts is sensitive to earnings, assets, equity and sales while valuation-based outcomes are also sensitive to market expectations. Adopting such a perspective, the findings presented in the papers summarized in this thesis suggest that a multiple-origin/multiple-performance measure approach is warranted.

Pakistan, Emerging Markets, and the Sector-Specific Gap

Ownership of companies in emerging markets might be different from the ones found in markets with more diffuse ownership and better established institutional involvement. The thesis touches upon Pakistan as a context where there may be a tendency of concentrated or family ownership reducing the opportunities of outside institutional investors to make major decisions (S. Ali et al., 2021). It also implies that the relatively limited role played by some institutional shareholders leaves it open as an empirical question whether or how effectively they can play a role.

The evidence from other countries or general financial samples can be used at best in an extrapolated form in the case of sugar companies in Pakistan. Compared to the other sectors, the interpretation of performance indicators may be influenced by sectoral variations in asset intensity, operating risks, financing structure and profitability (Hameed et al., 2024). Further, the motivation and governance outlets of domestic and foreign investors may differ. To answer the above the present research emphasizes on listed sugar companies and estimates the separate ownership coefficients for four outcomes over a stipulated 5 year period. It is not meant to represent all industries or emerging markets, but rather as a contribution within the context of the industries it represents.

Hypothesis Development

The active-monitoring argument provides a rationale to expect that there is a link between institutional ownership and firm performance. Monitoring by institutional investors might be more motivated if the investment would be significant enough and monitoring processes might correlate with better use of resources, profitability, and market confidence (Alshareef, 2024). Meanwhile, passive behaviour and possibly inconsistent incentives give explanations why any positive relationship foreseen can be absent from the data. The hypotheses are expressed in a directionality format and each is tested independently, without dovetailing the hypotheses to the final estimates, as per the original thesis.

Local information acquisition and management contact can be relevant for local institutional investors to operating profits and investors' returns (Karim et al., 2023). Based on the research, it is proposed that domestic institutional ownership has positive relationship with each of the four performance measures:

H1: Institutional ownership is positively related to the proportion of shares held in the home country.

H2: There is a positive relationship between domestic institutional ownership and ROE.

H3: The hypothesis is that domestic institutional ownership is positively related to net profit margin.

H4: There is a positive relationship between domestic institutional ownership and Tobin's Q.

In the case of foreign institutional investors (FIIs), the initial theoretical arguments highlight perhaps distinct monitoring mechanisms, investment history and lack of involvement in the local management. Foreign institutional ownership could also be positively correlated with financial outcomes if these characteristics are conducive to better monitoring (Ahmed et al., 2022). The hypotheses are that:

H5: There is a positive relationship between foreign institutional ownership and return on assets.

H6: Foreign institutional ownership has a positive relationship with ROE.

H7: Foreign institutional ownership is positively associated with the book value per share.

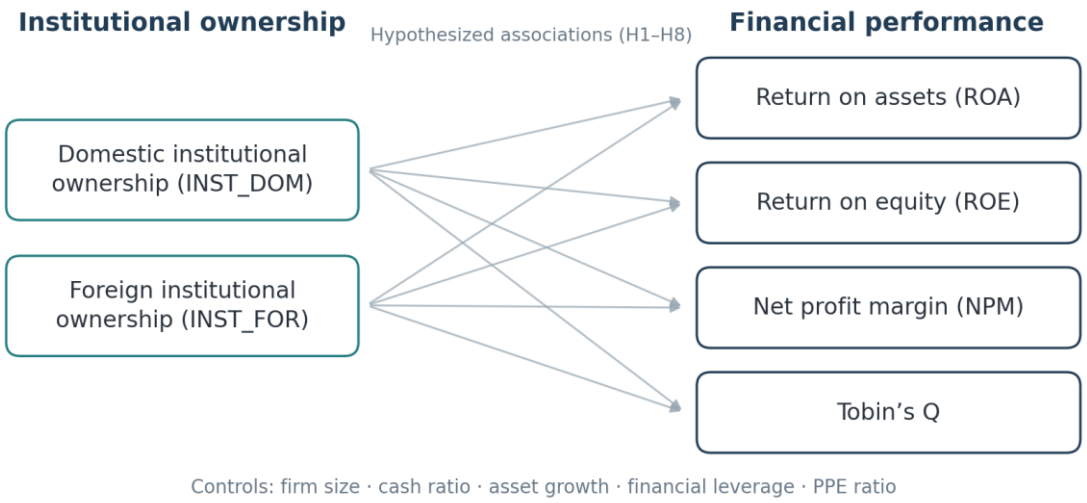
H8: As expected, H8 is accepted, as foreign institutional ownership is positively related tO Tobin's Q.

These are expectations (hypotheses) stated before the fact. They do not suggest that all eight relations were statistically confirmed, and the assessment should be based on a 5 percent level of significance and lower.

Conceptual Framework

The conceptual framework is shown in Figure 1 and is an adaptation of the original thesis. Domestic institutional ownership and foreign institutional ownership are the two explanatory variables. Both are directly connected to the four indicators of firm performance observed: ROA, ROE, Net Profit Margin and Tobin's Q. In addition, cash ratio, asset growth, financial leverage, and property, plant, and equipment/asset are used as the controls in the regression specification. The arrows indicate potential statistical relationships, not causal effects or measured mediation pathways.

Figure 1. Conceptual framework for institutional ownership and firm performance



Control variables: Firm size, cash ratio, asset growth and financial leverage, PPE to asset ratio are all control attributes.

Note. Arrows are not meant to imply causation, but hypotheses. There are four regression models, all of which contain control variables.

