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The Study on the Impact of Institutional Ownership on Some Financial Ratios of Listed Companies in Tehran Stock Exchange

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ABSTRACT
Emergence of the institutional investors is one of the most important corporate governance mechanisms. Institutional investors have required ability and motivation to monitor companies. Also, observing corporate governance significantly influences the improvement of financial ratios. Therefore, purpose of this study is to investigate the impact of institutional ownership on some financial rations of listed companied in Tehran stock exchange. Four ratios (leverage-ratio, return of assets ratio, Return of equity ratio and earning to price ratio) were used to estimate financial ratios of companies. Required data were extracted from financial statements of 78 listed companies in Tehran stock exchange during 2006 to 2009.Multiple regression model was used to test hypotheses of the research. Results of study showed institutional ownership positively influences on return of assets and return of equity. There was no significant correlation between institutional ownership and leverage ratio as well as between institutional ownership and earning to price ratio.
KEYWORDS: *Institutional Ownership, Financial Ratios, Leverage Ratio, Return of Assets Ratio, Return of Equity Ratio, Earning To Price Ratio.*

INTRODUCTION

Stockholder's structure in different enterprises may vary; however stockholders could play fundamental role in corporate governance and their different structure could have different impacts on financial ratios of companies. Presence of institutional investors in the area of public joint stock owners and impacts of this group on governance in organizations and financial ratios are more interesting. Institutional investors penetrate on company shares and could influence the processes. In other hand, such investors are known as professional stockholders and have strong analysts to analyze the accounting information and are able to use such information [1-8].

STATEMENT OF THE PROBLEM

Most economists believe that large companies are more effective, efficient and cost-effective. For this reason, economists focus on their activities and related issues. Principles of corporate governance were approved by Development and Economic Corporation Organization in 1992 by ministers. These principles are international base for policy-makers, investors and stockholders in the world. Then, corporate governance issue has been extended; these principles were used as a base to communicate members and non-members of development and economic corporation. At the moment, policy-makers believe broadcasting principles of corporate governance could stabilize financial markets, encourage investing and economic growth. Companies conclude observing principle of corporate governance could assist them in competition [9-12]. Institutional investors and pension funds play important role in investing. Observing principles of corporate governance improve healthy and economic growth of the society in macro level and improve financial rations of companies and increase values of company in micro level. So, aim of this study is to investigate impact of institutional ownership on financial ratios of companies.

PURPOSE AND HYPOTHESIS OF THE STUDY

Main purpose of this study is to investigate the impact of institutional ownership on some financial ratios of companies.

Main hypothesis

There is significant relationship between institutional ownership and some financial ratios of companies.

Sub-hypothesis

1- There is significant relationship between institutional ownership and leverage ratio.
2- There is significant relationship between institutional ownership and return of assets ratio.
3- There is significant relationship between institutional ownership and return of equity ratio.
4- There is significant relationship between institutional ownership and earning to price ratio.

METHODOLOGY

This study is applied-descriptive research and multiple regressions were used to identify correlation between several variables of financial ratios and ownership structure.

In order to test hypothesis of the study, multiple regression is used as below

$Y_{it} = \beta_0 + \beta_1 IO_{it} + \beta_2 QT_{it} + \beta_3 Size_{it} + \beta_4 Age_{it} + \varepsilon_i$

In this model:

Y: Shows four financial rations of company which are estimated by leverage ratio, return of assets ratio, return of equity ratio and earning to price ratio.

Financial ratios

In order to qualitative evaluation, quantitative information and report of users and classification and summarize of financial statements and accurate information of financial statement in this statement are in mathematical ratio.

Leverage ratio

Leverage ratio is defined as ratio of book value of total leverage to total book value of assets

Return of assets ratio

Return of asset ratio is a metric of company benefic which is shown as a percent of total assets.

Return of equity ratio

Return of equity ratio is one of most important metric of benefit which is applied as one of most important performance metric and includes annual benefit and increase (decrease) stock value.

Earning to price ratio

Earning to price ratio is defined as reported earning ration in Minutes of annual general meeting to market price of each stock in same date.

Institutional ownership in a company

Institutional ownership is defined as a fraction of shares and main stockholders are owners; it means institutional investors monitors at least fifty percent of issued total share, otherwise institutional ownership variable is zero.

Based on article 27 of stock exchange rule, institutional investors include

1-banks and issuance organization

2, holdings, investing companies, pension funds, investing and fund company listed in stock exchange organization.

3. Any real or legal person who is purchased more than 5 percent or 5 billionRials of issued exchanges.

4. Public institution

5. Public organization.

6. Board members and mangers

In this study, institutional investors are selected based on above rules.

Tobin's Q

In most studies, Tobin's Q indicator was used as a performance variable and shows importance of this indictor to estimate performance and financial ratios. This ration is able to manage income through an asset. So in this study, such indicator is used.

