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Shareholding Pattern and its Implications for Firm Performance

Abstract

The underlying relation between ownership structure and firm performance has been a well documented and well debated issue in literature of corporate finance. However the area is so widespread that there always exists a possibility for further analysis. As an attempt to contribute we have investigated the influence of shareholding pattern on firm performance using data of National Stock Exchange (NSE 500, India) for the years 2007 to 2016. Using Ridge Regression for analyzing cross section data for 10 consecutive years for two performance measures PBV and ROE, the present study tries to establish the relationship between the above two performance measures and the shareholding pattern across the firms under consideration and several firm specific control variables. The results indicate that relationship between shareholding pattern and performance is not consistent over the years. Among ownership variables, institutional shareholding is more prominent. Other firm specific factors also exert significant influence, few among them being very consistent and pronounced. The insights in the results of the paper can be valuable in corporate restructuring activities especially in emerging markets. The paper analyses the above relationships in newly emerging scenarios in the capital markets – domestically as well as globally.

Keywords: Shareholding Pattern, Firm Performance, Control Variables.

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Introduction

The central theme of this analysis is to see the impact of shareholding pattern on firm value and its profitability. By shareholding pattern we mean how shares are distributed among different shareholders. Holding of shares contains two rights – cash flow rights and voting rights. Cash flow rights are concerned with dividend distribution and capital gain on shares while voting rights are related with selection of board of directors and subsequently decision making. It has been found by different authors in different countries that voting rights may be different from the percentage of shares owned. In most of the companies promoters and insiders hold significant control in spite of minority holding in a company. Similarly, in management controlled firms managers have power of decision making without holding shares. This phenomenon raises the question that with little shareholding and cash flow interest whether owner- managers or managers would make efficient decisions which will benefit all stakeholders and most importantly shareholders. Jensen and Meckling, (1973) has stated that controlling shareholders may invest sub – optimally, since the costs of investing if failed, will be borne by other investors also.

As far as India is concerned, promoters are prominent blockholders and in few companies, financial institutions and government are major shareholders. Khanna and Palepu (1999) considers groups affiliation, lack of transparency and disclosure, presence of equity interlocks and lobbying as major characteristics of corporate governance in India. Thus, corporate governance problems in India are very different than those found in developed countries specially UK & USA. The problem in Indian corporate sector (be it public sector, MNCs or the Indian private sector) is that of disciplining dominant shareholders and protecting minority shareholders (J. R Verma, 1997). However, according to Khanna and Palepu, (2005), concentrated ownership is an outcome of institutional void and if these concentrated owners are not engaged in rent-seeking and entry deterring behavior, there is no intrinsic reason why concentrated ownership is inimical to competition.

With the eradication of licensing policy and opening of the economy to foreigner companies, Indian firms have been in severe need of money to expand and compete with their foreign counter parts. For raising

funds they approach to public as well as institutions and for preserving their status and image they are now forced to follow corporate governance codes. As Khanna and Palepu (1999) have said that promoters holding in Indian firms is higher like any other country in the world but they have changed themselves according to the need of time and created wealth for other shareholders too. Our work contributes with this line of enquiry. It examines the impact of ownership variables on firm performance and value using cross section data of NSE 500 companies for 10 consecutive years. Looking for yearly effect is important for retail investors' point of view because every investment is not long term in nature. We have used exact shareholding by different groups of owners which take even small changes into account. We document that ownerships variables don't exert significant impact for each year and non- monotonic relation is also evident only for some year's data.

Our paper is arranged as follows: Section 1 briefly reviews the existing literature. Data and variable constructions are presented in Section 2. The methodology used and the obtained results are presented in Section 3. Finally, we have presented a brief discussion in Section 4.

Review of Literature

This has been discussed very widely and vividly how shareholding pattern affects performance and value in literature. Initial studies were based on cross – section data. Since the focus of this study is shareholding pattern and firm value, we are more concerned with the empirical researches which examine the relationship between firm performance and value and three ownership variables namely - shareholding by promoters, by institutions and by retail shareholders. There is a series of relevant research works. Demsetz and lenn, (1985), Himmelberg et al. (1999), Demsetz and Villalonga (2001), found no relationship between ownership concentration and firm performance for US firms. Contrary to this Morck et al. (1988), McConnell and Servaes (1990), McConnell and Servaes (1995), McConnell and Servaes and Lins (2008), found a curvilinear relation between managerial ownership and firm value for US firms. Karl Lins (2003) found a non monotonic relation between managerial ownership and firm performance for 18 emerging countries when management is the largest shareholder. He also found that when management's voting rights exceeds cash flow rights, they are entrenched. A curvilinear relation shows that the value of firm rises first with increase in managerial ownership then decreases with further increase and again increases. However range of ownership is different for different authors. There are some authors who found a monotonic relation between the two variables. Leech and Leahy (1991) found a significant positive relation between ownership structure and firm value measured through valuation ratio and shareholders' wealth for UK firms. Similarly Hamid Mehran (1995), Cho (1998), Fahlenbrach and Stulz (2009) observed a linear positive relation between managerial ownership and value of firm for US firms. Dauma et al (2002), in his study of Indian firms found that there was a strong positive relation between the shareholding by directors and their relatives with performance when performance measure is ROA; it is moderated when firm belongs to a group and disappears when performance measure is stock market return. Hamidullah and Shah (2011) found that Tobin's Q is positively related with managerial ownership at lower level while it negatively related with managerial ownership at higher level while Wahla et al (2012) found that agency problems arise due to increase in managerial shareholdings, which ultimately negatively impact the performance of the firms for Pakistani firms. Pathirawasam (2013) found no relation between ownership structure and firm value for Lankan firms. Cho (1995) found that ownership structure affects investment which in turn affects firm value when OLS is used, however when simultaneous equations are used this relationship reversed that is investment affects corporate value which in turn affects ownership structure. Wenjuan, Tian and Shiguang (2011) studying China's civilian-run firms listed on the Chinese stock market between 2002 and 2007, suggest that managerial ownership affects capital structure, which in turn affects firm value.