Research Methodology

Research Design

The study adopted a quantitative and deductive research approach with secondary data of listed sugar companies in Pakistan. It evaluated and tested the relationship between institutional ownership and selected financial measures of the firm and reporting year. The design used was non-experimental and observational due to the ownership and financial indicators were taken from the existing company files and not manipulated by the researcher. Multiple observations could be made annually, and the panel data description was used (pooled ordinary least squares (OLS) estimation was used for the original estimation) (Gryko et al., 2024). As

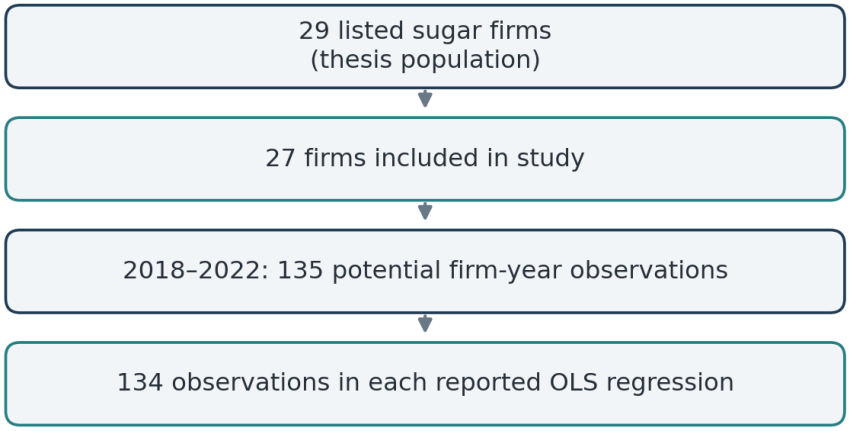
such, these coefficients represent statistical relationships that were conditioned on other factors – not experimental effects of ownership on performance.

Population, Sample, and Study Period

The thesis defined the population of sugar companies as those companies that are listed on the stock exchange, there are 29 companies listed, of which 27 companies selected as analytical sample. This report is for five financial years (2018 to 2022). Combined with the sample and time window, the maximum number of firm-year observations is 135. The descriptive statistics are based on 135 observations for most variables, and on 134 observations for asset growth. There are also 134 observations with usable data for each of the four regression tables. The difference is consistent with one observation not being available for the growth variable, and not being used in the complete case estimation, but the thesis does not specify the firm-year for which the observation is missing, nor does it explicitly describe the missing data decision. The two companies that are omitted and the reason for their omission, are also not specifically named in the thesis provided.

The firm-year, not the individual investor, was used as the unit of analysis. Hence, differences between listed sugar companies and the changes in sugar companies' report values within the 5 years have been compared. The sample does not allow for generalisation to the other sectors of the Pakistani economy as there are few firms and they are all in one sector.

Figure 2. Documented sample and regression observation flow



Exclusion reasons and the specific missing firm-year are not identified in the thesis.

Sources and Preparation of the Data

Secondary corporate records were used to obtain financial information (Farooq et al., 2022). The research of the thesis concludes that the financial statement analysis of non-financial companies is an important source for company financial indicators which is being analyzed by the State Bank of Pakistan (SBP). It also includes the annual-report shareholdings information for institutional shareholdings and information from Pakistan Stock Exchange for market capitalization which is used in the market based performance measurement. A firm-year data set of these sources was created for the selected firms and years. The information was organized and transposed using MS. Excel and then statistically estimated using Stata.

Ownership variables were split based on the domestic or foreign institutional shareholders reported. The financial indicators were matched to the matched firm-year observations. The original thesis does not describe a separate data validation process, the version of Stata used or a full record by record collection method. Such details should not be presumed without reference to the original data and the statistical files.

Measurement of Variables

Two explanatory variables related to institutional ownership (INST_DOM and INST_FOR) were used to measure institutional ownership. Performance of the firms was measured through return on assets (ROA), return on equity (ROE), net profit margin

(NPM) and Tobin's Q (Juliani & Finatariani, 2023). Five company characteristics, firm size, cash ratio, asset growth, financial leverage and the property, plant, and equipment (PPE) ratio, were also added as controls. The ability to compare the four models while acknowledging that the accounting and market outcomes are measuring different aspects of financial performance is provided by using the same predictors for each of the two measures of performance.

Table 1. Study variables and operational descriptions

Variable	Role	Operationalization in the thesis
Domestic ownership	Explanatory	INST_DOM; proportion of shares held by domestic institutional investors, from shareholding disclosures.
Foreign ownership	Explanatory	INST_FOR; proportion of shares held by foreign institutional investors, from shareholding disclosures.
Return on assets	Outcome	ROA; net income relative to total assets.
Return on equity	Outcome	ROE; net income relative to shareholders' equity.
Net profit margin	Outcome	NPM; net profit relative to revenue or sales.
Tobin's Q	Outcome	Market-oriented valuation measure; thesis uses PSX market-capitalization information.
Firm size	Control	Natural/logarithmic transformation of total assets (log base not specified in prose).
Cash ratio	Control	Cash holdings divided by total assets, as described in the thesis.
Asset growth	Control	Change in total assets between periods expressed relative to previous assets.
Financial leverage	Control	Thesis describes a ratio using average assets and average shareholders' equity; confirm the recorded formula.
PPE ratio	Control	Labelled PPE-to-assets in results; prose also describes PPE divided by sales. Denominator requires confirmation.

These two possible measurement errors need to be addressed prior to publication. The definition of leverage, as used in the thesis, should be compared to the definition of the variable as calculated. In particular, some of the reported values are negative, or close to zero. The PPE variable is always, in the results, an asset ratio but there is also a description in the explanatory text that is a sales based denominator. No different specification has been assumed here; the final measurement table should be the same as the formula that was used to calculate the stored values.

