

## **How Concentrated Ownership Affects the Growth of Firms in Pakistan?**

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The growth of firms signals economic growth. This study examines how concentrated ownership impacts the growth of firms. Empirical evidence is provided for 11 years (2006-2016) from manufacturing sector of large scale firms listed on Pakistan Stock Exchange (PSE). System Generalized method of moments (GMM) estimation method is used to deal with the endogeneity of the ownership variable. The results display revealed that concentrated ownership significantly and positively impacts the growth of firms under both its measures of growth; sales and assets. The results are homologous with Edith Penrose's theory of the growth of the firm and agency theory, supporting the alignment effect. Determinants of a firm's growth depicted varying behavior with sales growth and asset growth, revealing the diversity of the two measures. Study has practical implications for the investors and policy makers in understanding the role of concentrated ownership on the growth of firms.

*JEL Classification:* G32, D22, C23

*Keywords:* Concentrated Ownership, Firm Growth, System GMM

### **1. INTRODUCTION**

The growth of firms allow an economy to prosper (Zhou & De Wit, 2009). Multidimensional influence of a firm's growth on the overall well-being of the society mark its crucial importance (Diaz, 2007). Growth is an "organizational outcome" fruition of unique combination of firm specific factors such as resources, procedures and potentials (Nelson & Winter, 1982). According to Penrose (1959), a firm's growth implies to the increase in firm's size from one point in time to another. Increase in size refers to the increase in assets causing increased sales allowing increased production and employment that is translated into improved earnings of the people and their standard of living. This eventually accumulates to economic growth.

Birch (1981) and Bartelsman, et al. (2005) signify the importance of institutional settings in a country for the firms to grow. Rajan & Zingales (2004) elaborate that institutional settings include rules and regulations such as governance mechanisms, capital market conditions and fiscal and monetary policies. One of the important institutional factors is the ownership structure of the firms (Demsetz, 1988; Mascarenhas, 1989; Morck, Shleifer & Vishny, 1988). Divergent owners carry different set of goals and objectives of doing business, exercising their control rights in a specific manner in order to achieve their targets. This ultimately has an impact on firm's performance and growth. The concept of growth varies from owner to owner. Some view it as revenue

generation while others want value addition or increased volumes. The diversity in objectives and goals of the owners and their differences in exercising firm control signify a link why firms grow differently in the same institutional settings. The main objective of the study is to see how concentrated ownership affects the growth of firm. This study defines concentration of ownership as percentage of shares owned by the five biggest shareholders and aims to examine the effect of concentrated ownership in terms of control rights on the growth of the firms.

The well acclaimed agency theory is the most suited theory to explain the phenomenon of ownership structure, particularly the concentrated ownership. Firm's growth phenomenon is delineated with the help of Penrose Theory, after Nason & Wiklund, (2015) strongly propose future research on firm's growth to be based on the Penrosean theory with reference to resources versatility.

Abundance of research has been done in the area of firm's growth but the body of knowledge is still limited, highly fragmented and mixed results cast a doubt on its clear understanding (Davidson & Wiklund, 2000; Wiklund, Patzelt & Shepherd, 2009).

Most of the literature on firm's growth has emerged from developed countries. Few Researchers like Coad et al. (2008) and McKenzie and Woodruff, (2015) have studied the growth of firms in developing countries. However, very little information about it is available for Pakistan. Handful of researchers like (Afraz, Hussain & Khan, 2014; Ahmed & Hamid, 2011; Noreen & Junaid, 2015) have made their contributions towards unveiling the phenomenon of firm growth in Pakistan, but their focus is on the small and medium sized firms. The industrial sector constitutes 20.30% to GDP of Pakistan and large scale manufacturing (LSM) firms are consistently showing low growth over the last few years, yet the investigation in this area is sparse. This research is a modest contribution towards the investigation of the elements determining the growth of LSM firms by particularly focusing on the influence of concentrated ownership on the growth of a firm.

