

**Project Dissertation Report on**

**OWNERSHIP PATTERN AND CORPORATE  
GOVERNANCE OF INDIAN BUSINESS  
GROUPS**

**Submitted By:**

**Malvika Paliwal**

**2k16/MBA/27**

**Under The Guidance Of:**

**Dr. Sonal Thukral**

**Assistant Professor**



**DELHI SCHOOL OF MANAGEMENT**

**DELHI TECHNOLOGICAL UNIVERSITY**

**BAWANA ROAD DELHI 110042**

**APRIL -MAY 2018**

## DECLARATION

I, **Malvika Paliwal**, student of MBA Batch 2016-18 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that Project Report on **Ownership Pattern And Corporate Governance of Indian Business Groups** submitted in partial fulfilment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Malvika Paliwal

Place: New Delhi

## CERTIFICATE OF INSTITUTE

This is to certify that the project titled “**Ownership pattern and Corporate governance of Indian Business groups**” is a bonafide work carried out by Ms Malvika Paliwal of MBA 2016-18 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfilment of the requirement for award of the Degree of Masters of Business Administration.

Signature of Guide  
(DSM)

Signature of Head

Place:

Date:

Seal of Head

## **ACKNOWLEDGEMENT**

First I would like to thank Dr. Sonal Thukral , for giving me the opportunity to do a project under her guidance. I would also like to express my gratitude to Dr. Archana Singh for her valuable insights. For me it was a unique experience to work upon the Ownership pattern and corporate governance of Indian Business groups (After 2008 Crisis). It also helped to get back my interest in management, research and to consider them as alternate plans for future career. At last I would like to thank Head of Department, Delhi School of Management, Dr. Rajan Yadav for allowing me to do this along with everyone who supported me throughout the course of this MBA project. I am thankful for their aspiring direction, invaluable constructive criticism and other advices which helped me to complete the project

## EXECUTIVE SUMMARY

The business group as an organizational type is one amongst the numerous distinctive business structures that exist within the international economy. Literature geared toward understanding whether or not group-affiliated companies function differently from standalone companies, more so with reference to basic corporate finance decisions like investment, funding and reportage has remained scarce. It's in this context that we tend to answer different empirical questions based on Indian firms, aim to know and provide answers to some unresolved queries associated with how group-affiliated companies differ from standalone companies when making finance choices during the times of an economic event.

In the study we try to examine the relationship between ownership structure and performance of the firms on the basis of the level data available for an emerging market like India after the world economy is hit by an event of importance like the crisis. The focus is on previously unexplored phenomena of the types of business group and how they behave differently. An examination of about 31 Indian firms which are listed on BSE Sensex for a period of 8 years was done. These companies were chosen because they represent the Indian economy and have the targets market capitalisation. We document the hypothesis that the firms with concentrated shareholding perform better after the time of crisis during the recovery period.

From the findings we get that the groups with already higher promoters share hold showed negative relation with the firm's performance, this can be attributed to the fact that public invests more in the firm with distributed holding and because of their larger returns they started investing more in concentrated group holdings and hence the overall promoters share decrease over time. On the other hand for widely held

groups the promoters shareholding is positively related with firms performance, because public is reluctant to further invest in it without managements control, during the time of crisis.

Therefore the hypothesis that concentrated shareholding perform better after the time of crisis during the recovery period stands only true for one kind of group.

Also it can be seen that the characteristics of different type of business groups are highly different from each another, which add to the fact that we need to see these groups differently to understand them better.

# CONTENTS

1	INTRODUCTION.....	1
1.1	What is a business group? .....	1
1.2	Ownership Pattern in India .....	2
1.3	Economic crisis of 2008.....	4
1.4	Reason for the 2008 global crisis .....	5
1.5	Industry performance in India after crisis.....	6
1.6	Objective of the study .....	7
1.7	Scope of the study .....	7
2	REVIEW OF LITERATURE.....	9
2.1	Classification of Business Groups .....	9
2.2	Financial performance Indicator for Business Groups .....	10
3	DATA AND RESEARCH METHODOLOGY .....	12
3.1	Type of Research .....	12
3.2	Source of Data.....	12
3.3	Identification of business groups .....	13
3.4	Sample Period .....	13
3.5	Determining Financial performance.....	14
4	INTRODUCTION TO RESEARCH PROBLEM.....	15
4.1	Statement of Problem.....	15
4.2	Research Hypotheses .....	15
4.3	Methodology .....	16
5	ANALYSIS.....	18
5.1	Profile of companies in BSE Sensex.....	18
5.2	Classifying the companies.....	20
5.3	Shareholding Pattern.....	21
5.4	Tobins Q variation .....	22
5.5	Effect of type of Firm on performance in recovering from an economic crisis .....	23

6	FINDINGS .....	30
7	CONCLUSION .....	32
7.1	Limitations of the study.....	33
7.2	Directions for Future Research.....	33
8	REFERENCES.....	34
9	APPENDIX.....	36



## List of Figures

Figure 1 Separating business groups from other firm networks .....	10
Figure 2 Distribution of different types of industries .....	19
Figure 3 Average Age of the companies within the Index .....	20
Figure 4 Promoter Shareholding pattern over a period of 2008-2015 ..	22
Figure 5 Tobins Q variation over the period of 2008-2015 .....	22

## List of Tables

Table 1: Operational definition of the variables used .....	17
Table 2 Mean and Median shareholding percentage .....	23
Table 3 Mean and Median Tobins Q and their change percentage ....	24
Table 4: Regression statistics for family owned firms.....	25
Table 5: Regression Statistics for state owned firms.....	27
Table 6: Regression Statistics for Widely held firms .....	28
Table 7: Raw data regarding Public shareholding of the companies ..	36
Table 8: Tobins Q ratio for Sensex Listed companies.....	39

# 1 INTRODUCTION

The study talks about the relationship between ownership structure and performance of the firms on the basis of the level data available for an emerging market like India after the world economy is hit by an event of importance like the crisis.

India was chosen because very few studies have been done on the business groups present within the country. Since the firms in India were less affected by the crisis as compared to other parts of the world, the study tried to identify nature of group as factor to this resistance.

For conducting the study about 31 Indian firms which are listed on BSE Sensex are chosen and analysed for a period of 8 years after the crisis on the basis of the groups they belong within. These companies were chosen because they represent the Indian economy and have the largest market capitalisation. We use the hypothesis that the firms with concentrated shareholding perform better after the time of crisis during the recovery period.

## 1.1 What is a business group?

There have been various studies done on identifying the exact definition of business groups, however still there is no accepted definition in the literature. There have been several definitions which identify the relationship between business groups and help them to distinguish from the firm networks which are present widely. Leff defines a business group as “a group of companies that does business in different markets under a common administrative or financial control” and which are “linked by relations of interpersonal trust, on the basis of a similar personal, ethnic or commercial background” (Leff, 1978). There have been some definitions given specifically with respect to Indian business houses too, Encarnation is one of the people who used business houses as a means of description for multiple relationships

that are present:”In each of these houses, strong social ties of family, caste, religion, language, ethnicity and region reinforced financial and organizational linkages among affiliated enterprises” (Encarnation, 1989)

In India different committees were formed to define business groups, one of them was given by Monopolies Inquiry Commission (MIC) which stated that a company is a part of a business group, if it has more than 50 % controlling stakes within it (GOI,1965). It also defined 75 groups within India with an asset threshold of more than 5 crore in 1965, called them ‘large business groups’.