Econometric Model and Estimation

Four OLS equations were reported, with each having one of the financial performance indicators as the dependent variable. The original numerical regression tables are presented which show both domestic and foreign institutional ownership together with firm size, cash ratio, asset growth, leverage and the PPE ratio. A typical form of the reported specifications is:

$$\text{Performance}(i,t) = \alpha + \beta_1 \text{INST_DOM}(i,t) + \beta_2 \text{INST_FOR}(i,t) + \beta_3 \text{SIZE}(i,t) + \beta_4 \text{CASH}(i,t) + \beta_5 \text{GROWTH}(i,t) + \beta_6 \text{LEVERAGE}(i,t) + \beta_7 \text{PPE}(i,t) + \varepsilon(i,t)$$

Here, i is the company, t is the year, α is the intercept and β is a regression coefficient; and ε is the disturbance term. ROA, ROE, NPM and Tobin's Q are four different measures that replace the dependent variable in turn. While the equation is listed here with separate domestic and foreign terms to accommodate the results tables, the thesis's model description (which is rather compact) sometimes mentions ownership with a single INST term, so the original estimation commands for the models should be kept to repeat the results.

Coefficients, conventional standard errors, t-statistics, p-values and confidence intervals are reported for the thesis. R-squared values and model F-tests are also reported. It lacks documented cluster adjustments, fixed-effects estimates, year effects and formal tests of endogeneity. The present article does not include any analysis of this sort. However, the observations on a firm from one year to the next are not always independent, so the specification of standard errors and the presence of unobserved firm characteristics are still important inferential caveats (Wang & Luo, 2024).

Ethical Considerations and Data Availability

Secondary financial and ownership information were used in the study instead of intervening with people or asking for survey responses from individuals. A human-participant ethics approval number is not reported in the thesis nor claimed here. The data for the underlying companies, the underlying source records, and the Stata output used to calculate the regression estimates would be needed to repeat the reported estimates. The article utilizes the original thesis tables, and does not state that other models were estimated.

Results

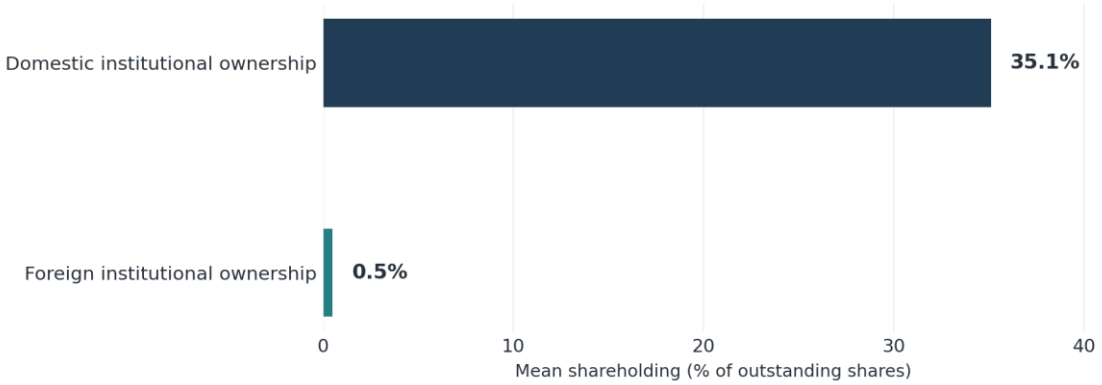
Sample Coverage and Descriptive Statistics

For the sugar companies, descriptive figures are duplicated in Table 2 from the figures given in the thesis. There are 135 observations for almost all variables (asset growth has 134 observations). The average domestic institutional ownership share was 0.351, while that of foreign institutional ownership was 0.005. The proportion of foreign ownership, therefore, was in general very low, although it varied from company to company and year to year. Mean ROA was 0.014, mean ROE was 0.566, mean NPM was −9.976, and mean Tobin's Q was 0.524. These figures are those of the thesis and can not be used to calculate percentages without verification of the number of units in the thesis.

Table 2. Descriptive statistics for listed sugar companies, 2018–2022

Variable	N	Mean	SD	Minimum	Maximum
Return on assets	135	0.014	0.076	−0.213	0.240
Return on equity	135	0.566	7.611	−9.729	87.438
Net profit margin	135	−9.976	64.281	−561.340	18.460
Tobin's Q	135	0.524	3.002	0.000	34.961
Domestic institutional ownership	135	0.351	0.262	0.002	0.854
Foreign institutional ownership	135	0.005	0.019	0.000	0.087
Firm size	135	22.591	0.768	20.785	24.931
Cash ratio	135	0.024	0.045	0.000	0.367
Asset growth	134	0.271	1.979	−0.921	21.938
Financial leverage	135	0.013	0.373	−4.113	0.712
PPE ratio	135	0.655	0.690	0.157	8.236

Figure 3. Mean domestic and foreign institutional ownership in the study sample



A few distributions were extremely fragmented. For instance, ROE ranged from −9.729 to 87.438, NPM from −561.340 to 18.460, and Tobin's Q from 0 to 34.961. In terms of asset growth, it was 21.938 and the PPE ratio was 8.236. These "very large" observations may be of concern in interpreting a pooled regression as they may have disproportionate influence in coefficient estimation. The thesis that has been uploaded includes only the values and does not describe any winsorization or influential-observation diagnostics, or the exclusion of outliers. As a result, no adjustment of the figures has been made.

