A Study on the Relationship between Proprietorship Concentration and Profit Management in the Companies Listed in Tehran Stock Exchange

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Abstract

The presence of institutional investors may change the behaviors of companies. The impact of institutional investors on management decisions on financial affairs have been proven in other studies; yet, the present study aims to investigate the relationship between lack of information symmetry an concentration of proprietorship with profit management in the companies listed in Tehran Stock Exchange. The period under study included years 2004 to 2009. Rahavard Novin Computer application was utilized to collect the data; then they were calculated using Microsoft Excel. SPSS computer application was used to test research hypothesis and conduct other statistical analysis using statistical methods like descriptive statistics, correlation (correlation coefficient, coefficient of determination), regression analysis and testing its coefficients, correlation analysis and test of coefficients and significance of the difference between two correlation coefficients. A total of 109 active companies in the stock exchange were selected as the sample of the study. Results on the first hypothesis revealed that the relationship between concentration of proprietorship and lack of information symmetry. In case of the second hypothesis, it is predicted that there is a significant relationship between profit management with lack of information symmetry and concentration of proprietorship. According to research results, investors and analysts ought to pay attention to factors like proprietorship composition, the level of information symmetry along with the figures published by the companies when making short and long-term decisions.

Keyword: Concentration of Proprietorship; Profit Management; Institutional Investment.

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Introduction

Composition of stockholders may vary in different companies. Part of the companies' proprietorship is for individual shareholders; another part goes to company managers and the third part goes to major shareholders or institutional stockholders. Institutional investors are major stockholders like banks, insurance companies and investing companies. The common idea is that presence of institutional investors may change companies' behavior. The impact of institutional investors on management decisions on financial affairs has been proven in several studies. Since in developing countries like Iran individual shareholders play a key role in economy, paying attention to this part of stockholders is of great importance. Encouraging them to invest more will help improve the economic condition in the society (Noorvash, 2005). The present study aims to investigate the relationship between concentration of proprietorship and profit management in companies admitted by Tehran stock exchange.

Statement of the Problem

Companies as financial entities are always looking for further revenues and more profit. Due to many reasons the most important of which is the difference between proprietary and management, companies not only have to conduct a business activity but also they have to be responsible toward external parties. The most efficient form of this responsibility based on empirical evidences, is financial reporting. Therefore, companies have to do their financial activities properly and report their financial activites as well so that their financial activity has the lowest costs and highest income and direct the financial report to the direction through which investors do not feel like taking their capital out of the company (Ahmad Poor et.al. 2006). Corporate governance includes the relationship between various groups in order to direct and lead the activities of the company. The corporate governance system could be defined as a set of rules, regulations, institutions and methods determining who manages the company and how this management is conducted. However, corporate governance does not simply refer to managing the operations of the company but it refers to the guidance, supervision an control imposed by executive managers and their responsibility toward company's beneficiaries (Chang & Leder, 2009).

According to these discussions, it is expected that the relationship between concentration of proprietorship and profit management be a significant one. Thus, the present study aims to examine the relationship between these parameters and tries to find an adequate answer to the following questions:

1.   Is there a significant relationship between concentration of proprietorship and lack of information symmetry?

2.   Is there a significant relationship between lack of information symmetry and concentration of proprietorship with profit management?

Significance of the Study

Development of any country necessitates utilizing all resources in the best possible way and directing them into a decent route. Different institutions in societies could help reach this goal and take a more serious responsibility for that. Capital markets and institutions related to them are one of the most important factors in this process. Tehran Stock Exchange is believed to be the most important center for capital exchange in Iran. Nevertheless, its proper and correct activity could undoubtedly play a key role in decent allocation of resources in macro-economy level and induce economic growth in a country. For many years, economists believed that all the groups related to one corporation worked toward one common goal. However, in the past thirty years, numerous conflicts between benefits of groups and the method they took to deal with these conflicts have been discussed by great economists (Bocsh, 2008).

Research Hypotheses

1.   There is a significant relationship between concentration of proprietorship and lack of information symmetry.

2.   There is a significant relationship between lack of information symmetry and concentration of proprietorship with profit management.