The propensity of the firm to develop dynamic capabilities required to grow depends upon the will and capability of the owner-manager, the policy and institutional settings of the environment within which it operates. Bishop et al. (2009) calls for further research in this area in order to develop firm conclusion regarding the extent of the influence of institutional and environmental settings on the firm growth. The research on the association of ownership structure and firm growth is scant. Studies have largely checked the influence of ownership structure on firm's financial conduct with reference to profitability or Tobin's q whereas growth has miserly been explored before. No study has explored the impact of concentrated ownership on the growth of the firms before using not only two measures of growth but also for high and low growth firms, addressing the endogeneity of the ownership variable, notably from developing economies like Pakistan. Therefore, this study is a little contribution in this regard and extends the literature on firm's growth from the ownership structure perspective. This study has practical implication for the stakeholders, particularly the investors and regulators in perceiving the influence of ownership concentration on firm growth. A sample of 80 PSE listed large scale manufacturing firms is taken, spanning a period of 11 years from 2006 to 2016.

The article is assembled in the following manner; section two covers the literature review on firm growth and ownership structure whereas section three gives theoretical framework followed by section four on data and methodology. Section five provides the results with discussion and last section 6 gives the conclusion and directions for future research.

## **2. LITERATURE REVIEW**

### **2.1. Firm Growth**

Growth of firm is a continuous process and is inevitable for its ultimate survival. Owners and managers aspire to the growth of the firm in a planned and organized manner (Claver et al., 2006) abstaining from losing the ownership and control of the firm (Storey, 1994). Review of literature on firm growth shows that it has been keenly studied by numerous researchers all over the world and from varied perspectives. A huge bundle of research is dedicated to the testing of Gibrat's Law reviewing if the growth of a firm is independent of its size. However, empirical testing gives mixed results. Audretsch et al. (2004); Geroski et al. (2003); Rasiah et al. (2014) support Gibrat's law whereas Anton (2019); Bottazzi and Secchi, (2003); Calvo (2006); Malerba and Adams (2014) reveal negative relationship between firm growth and size of the firm. However, some recent literature reports the partial validity of the law (Daunfeldt & Elert, 2013; Tang, 2015; Yu, 2016). Parallel to this, researchers have been keenly studying the link between firm growth and age of the firm. Evans (1987), Geroski and Gugler (2004) and Yasuda (2005) found aged firms to show retarded growth whereas Anton (2016) finds a positive relation between the age of a firm and its two measures of growth; sales and assets. However, inverse nature of firm growth with age is a robust feature. Researchers such as (Aggarwal, 2015; Claver et al., 2006; Feeny & Roger, 1999) report significant healthy impact of efficiency and profitability on firm growth.

Research on the firm growth and ownership structure association is scant. Few researchers have used ownership variable in their model but that was not the variable of main interest. However, Markovic and Stemmer (2017) report significant positive influence of foreign ownership on the growth of the firm's assets whereas state ownership has positive insignificant impact. Pham and Nguyen (2017) studied the effect of ownership types on the firm's growth with respect to Gibrat's Law and report that ownership is indeed salient determinant of firm growth. Therefore this can be concluded that growth of the firm depends upon the owner-manager strategies and policies along with a combination of institutional and environmental settings (Bishop et al., 2009).

There is no unique and specific measure of firm growth. Researchers have used different measures of firm growth depending upon the objective of their research. A firm may grow in terms of output or asset base with no growth in employment (Dunne & Hughes, 1994). Business researchers measure firm growth in terms of increase in assets, sales, productivity, market share or profitability measures (Tajnikar, Ponikvar & Dosenovic-Bonca, 2016). Employment growth is a measure of interest to policy makers and economists and is seldom a target of a business owner.