Correlations and Preliminary Screening

The correlation matrix in the thesis provides a first insight into the association between ownership, performance and company characteristics. There was a weak negative correlation between domestic institutional ownership and ROA (r = −0.039), NPM (r = −0.178), and Tobin's Q (r = −0.067); and a weak positive correlation with ROE (r = 0.065). Foreign institutional ownership had positive correlation with ROA (r = 0.171) and NPM (r = 0.060), while the correlation of foreign institutional ownership with ROE and Tobin's Q was −0.013 and −0.026, respectively. These bivariate figures are simply descriptive and do not reflect the control variables used in regression.

Financial leverage and ROE were found to be the most highly reported correlation (r = −0.979). Leverage also had a positive correlation with NPM (r = 0.721) while ROE and NPM had negative correlation (r = −0.738). This pattern suggests that the leverage definition and the effect of extreme values should be investigated before accepting the results of the regression that follows as stable. The thesis provides the correlation coefficients, but not any other documented diagnostic tests or variance-inflation factors, which are not assumed to exist here.

Pooled OLS Associations with Firm Performance

Table 3 is summarizing the four individual OLS model of the thesis. The entries include the original coefficient and its reported standard error (in parentheses) and the p value. The number of observations used in each model is 134, and the reported regressions sample size is the same as the number of observations to which the estimates presented in the display are directly related. Only evidence with less than 5% significance level is considered statistically significant and those in between 5% and 10%, marginal.

Table 3. Pooled OLS estimates for four performance measures

Predictor	ROA		ROE		NPM		Tobin's Q	
INST_DOM	−0.007 p=.748	(0.022)	−0.686 p=.207	(0.542)	−31.389 p=.036	(14.834)	−0.721 p=.491	(1.043)
INST_FOR	0.580 p=.069	(0.317)	2.013 p=.792	(7.635)	45.710 p=.827	(209.146)	−3.689 p=.802	(14.706)
Firm size	0.015 p=.067	(0.008)	0.129 p=.515	(0.198)	10.395 p=.057	(5.417)	−0.270 p=.479	(0.381)
Cash ratio	0.511 p<.001	(0.129)	−2.323 p=.455	(3.098)	162.852 p=.057	(84.856)	0.642 p=.914	(5.967)

Asset growth	−0.003 p=.273	(0.003)	−0.023 p=.766	(0.076)	−1.315 p=.527	(2.072)	0.012 p=.935	(0.146)
Leverage	0.029 p=.066	(0.016)	−20.028 p<.001	(0.374)	119.746 p<.001	(10.242)	0.050 p=.945	(0.720)
PPE ratio	−0.023 p=.007	(0.008)	0.021 p=.920	(0.204)	−6.275 p=.263	(5.582)	−0.056 p=.886	(0.393)
Intercept	−0.328 p=.079	(0.185)	−1.806 p=.686	(4.461)	−235.434 p=.056	(122.197)	6.922 p=.422	(8.592)
N	134		134		134		134	
R^2	0.221		0.958		0.563		0.010	
F statistic	5.112		415.600		23.169		0.182	
Model p	<.001		<.001		<.001		.989	

Note. Values are original estimates of the thesis. The coefficient (standard error) is listed for each cell along with the p value reported. In the thesis values < .001 were printed as 0 or 0.000. Estimation of a new model was not performed.

The coefficient on foreign institutional ownership was positive (β = 0.580, p = .069) in case of ROA. This is not statistically significant at 5%, but is marginal at 10%. The domestic ownership coefficient was not significant (β = −0.007, p = .748) and negative. The ROA specification accounted for around 22.1% of the variation (R^2 = 0.221). The cash ratio was positively associated with ROA (β = 0.511, p < .001) while the PPE ratio was negatively associated with ROA (β = −0.023, p = .007) among the control variables. The marginal P values for firm size and leverage were .067 and .066, respectively.

Both domestic and foreign ownership were insignificant for ROE at p-values of .207 and .792, respectively, and the β-values of −0.686 and 2.013, respectively. The leverage coefficient (β = −20.028, p < .001) had the largest coefficient. While R^2 was 0.958, the reported leverage–ROE correlation was extremely strong and caution should be used in judging the independent information provided by the model. The results of the printed estimates do not support the hypothesis of negative relation between domestic institutional ownership and ROE which is statistically significant.

There was a negative and statistically significant coefficient for domestic ownership (β = −31.389, p = .036) and a non-significant coefficient for foreign ownership (β = 45.710, p = .827) for NPM. Leverage was positively associated with NPM (β = 119.746, p < .001). Firm size and cash ratio each had p = .057 which is just above the conventional 5%. This model was significant with an overall F test and R^2 = 0.563. The negative domestic ownership outcome refers to NPM not ROE – as some prose parts of the original thesis stated.

Both of the ownership coefficients for Tobin's Q were statistically insignificant: domestic ownership (β = −0.721, p = .491) and foreign ownership (β = −3.689, p = .802). The overall model F test was also non-significant (F = 0.182, p = .989), with R^2 = 0.010. For this specification, the reported explanatory variables thus offered little evidence, at least as measured by a linear association, of being a good fit with the market-based valuation outcome.