Another definition was given by Hazari (1967) where he said that a business group can be defined with the help of ‘concentric circles series’ in which companies would be divided into different circles, inner and outer. Core companies are placed within inner circles and have decision making powers. The companies placed outside the circle are where the group has minority shares or an equal participation. He also identified about 20 groups and called them complexes.

## **1.2 Ownership Pattern in India**

In 1947, Indian economy underwent many phases of major structural changes when India gained independence against United Kingdom. In the 1st part, in the Nineteen Fifties, the assets controlled by British commerce houses were transferred to Indian stakeholders. Later in second part, from the late Nineteen Fifties through the Nineteen Seventies, the Indian government started intervening within the economy through a range of measures that together came to be known as the “Licence rule.” Finally, there was an economic reform era, which began with little steps of liberation within the Eighties and picked up speed in the Nineties and led to a serious depression in 1991.

This was during this time when the economy was governed by these considerably different policies over time, business groups in form of family owned, state owned and widely held firms continued to lead the Indian commercial setting.

In India corporate ownership is dominantly clustered within the hands of domestic individuals and promoter teams, international folks, or state. a lot of of the family and other domestic holdings might be traced back to the times of British Managing Agencies (Balasubramanian, 2010), arguably distinctive to India that enabled essentially British merchants and a few Indian businessmen to spawn and nurture totally different enterprises that eventually grew into big companies in their title.

After 1991, the economy of India was deregulated, one of the key objectives of the govt. policy were to draw in foreign institutional investors. To achieve this, the govt. established the Securities and Exchange Board of Asian country (SEBI), shaped closely on the lines of U.S. Securities Exchange Commission. These changes, as well as the major liberation of product markets, led to new opportunities and challenges for Indian groups. A number of first-generation entrepreneurs were able to faucet into the capital markets to exploit new business opportunities.

Even though the growth of capital markets and also the liberation and globalization of the Indian economy have given rise to the birth to many new entrepreneurial companies, a number of the old family business firms have also accustomed themselves and have matured throughout this era. The foremost outstanding among them is the Tata group that continues to be the most important business cluster in Asian economy. The Tata group has been able to exploit several of the new trade opportunities most important ones being software and

telecommunication. Today, Tata consultancy Services, one of the Tata group firms, is the country's largest information technology services company, and Tata telecommunication is one amongst the most important telecommunication companies in India.

### **1.3 Economic crisis of 2008**

The Global monetary crisis that started in 2008 is the latest within the series of economic crises to adversely impact world economies. In contrast to the past few crises, this crisis has not spared any of the countries or market sectors, and has ruined economies that were historically sturdy. Although the crisis is almost at its end, it's extensively recognized that among the financial crisis of the previous hundred years, only the great Depression of the Thirties had a lot of severe and prolonged impact on global economy compared to this economic disruption. The thing that started as an overly loose financial policy within the Nineties in major developed economies transformed into international imbalances and a full-blown monetary and economic crisis for all the economies of the globe.

Beginning in 2004, the United States central bank started contracting the credit markets by increasing interest rates in response to rising inflation, which caused the crisis within the sub-prime mortgage market. This quickly unfolds to the complete banking sector within the United States and different advanced economies, leading to the liquidation of many major banks. The banking sector within the advanced economies is calculable to possess lost up to \$2.8 trillion between 2007 and 2010.

The contagion within the banking sector caused a near termination of the credit markets and also the u. s. economy went into a severe recession that was mirrored within the securities markets. The crisis was not restricted to the u. s. market - it quickly unfold to any or all

alternative markets, including rising markets, through each money channels (i.e., flow of funds) and real channels.

The advanced economies, together with US, UK and Germany, were growing steadily before the crisis, however deteriorated considerably in 2008 and 2009. These economies are projected to grow in 2010, however at a awfully small rate. The rising economies as a bunch and developing Asian countries were growing at spectacular rates within the years leading up to the financial crisis, but the growth rates were curtailed in the succeeding periods. Though they're projected to grow quicker than the advanced economies in the next few years,

It took time for them to match the growth rates prior to the economic crisis.

#### **1.4 Reason for the 2008 global crisis**

The main cause of the 2008 global financial crisis was identified as US subprime crisis. The main contributors to the subprime crisis in USA which is attributed as the major reason for the global financial crisis are often summed up as follows.

- i) The low rate of interest charged by USA banks.
- ii) Use of extremely volatile complex financial instruments for mortgage just like the collateralized, debt obligation (CDO) and CDS.
- iii) The credit bubble is attributed result of low interest rates and simple borrowing conditions.
- iv) The profit objective of the banks and other financial establishments to use up the credit.

Other reason which further amplified international financial crisis have been identified are

- i) Wrong perception among people and underneath evaluation risk problem
- ii) Less stringent financial policy of USA
- iii) Loaning standards being relaxed
- iv) De-regulation of financial system.

At the present, the subprime crisis remodelled to international monetary crisis because the spill over effect of the crisis swelled to the other countries quickly.

### **1.5 Industry performance in India after crisis**

Dooley and Hutchinson (2009) have identified that before may 2008, the EMEs were insulated from the money crisis that had been severely touching the industrialised countries for over sixteen months. The decoupling of the EMEs from the advanced economies bust down in may 2008 because the crisis spread to the rest of the world economy.

This can be apparent within the case of India, as proved by the deterioration of all the political economy and monetary indicators in 2008-09. Industrial production magnified by 2.7%, a big drop from the 9.2% average growth within the previous four years. This contributed to the economy growing at only 6.7%. The BSE Index, which had been rising over a prolonged period, lost 37.9% of its worth, adversely affecting family wealth and also the ability of companies raising money within the capital market.

At the same time, rising goods costs in world markets contributed to a sharp increase in inflation rates. as the advanced economies started growing at slower rates and in some cases shrunk, India's bilateral trade stagnated in 2008-09, with exports growing at solely 5.4% and accounting deficit increasing to 2.6%. The tightening within the credit markets in advanced economies made it tougher for Indian businesses to continue borrowing in external markets. The scale of the external

debt failed to change a lot of from 2007-08 to 2008-09. In fact, the rupee had depreciated against several of the main foreign currencies and also the debt service cost was rising. To rectify the matter, India intervened within the exchange market to support its currency using its foreign reserves, that declined from US\$ 309.7 billion in 2007-08 to US\$ 252 billion in 2008-09.

## **1.6 Objective of the study**

The objective of the study is basically to identify the relationship that exists between business groups present in India, their corporate governance strategies and their financial performance.

The vision of the project is Analysis of relationship between corporate governance and type of business group holding, however the specific objectives are:

1. To determine the performance of the whole industry after the US depression.
2. Identify the various kinds of business groups in the market and their performance analysis in by comparing various variables.
3. To determine the type of group which is affected more by such events during their corporate governance practice.

These objectives will help to understand the relationship between business groups and corporate governance.