There is some restriction in this regard; following this indicator is historical value. Because Denominator is according to historical values, so impact of inflation is not shown in analyzing this indication and this could effect on results of the study.

Size of company

Size of company is natural logarithm of total average assets at the end of fiscal year.

Age of company

Age of company is number of years which company is listed in Tehran stock exchange.

E: unknown error

Above model is fitted separately for each hypothesis of the study and finally, positive (negative) and significantβ1coefficient shows acceptance of hypothesis.

Statistical sample
Statistical sample include all listed companies in Tehran stock exchange.
Accepted samples in Tehran stock exchange have below situation.
1. They should be accepted in Tehran stock exchange until end of March 205 and their fiscal year should be ended to end of March.
2. Companies don't have right to change their fiscal year.
3. Companies should have continuous activities during research and their stock should be interchanged.
4. Data of company should be available from 2006 to end of 2009 in database of Tehran stock exchange.
5. Company should be productive and investing companies are eliminated due to different categorize and nature of financial statement.
According to above regulation, 78 companies were selected among listed companies in Tehran stock exchange.
Statistical analysis
Testing precondition regression model
Normality of variables
Sample Kolmogorov-Smirnov Test was used to study normality of variable of study.
H0: data meet normal distribution
H1: data don't meet normal distribution
This test is used to study claims about data distribution of a quantitative variable.

Table 1: results of k-s test for variable of study

Results	Significance level	Variable
Not normal	0.004	Leverage ratio
Not normal	0.008	Return of assets
Not normal	0.000	Return of equity
Not normal	0.000	Earning to price
Not normal	0.000	Tobin's Q
Not normal	0.007	size
Not normal	0.000	age
Not normal	0.000	Institutional ownership

Above table shows dependent variables don't meet normal distribution. So, Box-Cox is used in Minitab software to normalize dependent variable. Box-Cox is positive for values, so outlier data should be converted to positive scale and then SPSS software was used to converting. Outputs of normalized data are shown in table 2.

Table 2: results of normalized variables using Minitab software

Results	Significance level	Variable
Normal	0.128	Leverage ratio
Normal	0.183	Return of assets
Normal	0.619	Return of equity
Normal	0.172	Earning to price

As shown, value of possibility of target variable in normality test of dependent variable is more than 0.05, so distribution is normal and normalized dependent variables lead to normalized of remainder in regression.
Significance test in regression pattern
In regression model, coefficient of two tests is used in order to determine significance of test. These two significant tests estimate regression line and significance of coefficient of independent variables.
In order to estimate regression coefficient F statistical is used as below:
$H_0: \beta_1 = \beta_2 = ... = \beta_k = 0$ regression equation is not significant.
$$H_1: \beta_i \neq 0: i = 1, 2, k \text{ Regression coefficient is significant}$$

All regression coefficients are zero simultaneously; this factor shows lack of correlation between dependent and independent variables and not significant equation. Otherwise, regression equation is significant. If confidence level is less than critical value, H0 is accepted and if confidence level is more h0 is denied and significance of regression is approved.

Significance test of regression coefficient

After determining significance of regression line equation, related coefficient to each independent variable is estimated by t static to evaluate significance of test coefficient. Related hypothesis are as below:

H_0: $\beta_i = o$ Coefficient of i variable is zero In regression model

H_1: $\beta_i \neq o$ Coefficient of i variable is zero In regression model

If confidence level is less than critical value, h0 is accepted and if confidence level is more h0 is denied and significance of regression is approved

Error independent is one of assumption which should be observed in the regression. If independence of error is denied and errors are not correlated, regression is not used. In order to evaluate error independent Durbin-Watson test was used. Statistic of this test is among zero to four. If this statistic is among 1.5 to 2.5, correlation of error are accepted and regression model could be used

RESULTS OF HYPOTHESIS TEST

First hypothesis of study: there is significant correlation between institutional ownership and leverage ratio.

This hypothesis is explained as below:

H0: there is no significant relationship between institutional ownership and leverage ratio.

H1: there is significant relationship between institutional ownership and leverage ratio.

Table 3: summary of regression results in first hypothesis of the study

Result of test	Durbin-Watson	statistic)F(	Coefficient of determination	significance	Regression coefficient	Correlation coefficient	Dependent variable	Independent variable
Denied	1.796	34.860	0.275	0.596	-0.028	0.525	Leverage ratio	Institutional ownership

Findings of table (3) shows:

Statistical results in Durbin-Watson statistic (1.796) showed that error correlation is denied and regression model is used to test this hypothesis. Based on statistical results of table above, there is no significant correlation between institutional ownership and leverage ratio (sig=0.596 > 0.05). So, H1 is denied.

Second hypothesis of study: there is significant relationship between institutional ownership and return of assets.

This hypothesis is explained as below:

H0: there is no significant relationship between institutional ownership and return of assets.

H1: there is significant relationship between institutional ownership and return of assets.