Hypothesis Decisions and Verification Needs

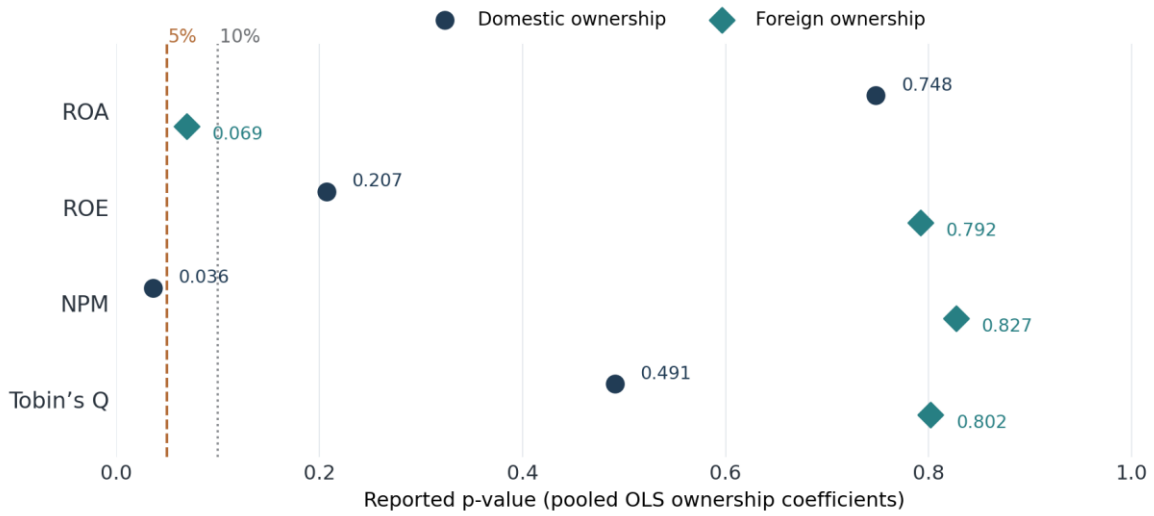
The original eight hypotheses involved positive relationships for both institutional ownership levels for the four financial outcomes. The consistency of the reported estimates with the predictions is summarized in Table 4. At the traditional 5% level, there is no support for any of the eight positive directional hypotheses. Foreign institutional ownership and ROA have little support unless a 10% ownership ratio is specifically accepted since the very high coefficient of ownership for NPM indicates the opposite of its hypothesis.

Table 4. Summary of the ownership hypotheses

Hyp.	Positive association predicted	β	p	Decision
H1	Domestic ownership → ROA	−0.007	.748	Not supported

H2	Domestic ownership → ROE	−0.686	.207	Not supported
H3	Domestic ownership → NPM	−31.389	.036	Opposite direction
H4	Domestic ownership → Tobin's Q	−0.721	.491	Not supported
H5	Foreign ownership → ROA	0.580	.069	Marginal at 10%; not 5%
H6	Foreign ownership → ROE	2.013	.792	Not supported
H7	Foreign ownership → NPM	45.710	.827	Not supported
H8	Foreign ownership → Tobin's Q	−3.689	.802	Not supported

Figure 4. Statistical evidence across the eight reported ownership coefficients



The hypothesis decisions are not new sensitivity analyses but are descriptive interpretations of those that already exist. Prior to submission the researcher should verify the source formulas for leverage and PPE, who is the missing growth observation, the unusual leverage–ROE correlation and whether the reported standard errors are sufficient to capture the fact that observations on the same firms are repeated. Those checks necessitate the original data set and output from Stata. In the interim, it would be wise to view the results as conditional associations in the 2018 - 2022 sugar-sector sample.

Discussion

Foreign Institutional Ownership and Return on Assets

The first central finding is that foreign institutional ownership is positively related to return on assets (ROA). The estimated coefficient is positive (β = 0.580) which means that the extent to which firms had foreign institutional investments was positively associated with the asset-based profitability after accounting for the selected firm characteristics. But the corresponding p value is .069 which is not considered statistically significant at the usual 5% level. Thus this finding merely offers weak statistical support at the 10% level, and does not show a strong positive relationship at the 5% level. This is important as foreign institutional ownership is typically low and the relationship might be dependent on the sample and/or model specification.

This may imply the financial knowledge, experience of foreign markets or managerial incentives for closer monitoring by foreign institutions (Phan, 2024). The possibilities are in line with the theory but were not directly measured in this study. Results fail to reveal the monitoring that actually took place by foreign shareholders and the results fail to show that the change in the ownership led to improvement in the productivity of the assets. A conservative reading is that the positive estimate provides an impetus to explore how foreign shareholding is linked with profitability in the sugar industry of Pakistan.

Domestic Institutional Ownership, Net Profit Margin, and Return on Equity

The trend for domestic institutional ownership is the reverse. There is a negative association with ROA, though the association is not significantly different than zero (β = −0.007, p = .748). The coefficient for net profit margin (NPM), on the other hand, is negative and significant at 5% (β = −31.389, p = .036). Thus, higher domestic institutional shareholding is correlated with a lower reported net profit margin, as long as the other variables included in the pooled regression are constant. It is the most significant (most positive) of the four performance models' ownership coefficients. However, it is negative, which is the opposite of the study's positive hypothesis.

By itself, the negative NPM association is not evidence of the deterioration of domestic institutions or reduction in profitability due to less managerial oversight. Some firms may have certain financial characteristics that investors may prefer, and challenges in operating may impact financial results as well as shareholder makeup. The length of investment time horizons, current level of ownership and governance may also be relevant (Glambosky et al., 2025). Due to the model's inability to measure those mechanisms, and inability to establish temporal order between investment and performance, these are still possible explanations, but not the findings.

The ROE evidence also makes some finer distinctions when it comes to the extent of domestic ownership. The domestic coefficient is negative (β = −0.686), but statistically insignificant (p = .207) and foreign institutional ownership is also statistically insignificant (p = .792). Therefore, it is not possible to conclude that the negative domestic ownership–ROE relationship is significant. Thus, the statistically significant negative domestic ownership coefficient is associated with NPM, rather than ROE. Results are not to be viewed as an overall ownership effect, but rather as individual performance measures.