Theoretical Framework

The need for corporate governance is derived from the conflict in the potential benefits common between individuals in the structure of the company. This benefit

conflict comes from two major sources. Firstly, different individuals present in the structure of the company have different interests and preferences. Secondly, their knowledge and experiences are not necessarily more than other individuals in the company (Chang & Leder, 2009). This conflict in benefits are reported through the test of differentiating management and propriety or in other words differentiating between control and proprietary. They believed that when there is lack of corporate governance mechanisms, differentiating proprietary from control enables managers to pursue their own interests instead of the one of the stockholders.

One of the outcomes of conflicts in interests in corporations is biased financial reporting by the managers of the company. Earning smoothing is to impose the ideas of corporation management in the priority of registering costs and revenues or considering the costs and transferring them to the coming years so that the corporation shows a steady profiting trend over years without showing a loss. The overall result of such operation will be a better image for the corporation compared to the reality and investors are motivated to participate in investments (Bosch, 2009). In case of a potential transaction, if a party has more information, lack of information symmetry occurs. This problem covers accounting information as well. Corporation managers have much more information about the value of their stock so the symmetry of information in stock market cannot exist (Noorvash, 2005).

Review of the Related Literature

Etemadi and Khabiri (2011) conducted a study named open cash flows and their effects on profit management and the role of auditing in years 1999 to 2003 and investigated 87 companies as the subject. They used the Pearson coefficient, t-student and multiple regression. Their results revealed that there is a direct and significant relationship between profit management and open cash flow. They also demonstrated that the relationship between auditing committee and the cash flows, size of the company and the whole number of Accruals significant.

Fakhari and Adili (2012) investigated the relationship between open cash flows and profit management through real activities in the companies admitted in Tehran Stock Exchange to find out about profit management through modifying real activities. Their

results revealed that there is a positive and significant relationship between open cash flows in companies with low growth and management criteria based on real activities including abnormal cash flow, abnormal production and abnormal voluntary expenditures.

Khodadadi et.al. (2010) investigated the effects of profit management on relating the share profit and the nominal value of the share separating short-term Accruals items, long-term Accruals items and all other optional Accruals items. Their results revealed that the profit of each share and its nominal value have a positive and significant relationship with the price of shares. Besides, they demonstrated that profit management through optional short-term or long-term Accruals items reduce the relativity of the shares and their nominal value.

Yaghoob Nejad et.al. (2012) attempted to find a model to measure profit management in companies admitted in stock market. Their study revealed the parameters like ratio of debt, size of the company, management change, profitability index and last year's profit management index are directly related to profit management. On the other hand, parameters like tax, type of proprietorship, type of auditor, change of auditor and type of the industry have no effect on profit management.

Nikoo Maram et.al. (2013) conducted a study and examined the political view and profit management in a 9-year course from 2001 to 2009. They demonstrated that there is a direct relationship between political management and profit management. In other words, presence of political management in companies is one of the factors affecting profit management. Change of auditor, type of auditor, profitability index and ratio of liabilities are other parameters with significant relationship with profit management. However, change of management, sale growth and size of the company have nothing to do with profit management.

In a study titled "investigating the effects and analyzing the factors influencing cost cohesion", Zanjir Dar et.al. (2014) demonstrated that official, general and sale costs along with cost of the good are cohesive and the degree of cohesion is very high in case of the sold goods. Parameters like number of staff, current assets of the company and ratio of liability affect the degree of cohesion of official costs, sale and cost of the sold good.

Nikoo Maram and Pazooki (2014) investigated management reward and profit stability in a ten year time from 2003 to 2012. Their results revealed that there is a positive

and direct relationship between management reward and profit stability. In other words, the more the profit stability, the further the management reward will be. Besides, they showed that the increase in the size of the company increases management reward as well. The quality of Accruals have a negative effect on management reward. Finally, the ratio of liability had no effect on management reward.

Palarmos and Schools (2010) investigated the relationship between profit management and regulations and standards in Indonesia and concluded that profit management in the companies under study were not affected by accounting and auditing regulations.

Hadani et.al. (2011) conducted a study on the relationship between institutional proprietorship of stock and profit management in a three-year time between 2001 and 2004 and demonstrated that the increase in the propriety of institutional investors reduces profit management.

Song et.al. (2011) investigated political management in the time period 2006 to 2008 in Chinese corporations and revealed that in companies with political relations, management profit is less than other companies. Moreover, they found that the format of profit management in companies with political relations is more than minimizing profit. This increases the coefficient of profit reaction in the capital market.