## **1.7 Scope of the study**

The scope of the study is limited to 31 Indian firms which are listed on BSE Sensex are chosen and analysed for a period of 8 years after the crisis on the basis of the groups they belong within. These firms represent the economy of the country as they are the top performers in the market. The classification use used as per given by Cuervo-Cazurra (2009)



For the analysis part we restrict our self to variables that are homogenous everywhere and are applicable to firms in all the parts of the world. These variables shall not be affected by the different accounting standards used by the companies

## 2 REVIEW OF LITERATURE

### 2.1 Classification of Business Groups

We'll take Cuervo Cazzura's (2006) types of business groups to distinguish amongst ours. He basically used previous literature study to classify business groups into three types based on their ownership.

Widely Held, State Owned and Family Owned

In a widely-held business group there's no distinct majority shareowner who exercises control. Possession is distributed among several shareholders, each of whom doesn't have a controlling stake. Managers are experts who have say in decision-making. These people are selected by the board that in several cases is controlled by the managers only. Other corporations, either industrial corporations or financial firms, might own massive blocks of shares. Nevertheless, these corporations are widely held. As a result, the ultimate possession of the business cluster is widely distributed among numerous shareholders and managers are the ones on top of things.

In state-owned firms, possession is officially vested in the citizens of the respective country, since the companies are officially owned by the govt, either at the national, sub-national or native level. However, politicians and civil servants are people exercising control. They manage the firm directly or indirectly with the help of selected managers.

On the other hand family-owned business cluster have single person or family concerned with the ownership, control, and management of the business cluster. In comparison to other business groups, there's no separation of the roles. Though in some cases professional managers run the corporations, these are under close control by the family.

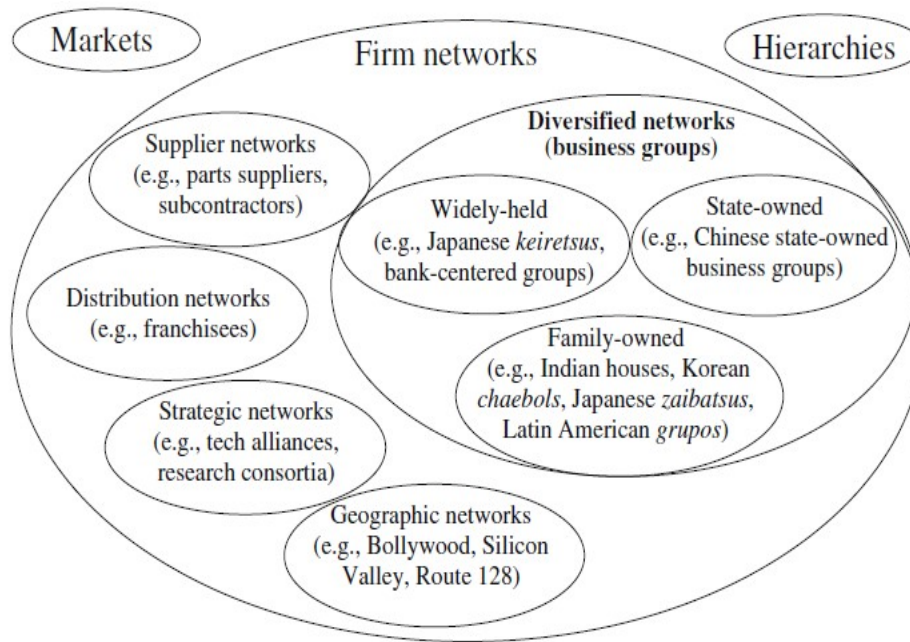


Figure 1 Separating business groups from other firm networks

Source: Cuervo Cazzura- Business groups and their types

## 2.2 Financial performance Indicator for Business Groups

Tobin's Q is used by various financial researchers and organisations to study the firm's performance. It is defined as the ratio of market value of a firm to replacement costs of its assets. It was first given by Nicholas Kaldor (1966) in his article "Marginal Productivity and the Macro-Economic Theories of Distribution: Comment on Samuelson and Modigliani", however later popularised by James Tobin, who gave its definition as: "One, the numerator, is the market valuation: the going price in the market for exchanging existing assets. The other, the denominator, is the replacement or reproduction cost: the price in the market for newly produced commodities. We believe that this ratio has

considerable macroeconomic significance and usefulness, as the nexus between financial markets and markets for goods and services.”

It has been used in financial research to explain a number of different concepts such as financing and dividend policies,

So for our final calculations we take Tobin’s Q ratio as ratio of total liabilities and market value of equity divided by book value of total assets.

The study primarily focuses on the performance of individual corporations rather than on group performance. We predict that it's wise to run our estimations using firm-level performance measures instead of group-level measures for many reasons. First, every firm is a public listed entity responsible to its own shareholders. Indeed, the group itself, the clarity of its identification even so, isn't a legal construct. The separate legal standing of every firm implies that there are ownership-structure variations across corporations within a business group. Second, an excellent deal of variation in performance would be lost if we tend to collective firm performance measures into group measures. Indeed, industry-adjusted performance varies considerably across the members of any group. Third, teams differ in the extent to which corporations are bound along by social and economic ties. Individual level performance variables implicitly assume that the extent of interlock is similar across groups. Instead, we tend to use a judgment approach in order explicitly to acknowledge that there are group-level unobservable that cause the error term in our specifications to be correlated across members of a particular group.

---

### **3 DATA AND RESEARCH METHODOLOGY**

To assess the relationship between business groups and their performance on the parameters of corporate governance, it is important that we assess both the qualitative and quantitative aspects of the same. Qualitative researchers aim to gather an in-depth understanding of financial behaviour of the Indian Business groups and the reasons that govern such behaviour. The qualitative method investigates the why and how of decision making, not just what, where, and when. Quantitative research refers to the systematic empirical investigation of social phenomena via statistical, mathematical, or computational techniques- regression and correlation between the financial performance and shareholding pattern.

#### **3.1 Type of Research**

The type of research that will be used in this study is qualitative research and quantitative research. Qualitative researchers aim to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour. The discipline investigates the “why” and “how” of decision making. Besides this, the researcher will also examine the phenomenon through observations in numerical representations and through statistical analysis. This shall be done with the help of secondary data from the BSE listed companies and different research papers on similar framework.

#### **3.2 Source of Data**

To gather information about the corporate governance strategies and financial performance, shareholding information and Tobin q's shall be calculated from the secondary data available in the annual reports of the companies. These ratios are also provided by various sites. It will

help the study by providing both qualitative and quantitative data for appropriate portrayal of performance of Indian companies.

This data along with the secondary indicators adopted from different case studies will help in providing an overall picture of the contribution of associated agents and their motivation towards the organisation.

Financial data shall be acquired from organisations internal audit system, which keeps information about the business generated from different branches in different area.

### **3.3 Identification of Business Groups**

Identifying the business groups and non business groups in our study is of utmost importance. To distinguish between the firms available to us from our secondary sources of data for this we use the definition given by Cuervo-Cazurra (2006). The identification of business groups is comparatively easy in India, this is probably because of two reasons, first of them is that most of the companies in India are members of only one group. (Strachan (1976), Goto (1982)). Secondly there is very minimal movement around the firm because of little merger activity.

So on the basis of Cuervo-Cazurra (2006) definitions we took three groups which were further verified on various other studies done by Khanna, Palepu and WU on the Tatas (1998), Gehmawat (1996) and RPG enterprise by Khanna (1996).

### **3.4 Sample Period**

To get a representation of the performance of firms over a period of time, we took a time period from the year 2008 to 2015. These eight years were the years during which the economy recovered from the economic depression it faced in 2008. This period was also apt

because of the up to date information is available about all the companies during this period of time.