Managers and entrepreneurs' most popular measure is sales growth. Asset growth as a measure of firm's expansion is appropriate for manufacturing firms with high capital

intensity. Distinct measures of firm growth may produce varied results (Almus, 2002; Shepherd & Wiklund, 2009). There is lack of consensus on the best and most appropriate measure of firm growth in terms of size as a growth indicator. Delmar (1997) conclude that different proxies for dependent variable should be used and their results should be compared. Investigation of firm growth not only requires selection of an appropriate firm growth indicator but also the categorization of high growth and low growth firms to better understand the diversities lying in them (Tajnikar et al., 2016). Daunfeldt et al. (2014) notice younger firms revealing rapid growth whereas Teruel and De Wit (2017) highlight entrepreneurship, institutional settings and growth opportunities to drive high-growth firms.

## 2.2. Ownership Concentration

Agency theory posits concentrated ownership as a strong corporate governance tool to limit agency problem arising from the separation of ownership and control (Shleifer & Vishny, 1986). Jensen and Meckling (1976) posit that bigger and powerful shareholders have greater incentive to accomplish wealth maximization for the shareholders. For less developed markets that are characterized by weak external governance mechanism, concentrated ownership serves the purpose to great extend (Heugens, et. al., 2009). Yeh (2003) from Taiwan, Dzierzanowski and Tamowicz (2004) from Poland, Cheema (2003) and Iqbal (2010) from Pakistan all find concentrated ownership to be a popular phenomenon. Perrini et al. (2008) from Italy Kapopoulos and Lazaretou (2007) from Greece and Karaca and Eksi (2012) from Turkey, Iwasaki and Mizobata (2019) from central and eastern Europe, Azam et al. (2011) and Waheed and Malik (2019) from Pakistan all confirm the positive influence of concentrated ownership on firm performance.

In highly concentrated ownership structures, agency problem switches from principal-agent to principal-principal conflict (Bebchuk & Weisbach, 2010; Young, et. al., 2008) giving rise to an issue between “controlling shareholders and minority shareholders, which gives opening to entrenchment and expropriation effects. Shan and McIver (2011) from China and Wahla et al. (2012) from Pakistan report the adverse effect of concentrated ownership on firm performance.

Demsetz (1983) highlight the endogeneity present in the ownership variable and unfold the fact that profit-maximization process of the shareholders eventually shape up the ownership structure of a firm. Therefore linking the variation in ownership structure to the variation in firm performance is incorrect (Demsetz & Villalonga, 2001). Researchers like (Himmelberg et al., 1999; Lemmon & Lins, 2003; Perrini et al., 2008) have confirmed the endogeneity of the ownership structure and state that results from studies that do not account for endogeneity are doubtful.

In the recent past second source of endogeneity is also recognized with reference to the ownership structure, firm performance relationship (Gedajlovic & Shapiro, 2002; Hu & Izumida, 2008; Thomsen & Pedersen, 2000). This endogeneity is referred to as dynamic endogeneity which implies that past performance determines current corporate governance structure and firm performance (Wintoki et al., 2012). When shareholders are more concerned with the return on stocks they would like to capture big portion of shareholdings of firms that have performed well and are expected to persist the same in future. Hence confirming the positive effect of past performance on the current concentration of ownership and same goes vice versa (Hu & Izumida, 2008).



The studies on concentrated ownership and firm performance accounting for the endogeneity provided inconclusive results. Nguyen et al. (2015), Hu and Izumida (2008) and Xu and Wang (1999) reported positive effect of concentrated ownership on firm performance whereas Hu, Tam, and Tan (2010) gave negative report whereas mixed results were received by Haniffa and Hudaib (2006).

The above discussion concludes that concentrated ownership affects firm growth but it has been rarely investigated before. In line with agency theory, it is purported that concentration of ownership reduces agency conflict between shareholders and managers. Concentrated owners having sufficient ownership and power seriously plan for the growth of the firm. They target unused resources in the firm and search new ventures for expansion. Thus, positively affect firm growth.