There are many studies on blockholding and its impact on firm value. McConnell and Servaes (1990) found a quadratic significant positive relation between Q and the fraction of shares owned by institutional investors for US firms, while Morck et al. (2000), found a monotonic relation between the two for Japanese firms. Wiwattangkantang (2001) found that the presence of controlling shareholders is associated with high performance, however their involvement in management is negatively related with performance specially when it is between 25% to 50% limit, while Lins (2003), in his study of emerging countries found that a larger non- management blockholder's presence is positively related with Tobin's Q and they also control the management to be entrenched and reduce their negative impact on firm's value. In a survey of 22 countries Dahya at. el (2006) found that firm value is positively correlated with the fraction of idependent directors unaffiliated with dominant shareholders. Laeven and Levine (2006) argues that there are multiple large owners in one- third of publicly- listed firms in Europe and there is strong negative relation between corporate valuation and dispersion of cash- flow rights across multiple large owners.

In almost all of the countries around the world including USA, UK and other developed countries family control is very common and it has been studied a lot. Agrawal and Nagrajan (1990) found that managers of all equity firms possess more shares in their firms than managers of similar sized levered firms and there is greater family involvement and control also. Villalonga and Amit (2004) have found that the value of the firm will be higher if founder serves as CEO and it will be lower for the firms where descendants serve as CEOs, even in comparison with non family firms operated by management. In their further study in 2010, they found that founding family is more likely to retain

control as it gives the firm a competitive advantage while an individual or non- founding family will retain the control when it has some private benefits of control. Driffield et al. (2007) studied four East Asian countries and found that owner- managed family firms have a positive significant relation with firm value and capital structure.

With the opening of the transition economies for FDI and FII, firms in these economies are facing new challenges and threats as well as new opportunities. Presence of FIIs and more than one controlling shareholders have shown a positive impact on firms' ROA for Thai firms (Wiwattanakantang, 2001). FIIs specially, are more advanced in monitoring techniques, but significant FIIs investment is common only in unaffiliated firms in India (Khanna and Palepu 1999). They have observed a negative effect of DFIs on firm performance in India while FIIs have a significant positive impact. Dauma at el (2002) differentiated between FDI and FII and found that FDI has particularly significant positive impact on the performance of Indian firms. While differentiating between DFIs and FDIs, Amiya Sahu, (2015), has found that FDI has a positive impact on performance for Indian firms and DFIs are not good monitors. The studies on India have shown a mixed result on this matter. Patibandla (2006), using firm level data has shown that foreign ownership has a positive relation with firm value while presence of domestic financial institution and public equity variable has a negative impact. Jayesh kumar has documented that institutional and managerial shareholding affect firm value non- linearly but foreign and corporate shareholders have no impact on firm value. Patnayak's study is about insiders and he has documented a significant non-monotonic relationship between insider shareholding and firm value. Kakani et al. have found that DIIS and public shareholding have a significant negative effect on firm performance whether it is measured through market variables or accounting variable. Using cross section data for the year 1995-96, Sarkar and Sarkar have observed a non linear relation between ownership stake by directors and firm value and a positive effect of foreign equity on it. Deb and Chatuvedula (2004) have also used cross section data to estimate this relationship. Only Jayesh Kumar has used cross section data for seven consecutive years (1994-2000) to see the impact of ownership on firm value.

This study is based on Indian firms, as the country has some unique features of shareholding patterns. It has a well developed capital market and very strict and vigilant regulatory institutions. It is far better in the category of developing nations with more than five thousand companies listed in two most prominent stock exchanges BSE and NSE, which is comparable to developed countries. There are big companies like TCS and RIL with market capitalization of Rs. 496,607 Cr. and 338,607 Cr. respectively. Simultaneously, there are small capital firms like Noesis Industries Ltd. and A T N International Ltd. with market capitalization of Rs .98Cr. and Rs. 1.58Cr. respectively (as on 31st March 2016), which clearly show the width of market. There is huge diversity in companies operating in India in terms of shareholding pattern, size, age, market capitalization and industry. It has stringent laws and regulations for companies to check any kind of fraud and protect shareholders and investors, but so many loopholes and poor enforcement of laws are also big concerns. Cases like Satyam and Kingfisher Airways surface time to time which shake the confidence of shareholders and investors in stock market.