### **3.5 Determining Financial performance**

The study use two measures, one being the asset size and a proxy for Tobin's Q ratio with non public shareholding, to measure company performance and relate it with the ownership. Non – Public shareholding percentage was taken from the annual reports of the different companies. Tobin's Q as a variable is defined as the ratio between market value of equity and market value of debt to the replacement cost of assets.

On the other hand, in India, just like other developing countries, the calculation of Tobin's Q is tough primarily because a large proportion of the company debt is institutional debt that's not actively traded within the debt market. Further, most corporations report asset values to historical prices instead of at replacement costs. We thus calculate a proxy for Tobin's Q by taking the book value of debt and also the value of assets in place of market values.

The study doesn't use accounting measures like ROE and ROA to gauge performance as corporations in India don't follow standardized accounting standards. In the US, standards are set by the Accounting Standards Board and it's compulsory for company bodies to adapt to those standards. In India, the implementation of uniform International Accounting Standards Committee (IASC) standards by corporations isn't nonetheless obligatory and it'd suffice for a corporation to disclose its accounting policies by means of a note in its books.

## **4 INTRODUCTION TO RESEARCH PROBLEM**

The primary objective of the study is to assess the financial performance and its relation to a business group during the times of an event.

### **4.1 Statement of Problem**

This research attempts to find out the relationship between business groups, their corporate governance and their performance, this analysis would study the performance of the chosen companies after the event of importance in the world economy. The country chosen is India because very few studies have been done on the business groups present within the country. Since the firms in India were less affected by the crisis as compared to other parts of the world, the study tried to identify nature of group as factor to this resistance.

### **4.2 Research Hypotheses**

It's conjointly argued that in addition to managerial ownership, ownership concentration might cause the dominant shareholders to be entrenched and optimise personal advantages rather than investor value.

For instance, the dominant shareholders are able to determine the profit distribution and will generally deprive minority shareholders of their rights to share profits, via, for example, connected party transactions (La porta et al., (2002); Dahya et al., (2008)). On the opposite hand, Shleifer and Vishny (1986) and Claessens et al. (2002) argue that dominant shareholders have incentives and skill to watch managers so as to safeguard their investments against arrogation. In line with this, Hoskisson et al.'s (2002) review of the literature shows that dominant shareholders have the flexibility to watch managers and therefore the influence to push modification useful to the firm.



The monitoring role of dominant shareholders is especially vital during a crisis surroundings as a result of the managerial agency costs are expected to be larger (Roe, 2003). La porta et al. (1998) conjointly argue that ownership concentration may be a replacement for a scarcity of legal protection in minimising expropriation by managers. In this context,

Ownership concentration could also be an efficient mechanism to resolve the different kind of agency issues caused by the severe political and economic setting and improve performance. A number of the dominant shareholders can also have stronger political connections that are valuable.

**Therefore the hypothesis is:**

H1: Firm performance increases with concentrated share ownership after the time of crisis because of effective management.

**4.3 Methodology**

In the previous studies, the standard approach for explaining the relationship between performance and corporate governance variables has been to employ the ordinary least squares (OLS) model.

The model used regresses Tobin's q on the levels of different categories of ownership for the 31 firms of BSE Sensex for which the required data is taken for a time period of eight years from 2008-2015. The specification includes variables to control size (total assets) and age.

Performance (Tobins Q) = Mean share holding size for a group of firms+ Age of the groups +firm size

**Table 1: Operational definition of the variables used**

<b>Dimension</b>	<b>Variable Name</b>	<b>Measure</b>
Growth Opportunities	Tobins Q	Tobin's Q = (Market value of equity + Book value of debt + book value of preference shares)/Book value of total assets
Size	Size of the company	Total book value of assets
Ownership variable	Shareholding pattern	Non public shareholding percentage
Age	Age	Incorporation year

Source: Author

## 5 ANALYSIS

Secondary data was used to analyse different the relationship between the type of shareholding that a business group has and how it affects the financial performance after an event of importance such as economic depression.

### 5.1 Profile of companies in BSE Sensex

There was a sample of 31 companies taken which were listed in BSE Sensex index. These companies were chosen because they are selected by BSE to depict the national market movement, as a benchmark for fund performance and for index based derivative projects. These companies are selected on the basis of two criteria:

**Quantitative Criteria:** There are six different variables of quantitative nature which have to be studied for inclusion of companies into the index.

**Market Capitalization:** On the basis of full market capitalisation, the Security should be placed in the Top 100 companies listed.

**Trading Frequency:** The Security should be listed on every other trading day for at least the last one year. There will be exception created for extreme reasons like Security suspension etc.

**Average Daily Trades:** It should also be among the top150 companies listed by average number of trades per day in the previous one year.

**Average Daily Turnover:** The Security must be again in the Top 150 companies listed in the market on the basis of average value of shares traded per day for the previous one year.

**Industry Representation:** The one dissimilarity between SCM and TCM is that SCM is not having the right to clear the trades other members

and can only clear individual trades. On the other hand TCM can clear the trades of any current member

Listed History: Security having listing history of more than one year on BSE will be permitted only.

**Qualitative Criteria:** There is only one qualitative variable for listing the company.

Track Record: The Company being listed should have a satisfactory track record, according to the members of the committee

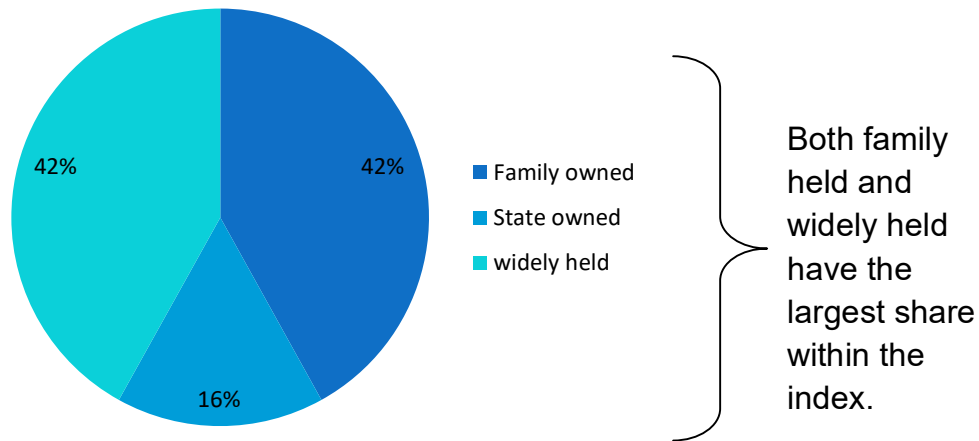
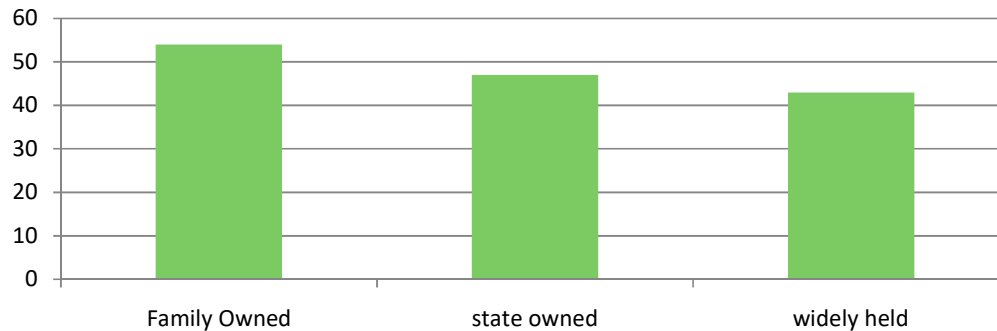


Figure 2 Distribution of different types of industries

Source: BSE, Sensex

The profile of companies presented in BSE Sensex comprises majorly of family owned and widely held companies. State owned companies have a smaller share because of their contribution being low in economy of the SWOT Analysis for third party agents.