Accounting-Based Performance Versus Market Valuation

Results show that there are varying interpretations based on which performance indicator is used. ROA and NPM are measures of accounting profitability from different denominators and ROE is dependent on the earning and shareholders equity. Tobin's Q provides a market-oriented approach that can include factors that may not be apparent on the financial statements (Park & Na, 2024). Thus, it is not surprising that the same ownership is linked to one outcome to the exclusion of another. The present study shows only one ownership coefficient that satisfies the 5% criterion which is a negative relationship between domestic ownership and NPM while the positive relationship between foreign ownership and ROA is marginal and there is no significant relationship between any of the two categories of ownership and ROE.

Especially limited evidence comes from the Tobin's Q model. The model is not significant (F = 0.182, p = .989), nor is either of the institutional ownership coefficients, and the R-squared is 0.010. The reported variation in this specification is hence not readily understood from the selected ownership/control measures. This should not be read as evidence of the nonrelevance of ownership as far as market value is concerned. Rather, it means that there is no clear relationship between the model and the specific pooled data set and period of observation (2018-2022).

Relationship to the Monitoring Literature

A broad literature has been synthesized in the theoretical framework, providing alternative explanations for the link between institutional shareholding and performance. An active-monitoring perspective is one in which institutions could promote a sense of responsibility and improved decision-making (Yuan et al., 2023), and passive-monitoring and conflicts-of-interest perspectives would enable weak or undesirable financial connections. All of the current results are consistent with the notion that origin of ownership and investor-incentives are important, but they do not reveal what mechanism resulted in the estimated values. Foreign shareholding appears to exhibit a positive association, albeit marginal, with ROA while the domestic shareholding exhibits a significant negative association with NPM.

The mixed results are also congruent with the literature review that presented non-uniformity in the results. Earlier empirical cases indicate positive relationships between the institutional investment and firm outcomes while other cases indicate negative or ambiguous relationships (Silalahi & Lestari, 2023). Variation can be explained by differences in country context, the characteristics of the firms, the concentration of ownership, investor goals, and definitions of outcomes. The evidence provided here for the individual sectors should thus not be seen as proof of the consistent positive or negative effects of a certain investor nationality on the performance of companies, but rather as an addition to an ongoing empirical debate. The reported associations are not the only ones that identify which explanation is responsible for differences across the different firms or the different performance measures.

Assessment of the Research Hypotheses

Eight hypotheses predicted positive relationships between each of the four outcomes of performance and each of the eight types of ownership. None of those positive directional hypotheses can be statistically supported based on the reported results of the coefficients at the stated significance level (5%). The domestic ownership–NPM relationship is important and negative, which is opposed to the hypothesis H3. There is qualified evidence to support H5 as the foreign ownership–ROA coefficient has a positive value, but this is only marginally significant at the 10% level. The other ownership coefficients are not significant. These results highlight the importance to differentiate between hypothesized directions and estimated values and to reject using causal language when interpreting an observational pooled OLS analysis.

Strengths, Limitations, and Future Research

A major advantage of this study is that it has focused on the sugar industry of Pakistan. Instead of lumping together any unrelated industries, it includes 27 firms from the same industry that are listed for five consecutive reporting years, enabling the ownership–performance relationship to be analyzed in a specific industrial context. The distinction between domestic and foreign institutions is captured which would not be detected by an aggregate measure of ownership. Furthermore, ROA, ROE, NPM and Tobin's Q gives a chance to make a comparison between accounting based and market based valuation. The same basic set of controls is taken into account for the four models reported.

There are a few factors that limit the interpretation of findings. First, it is an archival design, which means that it is non-experimental, and thus cannot prove causation. Ownership can be a reaction to performance and unobserved ownership-related governance attributes can be correlated with performance (Shakri et al., 2024). Second, pooled OLS is unable to automatically account for time-invariant differences in firms or common shocks to the years. Firm-clustered standard errors, estimates with fixed effects and tests for endogeneity were not reported in the analysis available. Thirdly, the sample is limited and only includes one sector and just runs through 2022. The descriptive data does not include one observation about asset growth and firm-year is not precisely documented. Large extreme values have also been reported and the negative leverage–ROE correlation is strong, which warrants questions regarding the sensitivity of the model and the construction of variables.

The scope of future research would include a longer time horizon, employment of additional manufacturing industries in Pakistan and comparison of shareholding patterns and corporate governance practices (if applicable) (Islam et al., 2023). Variable definitions, influential observations, and consideration of different panel estimators, year controls, and firm-clustered inference could be reconsidered based on the reanalysis of the original data. These are NOT analyses that were purportedly performed in this study, but suggestions for further research.

Theoretical and Practical Implications

Theoretical Implications

The results indicate that one cannot assume that all institutional investors or the performance of the investors is the same (Miao et al., 2023). The positive association between marginal foreign ownership and ROA could be significant, but the negative domestic ownership–NPM relationship and lack of significant relationships for the other outcomes suggest a more nuanced interpretation. The results suggest that the origin of investors, incentives, and governance context influence financial associations. However, the mechanisms were not directly observed and the study cannot differentiate between active oversight or investor selection, passive ownership, or other explanations. The principal theoretical contribution is hence to record the heterogeneous associations which should be more specifically tested through the governance channels.