Notion of firm growth rests on how the firm is defined. Penrose (1959) presents a well acclaimed theory of the growth of firm and expound firm as a bundle of resources knitted together by administrative skills aimed at most efficient use of them. According to Penrose, firm growth means increase in the size of the firm from one point in time to another. She delineated the concept of firm growth as to how quickly firms accumulate and assimilate the required resources and could tap the growth opportunities when it has underutilized internal resources (Penrose, 1959).

Penrose theory is designed for corporate style firms with separation of ownership and control and with de facto control vested in the managers. Agency theory by Jensen and Meckling (1976) and later by Shleifer and Vishny (1986) discusses the separation with conflicting interests of the principal, the shareholders and agent, and the managers. Over the time this conflict has resulted into the evolution of concentrated ownership structures. When the firms have concentrated ownership structure, the managers are bound to follow the strategies of the large block-holders hindering them from making decisions on their own. Agency theory also postulate that concentrated ownership results in better and effective monitoring that helps alleviate the conflict of interest between the value maximizing shareholders and self-interested managers – the alignment affect. Contrary to this, when firms have concentrated ownership structures, the owners get an opportunity to expropriate the profits of the minority shareholders, mostly in feeble minority protection environments because of which the entrenchment effects emerge.

Intrinsic motivation (Delmar, 1997) and growth intention of the entrepreneurs (owners/shareholders) is found to have positive impact on the subsequent growth of the firm (Delmar & Wiklund, 2008 ;Wiklund & Shepherd, 2003). This defines the crucial importance of ownership in the firm growth. Agency theory also purports the idea that the firms with better corporate ownership structure have lower agency cost, consequently showing better firm performance and valuation in the market. Penrose theory hinges upon resource based view of the firm that includes both physical as well as human resources. Penrose presumes the growth of the firm to be dependent upon the people running the organization. The entrepreneurial intention of the owner, the will and ability of the managers are antecedents of the firm's growth. Entrepreneurial capabilities rest on the owners' and executive's imaginative skills, whereas managerial capabilities are practical and directly linked to the execution of the ideas (Penrose, 1959). Firms that possess unique combination of highly motivated owners with vision and mission coupled with enthusiastic managerial team show above average growth in the industry.

Firms with dispersed ownership would lack the entrepreneurial outlook and the firm growth would solely lie in the hands of the managers. Since there is lack of ownership control, the firms perform less than optimal and show low growth. Concentrated ownership structure firms design their strategies to fulfill their long-term objectives which are inextricably linked to the preservation of ownership control of the firm at any cost. Although the ownership structure works as an alignment effect and curbs the opportunistic behavior of the managers, some of these firms are not interested in their growth and more interested in the continuous existence of the firm so that business could be transferred to the next generation as indicated by (Ding et al., 2011).

These firms show low growth and portray specific characteristics that result in less than average growth in the industry. Manufacturing firms are capital intensive and producers of finished goods making sales and asset growth more relevant. Employment growth is also widely used to indicate firm growth indicator but it is not relevant in the context of ownership structure as the owners are not interested in the employment growth. Owners want their firms to expand and grow in terms of sales, assets or profitability which is not necessarily correlated to employment growth. In line with Pham and Nguyen (2017), this study uses sales growth and asset growth in relative forms to measure firm growth under each of the different concentrated ownership types.

*H<sub>1</sub>: Concentrated ownership is significantly associated with firm growth.*

*H<sub>2</sub>: Concentrated ownership is significantly associated with high growth.*

*H<sub>3</sub>: Concentrated ownership is insignificantly associated with low growth.*

### 3. RESEARCH METHODOLOGY

#### 3.1. Data Collection

Around 391 large scale manufacturing (LSM) firms are listed on Pakistan Stock Exchange out of which 80 firms are taken for the study covering a period of 11 years from 2006-2016. Published annual reports are used to collect secondary data making a total of 880 firm level observations.

