

AN EMPIRICAL ANALYSIS OF FIRMS' OWNERSHIP STRUCTURE AND GROWTH: EVIDENCE FROM PAKISTAN STOCK EXCHANGE

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ABSTRACT

Purpose: This study aims to investigate the impact of firms' ownership structure on growth. Particularly it examines the effect of institutional, managerial and foreign ownership on growth of listed firms in an emerging country.

Design/Methodology: Generalized Method of Moments (GMM) approach was employed to conduct regression analysis. A 10 years' sample of 100 non-financial companies listed on PSX was taken for the period 2011-2020.

Findings: The results indicate that institutional ownership is positively associated with both the proxies of firm growth in Pakistan. Contrary to the initial prediction, managerial ownership also positively influences firm growth. This is due to the fact that in Pakistan, most of the managers are family members or owners which may work towards enhancing firm value. Furthermore, a positive relationship was observed between foreign ownership and firm growth, indicating that foreign investors enhance firm growth.

Implications: The findings of this study will be useful for policy makers, managers and practitioners in determining the role of various categories of equity ownership on firm growth and help firms in developing relevant policies to enhance growth within corporate sector.

Originality: Despite a number of studies examining the relationship between ownership structure and firm performance, research specifically focused on firm growth in context of Pakistan remains limited. This lack of evidence is further addressed in the present study through use of system's GMM technique with both asset growth and sales growth as proxies to offer more comprehensive results regarding the influence of ownership structure on firm growth in a recent time frame.

Keywords: *Ownership structure, Firm growth, GMM approach, PSX, Panel data*

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INTRODUCTION

Firm growth is an important indicator of firms' success and stability. It shows how well a firm can expand its operations, maintain competitiveness and enhance market share. Growth depends not only on financial resources but also on internal governance mechanisms such as ownership structure, which significantly influence decision making of firms. Different ownership types such as institutional, managerial and foreign ownership can influence firms' growth (Ali & Shah, 2023; Nguyen et al., 2019; Yang & Meyer, 2018). Pham et al. (2020) observed that ownership structure not only influences profitability but also plays a critical role in determining a firm's capacity to reinvest retained earnings, obtain assets, and pursue available opportunities in financial markets. Sound ownership structure helps firms to increase profitability, improve earning potential, growth and maximize shareholders wealth (Rehan & Javaid, 2019).

The presence of institutional, managerial, and foreign investors significantly helps to mitigate agency problems through enhanced monitoring, governance discipline, and improved transparency (Abedin et al., 2022; Bui et al., 2020; Tayeh et al., 2023). Among these, institutional shareholders are considered more influential than other investors in exercising voting rights and trading shares, particularly when managerial actions do not align with the interests of stakeholders and firm's benefits (Arikawa et al., 2017). In emerging economies such as Pakistan, where family-owned and closely held firms dominate, ownership mechanisms are particularly relevant in determining firm growth.

Various studies have examined the impact of ownership structure on firm performance, investment decisions, and firm value in both emerging and developed countries (Abdullah et al., 2017; Cao et al., 2020; He & Kyaw, 2018). However, the role of ownership structure in firm growth has received relatively limited attention (Nguyen et al., 2019). Existing research on this topic often focuses on specific regions such as Vietnam and China (Pham et al., 2020; Yang & Meyer, 2018) or examines SMEs rather than large firms (Chatterjee & Bhattacharjee, 2021). In addition, most studies concentrate on certain ownership categories like state, foreign, family, or ownership concentration, while other equity ownership variables remain underexplored (Ali & Shah, 2023). Given the persistent agency conflicts and information asymmetries in Pakistan's financial market (Ali & Hashmi, 2018), it is important to examine the effect of various ownership structures on firm growth in this context. Therefore, this study aims to examine the impact of corporate ownership structure on the growth of non-financial companies listed on PSX.