The average age of different type of companies present within the sample is:



**Figure 3 Average Age of the companies within the Index**

Source: Compiled by author

Family owned businesses have been in the market for a longer time as compared to the state owned and widely held companies. The oldest family owned or trust owned businesses are as old as a century, example the Tata group. State owned companies were mostly set up during the time of independence and almost four to five decades old. Widely held companies are younger comparatively, with the youngest being Yes Bank only 14 years old.

## **5.2 Classifying the companies**

The different companies which were present within the different groups are:

1. Family owned companies: Most of the family owned companies present within the index are those who have been in the business from decades. Their profiles are diverse and consist of all sectors ranging from telecom, paints, and pharmaceuticals. Although even with the diverse profile, auto manufacturing companies have the largest number within this group. For the reason of classification we take those industries in the group whose major shareholding powers are in the hand of one family group or trusts.

2. State owned companies: These are less in number and consist of firms that have been set up by the Indian government during and immediately after the independence. They are also the companies who have been listed under the tag of Maharatna companies and cover the high investment requiring sectors of the economy such as oil, power, banking and natural resources. These are also the sectors of utmost importance to the economy. The major shareholdings are in control of the government.
  
3. Widely Held companies: The second most, highest share in the index is of widely held companies, these are relatively young companies and are the ones in which public is substantially interested. These consist of various private sector banks in which public is a large stakeholder. Professional manager are appointed by board, which is controlled by shareholders. The decision are taken by the managers and public is also sometimes included.

These companies are those which represent Indian Economy – Talking about companies representing the Indian economy, we consider companies that have very high market capitalisations and are highly affected by the country's economic conditions in one way or other. Therefore Companies that have the uppermost market capitalisation in the exchange are traded on the BSE Sensex.

### **5.3 Shareholding Pattern**

The following graph shows the shareholding pattern of the firms during the period of 2008 to 2015 till the economy stabilised:

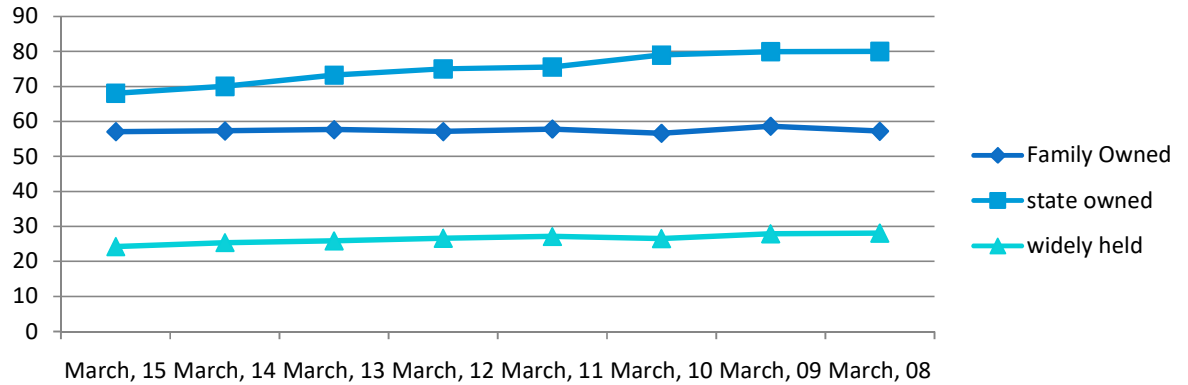


Figure 4 Promoter Shareholding pattern over a period of 2008-2015

Source: Compiled by author

From the above graph we can see that over the years the shareholding pattern of the promoters and non public institutes for the whole industry has declined over the past years. However the decline is steeper towards the end, this is because initially the public was apprehensive of investing in companies in the beginning of crisis. We can see this from the negative growth in promoters share in state owned and widely held groups towards the end, stable in family owned companies.

#### 5.4 Tobins Q variation

The following graph shows the variation in Tobins Q of the firms during the period of 2008 to 2015 till the economy stabilised:

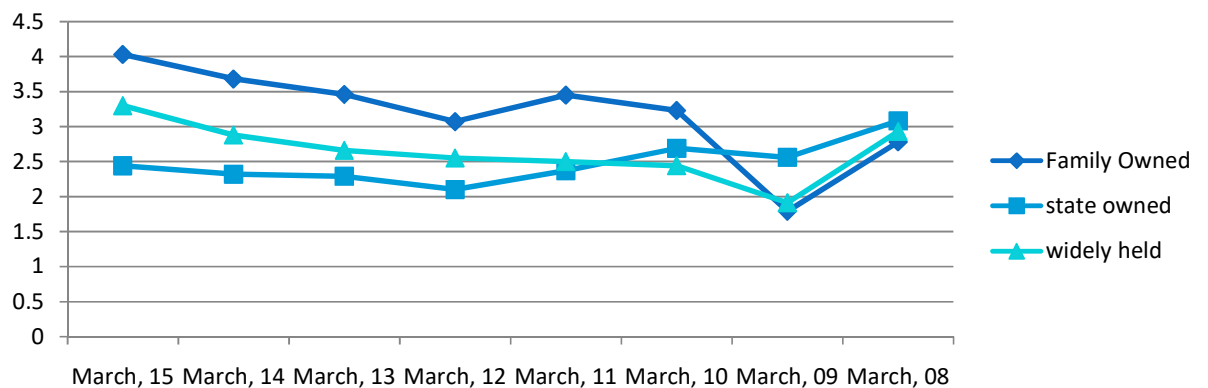


Figure 5 Tobins Q variation over the period of 2008-2015

Source: Compiled by author

The Tobins Q graph shows that when the economy was hit by the depression there was a sudden cumulative decrease in Tobins Q of all the business groups that are present in the market. However from the graph it can be seen that widely held and family held business groups were hit the most. However after the first year they were quick to come back to their original position and have grown at a faster pace since then.

### **5.5 Effect of type of Firm on performance in recovering from an economic crisis**

The primary hypothesis of our study is that the firm which in which inside management have high levels of control rights and own larger shareholding will display the biggest declines in the value of firm during the crisis.

#### **Univariate Analysis**

The mean and median ownership structure of the firms in our study is as follows:

**Table 2 Mean and Median shareholding percentage**

	Mean	Median
Family owned	57.3675	54.21
State Owned	72.51792	69.42
Widely Held	26.42577	30.37
Management control group percentage change (decrease)	Mean	Median
Family Owned	-0.2448	8.253845
state owned	-14.9343	-20.1714
widely held	-13.7206	-5.00957

Source: Compiled by author



From the table we can see that the highest promoters ownership stakes are present in the state owned companies, where the government is in charge of running the companies. This is followed by the family owned companies where the promoters are reluctant to lose ownership because that might result in loss of their decision making powers. Widely held companies have the least amount of shares in the hand of promoters because public is the largest stakeholder.