Great Iram et.al. (2013) conducted a study titled accruals and real profit management and political relations and showed that companies with political relations are not interested in classifying real profit management strategies with the potential to discover. Their findings demonstrated that political reliances have a great effect on selecting management strategies.

Shuang Xue & Yun Hong (2014) studied profit management, corporate governance and cost adhesion. They showed that cost adhesion could not be separated from managers' motivation. Corporate governance mechanisms could decrease opportunities for profit management and reduce the quality of the profit. They demonstrated that good corporate governance decreases cost adhesion.

Material and Methods

The present study was a correlation type and based on regression equations. Regression analysis and technical statistics were used to investigate and model the relationship between variables. At first, the analyzer assumes that there is a relationship of some kind between variables. In fact, he guesses if there is a linear relationship between two variables and then he collects data from those variables. Then he draws a figure with two dimensions and puts the collected data in the form of dots on the figure. Thus, some of the companies admitted in Tehran Stock Exchange were selected and their data from 2009 to 2014 were collected and analyzed using the method discussed above. Besides, the present study is an applied study from the point of view of purpose and used ideas, regulations, principles and techniques used in basic studies to solve real executive problems (Kordestani, 2008).

Data Collection

Data collection is conducted in order to find a mental response to a real problem. The present study used library resources including books, magazines, dissertations, papers and the internet. This method is used for preliminary researches, compiling review of the literature and theoretical framework of the different studies. In order to collect the data for research hypotheses, data from companies admitted in Tehran Stock Exchange will be referred to and after extracting the necessary information through Tadbir Pardaz and Rahavard Novin computer applications and financial statements of those companies in the years 2009 to 2014 and data banks of Tehran Stock Exchange. They were put into Microsoft Excel columns and the analysis was conducted to evaluate research hypotheses. Therefore, considering the conditions and the considerations after systematic elimination, 103 companies were selected as the research society for the five consecutive years.

Research Model and Measuring Variables

In order to study the relationship between concentration of proprietorship and information symmetry, one regression model in which lack of information symmetry was a function of the level of concentration of proprietorship was utilized. The model is:

$$ASBit = \alpha_0 + \alpha_1\,INSit + \alpha_2 MTBit + \alpha_3 Sizeit + \alpha_4 Levit + \alpha_5 Betait + \alpha_6\,LGDEBTit + \varepsilon it$$

Where:

ABSit is the level of the lack of information symmetry of company I in the year t

INSit is the level of concentration of proprietorship (percentage of the biggest stockholder in the company) of company I in the year t

MTBit is the ratio of market value to nominal value (growth opportunity variable) of the company I in the year t

Size it is the natural logarithm of company assets (size of the company) of the company I in the year t

Levit is the ratio of liabilities to assets (financial lever) of the company I in the year t.

Beta it is the systematic risk criterion of the company I in the year t

LGDEBT it is the natural logarithm of total liabilities of the company I in the year t.

And in order to investigate the relationship between concentration of proprietorship and lack of information symmetry with profit management a model was used in which optional accruals were used as indices of profit management and a function of lack of information symmetry and concentration of proprietorship. The model is follows:

$$DACit = \alpha_0 + \alpha_1\,DINSit + \alpha_2\,ABSit + \alpha_3\,ABSit^{*}DINSit + \alpha_4 MTBit + \alpha_5 Sizeit + \alpha_6 Levit + \alpha_7 Betait + \alpha_8\,LGDEBTit + \varepsilon$$

Where

DACit is the optional accruals of the company I in the year t

DINSit is the virtual changeable variable which is one if the level of concentration of proprietorship in the company I is more than the mean of concentration of proprietorship of all companies and will be zero if they are not

ASBSit is the level of lack of information symmetry of the company I in the year t

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MTBit is the ratio of market value to nominal value (growth opportunity variable) of the company I in the year t

Sizeit is the natural logarithm of the assets (size of the company) of the company I in the year t

Levit is the ratio of liabilities to assets (financial lever) of the company I in the year t.

Betait is the criterion of systematic risk of the company I in the year t

LGDEBTit is the natural logarithm of the overall liabilities of the company I in the year t

Method of Measuring Profit Management (Dependent Variable)

In the present study, the optional accruals were used as the indices of profit management. These accruals were calculated using remainders of the regression of all accruals on sale, property and machinery (independent variables).