This study is based on agency theory, which posits that conflict arises between principals (owners) and agents (managers) due to divergent interests and information asymmetry (Jensen & Ruback, 1983). Ownership structure is an important governance mechanism that can mitigate agency problems. Institutional investors, through their

monitoring ability, can enhance transparency and control manager opportunism, while foreign investors can leverage their expertise to promote better governance practices. Managerial ownership, through its equity stake can help align managements' interest with those of shareholders.

This study contributes significantly to the body of knowledge. First, it extends the application of agency theory by examining the role of different ownership types in explaining firm growth rather than focusing solely on financial performance. Second, this study employs the GMM method to address endogeneity issues commonly associated with ownership variables, thereby ensuring more robust and reliable findings. Finally, it provides context-specific evidence from Pakistan, where ownership concentration, family control, and information asymmetry exclusively influence corporate governance and firm growth. Furthermore, the research findings offer valuable insights to policymakers, investors and firms on how to improve firm growth through appropriate ownership structures.

LITERATURE REVIEW

Firms have a very important role to play in developing economies as firm creates employment opportunities, generates revenues, and increases nation's wealth (Almus, 2002). Firm growth is a key organizational objective, closely linked to revenue and profitability. In general, firm growth is associated with several financial and non-financial factors. Growth of firms is related with dynamic ownership structure (Nguyen et al., 2019). Firm growth can be influenced by different firm specific factors such as financial and ownership structure (Yang & Meyer, 2018). Literature shows ownership structure significantly affects firm growth and helps firms to increase profitability, improve earning potential and maximize shareholders' wealth. However, to achieve a significant growth rate, a firm should effectively manage its resources and earn considerable revenue, so it can retain some part of the net income and reinvest in business to expand its operations.

In general, firm growth is considered as a key feature of business survival and success. However, limited literature is available on the direct relationship between ownership structure and firm growth. Not many researchers have investigated firm growth in relation with different ownership types (Rehan & Javaid, 2019). Limited number of studies have examined the effect of corporate ownership structure on firm growth. Nguyen et al. (2019) found that state ownership negatively impacts growth in Vietnam, however despite indicating a positive effect, foreign ownership does not show statistical significance. Rehan and Javaid (2019) reported that ownership concentration positively affects firm growth in Pakistan's manufacturing sector, with leverage and firm size negatively influencing growth.

Block and Fathollahi (2022) observed that foundation ownership reduces sales growth but not employee growth in the DACH region. Pham et al. (2020) confirmed state ownership's negative impact on Vietnamese firm growth and highlighted dividend policy and ownership structure as key factors. Lappalainen and Niskanen (2009)

found that managerial ownership negatively affects growth of SMEs, while profitability increases growth. Yang and Meyer (2018) argued that ownership diversity affects competitive actions and revenue growth in China, favoring local and foreign owners over state owners. Belitski and Desai (2021) found mixed effects of female ownership on firm growth in South Asia. Kumar and Ranjani (2018) and Rashid (2020) highlighted nonlinear effects of institutional and managerial ownership on firm performance in India and Bangladesh. Moreover, Ali and Shah (2023) found that foreign ownership significantly enhances growth of listed firms in Pakistan. Overall, literature shows varied impacts of ownership types on firm growth across regions and context.

According to the corporate governance literature, a large portion of finance research has examined ownership structure in relation to firm performance in emerging and developed economies (Yeh, 2019). However, recently the role of non-financial factors such as financial and ownership structure in firm growth have attracted the attention of research scholars. In the recent decade, research has been conducted to examine the effect of various financial factors, ownership variables, firms' performance, and firm growth (Ali & Shah, 2023; Driver & Muñoz-Bugarin, 2019; Pham et al., 2020). Several empirical studies provide evidence that firm performance and growth are related with institutional ownership as such investors consistently monitor management activities related to short term and long-term investment and overall investment efficiency (Park et al., 2016). Based on empirical and theoretical evidence, following hypotheses have been developed for the study.

Hypothesis 1: Institutional ownership has a significant positive impact on the firm growth of listed companies in Pakistan.

Hypothesis 2: Managerial ownership has a significant negative impact on the firm growth of listed companies in Pakistan.

