

# The Relationship between Institutional Ownership with the Current Financial Performance of the Firms Listed in Bombay Stock Exchange

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## Abstract

In economically developed countries, numerous studies have been conducted on the effect of institutional ownership on firm performance. Because of the importance of this research subject, we plan to examine the institutional ownership in Bombay Stock Exchange in terms of the current performance during 2009 to 2013. Based on the examined variables, the data panel regression in software Eviews was used. The results showed that institutional ownership has no significant relationship with current performance of Bombay Stock Exchange Companies.

**Keywords:** Institutional ownership, current performance, Bombay Stock Exchange (BSE)

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## Introduction

Representative Problems appeared when the managers, namely those that undertook the responsibility of resources allocation of the companies as representative of shareholders, took actions that reducing the interests of the shareholders; they only wanted to achieve their own interests. Due to misalignment interests of shareholders and managers and informational asymmetry, the investors were always on the search of the criteria that measured actual performance of manager as well as the mechanism that led to its improvement. In the past, economists assumed that all groups in a corporation had a common goal to operate but over the past 3 decades, lots of cases about this that there is conflict of interests between the groups and how the companies face these issues, have been debated by economists. Today, what most attracts our attention is the increasing presence of legal and institutional investors, on the circle of owners of LLP companies and it is an impact that the active participation of this group can have on the governance and production on the organizations as well as their performance.

The main objective of this study was to investigate the relationship between institutional ownership on the current performance of the companies listed in Bombay Stock Exchange.

## Theoretical and literature

### *Institutional ownership theories*

In general, about the relationship and influence of institutional shareholders ownership with performance and value of the company, there are various theories, some of which are as follows:

#### Efficient Monitoring Hypothesis

Institutional investors and major shareholders that are out of the company compared to the minor shareholders, because of facilities, expertise and high experience can monitor performance at lower cost, so we can expect a positive relationship between the institutional ownership and company performance.

#### Strategic Alignment Hypothesis

Sometimes managers and institutional investors' expectations are tied to the interests of the group managers and by accommodating the interests of these two groups, the shareholders' interests are ignored. In such a case, the expected beneficial effects of exercising effective oversight by the major shareholders on managers would be reduced that in this case, in fact, we see a conflict of interest between major shareholders and other owners that due to the influence of major shareholders, the conflict will be ultimately at the expense of other shareholders.

### *The role of institutional investors on corporate performance*

Institutional investors, due to having a significant number of shares of the companies as well as being professional on investment have the ability and incentive to invest and

also the ability and incentive to monitor the companies. Generally, it is believed that the presence of institutional investors may lead to changes in behavior and firm performance. This is originated from regulatory activities of such shareholders. Researchers in this field argue that oversee the company performance via data collection and pricing management decisions implicitly, and through the administration of corporate practice (Nouravesh et al, 2009).

The role of institutional investors has been expanded, while increasing the size of firms and financial intermediaries and growth of institutional investors as well as movement of capital from the actual sector to financial institutions. Increased monitoring mechanisms outside the company, adds the company rule of institutional investors as owners. Institutional investors directly or indirectly have an effective influence on the activities of managers; their influence is through their own actions as well as stock trading. This influence can be very strong, so that the operation will lead to a specific direction. (Rahnamaye Rudposhti, 2006)

### *Bombay Stock Exchange*

Bombay Stock Exchange in Marathi **मुंबई शेअर बाजार** is the Stock Exchange of India, which its headquarters is located at Dalal Street, Mumbai, in Maharashtra state, India. It is the oldest stock exchange in Asia. In December 2011, the value of the market of shareholders of the companies listed on the Bombay Stock Exchange was estimated over \$ 1 trillion dollars, that accordingly, it was known as the sixth largest stock market in Asia. Also, it was ranked 14th on the list of the largest markets in the world. According to the statistics presented in March 2012, the Bombay Stock Exchange places over 5.133 companies on its list that from this point of view has the largest number of listed companies, among all the world's stock markets. BSE is the oldest exchange in Asia of 133 years old. It was founded as the Society of native stock brokers at the beginning in 1875. BSE is the first stock market in India that received its confirmation from the government in 1956 under Limited Contracts. The system of this exchange has been changed into electronic online state in 1995. (*Report Bahadur visited the Bombay Stock Exchange*)

Companies that are placed in Group A of BSE that are the most active companies in the Bombay stock exchange having the highest amount of capital, their transactions are widespread, their stocks are regularly bought and sold, are always profitable and stock index in all of them is SENSEX. The companies of this group must meet all conditions of exposure in group A.