Practical Implications

The findings highlight the importance for company board and management to consider investor composition along with a few measures of operating and market performance. It is not necessarily safe to assume that a higher percentage of institutional ownership will be correlated with greater profitability (Al-Janadi, 2021). The difference between the marginal foreign ownership–ROA estimate and the negative domestic ownership–NPM estimate is an argument for caution on investors' part in making their investment decisions, as opposed to relying solely on the type of investors. Policymakers and market regulators might interpret the results as a justification to promote the disclosure of ownership and easy access to financial information and reports, which enhances the quality of post-analysis. These implications are tentative, as the study does not actually test specific regulatory changes, board interventions, employee outcomes, and human resource policies.

Conclusion

The current research investigated the relationship between Domestic and Foreign Institutional Ownership with Financial Performance of 27 sugar companies listed in Pakistan from 2018-2022. It analyzed four outcomes—ROA, ROE, net profit margin, and Tobin's Q—using up to 135 firm-year records, 134 of which were used in a pooled OLS regression of each outcome. The analysis used a distinction in the ownership categories and firm size, liquidity, asset growth, leverage and PPE ratio were used as control variables.

Results show that no single favorable relationship exists between institutional ownership and firm performance. Foreign institutional ownership was positively estimated to be associated with ROA ($\beta = 0.580$, $p = .069$), although the result is marginally significant at 10%, but not the conventional level of 5%. Domestic institutional ownership had a significant negative relationship with NPM ($\beta = -31.389$, $p = .036$) which was opposite to the prediction. There was no significant association of either of these categories with ROE, with little explanatory power and no overall significance for the Tobin's Q specification.

These findings suggest that it is crucial to take into account the source of institutional shareholding as well as the type of financial objective considered. They offer evidence from sugar industry in Pakistan but do not establish a link between change in ownership and change in performance of the sector. This study has a relatively small sample, unclear measurement and estimation checks, and an observational design which limits generalization. The use of more recent panel data and variables that have been carefully constructed and robustly justified would help to determine whether these patterns continue and help to explain the organizational mechanisms involved.

References

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. https://doi.org/10.3390/jrfm15120567
2. Ahmed, Z., Hussin, M. R. A., & Pirzada, K. (2022). The impact of intellectual capital and ownership structure on firm performance. *Journal of Risk and Financial Management*, *15*(12), 553. https://doi.org/10.3390/jrfm15120553
3. Al-Janadi, Y. (2021). Ownership structure and firm performance in the Middle East: A meta-analysis. *Journal of Risk and Financial Management*, *14*(12), 577. https://doi.org/10.3390/jrfm14120577
4. Ali, M. S., Riaz, L., & Anis, W. (2021). Comparative study on the impact of individual and institutional ownership on firm performance: Evidence from Pakistan Stock Exchange. *Journal of Humanities, Social and Management Sciences*, *2*(2), 150–167. https://doi.org/10.47264/idea.jhsms/2.2.11
5. Ali, S., Fei, G., Ali, Z., & Hussain, F. (2021). Corporate governance and firm performance: Evidence from listed firms of Pakistan. *RISUS – Journal on Innovation and Sustainability*, *12*(1), 170–187. https://doi.org/10.23925/2179-3565.2021v12i1p170-187
6. Alshareef, M. N. (2024). Ownership structure and financial sustainability of Saudi listed firms. *Sustainability*, *16*(9), 3773. https://doi.org/10.3390/su16093773
7. Badhani, K. N., Kumar, A., Vo, X. V., & Tayde, M. (2023). Do institutional investors perform better in emerging markets?. *International Review of Economics & Finance*, *86*, 1041–1056. https://doi.org/10.1016/j.iref.2022.01.003
8. Boshnak, H. A. (2025). Ownership structure and firm performance: Evidence from Saudi Arabia. *Journal of Financial Reporting and Accounting*, *23*(4), 1656–1676. https://doi.org/10.1108/JFRA-11-2022-0422
9. Caixe, D. F., Pavan, P. C. P., Maganini, N. D., & Sheng, H. H. (2024). Foreign institutional ownership and firm value: Evidence of "locust foreign capital" in Brazil. *Emerging Markets Finance and Trade*, *60*(2), 310–327. https://doi.org/10.1080/1540496X.2023.2218967
10. Chung, C. Y., & Song, J. M. (2024). Institutional investors by nationality and long-term investor value appropriation. *Research in International Business and Finance*, *67*, 102153. https://doi.org/10.1016/j.ribaf.2023.102153
11. Din, S. U., Khan, M. A., Khan, M. J., & Khan, M. Y. (2022). Ownership structure and corporate financial performance in an emerging market: A dynamic panel data analysis. *International Journal of Emerging Markets*, *17*(8), 1973–1997. https://doi.org/10.1108/IJOEM-03-2019-0220

12. Farooq, M., Noor, A., & Ali, S. (2022). Corporate governance and firm performance: Empirical evidence from Pakistan. *Corporate Governance: The International Journal of Business in Society*, *22*(1), 42–66. https://doi.org/10.1108/CG-07-2020-0286

13. Glambosky, M., Jory, S., Mishra, T., & Ngo, T. (2025). Institutional ownership and firm performance by life-cycle stage. *Financial Markets and Portfolio Management*, *39*(3), 365–413. https://doi.org/10.1007/s11408-025-00471-y

14. Gryko, A., Cierocki, J., & Celer, K. (2024). Ownership structure and firm performance: A panel regression study from Poland. *Central European Journal of Economic Modelling and Econometrics*, *16*(1), 25–60. https://doi.org/10.24425/cejeme.2024.151364

15. Habib, S. M., Hussain, H., Al-Faryan, M. A. S., & Hussain, R. Y. (2022). Impact of firm characteristics and ownership structure on firm efficiency: Evidence from non-financial firms of Pakistan. *Cogent Economics & Finance*, *10*(1), 2106628. https://doi.org/10.1080/23322039.2022.2106628