In this backdrop, the objective of the paper is to study whether different categories of the shareholders exert any influence on firm value and performance.

Accordingly following hypotheses have been developed for analysis:

1. H_{01}: there is no impact of promoters' shareholding on firm value.
2. H_1: there is a significant impact of promoters' shareholding on firm value.
3. H_{02}: there is no impact of institutions shareholding on firm value.
4. H_1: there is a significant impact of institutions shareholding on firm value.
5. H_{03}: there is no impact of retail investors' shareholding on firm value.
6. H_1: there is a significant impact of retail investors' shareholding on firm value.

Variables of Interest and Data Collection

The variables used in our empirical analysis can be grouped into three categories,

1. Performance variables: variables that are used to measure company performance and value;
2. Variables that describe the extent of equity ownership of different types of shareholders and
3. Control variables: variables that describe the characteristics of a company which might also have a bearing on its performance. These three sets of variables are described below.

Performance Measures

In this research, we are basically concerned with the shareholding pattern and its impact on firm value; therefore we are relying on two performance measures which are ROE and P/BV ratio.

ROE

It is one of the most used measures to evaluate a firm's performance in corporate finance. It is calculated by taking profit after tax and preference dividend and dividing it by book value of equity, where equity would consist of issued ordinary share capital plus share premium and reserves. However, it has been put up with severe criticism and most significant is its origin. ROE is an accounting measure, so it may be subjected to accounting manipulation. As Wet and Toit (2006) have shown that ROE can be broken into three parts as Earning/sales*Sales/ Assets*Assets/Equity. The biggest problem with ROE is that changing any of these three variables will change it, while in reality facts may be otherwise. According to Wet and Toit (2006), there is very little relationship between ROE and market value. Thus ROE is not a true representative of shareholders' value. Along with this, ROE is also blamed of being short focused and not reflecting time value of money. In spite of all these allegations, ROE is used

prominently and it might be due to its easy availability and understandability as every company reports it in their annual report. Secondly new measures which are suggested such as EVA, have their origin in accounting and up to certain extent these too become subjective. Sometimes, return on net worth, according to Chibber and Majumdar, (1997), if governance influences are at work, should reflect in incentives for management to work efficiently for shareholders.

P/BV Ratio

All the criticism raised against ROE, can be handled with the help of P/BV ratio. This ratio is calculated as market value of equity divided by book value of equity. Market value is the price of a share in capital market times number of outstanding equity shares while book value of equity is the difference between book value of assets minus book value of debt. According to Damodaran (2006) fundamental determinants of P/BV ratio are ROE, pay- out ratio, growth and risk. Market value of equity reflects the market expectation towards the firm's future earnings and growth, so it takes into account time value of money and is long term focused. However, according to Jayesh Kumar (2004), high volatility of the stock market prices gives reasons to doubt the informational efficiency of the market. Insiders have much knowledge about the company and they can use this to manipulate share prices. So, market measures are subject to insiders' manipulation.

Key Variables

We include three ownership variables in our analysis –

1. Promoters and promoter group,
2. Institutional investors and
3. Retail investors.

The importance of promoters in Indian firms is undeniable. They are dominant shareholders and represent their firms. They exercise strategic control and are prime decision maker. Thus they are very important part of the analysis.

There has been much discussion on roles played by institutional shareholders in value creation of a firm by different authors. Some authors have found FDI better than FII on account of the shorter vision of FIIs, whereas some have found FIIs better than DFIs on account of active monitoring by foreign institutions. We club them together because now most of the prominent DFIs in the country are listed in security market and regularly watched (Sarkar & Sarkar, 2000). There are many private DFIs as well as public, so there is a huge competition among them to retain their respective positions. On this account, all the FIs, whether foreign, public or private are compelled to perform.

Retail investors, is a segment which is regularly ignored in literature. On account of their increasing presence in capital market, we have included them in this study. We have measured all the shareholdings in percentage terms.

Control Variables

Along with equity ownership, there are many other factors which affect firm value either directly through product market or indirectly through capital and labour market. In the empirical literature it is customary to control for the effect of external factors to avoid any spurious relation between performance and ownership structure (Sarkar, 2000). The control variables selected in this study are based on the previous studies (Himmelberg et al. (1999), Chibber & Majumdar (1997), Jayesh Kumar (2003)) etc. The control variables used in this study are size, age, net fixed assets utilization ratio, liquidity, debt to equity ratio, research and development intensity, and selling intensity. Description and justification of the variables are given below

Size

Log of sales has been used to measure the size of firms. It is the most used measure of size after total assets. We used this because most of the Indian studies have used it as a measure and it reflects the market power of a firm also. A priori size has an ambiguous effect on firm value. From ownership points of view large companies are difficult to monitor (Himmelberg et.al, 1999). So, it has a negative impact on performance. Simultaneously, economies of scale and scope help in monitoring by top management, as there will be lower cost of monitoring. From technical points of view also, effect of size is not consistent. On the one hand, it provides efficiency through economies of scale and scope and increases profits by reducing overall cost of production and stimulates market power; it also raises organizational inefficiency through red tapism and lack of proper monitoring.