#### 3.2. Variables of the Study

##### 3.2.1. Dependent Variable

The phenomenon of firm growth is captured using two growth measures such as gross sales growth and book value of total asset growth. These two growth indicators are used in this study as they are in line with the requirement and expectation of the owners of the firm.

Following Delmar (1997) and Çoban (2014), this study uses gross sales growth to measure firm growth. The second measure used is after Delmar, (1997), who suggested asset growth to be a suitable measure specifically for manufacturing firms. Following Lee and Temesgen (2008), this study also divides the sample into two groups as high growth and low growth firms. On the basis of capability and capacity, firms showing growth rate above median are categorized as high growth firms and *vice versa*. Median is used as a measure of central tendency because it is a resistant estimator and is not affected by extreme values.

Table 1

*Summary of Variables*

Variables	Label	Description	Reference
<b>Dependent Variable</b>			
<i>Sales Growth</i>	SGR	Ln Gross Sales for the year – Ln gross sales for the previous year / Ln sales for the previous year	Çoban (2014) (Delmar, 1997)
<i>Asset Growth</i>	AGR	Ln Total Assets for the year – Ln Total Assets for the previous year / Ln Total /Assets for the previous year	(Delmar, 1997)
<b>Independent Variables</b>			
<b>Ownership Variables</b>			
<i>Concentrated Ownership (%)</i>	Con_ow	Fraction of shares owned by five largest shareholders together	Perrini et al. (2008)
<b>Firm Specific Variables</b>			
<i>Tangibility</i>	TANG	Ln of Book Value of Fixed Assets	Lee and Temesgen (2008)
<i>Profitability</i>	PRO	Earnings Per Share	
<i>Leverage</i>	LEV	Total Debt / Total Asset	Aggarwal (2015)
<i>Solvency</i>	SOL	Current Assets / Current Liabilities	Aggarwal (2015)
<i>Firm Size</i>	SZ	Ln Number of Employees	Liu and Hsu (2006)
<i>Firm Age</i>	AGE	No. of years firm is in the business	Aggarwal (2015)
<i>Efficiency Ratio</i>	ER	Asset Turnover Ratio = Net Sales / Avg. Total Assets	Aggarwal, (2015)

**3.2.2. Independent Variable**

Concentrated Ownership is measured by the percentage of ownership owned by the largest five shareholders (Perrini et al., 2008; Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001). Firm Specific variables include all the significant determinants of firm growth indicated by Aggarwal (2015) such as tangibility, profitability, leverage, solvency, efficiency, size and age.

**3.3. Estimation Technique**

Generalized Method of Moments (GMM) estimators are used to address the endogeneity issue of the ownership variable. GMM is a generic method for estimating parameters in statistical models; it is dynamic in nature and can easily take care of heteroskedasticity and serial correlation along with not strictly exogenous variables. GMM allows the selection of instruments from within the model. System GMM is augmented version of difference. GMM that uses orthogonal transformed instruments improving the efficiency of results (Arellano & Bover, 1995; Blundell & Bond, 1998). In line with Phungand Mishra (2016), this study uses System GMM for estimations.

### 3.4. Model Specification

The model tests whether the concentrated ownership has an impact on the growth of firms in Pakistan. This paper extends and modifies the model of Perrini et al. (2008). In this study, we have taken concentrated ownership along with the determinants of a firm's growth such as tangibility, profitability, solvency, leverage, efficiency, size and age of the firm and their effect is checked on firm's growth instead of firm's financial performance.

$$\begin{aligned} Growth_{it} = & \alpha_0 + \beta_1 L1\ Growth + \beta_2 Con_{ow_{it}} + \beta_3 TANG + \beta_4 PRO_{it} \\ & + \beta_5 LEV_{it} + \beta_6 SOL_{it} + \beta_7 SZ + \beta_8 ER_{it} + \beta_9 AGE_{it} + \beta Year_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

## 4. DATA ANALYSIS

### 4.1. Descriptive Statistics and Correlation Analysis

Summary statistics of the data are reported in table 2. Only profitability and age of the companies show high standard deviation revealing high variation in the earnings of firms in the sample. Age of companies range 5 years to 155 years, carrying a legacy of knowledge and experience which makes competition difficult for the new firms. Rest of the variables shows a normal range and standard deviation. Correlation matrix shows the direction of association between variables. No correlation between the variables is above benchmark value of 0.7. Leverage, size and age of the firm show negative association with both variables of growth. Furthermore, size of the firm along with its age of the firm show weak inverse association with concentrated ownership which is the main variable of this study.