Hypothesis 3: Foreign ownership has a significant positive impact on the firm growth of listed companies in Pakistan.

Conceptual Framework

Based on the theoretical and empirical evidence, following conceptual framework has been developed for this study, in which institutional, managerial, and foreign ownerships are considered as independent variables while firm growth serves as dependent variable which is measured by both asset and sales growth. Moreover, in line with prior literature, firm profitability, size and leverage are included as control variables.

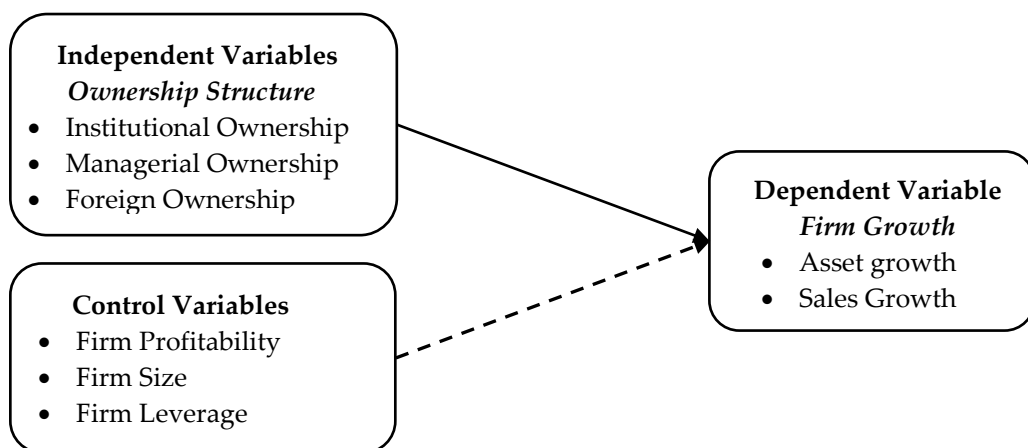


Figure 1 Conceptual Framework of the Study

METHODOLOGY

Population and Sample

Population of the study comprises all non-financial companies listed on Pakistan Stock Exchange over the period 2011 to 2020. Based on size and market capitalization, top 100 firms have been selected from the targeted population. This sample size is chosen to achieve a balance between representativeness and data availability, ensuring sufficient coverage for reliable statistical analysis. Furthermore, to be included in the sample, firms must have been listed on the stock exchange continuously for the entire ten-year period from 2011 to 2020, with complete data availability. Table 1 shows the sectors and number of companies included in the sample.

Table 1: Sector-wise Distribution of Sampled Companies

Sr. No.	Name of sector	Included firms
1	Automobile	9
2	Cable & Electrical	3
3	Cement	9
4	Chemical	8
5	Engineering	3
6	Fertilizer	5
7	Food and personal care industry	8
8	Glass & ceramics	3
9	Miscellaneous & others	6
10	Oil & Gas	9
11	Paper & board	3
12	Pharmaceutical industry	5

13	Power generation and distribution	7
14	Refinery industry	4
15	Sugar and related sector	3
16	Technology and communication	4
17	Textile sector	9
18	Transport	2
Total		100

Measurement of Variables

Firm Growth

Sales growth and assets growth have been used to measure firm growth, they are among the most widely recognized indicators in the existing literature. Shepherd and Wiklund (2009) reviewed 82 published articles and found that sales growth is a popular measure, with 60% of the studies using it. Hu and Izumida (2008) and Pham et al. (2020) calculated sales growth as the change in annual sales volume divided by lagged (t-1) annual sales. According to literature, sales growth is measured as the percentage change in sales from the previous year, calculated by dividing the difference between current and previous year sales by the previous year's sales. Moreover, asset growth is considered a robust proxy for various financial variables, including firm growth (Nguyen et al., 2019). Allen et al. (2012) describe firm growth as the change in the total value of a firm's assets over a specific time period. Literature reveals that there is no consensus among scholars about which proxy is best and more appropriate to measure firm growth. Though many studies considered sales growth and asset growth to be the most appropriate measures of firm growth. Therefore, this study uses both sales and asset growth to measure firm growth.