Age

Age has been defined as the numbers of years between the observation year and the firm's incorporation year. As there has been no direct theory on the relation between age and profitability (Patibandla, 2006) the relation is ambiguous. When firm gets older, it learns the market by experience, which helps it in growing faster and sort out many institutional and industry related problems. At the same time older firms are prone to rigidities in adopting new inventions and innovations and miss growth opportunity, which may dent their profitability in long run.

Debt-Equity Ratio

Debt equity ratio is measured as total debt upon total equity. Although initially in Miller – Modigliani framework firm value is considered to be independent of capital structure, debt can be regarded as double edged sword as it leads to distinct effect during different economic scenario. During boom debt is used to increase firm value and shareholders' wealth and helps a firm to grow faster but during recession it is burden to firm. Similarly, if tax saving is big, it will increase firm value, but if the ratio is sufficiently large it will increase cost of capital and restrict management to make some value enriching investment.

Liquidity

Liquidity in this study liquidity has been measured through cash to current liability ratio that is quick – asset ratio. Liquidity reflects firms' as well as industry attribute as few industries necessitates firms to hold a good amount of cash. Simultaneously it reflects the management ability to efficiently manage working capital and minimize the cost of holding cash.

Liquidity is expected to have a positive relation with firm value because it helps firm to grab profitable investments even in lean time. Efficient liquidity management also works as a shield against high cost of capital.

Net Fixed Asset Utilization Ratio

This ratio has been measured through net sales to net fixed assets. It assesses the operating efficiency of the fixed assets that is how well fixed assets minus depreciation are being utilized. It is typically used to control for capital intensity as few industries are more capital intensive to others. From ownership point of views, high capital intensive firms are easy to monitor as fixed assets value and total sales can be easily found from financial data, so it will have a positive relation with firm value. However, there are contrary arguments that as investors are more cautious about intangibles; high capital intensity might lead to poor governance.

Research and Development Intensity

In this study R&D intensity has been measured through R&D expenses to total sales ratio. Similar to liquidity it has a capacity to reflect industry as well as firm attributes because firms with high R&D expenses are expected to perform better and capture more market with continuous improvement in their products. High R&D is also an industrial attribute as few industries such as pharmacy and consumer goods require regular refinements in products to retain their market power and lure customers.

Advertising Intensity

This is defined as ratio of selling expenses to total sales. Along with liquidity and R&D it also captures the industry as well as firm attribute and is expected to have a positive relation with firm value. High advertising expenditure helps a firm in brand building and gain over competitors. Advertising intensity with R&D also controls for intangibles as they can be hardly measured through total sales or total assets. These two factors can be used as a source to fund diversion by management as their impact is difficult to measure, so may exert a negative relation with firm value as well.

Beta

Beta is a measure of systematic risk associated with stock return. It is calculated by regressing stock return on return of benchmark. Since it gives the sensitivity of return to market and economic factors, we have included it in the model to control for the market and economic factors. Demsetz and Lenn (1985) has put that economy wide events such as the rate of growth of money supply or fluctuations in government tax-expenditure flows are beyond a firm's control and even this more distant and less firm-specific instability is likely to call forth more concentrated ownership.

National Industrial Classification (NIC) Codes

In this analysis we have included dummies to control for industry effects based on NIC categories. According to the economic activities of the firms we have categorized them in various sections of NIC. There are 21 sections, 88 divisions, 238 groups, 403 classes and 1304 sub-classes in NIC-2008. Inclusion of industry effect in the analysis is crucial as macro variables affect different economic activities distinctively and so the firms. Again each industry faces distinct product and labour market constrains. To capture the peculiar features of each industry, it is important to classify firms according to their respective economic activities.

Source of the Data

The financial statement and capital market data for our research are obtained primarily from databases maintained by Centre for Monitoring the Indian Economy (CMIE). It was established in 1976. CMIE's software database package which is used to collect the data is known as PROWESSIQ. The ProwessIQ database consists of financial data of all listed as well as a large set of unlisted companies built from the audited reports of the companies and information submitted to ministry of company affairs in case of listed companies since 1989. In case of listed companies, the database also includes market data of these companies.

National Stock Exchange (NSE) Official Directory was used to crosscheck the data set. Ownership data were the same as reported in annual data, but there were some discrepancies in data like advertising and research and development expenses. We have followed the Prowess database for the present analysis.