Table 4: summary of regression results in second hypothesis of the study

Result of test	Durbin-Watson	statistic)F(	Coefficient of determination	significance	Regression coefficient	Correlation coefficient	Dependent variable	Independent variable
accepted	1.530	85.975	0.482	0.045	0.138	0.698	Return of assets	Institutional ownership

Findings of table (4) shows:

Statistical results in Durbin-Watson statistic (1.530) showed error correlation is denied and regression model is used to test this hypothesis. Coefficient of determination is 0.482 and this show approximately 48.2 percent of changes in return of assets variable is estimated by significant variable through institutional ownership variable. Correlation coefficient (0.698) between return of assets and institutional ownership shows positive and direct correlation. Based on statistical results of table above, there is significant correlation between institutional ownership and return of assets (sig=0.045 < 0.05). So, H1 is accepted.

Third hypothesis of study: there is significant correlation between institutional ownership and return of equity.

This hypothesis is explained as below:

H0: there is no significant relationship between institutional ownership and return of equity.

H1: there is significant relationship between institutional ownership and return of equity.

Table 5: summary of regression results in third hypothesis of the study

Result of test	Durbin-Watson	statistic)F(	Coefficient of determination	significance	Regression coefficient	Correlation coefficient	Dependent variable	Independent variable
accepted	1.511	42.176	0.314	0.003	0.411	0.561	Return of equity	Institutional ownership

Findings of table (5) shows:
Statistical results in Durbin-Watson statistic (1.511) showed that error correlation is denied and regression model is used to test this hypothesis. Coefficient of determination is 0.314 and this show approximately 31.4 percent of changes in return of equity variable is estimated by significant variable through institutional ownership variable. Correlation coefficient (0.561) between return of equity and institutional ownership shows positive and direct correlation. Based on statistical results of table above, there is significant correlation between institutional ownership and return of equity (sig=0.003< 0.05). So, H1 is accepted.
Fourth hypothesis of study: there is significant correlation between institutional ownership and earning to price ratio.
This hypothesis is explained as below:
H0: there is no significant relationship between institutional ownership and earning to price ratio.
H1: there is significant relationship between institutional ownership and earning to price ratio.

Table 6: summarize of regression results in fourth hypothesis of the study

Result of test	Durbin-Watson	statistic)F(	Coefficient of determination	significance	Regression coefficient	Correlation coefficient	Dependent variable	Independent variable
Denied	1.585	13.174	0.130	0.339	0.014	0.360	Earning to price ratio	Institutional ownership

Findings of table (6) shows:
Statistical results in Durbin-Watson statistic (1.585) showed error correlation is denied and regression model is used to test this hypothesis. Based on statistical results of table above, there is no significant correlation between institutional ownership and earning to price ratio in (sig=0.339 > 0.05). So, H1 is denied.

Limitations
1. Access to financial information of companies was restricted, so in this study public joint stock companies which are listed in Tehran stock exchange were selected. So, results of study are not applied for all kinds of commercial companies.
2. Selecting samples was done through elimination method due to nature of variables and restrictions of qualified companies and this could be one of restrictions of the study.
3. Items of financial statements are not adjusted due to inflation impacts and this can affect the results.

CONCLUSION
Emergence of institutional investors is one of most important mechanisms of corporate governance. Since, institutional investors are biggest group of stockholders in a company, their role to monitor and influence on financial ratios is crucial. In this study, relationship between institutional ownership and some financial ratios (leverage ratio, return of assets ratio, return of equity ratio and earning to price ratio) is investigated. In this study, positive relationship of institutional ownership and return of equity and return of assets as performance indicators is obtained in listed companies in Tehran stock exchange; such performance indicators is monitored by most of investors in investing decision-making.
So, institutional investors are able to improve financial ratios of owned companies as well as to punish managers who are not move toward meeting their benefits. This shows institutional owners manage their portfolio actively and motivate manages to make optimize decision. In other word, institutional investors improve financial rations of company. By increasing number of institutional investors in ownership structure, monitoring and controlling is increased among stockholders, conflicts of benefits are decreased and benefits are increased.
Findings of this research are consistent, because institutional owners have financial and investing expertise to monitor management decisions; they are able to control operation of company to improve financial ratios.

RECOMMENDATIONS BASED ON RESULTS OF HYPOTHESIS

Based on findings of results, it is expected that investors investigate ownership structures of companies from focus view point and ownership combination and don't invest in companies in which most of ownership shares is in managers authority, also factors like size and age of company should be investigated based on findings of the research. In addition, managers should observe institutional ownership structure as an effective factor on financial ratios and try to modify them.

It is recommended that financial statements users observe stockholders combination and values of stock. Also, it is recommended to provide a mechanism to prepare accurate information of stockholders (ownership chains among stockholders) for financial statement users.

Results of study showed variables of ownership structures play important role at financial ratios of company. Government and companies should understand governance issues due to corporate governance mechanisms in Tehran stock exchange and create a suitable ownership structure to improve financial ratios.

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