Ownership Structure

Ownership structure refers to the distribution of firms' ownership and it shows the proportion of shares held by different types of shareholders. In this study three main forms of equity ownership are considered such as institutional ownership, managerial ownership and foreign ownership. Institutional ownership is measured as total numbers of shares held by institutional investors, managerial ownership is measured as the number of shares held by the management, while foreign ownership represents the shares held by investors from outside the country (Ali & Shah, 2023; Kim et al., 2019; Nguyen et al., 2019; Zamzamin et al., 2021). In this study each ownership variable is calculated as the number of shares held by each group divided by the total numbers of shares outstanding.

Control Variables

Previous studies investigated the link of ownership structure and performance using a variety of control variables. Relevant literature suggests some control variables

beyond ownership variables that can affect firm growth. Firm profitability is frequently used as the control variable since it has the potential to influence the growth capacity of the firm (Coban, 2014). Rizqia and Sumiati (2013) suggest that firm profitability can be measured by using return on assets (ROA), as it reflects a firm's ability to utilize its assets to generate returns. Firm leverage of a firm is the ratio of total debt to total assets and firm leverage is measure by same ratio (Cheng et al., 2022). Moreover, several studies found firm size can significantly influence firm growth (Adams et al., 2014; Lefebvre, 2021; Megaravalli & Sampagnaro, 2017). In this study, we use the natural logarithm of total assets to measure firm growth.

Model Specification

To assess the relationship between ownership variables (IVs) and firm growth (DV), the following baseline model has been developed.

$$\text{Firm Growth}_{i,t} = \beta_0 + \beta_1 \text{IO}_{i,t} + \beta_2 \text{MO}_{i,t} + \beta_3 \text{FO}_{i,t} + \beta_4 \text{ROA}_{i,t} + \beta_5 \text{FL}_{i,t} + \beta_6 \text{FS}_{i,t} + \varepsilon_{i,t}$$

As discussed in the methodology section, this study employs GMM method and included lag of dependent variable as independent (instrumental) variable in the original model. The dependent variable firm growth is measured by two proxies i.e., asset growth and sales growth. Therefore, the following regression equations have been formulated.

$$\text{AG}_{i,t} = \beta_0 + \beta_1 \text{AG}_{i,t-1} + \beta_2 \text{IO}_{i,t} + \beta_3 \text{MO}_{i,t} + \beta_4 \text{FO}_{i,t} + \beta_5 \text{ROA}_{i,t} + \beta_6 \text{FL}_{i,t} + \beta_7 \text{FS}_{i,t} + \varepsilon_{i,t}$$

$$\text{SG}_{i,t} = \beta_0 + \beta_1 \text{SG}_{i,t-1} + \beta_2 \text{IO}_{i,t} + \beta_3 \text{MO}_{i,t} + \beta_4 \text{FO}_{i,t} + \beta_5 \text{ROA}_{i,t} + \beta_6 \text{FL}_{i,t} + \beta_7 \text{FS}_{i,t} + \varepsilon_{i,t}$$

Where:

i = firm

t = time (year)

β = beta

β_0 = intercept

$\text{AG}_{i,t}$ = asset growth

$\text{SG}_{i,t}$ = sales growth

$t - 1$ = lag of dependent variable

$\text{IO}_{i,t}$ = vector of institutional ownership

$\text{MO}_{i,t}$ = vector of managerial ownership

$\text{FO}_{i,t}$ = vector of foreign ownership

$\text{ROA}_{i,t}$ = vector of control variable return on assets (profitability)

$\text{FL}_{i,t}$ = vector of control variable leverage of firm

$\text{FS}_{i,t}$ = vector of control variable size of firm

$\varepsilon_{i,t}$ = error term

RESULTS AND DISCUSSION

Descriptive Statistics

Following table displays the descriptive statistics of the sample firms.