In order to measure the optional accruals, Dechow et.al. (1995) model modified by Kothari, Leone and Wasley (2005) will be utilized. This model is as follows:

$$\frac{TACC}{TAi,t-1} = \alpha_1 \left(\frac{1}{TAi,t-1}\right) + \alpha_2 \left(\frac{\Delta REVit}{TAi,t-1}\right) + \alpha_3 \left(\frac{PPTi.t}{TAi,t-1}\right) + \varepsilon_{it}$$

Where:

TACC is the total accruals (net operational profit after taxes- cash flow induced by operational activities)

ΔREV is the change in annual sale

PPE is the net value of properties, machinery and tools

TAit-1 is the overall nominal value of the assets

ε is the remainder of regression

In this model, remainders of the regression are optional accruals used as an index for the quality of reporting (dependent variable) in hypotheses tests. The more this value is the lower the quality of the accruals will be.

Method of Measuring Lack of Information Symmetry (Independent Variable)

In order to measure lack of information symmetry between investors and managers a model proposed by Venkatesh and Chiang (1986) was utilized which was originally designed to determine the range of price for buying and selling stock. This model has been used in several studies:

$$\text{ABSit} = \frac{AP - BP}{(AP + BP)/2} \times 100$$

Where:

ABSit (SPREAD) is the range of the difference in the price for buying and selling stock

AP is the annual mean of the suggested price for selling the shares

BP is the mean annual price for buying shares

Method of measuring the level of concentration of proprietorship (independent variable)

Level of proprietorship concentration= the number of the shares of the largest shareholder/ the whole number of published shares

Analyzing Statistical Data

After collecting the data, the researcher has to classify, categorize and analyze them so that the research hypotheses helping him reach the point are tested to find an adequate response to research questions. Analyzing the data is a multistage process in which the data are collected, summarized, classified and finally processed to create the ground for analyzing and communicating the data for the final purpose of testing the hypotheses. In this process, the data are empirically and conceptually purified and various statistical methods play a key role in inferences.

Descriptive Analysis of the Data

Central and distribution indices for research variables are determined before descriptive analysis of the variables. Mean as the most important central index along with

standard deviation as the most important distribution index are calculated. Standard deviation shows the data distribution. This gives an overall view toward statistical society and offers a better recognition from it.

Testing the First Hypothesis

In order to test the first hypothesis a regression model in which lack of information symmetry was a function of proprietorship concentration is used. The model is as follows:

$$
\begin{cases}
\text{ASBit} = \alpha 0 + \alpha 1\ \text{INSit} + \alpha 2 \text{MTB} + \alpha 3 \text{Size} + \alpha 4 \text{Lev} + \alpha 5 \text{Beta} + \alpha 6\ \text{LGDEBTit} + \varepsilon \\
\text{H0: } \alpha 1 = 0 \\
\text{H1: } \alpha 1 \neq 0
\end{cases}
$$

Where:

ABSit is the level of lack of information symmetry

MTB is the ratio of market value to nominal value (growth opportunity variable)

Size is the natural logarithm of company assets

Lev is the ration of liabilities to assets (financial lever)

Beta is the systematic risk criterion

LGDEBTit is the natural logarithm of overall liabilities of a company

Testing the Second Hypothesis

In order to test the second hypothesis a model was used in which optional accruals as indices of profit management are functions of lack of information symmetry and the level of proprietorship concentration. The model is as follows:

$$
\text{DACit} = \alpha 0 + \alpha 1\ \text{DINSit} + \alpha 2\ \text{ABSit} + \alpha 3\ \text{ABSit}^* \text{DINSit} + \alpha 4 \text{MTB} + \alpha 5 \text{Size} + \alpha 6 \text{Lev} + \alpha 7 \text{Beta} + \alpha 8\ \text{LGDEBTit} + \varepsilon
$$

$$
\text{ASBit} = \alpha 0 + \alpha 1\ \text{INSit} + \alpha 2 \text{MTB} + \alpha 3 \text{Size} + \alpha 4 \text{Lev} + \alpha 5 \text{Beta} + \alpha 6\ \text{LGDEBTit} + \varepsilon
$$

$$
\begin{cases}
\text{H0: } \alpha 2 = 0 \\
\text{H1: } \alpha 2 \neq 0
\end{cases}
$$

Where:

ABSit is the level of lack of information symmetry

MTB is the ratio of market value to nominal value (growth opportunity variable)

Size is the natural logarithm of company assets

Lev is the ration of liabilities to assets (financial lever)

Beta is the systematic risk criterion

LGDEBTit is the natural logarithm of overall liabilities of a company

These tests were conducted using SPSS computer application and the outlets of the application determined the significance of the relationships between variables. Studying statistical hypothesis through the level of significance (P-value) of independent variables and comparing them with the level of test error (α) is done in correlation tests.