Looking at the trend analysis we see that all of these have decreased over a period of eight years. The highest decrease have been in state owned and widely held companies who have lost their stakes of about 13-14%. On the other hand family business groups have tried to maintain their stakes at a constant number.

Table 2 displays mean and median Tobin's q values for group affiliates, broken down into family held, state held and widely held ownership categories and are as follows:

**Table 3 Mean and Median Tobins Q and their change percentage**

	Mean Tobins Q	Mrdian Tobins Q
Family owned	3.19	2.50
State owned	1.85	1.21
widely held	2.64	1.76
Percentage change in Q from 2008 to 2015	Mean	Median
Family Owned	44.96402878	54.61398694
state owned	-20.7792208	-33.8212796
widely held	12.62798635	11.52196224

Source: Compiled by author

Mean Tobin's q is higher for the family owned business groups category, than for each of the other group samples, with the difference in means being significant at the 1 percent level. In fact even though for

other groups the Tobin's Q has increased over a period of time, but for state owned firms it has decreased. This does not give a clear picture of the supportive notion that concentrated ownership is correlated with higher performance, than the other group firms. The uni-variate suggest the notion that any beneficial effects of ownership are experienced more in widely held and family owned companies rather than state owned companies.

For each of the ownership categories, there is statistically significant difference in mean Tobin's q between different types of groups.

### **Multivariate Analysis-Regressions on Firm Performance**

Multivariate analysis will look into the effect of age, assets and shareholding size as independent variables on Tobins Q as a dependent variable. It will show the effect of these variables on different business groups during the times of a crisis.

#### **Family owned**

The following table shows regression analysis for the family owned firms and the relationship between financial performance and other dependent variables:

**Table 4: Regression statistics for family owned firms**

<i>Regression Statistics</i>					
Multiple R		0.93321			
R Square		0.87088			
Adjusted R Square		0.77404			
Standard Error		0.32290			
Error		9			
<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	2.813106	0.937702	8.992982	0.02988
Residual	4	0.417082	0.10427		

Total		7	3.230188					
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 99.0%</i>	<i>Upper 99.0%</i>
Intercept	18.185	12.99145	1.399	0.234	-17.885	54.255	-	77.9988
Mean share holding	-0.31478	0.239408	1.314	0.258	-	0.3499	-	0.78747
Age	0.03549	0.12154	0.292	0.784	-	0.3729	-	0.59507
Assets	1.25E-05	8.95E-06	1.395	0.235	-1.2E-05	3.73E-05	-2.9E-05	5.37E-05

Source: Compiled by author

The variable coefficient of determination is also known as R square. It measures the proportion of variation in dependent variable, which is due to independent variable. In case of multiple regressions, Multiple R square is the proportion of variation in the dependent variables. For family owned firms coefficient of multiple determinations is computed as 0.9332, this means that 93.32% of the variation in Tobins Q of these firms over a period of time is explained by variation in the number of independence variables like shareholding size, age of the firm and assets owned.

Next test is ANOVA, it resulted in to no significant different between independent variable and dependent variables.

Table also shows the coefficient of independent variable like mean shareholding size, Age of the companies, and firm size(assets). It compares the impact of independent variables on the dependent, which is the Tobins Q. For the case of family owned business groups mean shareholding size has negative impact on Tobins Q and t test is also significant. Firm size (assets), and age have positive and significant effect on Tobins Q. This suggest the fact that even with decreasing sharehold of promoters the firms ave ben doing well during the times of crisis.

## State Owned

**Table 5: Regression Statistics for state owned firms**

<i>Regression Statistics</i>	
Multiple R	0.899202
R Square	0.808564
Adjusted R Square	0.664987
Standard Error	0.17368

ANOVA				
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>Significance F</i>
Regression	3	0.509628	0.169876	5.631581
Residual	4	0.120606	0.030165	
Total	7	0.630234		

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 99.0%</i>	<i>Upper 99.0%</i>
Intercept	32.27012	11.34399	2.84469	0.046646	0.77417	63.76608	19.9587	84.49891
Mean share holding	-0.09265	0.079573	-1.16439	0.308979	-0.31358	0.128277	0.45902	0.273709
Age	-0.60582	0.205522	-2.94769	0.042066	-1.17644	-0.03519	1.55206	0.340429
Assets	9.19E-06	5.61E-06	1.636728	0.177029	-6.4E-06	2.48E-05	-1.7E-05	3.5E-05

Source: Compiled by author

For state owned firms coefficient of multiple determinations is computed as 0.8992, this means that 89.92% of the variation in Tobins Q of these firms over a period of time is explained by variation in the number of independence variables like shareholding size, age of the firm and assets owned.

ANOVA for state owned firms again resulted in to significant different between independent variable and dependent variables.

The regression table shows the coefficient of independent for the case of state owned business groups mean shareholding size has again negative impact on Tobins Q and t test is also significant. Firm size (assets) has a negligible positive and significant effect on Tobins Q. In the case of state owned groups, age has a negative impact on firm performance.

## Widely Held

**Table 6: Regression Statistics for Widely held firms**

<i>Regression Statistics</i>	
Multiple R	0.934067
R Square	0.872482
Adjusted R Square	0.776843
Standard Error	0.193788

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	1.027773	0.342591	9.12269	0.029161
Residual	4	0.150215	0.037554		
Total	7	1.177988			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 99.0%</i>	<i>Upper 99.0%</i>
Intercept	13.08347	8.616572	1.518407	0.203526	-10.849	37.0069	-26.5888	52.75498
Mean share holding	0.137949	0.228764	0.603019	0.579018	-0.4972	0.773098	-0.9153	1.191198
Age	-0.44922	0.140577	-3.19556	0.03304	-0.83953	0.05892	-1.09646	0.198008
Assets	2.23E-05	6.17E-06	3.623028	0.022297	5.22E-06	3.95E-05	-6.1E-06	5.07E-05

Source: Compiled by author

Again in the case of widely held firms coefficient of multiple determinations is computed as 0.9340, this means that 93.4% of the variation in Tobins Q of these firms over a period of time is explained by variation in the number of independence variables like shareholding size, age of the firm and assets owned. ANOVA for this also showed

no significant difference between independent variable and dependent variables.

Table of regression for widely held firms has an opposite view and shows that promoter's shareholding size has positive impact on Tobin's Q, unlike state held and family owned firms and t test is also significant. Firm size (assets) has a positive negligible relation and Age is negatively related with Tobin's Q.

## 6 FINDINGS

From the analysis the findings that gave an insight about the relationship between the ownership pattern and performance during the time of a crisis are:

1. The performance of the firms over the period of time cannot be explained with the help of ownership, age of the firms (from the time it has been established) and size of the firm, different groups behave differently with respect to ownership and performance.
2. From the uni-variate analysis, it does not give a clear picture of the supportive notion that concentrated ownership is correlated with higher performance, than the other group firms. It only suggests the notion that any beneficial effects of ownership are experienced more in widely held and family owned companies rather than state owned companies.
3. Our hypothesis that firm performance increases with concentrated ownership is only true for widely held firms and not for family owned and state run companies, from the multi -variate analysis.
4. The regression analysis shows that ownership by promoters cannot be directly related to firm's performance during the period of economic crisis, in fact it is the public view which decides this.
5. The groups with already higher promoters share hold showed negative relation with the firm's performance, this can be attributed to the fact that public invests more in the firm with distributed holding and because of their larger returns they

started investing more in concentrated group holdings and hence the overall promoters share decreased over time. On the other hand for widely held groups the promoters shareholding is positively related with firms performance, because public is reluctant to further invest in it without managements control, during the time of crisis.

