

## The impact on the ownership structure and capital structure of listed companies in Tehran Stock Exchange

AbazarMahmoudy<sup>1</sup>, YosefAsadzadeh<sup>2</sup>, Farhad Moradpour<sup>3</sup>, Somayeh Safdariyan<sup>4</sup>

<sup>1</sup>Islamic azad university Bonab Branch, Bonab ,Iran

<sup>2</sup>Islamic azad university Ahvaz Branch, Ahvaz ,Iran

<sup>3</sup>Farabi campus university of Tehran, Tehran, Iran

<sup>4</sup>Islamic azad university Ahvaz Branch, Ahvaz ,Iran

\*Corresponding Author

AbazarMahmoudy

Email: [minafarahzan@gmail.com](mailto:minafarahzan@gmail.com)

**Abstract:** The aim of this study was to evaluate the impact of the ownership structure and capital structure of listed companies on the Stock Exchange in Tehran. Thus, during the years 1385 to 1393, 186 companies as samples, were tested using a multiple regression model hypotheses. The Tobin's Q ratio (Tobin's Q) and return on assets (ROA) has been used as an indicator of the performance of companies. Ownership structure were examined through the mechanisms of institutional shareholders, shareholder equity and capital structure of modules and focus on indicators of long-term debt-to-equity ratio and the ratio of equity debts. In general, hypothetical test results showed that among the mechanisms of ownership structure, institutional shareholders has a significant positive correlation with Tobin's Q ratio and shareholder block has a significant positive correlation with the rate of return on assets. Results also showed that the capital structure has a significant negative correlation with the performance of firms.

**Keywords:** ownership structure, capital structure, institutional shareholders, shareholder block, focus stock

### INTRODUCTION

Economic developments, the Industrial Revolution in the nineteenth century Europe and its continuity, caused initiation of big factories and big industrial projects such as the construction of the national railway network. The factories and projects required huge capital and being provided by one or more investors was impossible. So to provide the necessary capital of large companies, most of the companies formed an ownership structure which was composed of several owners. Increase of the number of company owners, decreased management and control by their owners, which led to the separation of ownership from management and raised the issue of agency problems. On the question of agency problems, conflict of benefits between the owners of the company (employers) and managers (agents) is supposed to happen and the agency costs arises of this conflict of benefits. To reduce conflicts of benefits and costs of representing the companies, there are different mechanisms, most notably corporate governance. Corporate governance includes internal and external mechanisms.

The market capitalization of these companies comes from various sources which are classified in two main categories of debt and equity. Determining

optimal capital structure of a company and ways of financial provision is one of the main decisions and goals of managers in order to maximize the wealth of the stockholders and its components are one of most complex issues which managers face. capital structure of a company shows the relationship of debt and the stockholders rights. Basically, the use of debt increases the expected return on equity and performance and on the other hand it can also cause an increase in the company's financial risk. Given the above, what is the question of this study is whether the ownership structure and capital structure have an impact on listed companies in Tehran Stock Exchange performance? Having answered this question, managers and decision makers of the company's can do better to improve the performance of companies and creditors and potential investors, with understanding the impact of these factors on the performance of the company, will do better in their future decisions

In this respect the necessity of this study was to determine what kind of composition and identity can lead to better monitoring of the ownership and what amount of debt can be used in the composition of capital better. In this paper, a brief review of the research, methodology of proposed research and then test of the hypothesis and conclusion are presented.

## THEORY AND LITERATURE

Casey and et al. (1997), to exercise effective corporate governance, ownership structure and factors external to control mechanisms on the market, raised issues of legal protection of the rights of minority shareholders. The type of ownership structure and corporate governance shareholders is a means of control of the companies. This factor in many aspects of determining property, including property distribution, concentration of ownership, presence of major shareholders in the combined company ownership and possession can be investigated. In general, institutional shareholders, shareholder block, the concentration of ownership of shares, are external mechanisms of corporate governance that can monitor the actions of managers and improve the performance of their effective participation in the study are used as mechanisms of ownership structure in this study.