Sample

This analysis is based on NSE 500. For getting sample of NSE 500, we first took all the companies of NSE 500 as on 31 March 2016. To increase the sample size we further added all the companies which have been in NSE 500 for at least once during the period from 31 March 2007 to 31 March 2016. To get this data we first get all the inclusions and exclusions in NSE 500 during those periods which were 678 in counts. We then remove all the duplicates in this inclusion exclusion data, which gives us 528 unique companies. When we merge this list with NSE 500 as on March 31, 2016, we got the list of 834 companies which have been part of NSE 500 during that period. We removed further 154 companies for the unavailability of data on major factors like ownership, PBV ratio, and RONW as many companies were merged and non-existent, so their data were not available even for a few consecutive years. Thus we are left with 670 companies. From this set of companies, 85 companies were further removed as they belonged to banking services, auto finance services, housing finance services, infrastructure finance services, and several other financial services. Almost all these finance companies had very low equity base as they are highly leveraged institutions. We also removed central and state government owned companies which were 41 excluding financial institutions. Final analysis is based on the unbalanced dataset of 544 companies. For 544 companies we have 5440 observations, but for few companies, ownership data for all categories were missing for some years, so we dropped them. For some companies ROE and PBV ratios were missing. For some companies data on sales were either missing or zero. We removed such

observations. This left us with 4893 observations pertaining to 537 companies.

Descriptive Statistics

Table -1: Section- Wise Classification of Sample

NIC Category	Name of the Category	No. of Companies
A	Agriculture, forestry and fishing	3
B	Mining and quarrying	7
C	Manufacturing	319
D	Electricity, gas, steam and air conditioning supply	14
F	Construction	52
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	23
H	Transportation and storage	13
I	Accommodation and Food service activities	6
J	Information and communication	66
M	Professional, scientific and technical activities	9
N	Administrative and support service activities	19
P	Education	3
Q	Human health and social work activities	5
R	Arts, entertainment and recreation	5
TOTAL		544

Table-2: Year-Wise and Category-Wise Classification of Data

Nic sections	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
A	3	3	3	3	3	3	3	3	3	3	30
B	5	6	7	7	7	6	7	7	7	7	66
C	285	290	293	296	301	306	309	307	307	303	2997
D	8	8	8	12	12	12	12	12	12	14	110
F	28	39	40	42	49	50	51	50	51	51	451
G	13	15	16	15	16	16	17	19	19	20	166
H	9	9	9	9	9	9	9	9	10	13	95
I	4	4	4	5	5	5	5	5	5	6	48
J	53	57	57	62	63	63	63	60	61	60	599
M	4	6	6	5	6	7	7	8	8	9	66
N	18	18	18	19	19	19	19	19	19	18	186
P	2	2	2	2	2	2	2	2	2	3	21
Q	1	2	2	2	2	3	3	3	3	4	25
R	2	3	3	3	3	3	3	3	5	5	33
TOTAL	435	462	468	482	497	504	510	507	512	516	4893

We present the structure of sample according to NIC classification. It can be noticed that most of the firms listed in NSE 500 belong to manufacturing sector.

Empirical Analysis

Methodology

We have estimated the following equation for each year from 2006-07 to 2015-26.

$PBV = \beta_0 + \beta_1*Promoters_i + \beta_2*Promoters_i^2 + \beta_3*Institutions_i + \beta_4*Institutions_i^2 + \beta_5*Retail_i + \beta_6*Age_i + \beta_7*LnSales_i + \beta_8*D/E\ Ratio_i + \beta_9*Util\ Ratio_i + \beta_{10}*Liquidity_i + \beta_{11}*Ad_i + \beta_{12}*R\&D_i + \beta_{13}*Beta_i + \beta_{14}*\ Nic\ Codes_i$ and

$ROE = \beta_0 + \beta_1*Promoters_i + \beta_2*Promoters_i^2 + \beta_3*Institutions_i + \beta_4*Institutions_i^2 + \beta_5*Retail_i + \beta_6*Age_i + \beta_7*LnSales_i + \beta_8*D/E\ Ratio_i + \beta_9*Util\ Ratio_i + \beta_{10}*Liquidity_i + \beta_{11}*Ad_i + \beta_{12}*R\&D_i + \beta_{13}*Beta_i + \beta_{14}*\ Nic\ Codes_i$

First of all, we have regressed the PBV and ROE on the explanatory variables. Since the data are cross section, problem of outliers and heterogeneity was expected. To test the heterogeneity we used Bruesh - Pegan test and found very significant level of heterogeneity. To overcome the problem we used box plot statics produced in R software firstly to remove outliers from both the dependent variables and then tested again for insignificant BP coefficient. Since we have used all the three ownership variables simultaneously which together constitute total of shares holdings, high level of multicollinearity was also expected. We calculated the variance inflation factor for each variable, which was very high for all the ownership variables and their square terms. We wanted to keep all these variables in the model simultaneously. However with the very high level of multicollinearity OLS doesn't produce reliable estimates. So to get a reliable measure of coefficients we have used Ridge regression method. In OLS, the regression coefficients are estimated using the following formula as given below.

$$B = (X'X)^{-1} *X'Y$$

While in ridge regression we proceed by adding a small value of k to the OLS matrix, that is

$$B = (X'X + kI)^{-1} *X'Y$$

It's a diagonal matrix of penalty which is added.