6. A trend can be seen that the shareholding size and firms performance are trying to achieve equilibrium where the public wants to hold shares of companies in which promoters have larger stakes.



## 7 CONCLUSION

This study examines the link between family ownership, firm performance, and capital structure using a data procured from annual report of 31 firms from 2008-2015, which have been listed on BSE Sensex. This distinctive dataset includes information on features of the firm, as well as the size of public and non public control stake, the identity of ownership based on three groups, the use of control-enhancing mechanisms, and the firm performance variables.

Previous studies of ownership which were done in US and internationally say firm performance and capital structure have produced unconvincing and mixed results, maybe because of high endogeneity among these variables as well as the failure to distinguish between ownership and mechanisms that enhance control.

India a developing country, with much better classification has an ideal setting to answer these questions, as it features similar legal and regulatory institutions as the United States, with the similar legal system, comparable levels of minority shareholder distribution, and similar levels of disclosure. Also, India has more concentrated business group ownership with most of the large companies controlled by families or by the state. This type of ownership structure provides an ample opportunity for tests of the links between family ownership, firm performance, and capital structure, while holding key country-level factors constant.

After looking at Himmelberg, Hubbard and Palia (1999), we use data techniques to in order to better measure the relationship between family ownership, firm performance, and capital structure. BSE data studies of ownership have been rare, due to the difficulty of collecting the data required, and we are not aware of any study of this type with an economic even concerning with Indian ownership. With reference to

Claessens et al. (2002), we unravel the configuration and entrenchment effects of ownership from the use of Tobins q and shareholding size as a wedge between control and cash-flow rights.

Our findings highlight that the ownership structure play different role for different kind of business groups and is dependent on the perception of the people in the economy. It cannot be stated firmly that increasing promoter shareholding or concentrated shareholding would result in better performance of the firm over a period of time, due to better decision making, which is the general misconception.

## **7.1 Limitations of the study**

The different limitations associated with the study are:

1. The result is based on the performance of the top 31 companies as identified by the BSE.
2. The variables are limited to three which directly affect the firms performance.
3. The quality of data could have been improved by taking it from CMIE with inbuilt definitions for distributing firms within different types of group
4. More sophisticated tools could have been used for statistical analysis for better results

## **7.2 Directions for Future Research**

For future studies we can focus on the fact that there might be some optimum level of shareholding size of promoters, which a firm relating to a particular group must try to achieve for better performance. Also several other firms can be taken to get a better understanding of the differentiated firm groups, which may have different working styles and characteristics, future researchers might not limit themselves to BSE Sensex firms.

## 8 REFERENCES

- Ali, M. S., & Balasubramaniam, P. (2010). Exponential stability of time-delay systems with nonlinear uncertainties. *International Journal of Computer Mathematics*, 87(6), 1363-1373.
- Claessens, S., & Fan, J. P. (2002). Corporate governance in Asia: A survey. *International Review of finance*, 3(2), 71-103.
- Cuervo-Cazurra (2006), A. (2006). Business groups and their types. *Asia Pacific Journal of Management*, 23(4), 419-437.
- Encarnation, D. (1989). Dislodging multinationals: India's comparative perspective. *Cornell University Press*, NY: Ithaca.
- Douma, S., George, R., & Kabir, R. (2006). Foreign and domestic ownership, business groups, and firm performance: Evidence from a large emerging market. *Strategic Management Journal*, 27(7), 637-657.
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of financial economics*, 53(3), 353-384.
- Khanna, T., & Palepu, K. (2000). Emerging market business groups, foreign intermediaries, and corporate governance. In Concentrated corporate ownership (pp. 265-294). *University of Chicago Press*.
- Khanna, T., & Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *The Journal of Finance*, 55(2), 867-891.
- La Porta, R., F. Lopez-de-Silanes., A. Shleifer, and R. Vishny (1998). 'Law and Finance', *Journal of Political Economy*, 106(6), pp. 1113-1155.

- La Porta, R., F. Lopez-de-Silanes., A. Shleifer and R. Vishny (2002). 'Investor protection and corporate valuation', *Journal of Finance*, 57(3), pp. 1147-1170.
- Leff, N. H. (1978). Industrial organization and entrepreneurship in the developing countries: The economic groups. *Economic Development and Cultural Change*, 26: 661–675.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *The journal of finance*, 58(4), 1445-1468.
- Mohan, Rakesh (2009), "Global Financial Crisis: Causes, Impact, Policy Responses and Lessons", Working Paper 407, Stanford University, Stanford, CA, USA. Taylor, John (2008), "The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong," Working Paper 14631, *National Bureau of Economic Research*, Washington D.C., USA.
- Rajakumar, J. D., & Henley, J. S. (2007). Growth and persistence of large business groups in India. *Journal of Comparative International Management*, 10(1).
- S&P BSE SENSEX, FAQ, Retrieved from <https://www.bseindia.com/markets/Derivatives/DeriReports/FAQs.aspx> (on 25 th April 2018)
- Thanga lakshmi. C.(2016) The Global Financial Crisis and its Impact on Indian It Industries. *International Journal of Advance Research and Innovative Ideas in Education*. Vol-1 Issue-1 2016
- Tobin, James and W. Brainard,(1997) Asset Markets and The Cost Of Capital in Balassa and Nelson, eds., *Economic Progress, Private Values, and Public Policy*, New York: North—Holland Co.

## 9 APPENDIX

**Table 7: Raw data regarding Public shareholding of the companies**

Ownership	A	ge	Public share holdings									
			Mar-15	Mar-14	Mar-13	Mar-12	Mar-11	Mar-10	Mar-09	Mar-08		
family owned	1	20	Adani Ports and Special Economic Zone Ltd.	25	25	22.5	22.5	22.5	19.8	3	18.8	18.7
family owned	2	76	Asian Paints Ltd.	47.21	47.21	47.2	47.2	47.6	49.4	50.0	50.5	3
widely held	3	25	Axis Bank Ltd.	68.35	67.2	57.9	54.0	53.6	53.1	49.8	53.8	4
family owned	4	72	Bajaj Auto Ltd.	50.76	49.98	49.9	49.9	49.9	50.3	50.2	49.1	9
family owned	5	22	Bharti Airtel Ltd.	34.63	34.68	31.4	31.5	31.7	32.1	32.8	34.1	2
state owned	6	42	Coal India Ltd.	20.35	10.35	10	10	10	10	10	10	10
family owned	7	34	Dr. Reddys Laboratories Ltd.	57.63	56.47	57.5	57.5	55.6	59.6	57.8	58.1	1
widely held	8	23	HDFC Bank Ltd.	59.4	60.4	60.1	59.6	59.2	76.3	80.6	76.7	
widely	9	34	Hero	65.36	60.08	47.7	47.7	47.7	45.0	45.0	45.0	4