Three important hypotheses are there about the relationship between institutional investors and corporate performance: active monitoring hypothesis (efficient), the hypothesis of a conflict of interest and strategic homogenic hypothesis. Active monitoring hypothesis states that the supervision by the shareholders costs high, so only large shareholders including institutional shareholders, managers have the incentive and the ability to monitor and influence (Cornet et al., 2007). The hypothesis has had a positive impact on the firm's institutional shareholders, while the hypothesis about conflict of benefits states that, institutional shareholders are the ones who are focused on short-term profits over long-term benefits and long-term reduction in the value of the company (Porter, 1992). The third hypothesis, related to institutional shareholders, is the strategic alignment hypothesis. This hypothesis states that institutional shareholders have a strategic alliance with the company's management and put a negative impact on the company's value in the long term.

Modern theories relating to corporate governance and ownership structure, such as agency theory state that the stock markets concentration and the major shareholder, increase the ability to monitor the actions of managers. Jensen and McInling (1976) stated that large shareholders improve the company's performance and the performance of the company managers can monitor and protect their assets. In other words, major shareholders have economic rationalization to monitor the company's managers performance (Shleifer and Vishny, 1989). The more the number of major shareholders in the combined company's ownership the more control between major shareholders; and conflicts of benefits between them

decreases, so the expected return of shareholders and the company's performance increases.

Modern theories of capital structure were introduced in 1958 with the publication of Miller & Modigliani. These authors noted that given the lack of income tax, no agency costs and capital structure and corporate value have no relation with each other and are independent. They, in their research in 1963, asserted that using debt in capital structure decreases paid tax and more use of debt increases value of company. The tax allows companies to cut debt and loan from profits as costs.

### Ownership structure and corporate performance

Shaheed (2003), in his study in Egypt on 90 selected people to participate in the exchange, found that the relationship between ownership and indicators (price to book value) is not significant, but the relationship between ownership and performance Accounting firm (ROA and ROE) is a significant relationship.

Driffield et al (2007) concluded that the concentration of ownership has a positive effect on financial leverage and firm value in the companies in Indonesia, Korea, but this effect is negative in Thailand and Malaysia. They also concluded that ownership concentration as a mechanism for effective monitoring can reduce agency costs. The results of Bertrand and Molainathan (2001) also showed that a majority shareholder in the combined board of directors will lead to greater control over wages.

Minguez & Martin (2007), using data from 95 Spanish companies and using panel data methods, concluded that major shareholders have no significant relationship with the companies Tobin's Q ratio. Tisa and Chu (2007) studied the relationship between institutional ownership and operation of the 106 US companies between 1999 and 2003. In this study, the performance of Tobin's Q ratio was used. Overall Results of research using multiple regression analysis showed a significant positive relationship between institutional ownership and firm performance.

Lee (2008) in a study entitled "The Impact of Ownership Structure on financial performance" investigated Korean companies. In this study, the concentration of stock ownership structure of the three variables (number of shares held by the largest shareholder), foreign shareholders and institutional investors for the performance of the rate of return on assets is used. According to research improved performance by focusing shares, but the impact of foreign and Institutional owners was not found on the company's performance.

Arosa et al (2009), using data from 586 Spanish companies, have the effect of ownership structure on firm performance. The stock ownership is calculated through focusing and concentration of relative stock. Profitability (ROA) and earnings before interest and taxes (EBIT) for the performance indicators were used in this study. The results of this study showed that the relationship between ownership concentration and corporate performance management depends on family and kinship management and ownership concentration.

Hosseini (1386) [6] examined the effects of institutional investors as one of the criteria for efficiency of corporate governance on shareholder returns. The results of this study demonstrated that the level of institutional ownership in companies listed in Tehran stock exchange are numerous, but there is no significant relationship between institutional investors and efficiency.

Namazi and Kermani (1387) [8] concluded that there is a significant and negative relation between "Institutional Ownership" and the company's performance and positive significance between "ownership" and the company's performance. "Management ownership" significantly and negatively affects performance and about the "foreign ownership" no information was observed to represent the ownership of foreign investors in the companies of the sample, and in general there is a significant relationship between ownership structure and performance.

Babai Zaklyky and Ahmadvand (1387)[2] concluded that with increase in the number of major shareholders in the combined ownership, return on equity increased. This means that there is a positive relationship between shareholders and ROE. The number of shareholders also showed a positive relationship with P/E. Hassas Yeganeh, Moradi and Alexander (1387), [5] in their study, examined the relationship between institutional investors and corporate value. The results indicate the existence of a positive relationship between institutional investors and corporate value and approve Effective Monitoring Hypothesis. However, the results showed no significant relationship between institutional ownership concentration and corporate value and did not support the hypothesis of convergence of benefits.