Results

Table- 3: Regression Results When Dependent Variable Is PBV

Years / Variables	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Promoters	-0.021	-0.0127	-0.012	-0.016	-0.005	-0.0327	-0.017	-0.004	-0.011	0.009
t-values	0.287	0.529	0.365	0.040*	0.490	0.076.	0.300	0.839	0.441	0.816
Prom^2	0.0004	0.000	0.0002	0.0002	0.0001	0.0007	0.0004	0.0002	0.0004	0.0002
t-value	0.132	0.948	0.323	0.014*	0.092.	0.004**	0.055.	0.449	0.026*	0.262
Institutional	0.037	0.0539.	0.024	0.029	0.014	0.050	0.040	0.032	0.022	0.027
t-values	0.136	0.0316*	0.159	0.003**	0.111	0.030*	0.048*	0.233	0.181	0.568
Inst ^2	-0.0004	-0.0012	-0.0004	-0.0002	0.000	-0.0004	-0.0003	-0.0002	0.0002	-0.0008
t-value	0.434	0.054.	0.323	0.366	0.717	0.504	0.459	0.671	0.512	0.689
Retail	-0.0068	-0.032	-0.005	-0.006	-0.006	-0.0037	-0.014	-0.021	-0.007	-0.036
t-values	0.664	0.046*	0.617	0.252	0.257	0.780	0.250	0.211	0.499	0.262
Age	-0.004	0.0006	0.017	0.003	0.010	0.0127	0.007	0.012	0.0008	0.030
t-values	0.62	0.939	0.003**	0.320	0.001**	0.085.	0.285	0.1520	0.882	0.067.
Sales	0.513	0.315	0.184	0.209	0.159	0.193	0.236	0.086	0.198	0.103
t-values	0.000***	0.004**	0.008**	0.000***	0.000***	0.036*	0.004**	0.410	0.007**	0.603
Debt ratio	-0.0282	0.0942	0.097	-0.062	-.101	0.0039	0.037	0.003	-0.033	0.194
t-values	0.198	0.472	0.180	0.178	0.064.	0.637	0.000***	0.925	0.052.	0.000***
Util. ratio	0.0056	0.026	0.002	0.006	0.0029	0.0036	0.001	0.002	-0.0018	0.001
t-values	0.244	0.102	0.808	0.166	0.419	0.638	0.815	0.794	0.496	0.855
Liquidity	-0.132	-0.102	0.030	-0.014	-0.067	-0.0037	0.072	-0.151	0.256	-0.032
t-values	0.557	0.226	0.461	0.659	0.335	0.982	0.673	0.488	0.071.	0.891
Adver. Intensity	5.384	9.754	2.765	3.108	2.997	-0.080	8.166	9.012	2.239	14.926
t-values	0.1727	0.013*	0.025*	0.012*	0.138	0.766	0.001**	0.001**	0.298	0.032*
R&D intensity	17.436	-3.834	-0.218	7.882	4.268	-0.507	26.0	17.014	20.158	143.79
t-values	0.137	0.599	0.966	0.0149*	0.191	0.939	0.000***	0.000***	0.002**	0.000***
Beta	-0.614	-1.276	-1.761	-0.765	-0.823	-2.530	-2.194	-2.588	-1.657	-1.253
t-values	0.214	0.045*	0.000***	0.002**	0.000***	0.000***	0.000***	0.000***	0.000***	0.455
Industry effect	0.311	2.716	0.950	0.896	0.888	1.730	1.104	3.976	1.853	2.032
R^2	0.214	0.194	0.161	0.303	0.276	0.200	0.401	0.225	0.321	0.682