Table 2: Descriptive Statistics

Variables	Mean	SD	Minimum	Maximum
Asset growth	0.1259	0.1398	-0.2576	0.7390
Sales Growth	0.1065	0.1584	-0.4665	0.7526
Institutional Ownership	0.4530	0.2809	0.000	0.8970
Managerial Ownership	0.1448	0.2067	0.000	0.6896
Foreign Ownership	0.0848	0.1377	0.000	0.6356
Firm profitability (ROA)	0.0879	0.1059	0.000	0.7281
Firm leverage	0.1851	0.1825	0.000	0.7517
Firm size	16.9362	1.2960	9.5780	20.5741

Table 2 shows the basic descriptive statistics of sample Pakistani firm. The mean value ranges from 0.0848 (foreign ownership) to 16.9362 (Firm Size). The mean value of variables represents the average value of sample firms. For example, the mean value of asset growth and sales growth indicates a firm's average asset growth is 12.59% and sales growth is 10.65%. Moreover, the mean of institutional ownership is 0.4530, managerial ownership 0.1448, foreign ownership 0.0848, firm profitability 0.0879, firm leverage 0.1851, and firm size 0.16.93. Standard deviation ranges from 0.1059 (ROA) to 1.2960 (Firm size). Standard deviation value of asset growth is 0.1398, sales growth 0.1584, institutional ownership 0.2809, managerial ownership 0.2067, foreign ownership 0.1377, ROA 0.1059, firm leverage 0.1825, and firm size 1.2960. Furthermore, the minimum and maximum values show the highest and lowest values of each variable. These all show the basic descriptive statistics of the variables which provide the overview and the behavior of collected data.

Correlation matrix

The correlation matrix presents the results regarding the associations between variables and provides insight into potential multicollinearity. The following table shows the result of the correlation matrix for the sample firms. The results indicate that there exists no issue of multicollinearity among the variables, as the correlation values between the independent variables are below the threshold limit.

Table 3: Correlation Matrix

Variables	AG	SG	IO	MO	FO	ROA	FL	FS
1. AG	1							
2. SG	0.061	1						
3. IO	0.048	0.029	1					
4. MO	0.057	0.061	0.042	1				
5. FO	0.061	0.038	0.021	0.019	1			
6. ROA	0.018	0.020	0.021	0.010	0.019	1		
7. FL	-0.058	-0.078	-0.029	-0.018	0.015	-0.017	1	
8. FS	0.029	0.039	0.051	0.049	0.059	0.057	-0.047	1

Note: AG represents asset growth while SG symbolizes sales growth. Independent variables include IO (institutional ownership), MO (managerial ownership) and FO (foreign ownership). Control variables ROA (return on assets, profitability) FL (firm leverage), FS (firm size).

Table 3 presents the correlations among the study variables. Sales growth is positively correlated with asset growth (0.061). Institutional ownership shows positive correlations with asset growth (0.048) and sales growth (0.049). Managerial ownership has a positive correlation with growth in assets (0.057), growth in sales (0.061), and institutional ownership (0.042). Foreign ownership has a positive correlation with growth in assets (0.061), growth in sales (0.038), institutional ownership (0.021), and managerial ownership (0.019). ROA has a positive correlation with all other variables with a range of 0.010 to 0.021.

Regression Analysis

In general, prior studies employed both GMM and OLS methods to examine the association between ownership structure, investment, firm performance, and growth. However, the drawback of the OLS method is that it faces the problem of both endogeneity and sample selection, especially in the context of the variables involved in the ownership structure and the growth of the firm equation, as far as the first order is concerned, since the variables are prone to endogeneity (Farooque et al., 2010). To address this issue, this study employs the GMM method to analyze the impact of ownership variables on the growth of listed Pakistani firms. This approach is consistent with previous research on corporate governance and firm performance. The current study uses GMM method, which requires that the number of groups exceeds the number of instruments. The Hansen test is used to assess instrument validity, while the Arellano and Bond test checks for serial correlation. First-order correlation is expected, but second-order correlation should not be present (see Al-Malkawi & Javaid, 2018; Garín Muñoz, 2007).