Sadeghi Sharif and Bahadori (1388)[7], in a study, concluded that the ownership of the largest shareholder and the 5 largest shareholders has a positive effect on a firm's payout ratio. It means that companies which most of their property is in a single shareholders possession or most of its shares go to 5

large shareholders have more interest payment rather than companies with more dispersed possession and concentration on possession increases the ratio of payment. The impact of institutional shareholders on the company's payout ratio was confirmed. It means that the ownership of institutional investors in a company is increased, causing the ratio of interest payments that increase over time. On the other hand the more real investors in a company is increased, the more the ratio of interest payments is reduced.

### **Capital structure and corporate performance**

Baker & Wurgler (2002) studied the relationship between leverage and firm performance using the ratio of market value to book value, as a performance and concluded that between the ratio of market value to book value and leverage is a negative relationship. Abor (2005) studied the effect of capital structure on the profitability of companies in Ghana between 2002-1998. The results of this study showed that there is a positive relationship between relative to total current liabilities assets with ROE, however, in this study, a statistically negative correlation between long-term debt to total assets ratio with ROE was observed. The results also show that there is a relation between the ratio of debt to total assets ratio and return on equity.

In another study conducted in New York Stock Exchange and the United States, it was concluded that the relationship between capital structure and return on assets is negative and significant (Fsborg and Ghosh, 2006). The results of Olive and Thain (2007), using data from 167 firms, showed that the company's capital structure has a negative relationship with accounting performance indicators (ROE and ROA) and the market performance indicators (Q Tobin and P/E). Eriotis (2007) studied the relationship between capital structure and profitability of the company. In this study, the ratio of debt to total assets was used for capital structure, and concluded that there is a negative relationship with the profitability of the company. In other words, with an increase in the rate of debt to total assets of the Greek companies, profitability is reduced.

Biglar (1385) [3], studied the relationship between capital structure and functional characteristics of the firms listed in the Tehran Stock Exchange and concluded that capital structure has an impact on financial performance. This means that companies with high debt ratios have shown a better performance. In another study, Namazi and Shirzadeh (1384)[9], by taking a sample of 108 companies from various industries (food and beverage, chemical products, non-metallic mineral products and vehicles), investigated the relationship between capital structure and profitability of companies listed in stock Tehran's securities. They

concluded that there is a positive relationship between capital structure and profitability, but this relationship was statistically weak.

Arbaban and Safari (1388)[1] examined the effect of capital structure on profitability of companies listed in Tehran Stock Exchange by selecting 100 companies from 13 industries and using multivariate regression models. The results showed that there is a positive relationship between the ratio of short-term debt to total assets and profitability as well as the ratio of debt to assets and profitability. But there is a negative relationship between the long-term debt to total assets ratio and profitability. Piri (1389)[4] studied measures of capital structure (debt-to-equity ratio and current ratio to total assets and debts) and concluded that market value is not statistically significant relationship.

### Hypotheses of the study

According to the theoretical principles and previous research, the hypotheses of this proposed research are the following:

Hypothesis 1: The structure of ownership and capital structure have a significant impact on the Company Tobin's Q ratio.

Hypothesis 2: ownership structure and capital structure have a significant impact on the rate of return on assets firms.

### METHODOLOGY

This study is a correlational research that tries to describe relationships between variables using statistical tests. Method of investigation of the present study is post-vent and uses historical data and research according to the purpose is an applied research. For the study, a sample of firms listed on Tehran Stock Exchange was selected. The sample consisted of firms which were admitted to Tehran Stock Exchange by the end of 1384, and maintain membership by the end of 1393 and are not among the investment firms, banks and insurance companies. Their financial period should be up to the end of March and during the investigation period, the fiscal year shouldn't have changed. Due to the limitations listed, 186 companies were considered as the final sample for the study.

Data and information needed for the study of official sites of Tehran Stock Exchange including information of Stock Exchange and site of research management, development and Islamic studies were collected and conducted and preliminary calculations required were used in an Excel spreadsheet. The final analysis was done using software SPSS16 and using the multiple regression models, significant regression test (test F), test each variable coefficients, coefficient of determination and test multiple and test of Dorbin-