Table 2

#### *Descriptive Statistics*

Variable	Mean	Std. Dev.	Min	Max
SGR	14.558	1.608	7.092	17.028
AGR	14.446	1.460	10.266	16.998
Con_ow	0.677	0.181	0.169	0.9924
TANG	13.962	1.581	6.116	17.585
PRO	15.744	23.016	-8.217	255.122
LEV	0.494	0.215	0.078	1.005
SOL	1.655	1.052	0.211	5.599
SZ	546	1.147	3.218	7.958
ER	1.397	0.840	0	3.865
AGE	38.525	22.628	5	155.000

Table 3

*Correlation Matrix*

	SGR	AGR	Con_ow	TANG	PRO	LEV	SOL	SZ	ER	AGE
SGR	1.000									
AGR	1.000									
Con_ow	0.318	0.229	1.000							
TANG	0.599	0.637	0.009	1.000						
PRO	0.337	0.284	0.209	0.121	1.000					
LEV	-0.007	-0.006	0.151	0.147	-0.126	1.000				
SOL	0.135	0.109	0.078	-0.138	0.276	-0.678	1.000			
SZ	-0.192	-0.121	-0.114	-0.055	-0.026	-0.174	0.014	1.000		
ER	0.284	-0.067	0.237	-0.064	0.193	0.056	-0.001	-0.173	1.000	
AGE	-0.083	-0.061	-0.019	-0.097	0.218	-0.253	0.190	0.167	-0.068	1.000

**4.2. Regression Analysis**

System GMM estimators are used to check the impact of concentrated ownership on the growth of manufacturing firms in Pakistan. Six regressions are run in a set of two each, first being the impact of concentrated ownership on the growth of firms measured as sales growth and asset growth. Second set targets the high sales growth and high asset growth firms whereas the third set checks the influence of concentrated ownership on the low sales growth and low asset growth. All the three sets of models are dynamic in nature meaning the past growth value is taken as independent variable assuming that it has an impact on the current growth. All models are rightly instrumented but the Hansen-J values are insignificant and the models do not have second order serial correlation.

In first set, Table 4 shows that lagged values of the firm growth are positive and highly significant in asset growth and slightly significant in sales growth model

Table 4

*Regression Results of the Impact of Concentrated Ownership on Firm Growth*

Variables	Asset Growth		Sales Growth	
	Coef.	t-values	Coef.	t-values
Asset Growth L1	0.8403***	24.84		
Sales Growth L1	0.3514*	1.71		
Con_ow	0.5843***	3.04	2.3979**	2.35
TANG	0.0897***	3.94	0.3578**	2.62
PRO	0.0037***	3.84	0.0025	1.27
LEV	-0.2466	-1.34	-0.4550	-1.46
SOL	-0.0575	-1.23	0.0519	0.92
SZ	0.0084	0.35	-0.0002	-0.00
ER	0.0605	1.26	0.2814***	2.83
AGE	-0.0011	-0.62	-0.0046*	-1.76
YEAR	-0.0105***	2.83	0.0328*	1.91
CONS	22.0088***	2.95	-63.2930*	-1.89
GMM Style	[1, 3]		[2, 3]	
IV Style	[4,5,6, 8]		[4 -10]	
AR (2) in first differences:	Pr> z = 0.290		Pr> z = 0.809	
Hansen test	Prob> chi2 = 0.583		Prob> chi2 = 0.443	