The results support the use of the GMM method, as the number of groups (100 in each model) exceeds the number of instruments (92 and 94, respectively), as shown in

Table 4. The Hansen test p-values (0.291 and 0.119) are above the 5% threshold in both models, indicating that the instruments are valid and properly specified. Additionally, the Arellano-Bond test confirms the presence of first-order serial correlation ($p = 0.023$ and 0.001 in Models 1 and 2, respectively), but no significant second-order correlation ($p = 0.311$ and 0.231). These findings meet the key assumptions of the system GMM estimator. Similar AR(1) and AR(2) results were reported by Al- Al-Malkawi and Javaid (2018). Therefore, the model is well appropriate and correctly specified to employ on panel data.

Table 4: Results of Regression Analysis (GMM)

Variables	Model 1 (Asset growth)	Model 2 (Sales growth)
	Coefficient	Coefficient
Lag of Asset growth	0.561**	
Lag of Sales Growth		0.291***
Institutional Ownership	0.445***	0.335***
Managerial Ownership	0.286***	0.246**
Foreign Ownership	0.390*	0.288*
Profitability (ROA)	0.028*	0.681***
Firm leverage	-0.364**	-0.298*
Firm size	0.019**	0.002
Constant	0.345**	0.231**
Year	Yes	Yes
No, Groups	100	100
No, Instrument	92	94
AR-1 test (<i>p value</i>)	0.023	0.001
AR-2 test (<i>p value</i>)	0.311	0.231
Hansen test (<i>p value</i>)	0.291	0.119
No. of Observations	900	900

Note: *** indicates $p\text{-value} < 0.001$, ** indicates $p\text{-value} < 0.01$ and * indicates $p\text{-value} < 0.05$. Std. Err. signifies standard errors. One year lagged dependent variables are used as instruments. The Hansen test assesses the validity of instruments through over identification.

Table 4 shows the results regarding effect of ownership structure on firm growth of Pakistani firms. Two models have been estimated to capture the effect of ownership variables. Model 1 shows the result regarding asset growth while model 2 presents result of sales growth. Model 1 indicates that the coefficient of lag of asset growth is positive and significant (0.561** $p\text{-value} < 0.01$) which indicates that previous year asset growth is positively associated with growth in current year. Likewise, result of the model 2 also exhibits a significant and positive relationship between prior year sales growth and sales growth in present year as the coefficient value is statistically significant and positive (0.291*** $p\text{-value} < 0.001$).

Results of models 1 and 2 show a positive coefficient for institutional ownership, indicating that institutional ownership has a significant impact on firm growth among

the sample firms. The coefficient values in both models are positive and highly significant. A 10% rise in institutional ownership increases asset growth by 4.45% and sales growth by 3.35%. For managerial ownership, the relationship is also positive and highly significant in both models. A 10% increase in managerial ownership results in 2.86% rise in asset growth and a 2.46% rise in sales growth. Moreover, in both models, coefficient of foreign ownership is positive and significant. For each 10% increase in foreign ownership, asset growth increases by 3.9% and sales growth increases by 2.88%. From these results, it may be inferred that ownership variables institutional, managerial, and foreign ownership positively influence firm growth in Pakistan.

For the control variables, the results indicate that return on assets and firm size positively influence firm growth. In both models, coefficients for ROA are positive and statistically significant, which exhibits that profitability positively influences asset growth and sales growth. Furthermore, in both models, the coefficient values for firm size are positive, indicating that larger firms tend to realize higher growth in assets and sales. However, the coefficient values of firm leverage in both models are negative and significant, indicating that leverage negatively affects firms' asset and sales growth. Overall results reveal that firm profitability and size positively influence firm growth while leverage has a negative impact. This implies that profitability and size enhance growth while higher leverage reduces firm growth of non-financial companies in Pakistan.