Watson . to investigate the hypotheses of the research multiple regression model was used:

$$Performance_{i,t} = \alpha_0 + \beta_1 Ownership_{i,t} + \beta_2 Capital_{i,t} + \beta_3 Tangibility_{i,t} + \beta_4 Growth_{i,t} + \beta_5 Size_{i,t} + \varepsilon_0$$

performance in the above regression model indicates the dependent variable and the performance of each of the main hypotheses Tobin's Q ratio (Tobin's Q) and return on assets (ROA) were used proportionally. Tobin's Q by market capitalization (number of shares multiplied by the stock price end of the year published by the company) is calculated considering the book value of the company assets and return on assets by dividing net income as total assets. Ownership and Capital represent the independent variables and indicates the ownership structure and capital structure of the firms. For institutional shareholders (INST), major or block shareholder (Block Stock) and stock markets (CENT) is used for property structure. INST is calculated from percentage of stake held by institutional investors (banks, public institutions, investment firms and general legal shareholders). Block Stock percentage of the shares representing the company's largest shareholder and shares held by shareholders CENT indicates the percentage of stocks to be above 5 percent. For capital structure ratio of the debt-to-equity and the ratio of Long Debt-To-Equity were used.

Tangibility, Growth and Size represent an important loss of control variables. Tangibility indicates on tangible assets which is obtained from division of fixed assets to total assets. Growth reflects the company's growth which is achieved through the geometric mean of company's sales growth; and Size also indicates that company's size in this study is used as a measure of value.

### RESULTS

H1 test results are shown in Table 1. A significance level of 0.000 and F value obtained from the 150/27 model would be models show a significant meaning and can be used in general. The Dorbin-Watson statistic is between 5/1 and 5/2 of the implementation of the model is acceptable 813/1, respectively. Given the significant level of 073/0 obtained for institutional shareholders and institutional shareholders plus factor, it can be said that the 90 percent confidence level with Tobin's Q ratio has a positive and significant relationship. However, given the significant level obtained for the mechanisms of shareholder block (major) 882/0 and 718/0 respectively, which is the focus stock, it can be said that these mechanisms are not significant relationship with Tobin's Q ratio. Achieved a significant level for the debt-to-equity ratio is 0.000 and the coefficient has a

minus signand indicates the Tobin ratio and 99% confidence level and there is a significant negative relationship. However, given the significant level obtained for the ratio of long-term debts of 228/0 is the equity that, it can be said that between the capital

structure of the index and Tobin's Q ratio, there is no significant relationship.ownershiphas been used with control variables used in the study, about 63 percent of the ratio

**Table 1. Results from testing hypotesis 1**

valuet	Standardized coefficient	Meaningfulness scale	Variable Name
4/291	-	0/000	Width of origin
1/806	0/109	0/073	(INST) institutional investors
-0/148	-0/010	0/882	(Block Stock) Block Stockholders
-0/361	-0/024	0/718	(CENT)Capital Structure
-4/266	-0/234	0/000	debt-to-equity ratio
-1/212	-0/068	0/228	long-term debt-to-equity ratio
-5/764	-0/329	0/000	Tangibility
-0/045	-0/002	0/964	Growth
12/430	0/729	0/000	Size

Dorbin-Watson Value: 1.381  
**F Value:27.150**  
**F value meaningfulness 0.000**  
**Justified Coefficient of Determination: 0/611**  
**Coefficient of Determination 0/634**

H2 test result is reflected in Table 2. The results of the implementation of the logistic regression model showed that the model was significant at 99% confidence level and that 328/29 is the F statistic. Watson also obtained statistics camera 772/1 is the desirable and acceptable. Given that a significant level of institutional shareholders 562/0 is obtained for institutional shareholders have a significant relationship can be said that the rate of return on assets, but

according to the level of significance to block shareholder (major) that 070 / 0 positive factor is the marked, it can be said that the major shareholder and return on assets at a confidence level of 90 percent is a significant and positive relationship. Also according to the 644/0 is the significance level obtained for the stock markets, there is a significant relationship between these variables was not confirmed by return on assets.

**Table .2 Results from testing hypotesis2**

valuet	Standardized coefficient	Meaningfulness scale	Variable Name
4/667	-	0/000	Width of origin
0/581	0/035	0/562	(INST) institutional investors
1/828	0/117	0/070	(Block Stock) Block Stockholders
-0/463	-0/031	0/644	(CENT)Capital Structure
-5/544	-0/304	0/000	debt-to-equity ratio
-2/437	-0/138	0/016	long-term debt-to-equity ratio
-3/350	-0/193	0/001	Tangibility
-0/098	0/005	0/922	Growth
12/384	0/732	0/000	Size

Dorbin-Watson Value: 1.772  
**F Value: 29.328**  
**F value meaningfulness:**  
**Coefficient of Determination 0.620**  
**Justified Coefficient of Determination:0.599**

Source: researchers' findings

Time-to-equity ratio and negative sign, it can be said that the capital structure and return on assets is a significant negative correlation.