*Regressions are estimated using two-step GMM dynamic panel data regressions, orthogonal deviations transformation, and Windmeijer's standard errors correction.*

confirming the dynamic nature of growth variable (Oliveira & Fortunato, 2004). Concentrated ownership is positive and highly significant in asset growth and moderately significant in sales growth indicating that an increase in the level of ownership concentration increases the growth of firm. The results are in consonance to Nguyen et al. (2015), Hu and Izumida (2008) and in line with the agency theory that purports that ownership concentration gives power to the owners to exercise and influence the managers, to pursue their goals (Shleifer & Vishny, 1986).

Owners with vision, power and entrepreneurial orientation will look for growth opportunities and exercise their control to accomplish them. Thus, the alignment effect of concentrated ownership will lead to a higher growth both in terms of asset and sales.

In firm specific variables, tangibility is significantly positive in both models showing that higher the investment in fixed assets, greater would be the growth of the firms. Profitability is positive in asset growth model showing that profitability provides funds needed for further investment. Efficiency ratio is highly significant and positive in sales growth model confirming the fact that increase in asset turnover enables firms to produce more increasing sales growth. This is in line with Penrose Theory that emphasizes on the use of unproductive resources and target slacks. Age of the firm is negative in both the models which is in line with Geroski and Gugler (2004) and Yasuda (2005) who report that firm growth decreases with age. The rest of the determinants are insignificant showing that the impact of these variables on the growth of the firm is not strong enough to be considered significant and cannot be used to make any inference for population. Insignificant variables however display varying behavior in both the models confirming the difference in nature of both the measures of growth (Delmar, 1997). Owners should have clear understanding of the goals they set regarding the growth of their firms and all policies and strategies should be designed accordingly.

In the second set of regressions, the lagged dependent variable is positive and highly significant in high asset growth firms. Concentrated ownership is again positive and highly significant but this time the coefficient values are quite distant apart, showing that concentrated ownership exerts more influence in case of sales growth than asset growth. Perhaps this reflects the strict monitoring and control by concentrated owners that result in alignment effect. The owners and managers target unutilized resources in the firm and this increases efficiency that contributes to high sales growth. Higher efficiency also motivates the owners to further invest in the assets of the firm and to expand the firm size leading to firm's asset growth.

The rest of the firm specific variables show same pattern. Leverage, size and age show negative effect on firm growth which are in line with the findings of Anton (2019) who report similar findings for gazelles. However, leverage is significant at 10% level in high asset growth model whereas size is significant at 5% level in high sales growth model. Increase in debt burden restricts the management from further investment and growth. Age has marked negative impact on growth of the firms which is in line with Hunjra et al. (2018) and Oliveira and Fortunato, (2004). With age and bigger size, growth potential of the firms decreases as they are left with less unutilized resources to tap for further growth. Secondly, owners of the mature firms are not that enthusiastic for the growth as compared to young firms.



Table 5  
*Regression Results of the Impact of Concentrated Ownership on Firm Growth*

Variables	High Asset Growth		High Sales Growth	
	Coef.	t-values	Coef.	t-values
Asset Growth L1	0.9006***	21.39		
Sales Growth L1	0.2704	1.42		
Con_ow	0.4675**	2.55	2.7944***	2.82
TANG	0.1464***	4.85	-0.1204	0.84
PRO	0.0019***	3.64	0.0004	0.08
LEV	-0.3084*	-1.90	-0.7317	-1.02
SOL	0.0042	0.17	-0.1577**	-2.38
SZ	-0.0385	-0.89	-1.5472**	-1.98
ER	0.0794**	2.54	0.6034***	6.13
AGE	-0.0003	-0.12	-0.0192	-0.47
YEAR	-0.0362***	-4.54	0.0686	1.34
CONS	72.2923***	4.78	-117.8878	-1.14
GMM Style	[1, 3]		[2, 3]	
IV Style	[5, 6]		[4,5,7-10]	
AR (2) in first differences:	Pr> z = 0.252		Pr> z = 0.222	
Hansen test	Prob> chi2 = 0.751		Prob> chi2 = 0.618	