Three hypotheses were tested in this study. Hypothesis 1 stated that institutional ownership positively affects firm growth. The results of the GMM analysis reveal that institutional ownership has a positive and significant impact on both proxies of firm growth. Therefore, Hypothesis 1 is accepted. These results are consistent with earlier studies such as Abedin et al. (2022); Ali et al. (2021); Bishara et al. (2020); Qurashi and Gul (2025). According to Jiang et al. (2021) an increase in the percentage of institutional ownership translates to an acceleration in financial profits since companies will benefit from intensified monitoring, which contributes to minimized agency costs and increased profitability. The same applies to the principle of agency theory that states that institutional investors have powerful monitoring capacities and that their active monitoring will result in minimized agency problems that will eventually translate to accelerated firm growth.

The second hypothesis proposed in the study is that managerial ownership negatively impacts firm growth. However, the results of the regression analysis indicate that managerial ownership positively affects both asset growth and sales growth, which are the measures of firm growth. Therefore, hypothesis 2 has been rejected. This finding contradicts the results of several studies, such as Bishwas and Hossain (2025); Rashid et al. (2023) and Shan (2019), but is consistent with the findings of Kamardin (2014). Similarly, Chen (2025) found that managerial ownership is often significantly and positively correlated with firm performance as it aligns the interest of management and shareholder interests while decreasing agency costs. This is also consistent with the alignment hypothesis of agency theory, which posits that a

managerial stake in the firms aligns the interest of shareholders and managers, thereby reducing agency costs and encouraging managers to make decisions that increase firm value and growth. The positive effect of managerial ownership in Pakistan can possibly be explained by the fact that most managers are family members of the owners or are themselves owners, and they work towards the betterment of the firms.

In case of Hypothesis 3, which states that foreign ownership positively affects firm growth, the results disclose that foreign ownership has significant and positive effect on both measures of firm growth. Therefore, Hypothesis 3 is accepted. These results are consistent with earlier research that also found a positive effect of foreign ownership on firm growth in Pakistan (Ali & Shah, 2023). Foreign investors contribute not only capital but also bring international expertise, advanced technology, and improved management practices, all of which help enhance a firm's competitiveness and growth potential in the local financial market. Consistent with agency theory, the positive influence of institutional, managerial and foreign ownership on firm growth suggests that such ownership types help reduce agency problems by enhancing oversight, aligning interests and improving governance mechanism. Therefore, it is concluded that ownership structure plays a significant role and healthy ownership structure can improve firm growth of non-financial companies in Pakistan.

CONCLUSION

The study examined the role of ownership structure in influencing firm growth, using a sample of 100 non-financial firms listed on the PSX over a ten-year period (2011-2020). This study employed the system GMM method for regression analysis and hypothesis testing. Overall, study results indicate that ownership structure has a significant impact on firm growth. Specifically, results show that institutional ownership has a significantly positive impact on firm growth. This implies that increased institutional ownership leads to improvements in a firm's growth. Finding of the study also revealed that managerial ownership positively effects firm growth. In Pakistan, most of the managers are family members or owners which may work towards enhancing firm value. Managerial ownership plays a significant role in the firms' activities; therefore, an appropriate level of managerial ownership should be maintained. The study also finds a positive association between foreign ownership and firm growth. In addition to financial contribution, foreign ownership also provides new technology, knowledge, and financial expertise from overseas, which is essential for firm growth and business expansion. Based on the empirical evidence and current study findings, it is conferred that firms' ownership structure significantly impacts growth of listed firms. These findings are important for policymakers, investors, and common shareholders in order to enhance firm value and growth. The regulatory authorities should encourage the participation of institutional and foreign investors in order to strengthen the oversight mechanism for greater transparency and to make more balanced decisions.

Besides its major contribution, this study is not completely free from limitations. This study only focuses on non-financial listed companies and does not include other financial firms, future studies should focus on the financial sector or conduct comparative studies between financial and non-financial sectors. The study does not consider the dynamics of ownership structure over time and how changes in ownership structure of individual firm can affect its growth rate in particular situations. In this study, asset growth and sales growth are the only two indicators used to measure firm growth. Further research may use additional indicators like employment growth, investment ratios, or market expansion in order to present a more comprehensive measure of growth.

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