16. Hameed, A., Nazeer, N., Mehmood, K. A., & Khan, M. I. (2024). The impact of institutional ownership on firm performance: Evidence from Pakistan's textile industry using panel data analysis. *Social Science Review Archives*, *2*(2), 654–668. https://doi.org/10.70670/sra.v2i2.113

17. Hasan, A., Riaz, Z., & Nakpodia, F. (2023). Explicating the contextuality of corporate governance through ownership structure and family management: Evidence from an emerging economy. *Corporate Governance: The International Journal of Business in Society*, *23*(5), 1085–1104. https://doi.org/10.1108/CG-08-2022-0332

18. Islam, M. S. U., Wong, W.-C., & Yusoff, M. Y. B. M. (2023). Types of political connections, election years, and firm performance in Pakistan: Moderating role of external monitoring. *Cogent Business & Management*, *10*(2), 2224139. https://doi.org/10.1080/23311975.2023.2224139

19. Juliani, A. S., & Finatariani, E. (2023). Institutional ownership, tax planning and tax avoidance effect on firm value. *JAS (Jurnal Akuntansi Syariah)*, *7*(2), 168–183. https://doi.org/10.46367/jas.v7i2.1370

20. Jurnali, T., Meiliana, M., Septiany, S., & Jenny, J. (2024). Struktur kepemilikan, kinerja perusahaan, dan dewan independen sebagai moderasi. *E-Jurnal Akuntansi*, *34*(3), 556–571. https://doi.org/10.24843/EJA.2024.v34.i03.p01

21. Karim, S., Naeem, M. A., & Ismail, R. B. (2023). Re-configuring ownership structure, board characteristics and firm value nexus in Malaysia: The role of board gender and ethnic diversity. *International Journal of Emerging Markets*, *18*(12), 5727–5754. https://doi.org/10.1108/IJOEM-01-2021-0004

22. Manan, F., & Amin, K. (2023). The effect of corporate governance on firm financial performance with mediating role of earnings management: Evidence from Pakistan Stock Exchange. *Pakistan Journal of Humanities and Social Sciences*, *11*(1), 532–547. https://doi.org/10.52131/pjhss.2023.1101.0371

23. Manurung, M. R. A., & Wijaya, J. R. T. (2022). The effect of family ownership, institutional ownership, managerial ownership, blockholder ownership, and board of directors on company performance. *Ratio: Reviu Akuntansi Kontemporer Indonesia*, *3*(2), 116–128. https://doi.org/10.30595/ratio.v3i2.14773

24. Maryanti, E., & Dianawati, W. (2024). Ownership structure and performance: How does business environmental uncertainty matter?. *Cogent Business & Management*, *11*(1), 2396540. https://doi.org/10.1080/23311975.2024.2396540

25. Miao, M., Khan, M. I., Ghauri, S. P., & Zaman, S. I. (2023). The effect of corporate governance on firm performance: Perspectives from an emerging market. *Economic Research-Ekonomska Istraživanja*, *36*(3), 2277275. https://doi.org/10.1080/1331677X.2023.2277275

26. Naidu, D., Charteris, A., & Moores-Pitt, P. (2022). The impact of foreign ownership on the performance of Johannesburg Stock Exchange-listed firms: A blessing or a curse?. *South African Journal of Economics*, *90*(1), 75–92. https://doi.org/10.1111/saje.12302

27. Nel, G., Jachi, M., & Scholtz, H. (2025). The impact of institutional and managerial ownership on the pay-performance relationship: Evidence from JSE-listed firms. *Journal of Management and Governance*, *29*, 945–975. https://doi.org/10.1007/s10997-024-09725-9

28. Park, Y. S., & Na, J. (2024). The relationship between heterogeneous institutional investors and operational performance: Evidence from mergers and acquisitions. *Heliyon, 10*(20), e39365. https://doi.org/10.1016/j.heliyon.2024.e39365

29. Phan, Q. T. (2024). Country-level governance quality, foreign ownership, and firm investment: Evidence from WBES database. *Cogent Economics & Finance, 12*(1), 2302633. https://doi.org/10.1080/23322039.2024.2302633

30. Shakri, I. H., Yong, J., & Xiang, E. (2022). Does compliance with corporate governance increase profitability? Evidence from an emerging economy: Pakistan. *Global Finance Journal, 53*, 100716. https://doi.org/10.1016/j.gfj.2022.100716

31. Shakri, I. H., Yong, J., & Xiang, E. (2024). Corporate governance and firm performance: Evidence from political instability, political ideology, and corporate governance reforms in Pakistan. *Economics & Politics, 36*(3), 1633–1663. https://doi.org/10.1111/ecpo.12303

32. Silalahi, B. M. U., & Lestari, T. U. (2023). The effect of managerial ownership, institutional ownership, and market activity on firm value. *Gema Wiralodra, 14*(2), 629–637. https://doi.org/10.31943/gw.v14i2.485

33. 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. https://doi.org/10.1016/j.ribaf.2023.102188

34. Yuan, F., Hussain, R. T., Khalid, I., & Li, M. (2023). Does board activeness strengthen the relationship between structure of corporate ownership and firm performance?. *Frontiers in Psychology, 13*, 1104178. https://doi.org/10.3389/fpsyg.2022.1104178

35. Zhang, M., Cheng, J., & Bai, Y. (2025). Impact and mechanisms of ownership structure on firm performance. *Finance Research Letters, 86*, 108670. https://doi.org/10.1016/j.frl.2025.108670



2026 by the authors; Journal of Global Social Transformation (JGST). This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).