### *Past researches*

Hosseini et al (2012) investigated the effect of company function and institutional ownership on intellectual capital of firms listed in Tehran Stock Exchange between 73 companies in 81 to 89 and it indicates that the company's function has a positive and significant correlation with intellectual capital, but no significant relationship between an institutional ownership and intellectual capital was shown.

Rahimi (2011) studied the impact of the percent of non-bound board of institutional ownership on the social responsibility of the companies listed in Tehran Stock Exchange. In this study, samples were collected from 56 companies in the years of 81-88 and through Sepengapkdy et al (2007)' questionnaires concluding that there is no relation between percentage of non-bound board and institutional ownership on corporate social responsibility. Nikbakht and Rahmani-nia (2010) in their study examined the effect of institutional ownership on the performance of firms listed in Tehran Stock Exchange. The data needed was of the financial statements of 78 stock companies from 81 to 86 and the results of the study showed a positive and significant relationship between institutional ownership and performance.

By a research in 2011 in Spain it was concluded that only ownership concentration has a significant impact, with the calculated Tobin's Q, as the measure of valuating the company's value.

The results of Mat -Nor, F., & Sulong, Z. (2010).' research over 403 companies of stock exchange of Malaysia showed a significant positive relation between institutional ownership of the company. Tsaia H., Z. Gu(2007) studied the relationship between institutional ownership and firm performance for the period 1999 to 2003. In this study, institutional ownership was considered against the percentage of shares held by state-owned companies of the whole of the capital. Companies in this research include insurance companies, financial institutions, banks, government agencies, and other components of the government. They showed that institutional investors may help investors reduce agency problems resulting from the separation of management and ownership.

Namazi and Kermani (2007) studied the effect of ownership structure on firm performance using a sample of 66 specimens of companies listed on the stock exchange. The results of the study done by use of a combined regression, suggested that there is a positive relationship between corporate ownership and performance, while the relationship between institutional ownership (state ownership) and management ownership was negative. In this research, the criteria such as ROA, ROE, Tobin's Q and the MBVR were used to evaluate the performance.

Chioun, Jeng-Ren, Lin,& Yi-Hua,(2005) compared the ownership structure of Chinese and Taiwanese companies and examined that whether the performance of these companies is influenced by their ownership structure. The results showed that: 1. the state ownership and concentration of ownership in Chinese companies are more than Taiwanese companies. Meanwhile, shares in the hands of private enterprises in China are less than Taiwan; 2. The operational performance of Chinese companies has inverse relation with state ownership concentration and has a direct relationship with the concentration of private property (institutions); 3. There is a straightforward relationship between ownership concentration and firm performance in Taiwan.

Ranjbar (2005) studied the effect of ownership type on the company performance (Privatization experiences in Iran). he used financial information of 18 companies (8 companies have been transferred to the private sector and 10 assigned to semi-public sector) that were assigned in 1991 to 2000 and studied the performance related to 3

years before and after assignment of the companies of the two groups. The results showed that although the performance has gotten better after assignment but statistically there is no relation between the performance before and after assignment. Also, there is no significant relation between the function of the companies assigned to the public and private sectors in the period after the assignment

Peng et al. (2003) in the study entitled "The relationship between board composition and firm performance" examined the relation between presence of the other members of the board with no responsibility and company function in Russian companies. In their study, they used the rate of non-bounded managers as the criteria to composition of the board and the ratio of ROE as a benchmark to measure performance. Their research results indicated that there is no significant relation between the ratio of the non-bound managers of board and ROE.

Holderness (1988) examined the studies that had tested the effects of ownership of insiders in USA and institutional investors on the decisions of the company and the company value. Conflicting results were obtained about the effects of various investigations. Insiders' ownership in the company can align the interests of the insiders with the shareholders, thus leading to better decisions or the higher value of the company. However, ownership of the most insiders may result in a higher degree of management control, which potentially puts administrators in the trench. Entrenching of managers also means that they re-buy a number of shares, so they can be effective in decision making. Similarly, more control of institutional investors would cause their actions, which increases the company's stock market value and all stakeholders would take benefit. However, such control may be of private interests for institutional investors, it means that the benefits that the other shareholders will not have. Usually this type of interest reduces the value of the company.