held			MotoCor p Ltd.								
widely held	1 0	84	Hindustan Unilever Ltd.	32.77	32.75	47.5 2	47.5	47.4 5	47.9 8	47.8 8	48.5 7
widely held	1 1	23	Housing Developm ent Finance Corporati on Ltd.	100	100	100	100	100	100	100	100
widely held	1 2	23	ICICI Bank Ltd.	100	100	100	100	100	100	100	100
widely held	1 3	24	IndusInd Bank Ltd.	84.91	84.79	84.7 1	80.5 4	80.4 6	77.8 3	74.3 7	68.6 6
widely held	1 4	36	Infosys Ltd.	70.23	67.96	71.6 2	70.4 9	66.3 6	65.3 2	64.3 7	64.3 1
widely held	1 5	10 7	ITC Ltd.	99.75	99.74	99.7	99.6 9	99.6 7	99.6 1	99.4 4	99.2 8
widely held	1 6	15	Kotak Mahindra Bank Ltd.	59.98	56.42	55.0 4	54.6 8	54.4 3	51.7 7	47.6 2	47.4 5
widely held	1 7	80	Larsen & Toubro Ltd.	97.71	97.32	96.4 2	96.8 8	96.4 4	97.3 1	97.0 6	95.8 7
widely held	1 8	72	Mahindra & Mahindra Ltd.	68.97	69.72	69.4 5	69.1 5	69.1 6	68.4 9	64.1 5	69.5 4
family owned	1 9	36	Maruti Suzuki India Ltd.	43.79	43.79	43.7 9	45.7 9	45.7 9	45.7 9	45.7 9	45.7 9
state owned	2 0	42	NTPC Ltd.	25.04	25	25	15.5	15.5	15.5	10.5	10.5

state owned	2 1	61	Oil & Natural Gas Corporati on Ltd.	31.06	31.08	30.7 7	30.7 7	25.8 6	25.8 6	25.8 6	25.8 6
state owned	2 2	28	Power Grid Corporati on Of India Ltd.	42.1	42.1	30.5 8	30.5 8	30.5 8	13.6 4	13.6 4	13.6 4
family owned	2 3	41	Reliance Industries Ltd.	54.76	54.7	54.6 6	55.2 5	55.2 8	55.2 4	47.5 4	48.6 3
state owned	2 4	62	State Bank Of India	41.4	41.4	37.6 9	38.4 2	40.6	40.5 9	40.5 9	40.2 7
family owned	2 5	35	Sun Pharmace utical Industries Ltd.	36.44	36.35	36.3 2	36.2 8	36.2 8	36.2 8	36.2 9	36.2 9
family owned	2 6	50	Tata Consultan cy Services Ltd.	26.1	26.1	26.0 4	26.0 2	26.2 1	26.2 3	26.1 4	22.4 5
family owned	2 7	73	Tata Motors - DVR Ordinary	44.39	44.42	46.9	49	44.7 8	51.1 1	45.1 7	53.8 9
family owned	2 8	73	Tata Motors Ltd.	44.39	44.42	46.9	49	44.7 8	51.1 1	45.1 7	53.8 9
family	2	11	Tata Steel	68.06	67.69	67.9	68.0	68.6	68.5	66.0	66.0

owned	9	0	Ltd.			3	5	2	3	5	6
family	3		Wipro			19.9	19.8	19.0	18.8	19.0	18.9
owned	0	72	Ltd.	25.14	25.08	9	8	3	3	6	6
widely	3		Yes Bank			74.2	73.8	73.4	72.8	67.4	66.0
held	1	14	Ltd.	77.94	74.45	8	7	3	4	2	3

Source: Moneycontrol.com

**Table 8: Tobins Q ratio for Sensex Listed companies**

	Mar-15	Mar-14	Mar-13	Mar-12	Mar-11	Mar-10	Mar-09	Mar-08
Adani Ports and Special Economic Zone Ltd.	2.83	2.23	1.92	2.31	3.39	4.22	2.18	4.23
Asian Paints Ltd.	10.66	7.74	8.25	6.17	6.17	6.22	3.41	5.71
Axis Bank Ltd.	1.12	1.00	1.01	1.02	1.07	1.09	0.90	1.04
Bajaj Auto Ltd.	3.72	4.05	4.12	4.24	4.57	3.47	1.72	0.00
Bharti Airtel Ltd.	1.40	1.38	1.40	1.76	2.04	2.21	2.49	3.96
Coal India Ltd.	9.96	6.87	5.23	6.60	7.54	8.19	8.82	9.95
Dr. Reddys Laboratories Ltd.	3.75	3.14	2.56	2.95	3.14	2.60	1.15	1.48
HDFC Bank Ltd.	1.23	1.14	1.16	1.12	1.11	1.14	0.94	1.05
Hero MotoCorp Ltd.	5.00	4.48	3.21	4.24	3.08	4.34	3.49	2.72



Hindustan Unilever Ltd.	13.67	9.87	8.61	7.92	5.89	5.27	5.98	6.80
Housing Development Finance Corporation Ltd.	3.28	2.68	2.48	1.13	1.29	1.45	1.20	1.61
ICICI Bank Ltd.	1.07	1.02	1.01	1.01	1.09	1.03	0.81	7.55
IndusInd Bank Ltd.	1.26	1.12	1.11	1.10	1.09	1.03	0.87	0.91
Infosys Ltd.	3.67	3.10	3.38	4.09	5.97	5.38	3.15	4.38
ITC Ltd.	5.73	7.07	7.08	6.03	5.44	4.26	3.48	4.41
Kotak Mahindra Bank Ltd.	1.74	1.47	1.41	1.42	1.43	1.44	1.06	1.47
Larsen & Toubro Ltd.	1.96	1.60	1.25	1.28	1.84	2.21	1.21	3.36
Mahindra & Mahindra Ltd.	2.15	1.88	1.90	1.80	2.19	1.96	0.92	1.76
Maruti Suzuki India Ltd.	3.33	1.98	1.47	1.69	1.85	2.53	1.55	1.98
NTPC Ltd.	0.95	0.81	0.95	1.16	1.45	1.72	1.60	1.85
Oil & Natural Gas Corporation Ltd.	1.25	1.31	1.42	1.24	1.58	1.39	1.08	1.57
Power Grid Corporation Of India Ltd.	1.04	0.93	1.01	1.09	1.08	1.20	1.25	1.42

Reliance Industries Ltd.	0.87	0.95	0.80	0.89	1.33	1.59	1.18	2.41
State Bank Of India	0.91	0.91	0.92	0.94	0.93	0.93	0.84	0.89
Sun Pharmaceutical Industries Ltd.	5.79	8.75	9.12	6.32	5.86	5.70	3.51	4.53
Tata Consultancy Services Ltd.	7.65	7.02	7.06	6.58	8.77	6.67	2.77	5.36
Tata Motors - DVR Ordinary	3.93	2.87	1.91	1.77	1.69	1.13	0.55	1.07
Tata Motors Ltd.	3.93	2.87	1.91	1.77	1.69	1.13	0.55	1.07
Tata Steel Ltd.	1.80	2.13	1.85	0.66	0.89	1.05	0.67	1.34
Wipro Ltd.	2.72	2.79	2.55	2.77	3.43	3.42	1.47	3.09
Yes Bank Ltd.	1.07	0.97	1.01	1.00	1.02	1.05	0.81	1.08

Source: Money control.com