In general, according to the coefficient obtained from the execution of regression model to test the hypothesis that is 620/0, could be verified that H1 is approved and

variables ownership structure and capital structure as well as control variables are able to And about 62 percent of the rate of return on assets cause.

## CONCLUSION

In this study, the hypothesis was tested experimentally. In H1 H2 Tobin's Q ratio and return on assets were the dependent variable and the impact of the ownership structure and capital structure were studied. For the ownership structure, mechanisms of institutional investors, shareholders were used and the capital structure of modules and stock markets indices of long-term debt-to-equity ratio and the ratio of equity were used. The results of the tests show that institutional shareholders ratio has a significant positive correlation with Tobin Q and confirms active monitoring. But the relationship between two other mechanisms of property structure (block shareholders and stock markets) with Tobin's Q ratio was not confirmed. The test H2 showed a significant relationship between the rate of return on assets and shareholder block, but a significant relationship between the rate of return on assets ownership and other two structure mechanisms was not confirmed. The results of this research corresponded to the results of some studies such as Manguéz and Martín (2007), Tsai & Gu (2007) and Babai Zakilaky and Ahmadvand (1387), but some other researches such as ones including Lee (2008) and Namazi and Kermani (1387) [8] do not confirm. For example, Lee, achieved the positive impact of concentration of ownership and Namazi and Kermani also concluded with the negative impact of the performance of institutional ownership on the performance.

Test results about the relationship between the company's capital structure and firm performance, showed that the debt-to-equity ratio has significant negative correlation with Tobin's Q ratio respectively. But a significant relationship between the proportion of long-term debt to equity ratio was not seen. On the other hand, in the second main hypothesis, a significant negative correlation between both indicators is shown for capital structure and return on assets. The results, alongside with the results of other research, including Baker (2002), Zaitun and Thain (2007) matched but researches, including research of Abaid (2009), Arbabian and Safari (1388) [1] did not correspond to the results of research. In this research a positive impact on the performance of the capital structure is considered.

Obtained results showed a significant relationship between ownership structure and capital structure with a performance of some of the mechanisms at various levels. For example, institutional shareholders with Tobin's Q ratio as an indicator of the company's performance and showed a significant

positive correlation with the rate of return on assets, ownership structure, and this mechanism did not show a significant relationship. Or there is a significant relationship between the proportion of long-term debts equity to return on assets was approved, while this index did not show a significant correlation with Tobin's Q ratio.

## REFERENCES

1. Arbabian AA, Safari Graily M; The effect of capital structure on profitability of firms listed in Tehran Stock Exchange. *management vision*, 1388; 33:175-159.
2. Babaei Zaklyky MA, Ahmadvand J; The effect of ownership structure on the performance of firms listed in Tehran Stock Exchange. *Financial Research*, 1987; 26: 41-60.
3. Biglar K; The relationship between capital structure and functional characteristics of the firms listed in the Tehran Stock Exchange, M.A.thesis in ShahidBeheshti University, Faculty of Management and Accounting. 1385.
4. Piri A; The impact of corporate governance, capital structure and liquidity on the market value. Thesis for master's degree in Business Administration, Qazvin Islamic Azad University, Faculty of Management. 1389.
5. HassasYeganeh Y, Moradi M, Eskandari H; The relationship between institutional investors and corporate value. *check-in accounting and auditing*, 1387; 52:122-107.
6. Hosseini M; Effect of institutional investors as a measure of corporate governance on shareholder returns of companies listed in the Stock Exchange in Tehran," master's thesis, Tehran University, Faculty of Management. 1387.
7. Sadegh Sharif J, Bahadori H; The effect of ownership structure on the ratio of interest payments in listed companies in Tehran Stock Exchange. *Financial Research*, 1388; 27:61- 80.
8. Namazi M, Kermani E; The effect of ownership structure on the performance of firms listed on Tehran Stock Exchange. *assessment of accounting and auditing*, 1387; 53, pp. 83-100.
9. Namazi M, Shirzadeh J; The Relationship between the capital structure of firms listed in Tehran Stock Exchange profitability: with emphasis on the types of" investigations of accounting and auditing, 1384; 42: 95-75.