## **Research Hypotheses**

The research hypotheses are expressed as follows:

H<sub>1</sub>: There is a significant relationship between institutional ownership and the current function of the companies listed on Bombay Stock Exchange.

*H<sub>1a</sub>: There is a significant relationship between institutional ownership ratio of the companies listed on Bombay Stock Exchange and ROE.*

*H<sub>1b</sub>: There is a significant relationship between institutional ownership ratio of the companies listed on Bombay Stock Exchange and the interest of each share*

## **Methodology**

### *Variables*

Dependent variables

Current and future financial performance

- Return on equity

It is one of the performance evaluation accounting criteria that is obtained out of dividing the net profit of the owners of ordinary shares by shareholders' equity, common stocks (or its average). This ratio indicates the return of cash funds invested of the company's common stock owners and indicates the ability of the firm's management on use of these funds. A firm that has a relatively high return on equity, in essence, has the ability to generate cash (Roos, G., Roos, J. (1997). Return on equity ratio was used to assess the function.

- Earnings per share

Another indicator of performance evaluation of the company is earnings per share. The specified index is calculated and reported in the financial statements. This index is the most widely used measures of performance for all investors due to its simplicity in understanding which is calculated by dividing the net profit of the company by the number of issued shares.

### Independent Variables

#### Percentage and quantity of institutional ownership

In this study, "institution ownership" is taken as the independent variable that its indices include:

#### Percentage of institutional ownership and quantity of the institutional owners

These variables are considered based on a review of the literature related to corporate governance and are used as the institutional ownership in the researches of Cornet et al (2007), Hasas Yeganeh et al (2008) and Namazi et al (2007).

### Control variables

#### Debt or leverage ratio

Researchers, to measure the leverage, use the various criteria, such as financial leverage, debt ratio, the total of debts modified by market value of equity and others. In this study, the ratio of total debt divided by total assets used in financial leverage =  $\frac{\text{total liabilities}}{\text{total assets}}$

#### Company Size

In order to calculate the variable of company size we used the criteria such as Logarithm of the market value of equity, log of company assets, and log of sales and so on. At this research we used the logarithm of the total assets of the company to measure this variable.

### *Population and sample*

Research population includes industries of cement, pharmaceuticals, chemicals, oil, Car and essential metals. They should not be of the investment companies and banks and financial intermediate, due to the special nature of their activities. They should have participated in Bombay Stock exchange during 2009 to 2013 with no financial year change. They should have had a continuous activity and they should have been profitable.

The sample size consists of 38 companies out of 58. In this study, we only used the systematic omission method to select the sample with respect to the conditions considered by the researcher.

### **Data analysis**

Data analysis and testing hypotheses of this research were done by Excel and Eviews softwares. Thus, the information provided by the databases was sorted out and categorized in Excel and then communicated to Eviews software so that the relevant statistical tests performed on them. In this research, to test hypotheses and examine the validity of the regression total value and the justification power of regression t, F statistics and coefficient of determination ( $R^2$ ) were used. The method of combined data (time-series and cross-sectional data) were used to estimate the model. For statistical test, the software E-views, and used Excel were used.

### *Descriptive analysis*

Understanding the research statistical population, it is required to describe the research data to identify a dominant model of relationships among variables.

Table 1. Variables descriptive statistics

Variables	Average	Mean	Max.	Min.	SD	Skewness	Elongation	Statistics quartile Bra	Prob. of Statistics quartile Bra
EPS	31.05	19.66	199.09	0.58	30.45	1.76	7.43	253.63	0.00
Institutional ownership	74.09	79.11	99.84	18.08	21.61	-1.06	3.03	35.88	0.00
number of Institutional ownership	2615.46	1915.50	41448.00	350.00	3785.45	6.70	62.08	29055.81	0.00
Leverage	0.30	0.31	1.00	0.00	0.21	0.23	2.41	4.37	0.11
ROE	27.30	10.90	2259.96	-0.92	163.87	13.42	183.30	263073.20	0.00
Size	25.14	25.01	28.48	22.57	1.31	0.32	2.52	4.55	0.10

According to Table 1 and comparing of the descriptive statistics related to the Bombay, it can be found that an average of percentage of ownership of institutional investors in Mumbai is 74.09 indicating the more ownership of institutional investors in Mumbai. Also, the average financial leverage of the firms listed in Bombay Stock Exchange is equal to 0.30 showing that companies use debts more to finance their activities and they are dependent on their capital structure. The probability statistics for

the quartile Bra show that the study variables have mostly a significance level of less than 0.05% which represents the non-normality of the data variables. However, according to the central limit the data more than 30 tends to be normal. Based on theorem of the total central limit and average values, a random sample of n number was selected that approximately tends to have a symmetrical distribution of the sample.