Table- 4: Regression Results When Dependent Variable is ROE

Years / Variables	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Promoters	0.010	0.3066	0.181	0.045	0.074	0.047	0.016	0.251	-0.0004	-0.020
t-values	0.889	0.105	0.089.	0.528	0.268	0.491	0.784	0.072.	0.995	0.748
Prom^2	0.0005	-0.0005	-0.0006	0.0005	-0.0000	0.0001	0.0001	-0.0008	0.001	0.0007
t-value	0.634	0.827	0.663	0.989	0.998	0.998	0.997	0.992	0.983	0.986
Institutional	0.053	-0.342	-0.134	-0.053	-0.082	-0.025	-0.013	-0.390	-0.057	-0.042
t-values	0.533	0.126	0.309	0.039*	0.001**	0.294	0.500	0.000**	0.025*	0.070.
Inst ^2	-0.0003	0.007	0.016	0.0005	0.0002	0.0007	0.0005	0.0089	0.001	0.001
t-value	0.879	0.188	0.694	0.474	0.771	0.365	0.464	0.000**	0.055.	0.044*
Retail	-0.060	-0.0489	-0.094	-0.0065	-0.014	-0.032	-0.006	0.054	0.054	0.066
t-values	0.289	0.728	0.121	0.905	0798	0.523	0.956	0.411	0.360	0.155
Age	-0.024	-0.068	0.016	-0.026	-0.032	-0.075	-0.028	-0.049	-0.049	-0.044
t-values	0.433	0.358	0.694	0.930	0.902	0.786	0.901	0.926	0.872	0.872
Sales	2.039	2.346	2.572	2.093	1.90	1.238	1.044	1.823	1.870	1.418
t-values	0.000**	0.017*	0.000**	0.002**	0.001**	0.078.	0.048*	0.047*	0.012*	0.028*
Debt ratio	-1.048	-5.0	-7.103	-1.228	-3.234	-4.194	-1.814	-9.763	-5.086	-6.145
t-values	0.097.	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
Util. ratio	0.030	0.256	0.079	0.026	0.033	0.030	0.016	0.015	-0.0004	0.003
t-values	0.073.	0.086.	0.271	0.917	0.944	0.954	0.975	0.989	0.999	0.991
Liquidity	1.105	-0.591	-0.250	-0.240	-0.160	-0.352	0.996	-0.049	1.407	0.467
t-values	0.165	0.440	-0.432	0.978	0.982	0.678	0.883	0.996	0.881	0.958
Adver. Int.	4.533	76.80	-2.293	-3.554	-16.81	0.837	4.953	8.742	2.810	-0.916
t-values	0.742	0.031*	0.561	0.881	0.061.	0.968	0.775	0.707	0.913	0.972
R&D int.	-2.399	-106.33	-66.585	42.226	11.515	-37.793	-24.761	8.534	20.30	13.935

t-values	0.951	0.118	0.103	0.000***	0.000***	0.000***	0.000***	0.002**	0.000***	0.000***
Beta	-1.817	-3.70	-10.548	-6.893	-8.612	-7.517	-7.234	-9.222	-5.917	-4.150
t-values	0.300	0.509	0.002**	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***	0.000***
Industry effect	3.950	-4.288	5.092	4.976	9.010	12.698	9.656	2.357	-0.537	4.220
R^2	0.215	0.144	0.432	0.270	0.353	0.317	0.278	0.346	0.380	0.397

The Empirical Findings

ROE has been used in the present paper as a firm performance measure and PBV as valuation measure to assess the impact of shareholding pattern on yearly basis. Three components of ownership have been considered: equity ownership by promoters, equity ownership by institutions and equity ownership by retail investors. For each year of the sample period we have estimated the impact of ownership and control variables on both the above performance variables.

Ownership Variables

The results presented, in this study suggest that, for Indian Firms, performance and ownership is not consistently related. We find that results vary across years in case of ownership variables. For PBV, shareholding by promoters is negative for eight years however it is significant only in the years 2010 and 2012. Square terms of promoters are positive and significant in the years 2010 to 2013 and 2015, which shows the possibility of presence of non monotonic relation between promoters' shareholding and value of the firm. Institutional shareholding exerts significant positive impact during the years 2008, 2010, 2012 and 2013 however their squares are always negative and insignificant. As far as retail holding is concerned its impact is always insignificant and negative except for the year 2007-08, a year which was very volatile as far as stock market is concerned.

Analysis relating ROE to the level of promoters' shareholding shows that it is not impacted significantly in general by the level of promoters' shareholding but for the year 2014 shareholding pattern was found impacting ROE positively. Square terms are also never significant. Here it was found noteworthy that the impact is positive for all the years except 2014-16, while it was negative in the case of PBV except the year 2015-16. However institutional holding has significant and negative impact for the years 2010, 2011, 2014, 2015 and 2016. Square terms are also significant for the years 2013- 16. Retail investors here have mixed impact but it is never significant in the case of ROE.

Control Variables

As far as control variables are concerned, utilization ratio and liquidity are rarely significant on both the measures. But sales, debt ratio, advertising and R& D intensity and beta are generally highly significant. While, sales always have positive impact, beta has negative impact and advertising and R& D intensity show mixed ressults. Debt produces contradictory results. In the case of ROE its impact is always negative and significant, but in the case of PBV it has mixed impact. Sometimes positive, sometimes negative and is not significant most of the times.

Discussion

This study has examined empirically the relationship between ownership structure and firm performance. Three aspects of ownership have been considered - equity ownership by promoters, equity ownership by institutions and equity ownership by retail investors. The results presented, in this study suggest that, for Indian Corporate Firms, performance and ownership is roughly unrelated when we study it in the short term. The results of similar studies on Indian data have produced varying results. The contradictory results can be accounted for by differences in time periods studied and in research designs. Definition of ownership variables have been changing time to time. Given the lack of previous work examining the effects of ownership structure on performance of Indian Corporate Firms, with cross section data, it is difficult to make comparison between this and other studies. Some comparison can be made with Khanna and Palepu (1999), Sarkar and Sarkar (2000), Jayesh kumar (2003), Deb and Chaturvedula (2003), whose analysis is based on cross section data. Sarkar and Sarkar (2000) have studied the period of 1995-96 and found that managerial shareholding which they have considered as comparable with owners shareholding, significantly affects firm value. Similarly FIIs have significant impact. Similar is the result revealed by Khanna and Palepu (1999). While analyzing Indian firms, they have also documented that insiders and FIIs significantly and positively affected firm performance for the year 1993. Deb and Chaturvedula (2004), found positive but non-significant impact of ownership concentration on firm value. Very close to our study is the analysis performed by Jayesh Kumar (2003) which is also consistent with the present study. In his study it was found that performance and ownership were nearly unrelated in cross section analysis. One of the explanations of such unrelatedness could be that shareholding pattern doesn't change much in short periods. However, given the contradictory results produced by the current study and the prior Indian research, it is apparent that there are many questions relating to the relationship between share holding pattern and performance of the firm, which remain unsolved.