*Regressions are estimated using two-step GMM dynamic panel data regressions, orthogonal deviations transformation, and Windmeijer's standard errors correction.*

In the third set of regressions, Table 6 shows that the concentrated ownership is seen to have a positive and significant impact on both growth models which shows that as the level of concentrated ownership increases, the growth rate improves. From the results, it is inferred that these firms possess low level of concentration of ownership or are owned by families that are not interested in growth of the firm but are more interested in the safe continuous existence of the firm (Ding et al., 2011). From Penrose perspective, these firms avoid taking risks and do not strive for growth opportunities as their owners lack the entrepreneurial abilities whereas agency theory points towards higher agency cost due to nepotism that retards their growth. This is also evident from its significant and positive efficiency ratio in case of sales growth that shows that low growth firm can grow better with the increase in efficiency and that can only be attained through strict monitoring and controlling a feature of concentrated ownership. Profitability is seen to have significant positive impact on firm growth in both the models depicting that whenever these firms earn profit, it positively affects firm's growth. These firms are particularly sick units that operate at low level of efficiency. Huge firms possess bundle of unutilized resources that adds to the cost of the firm and these low growth firms face severe difficulty in earning profits. Concentrated ownership with entrepreneurial orientation and motivation can help these firms to perform better.

Table 6

*Regression Results of the Impact of Concentrated Ownership on Firm Growth*

Variables	Low Asset Growth		Low Sales Growth	
	Coef.	t-values	Coef.	t-values
Asset Growth L1	-0.3635	-1.53		
Sales Growth L1	0.0549	0.56		
Con_ow	1.1045**	1.99	1.4548**	2.31
TANG	1.2008***	5.44	0.7398***	13.15
PRO	0.0095***	3.38	0.0070**	2.17
LEV	0.0473	0.13	-1.4908**	-2.10
SOL	-0.0063	-0.12	-0.1638	-1.98
SZ	0.0964	0.60	-0.2035**	-2.34
ER	-0.0798	-0.88	0.6689***	7.38
AGE	0.0025	0.18	-0.0036	-1.63
YEAR	0.0404**	2.28	0.0337***	3.35
CONS	-80.2862***	2.30	-64.2868***	-3.24
GMM Style	[1, 3]		[2, 3]	
IV Style	[4, 5, 7-10]		[4,5,7-10]	
AR (2) in first differences:	Pr> z = 0.396		Pr> z = 0.424	
Hansen test	Prob> chi2 = 0.769		Prob> chi2 = 0.658	

*Regressions are estimated using two-step GMM dynamic panel data regressions, orthogonal deviations transformation, and Windmeijer's standard errors correction.*

## 6. CONCLUSIONS AND IMPLICATION

Current research aims to study the impact of concentrated ownership on the growth of firms. Pakistan Stock Exchange listed firms are selected only from manufacturing sector covering 11 years (2006 – 2016). System GMM is applied to address the endogeneity of the ownership variable and the dynamic nature of the performance variable measured in terms of asset growth and sales growth. The results are in line with Penrose Theory that purports that growth of the firm depends upon the people running the organization and owners with vision and power influence the firms to show growth. According to agency theory, concentrated ownership means tight monitoring which curbs the opportunistic behavior of the managers –the alignment effect and hence, results in firm growth. Concentrated ownership is highly significant and positive in all models of asset growth and sales growth. Firm specific factors behave differently in sales growth models and asset growth models, highlighting the importance and sensitivity of the growth variable. The study has practical implication for stakeholders, particularly investors and policy makers in assimilating the role of concentrated ownership on the growth of the firms in Pakistan. The study is limited to manufacturing firms with growth measured as asset growth and sales growth. Future researchers may explore other sectors with growth measured as employment growth or export growth.

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