### *Inferential Analysis*

Testing research hypotheses, panel data regression test were used. Since the data used in this study are panel they need particular steps to be analyzed. Generally, model estimation by panel data involves the following steps:

- Reliability analysis
- Model predictability by panel data
- Determination of fixed or random effects
- Parameters estimation

### Reliability of the variables

Investigating the reliability of variables, it is possible to use tests such as ADF, PP16, ISP15 and LLC14. Dickey Fuller Test (ADF) is one of the most important unit root test which has been applied in this study. The reliability of variables has been shown in table 2.

Table 2 ADF for evaluating the reliability of the variables

Variable	Statistics	Probability statistics
EPS	142.158	0
Institutional ownership percent	154.932	0
number of Institutional ownership	104.893	0.015
Leverage	136.068	0
ROE	110.119	0.006
Size	100.835	0.006

If the probability of t is less than 0.05 for Dickey Fuller test, we confirm the reliability of the variable otherwise the variable is not valid and Dickey-Fuller test with a phase of difference measurement must be executed again. Table 2 shows that for some variables, statistics probability is less than 0.05 and for some of variables is greater than 0.05. Preparing for the variables, to perform tests of Limer F and Hausman test, for the data of data panel, the variables must be reliable. Therefore Dickey Fuller test is done on variables that are of statistics probability more than 0.05. We also conducted a phase difference measurement that the outputs are shown according to Table 3 that the results of Dickey-Fuller test is performed on the data with a phase of difference measurement, that the outputs statistics imply less than 5% which indicates the reliability of all the variables, therefore the conditions for implementing the next tests to chose a good model for the regression model is satisfied.

### F test (Chow) for selecting Intercept or Constant variables

Firstly, it is required to test the common fixed value which is homogeneity of different times of study. Testing this hypothesis, F test is used. The result of this test has been shown in table 3. The hypotheses are also presented as follows:

Hypothesis  $H_0$ : intercepts of the model are equal to each other = combined data model

Hypothesis  $H_1$ : intercepts of the model vary from sample to sample = fixed effects model

Table 3 F test (Chow) for selecting Intercept or Constant variables

Research hypotheses	Statistics	Probability statistics	effect
Secondary hypothesis (1)	0.834	0.733	The combined data model is confirmed
Secondary hypothesis (2)	7.414	0.00	The constant effects model is confirmed

If the statistic probability is less than 0.05 the constant effects model is confirmed otherwise the combined data model is confirmed. Table 3 shows that in the first secondary hypothesis the combined data and in the second secondary hypothesis constant effects models are confirmed. Now, to examine to select the fixed effects model test against random effects model, we need the Husman test

If the Hausman test statistics probability is less than 0.05, the fixed effects model is accepted, but if the probability is greater than 0.05 then there is sufficient reason to reject the fixed effects model and to test related hypotheses the random effects model is used. According to table 4, the random effects model needs to be applied since the probability is larger than 0.05.

Table 4: Hassman test for selecting the constant and random effect patterns

Research hypotheses	Test Type	statistics	Freedom degree	Probability statistics
Secondary hypothesis (2)	$\chi^2$	5.928	4	0.204

### Estimation of coefficients of the research hypotheses

After reliability tests and F Limer test, we should estimate the coefficients of hypotheses models of 1 and 2 for which multiple regression tests were used.