In our analysis, we have found promoters' shareholding is negatively impacting PBV although it is significant for two years only. We can infer that market favors dispersion across various shareholders. In the case of ROE, their impact is, although positive, but again significant for only two years. ROE is an operating measure and a positive impact on ROE signals that as far as actual functioning of a business is concerned presence of promoters is valuable. One of the possible explanations of insignificant effect of promoters' shareholding for short period, as in our analysis, could be their roughly unvarying share over time. Influence of institutional shareholding is found to be more pronounced in our analysis. We have clubbed all kinds of institutional shareholding together and as it is observed that FIIs normally shift their

shareholdings frequently, this could be one reason of institutional shareholding's impact being more significant in the short run. Institutional shareholding has a positive impact on PBV while it is negative for ROE. This is just the opposite of promoters influence. It indicates that although market prefers their presence, they are not a deemed favorable for actual operations. One justification of such occurrence could be in our definition of institutional shareholding that we have taken all of them together. Various authors have categorized them in different groups. It has been seen that FIIs are good monitor than DFIs (Khanna and Palepu 1999, Sarkar and Sarkar 2000, Amiya Sahu 2013). But one argument here is that FIIs in general are not considered as long term investors and they flee when they perceive economic fallout. As Chhibber and Majumdar (1999) have also pointed that foreign ownership displays superior performance only when property rights devolve to foreign owners at sufficiently high levels of holdings. Retail investors are usually very small and dispersed. Their effect on firm value is found insignificant and negative in every study of this line. In our analysis they have been found to be significantly but negatively affecting firm value for the year 2007-08 only, a year of very volatile economic scenario. For ROE their impact is positive sometimes but always insignificant. We can infer that although for few firms their shareholding is considerably large; their role is negligible whether it is capital market actions or actual running of a firm. As suggested by Kakani at el., (2005) they often do not have the incentives or the capability to monitor firm performance.

As far as firm specific factors are concerned, most of the firms' characteristics don't show consistent impact except size, advertising intensity and beta in the case of PBV and size, debt equity ratio and beta in the case of ROE. Size which is measured through total sales of the firm has always shown positive impact on both the performance measures. Since ROE is derived from sales, impact of size on ROE is direct but it looks like that market also rewards them as propeller of growth. Debt has always a negative and significant impact on ROE that is higher the debt equity ratio lower the profit of a firm. Shield of tax doesn't seem to work as per our analysis. In the case of PBV, its influence is not specific. It indicates that share market does not have much apprehension from debt. In our analysis, for two years the impact of debt is very significant in the case of PBV, when it is positive.

Impact of age is found to be positive in the case of PBV except for the year 2006-07, a year of financial turmoil and it is significant also sometimes. It suggests that market puts more trust on established firms, however when we come to ROE, age inertia seems to work. Its influence is always negative although insignificant. Utility ratio, a measure of efficiency in our analysis has shown most surprising outcome. Although its impact is always positive in case of both of the measures it is rarely significant even in the case of ROE. In an increasingly volatile competitive environment, firms that remain liquid have the flexibility to adapt rapidly to changing circumstances; and this adaptability seems likely to have a beneficial effect on profitability (Goddard, 2005). But this argument is not well supported in the present analysis as its impact on both the performance measures is neither consistent nor significant. Advertising intensity and R&D intensity reflect partly the firm specific and partly the industry specific characteristics. The influence of advertising is more pronounced in the case of valuation measure while R&D is more effective in case of both. Intangible assets are considered to enhance firm value in long run but their impact is difficult to measure, so are considered to be source of fund expropriation. Thus, they work both ways. In our analysis also, they have exerted mixed effect however mostly positively.

Beta is a measure of risk related with market and economy wide fluctuations. Impact of beta was expected to be negative and this is also the case in the present study. The significant impact of beta on PBV can be considered to be coming from the fact that in calculation of beta, price of share is also a variable; but its negative sign infers that market doesn't like highly risky firms or perhaps risky firms are not generating sufficient profit to match their expected risk. It is also significant and negative in the case of ROE, which reflects that macro variables are important in determining a firm's performance.

Conclusion

The central idea of the paper was to understand the causal relation between shareholding pattern and shareholders' wealth in the short term. Analyzing three categories of shareholders, the present study has found that the results are contradictory for the two performance measures under consideration as capital market oriented PBV is more influenced by institutional shareholding than other components of equity whereas operating measure of firm performance, ROE, is relatively more affected by promoters' prominence.

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