## Hypothesis testing

The main hypothesis states that there is a significant relationship between the institutional ownership and the current performance of listed companies in Bombay Stock Exchange. For this hypothesis, two sub-hypotheses were as follows:

- The first sub-hypothesis: there is a meaningful relationship between the institutional ownership and rate of return on equity of firms listed in Bombay Stock Exchange.
- The second sub-hypothesis: there is a meaningful relationship between the institutional ownership and the earnings per share of listed companies in Bombay Stock Exchange

Table 5 shows the result of the first sub-hypothesis. Durbin Watson test is used to examine the presence or absence of the correlation between the variables. So if the statistics value is between 1.5 and 2.5, it shows low probability of autocorrelation is low correlation and if it is close to 4 or 0, it shows high probability of autocorrelation. Since Watson statistics for the (Mumbai) is between 1.5 and 2.5 the probability of autocorrelation is very low. F statistics and its probability represent the significance of the whole model. Also the coefficient of adjusted determination of model is the ability of model at the ability of the explanation the dependent variables. In this hypothesis, the figure of the adjusted determination coefficient is equal to 0.12 (for Mumbai). The t statistics indicates the significance of the related variable so that if the probability of t-statistics is less than 0.05 for a variable, the variable in the model will be viable which has a linear relationship with the dependent variable of model. Therefore table 5 reveals that for the first sub-hypothesis, none of the variables in model has significant relationship with the dependent variable (Return on equity).

Table 5 The first sub-hypothesis test results

Variable	Coefficients	Statistic t	Significance level
Constant number	77.156	0.298	0.765
Institutional ownership percent	-0.001	-0.519	0.604
numberof Institutional ownership	-1.009	-1.676	0.095
Leverage	130.102	2.141	0.033
Size	-0.371	-0.036	0.970
Determination coefficient	0.246	Statistic F	2.003
Balanced Determination coefficient	0.123	Probability of F	0.096
Durbin Watson Statistic			1.493

Table 6 displays the test results of the second sub-hypothesis. As it was said in the explanation of the first sub-hypothesis, Durbin Watson statistics should be between 1.5 and 2.5 in order to not have the problem of autocorrelation. As table 6 shows, for the second sub-hypothesis this statistic is in this limit (2.15).

F statistics probability is less than 0.05 and indicates the significance of the model and there is a linear relationship between the variables in the model. In this study, the independent variables, namely the institutional ownership (number and percentage of institutional ownership) has no significant relationship with the dependent variable (Earnings per share).

Table 6 the second sub-hypothesis test results

Variable	Coefficients	Statistic t	Significance level
Constant number	44.998	1.181	0.239
number of Institutional ownership	-0.000	-1.005	0.316
Institutional ownership percent	0.383	1.233	0.219
Leverage	-14.779	-0.718	0.473
Size	-1.409	-1.109	0.269
Determination coefficient	0.694617	Statistic F	7.156
Balanced etermination coefficient	0.597557	Probability of F	0.000
Durbin Watson tatic			2.158

## Conclusion

The main hypothesis of the study states that there is a significant relationship "between institutional ownership and the current performance of the companies listed in Bombay Stock Exchange." According to this hypothesis, the researcher examined the relationship and impact of the institutional ownership on the performance of the companies. Theories and previous studies have investigated the role of institutional investors in companies in different countries and the majority of institutional investors have been evaluated the ownership structure of the company positive, because the institutional companies with respect to high activity in investments and having the ability to assess the status of the companies can affect the management and oversee it. But the issues including short-term and long-term institutional shareholders' ownership concentration showed that only the presence of institutional investors in the company framework is not enough. Some earlier studies have shown that presence of institutional investors with a high percentage of ownership, increases the concentration of ownership in the hands of a limited number of people that contrary to this expectation, which it should help to improve the monitoring of management decisions but also would encourage them to become a partner with the management in their own interest and thus the rights of the minor shareholders is crushed.

In this study with use of two variables of the number of the institutional owners and the percentage of the institutional ownership we examined the impact of these two indices on the current performance of the company. Index of the number of institutional owners indicates the concentration of ownership in the hands of institutional shareholders that whatever the index is greater the ownership concentration decreases and the smaller the concentration, the ownership increases. On the other hand, the percentage of ownership of institutional investors shows also the percentage of ownership of the shareholders of the company. The results showed that in none of the Bombay Stock Exchanges, the indicators of institutional shareholders could have a

significant impact on the performance of the company. In other words, institutional investors do not influence the current performance of the company and institutional investors apparently are not interested in the current performance of the company. Therefore, considering the results of the study, it is recommended that users of financial statements pay attention to the ownership structure since different indices can influence the institutional ownership in different counties and industries. This requires companies to develop a mechanism for provision of stakeholders' information for users of financial statements.

### **Recommendations for future research**

With respect to our results and the limitations of the study, recommendations for future research are presented as follows:

- It is suggested that the influence of factor of industry type should also be considered.
- It is suggested that other measures of company performance should also be evaluated.

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