Table 1. Chow test results for the first regression model to test hypotheses

result	Significance level	F statistic
Model panel	0.000	12.809

Table 2. Hausman test for the first hypothesis tests, regression model

result	Significance level	Chi-Sq test
Regression, based on fixed effects	0.034	13.611

Table 3. Results of statistical analysis to test the first hypothesis

Variable	T-statistic	B coefficient	meaningful level
Constant factor	2.165683	0.712298	0.0308
INS	3.335352	0.400757	0.0009
MTB	0.262677	0.000163	0.7929
SIZE	-2.893210	-0.310513	0.0189
LEV	-2.351170	-0.888733	0.0191
BETA	-0.740809	-0.005876	0.4592
LGDEBT	2.859729	0.309235	0.0135
Adjusted coefficient of determination: 0.266 Durbin-Watson statistic:1.685 Statistic F: 3.328 The significant level of statistic F: 0.000			

A closer look at other studies shows that presence of confidential information and lack of access to them by public creates a condition named lack of information symmetry and this creates different prices for buying and selling shares. The second hypothesis tried

to find out if concentration of proprietorship in companies with lack of information symmetry induces profit management or not.

Table 4. Chow test results for the second hypothesis tests, regression model

result	Significance level	F statistic
Model panel	0.000	10.049

Table 5. Hausman test results for the second hypothesis tests, regression model

result	Significance level	Statistics Chi-Sq
Regression, based on fixed effects	0.000	19.663

Table 6. Results of statistical analysis to test the second hypothesis

Variable	T-statistic	B coefficient	meaningful level
Constant factor	-5.222567	-4.183499	0.0000
DINS	-2.676169	-0.184760	0.0144
ASB	1.367945	0.197707	0.1720
DINS*ASB	2.837354	0.185270	0.0128
MTB	0.266412	0.000400	0.7900
SIZE	2.097087	0.827283	0.0365
LEV	1.977412	1.791754	0.0486
BETA	0.028564	0.000550	0.9772
LGDEBT	-2.903081	-0.760790	0.0176
Adjusted coefficient of determination:0.312			
Durbin-Watson statistic:1.625			
Statistic F: 5.503			
The significant level of statistic F: 0.000			

The results on this hypothesis showed that the relationship between lack of information symmetry and profit management with high concentration of proprietorship is lower compared to other companies. In other words, in these companies, lack of information symmetry has a little effect on profit management compared to other companies. This finding could be a proof for the role of major shareholders in supervising the performance of managers in corporations.

The proper role of institutional shareholders in any economy is a controversial issue. Shareholders as the owners of the corporation are of particular rights like selecting the managing board which they are representatives of shareholders and have the responsibility of supervising managers of the company. It seems as if supervision of major shareholders in corporations reduces the opportunities and abilities of managers to conduct a proper financial reporting. In other words, managers in companies with high

concentration of proprietorship are not very interested in profit management or they did not have the opportunity or tools needed for this management. This finding could be interpreted in two ways: firstly, high concentration of proprietorship solves several problems of representation and converges the interests of managers and shareholders. This factor reduces the managers' motivation to manage profit. Secondly, if major investors are knowledgeable investors, their supervision will not simply cover performance of the corporation and will focus on the quality of reports provided by the management.

Conclusion

One of the outcomes of conflict between interests of corporations is financial reporting by company managers. Managers as officials providing financial reports have a comprehensive knowledge about condition of the company and a higher level of awareness about users of financial reports could potentially give a more desirable image of the business entity.

Results from the first research hypothesis show that in the companies under study, the further the concentration of proprietorship is, the more the lack of information symmetry will occur. This findings concords with the first hypothesis and theoretical framework offered in the second part. This finding demonstrates that major shareholders are of great importance in the context of company information. This role however could be positive or negative depending on the motivation and abilities of the shareholders.

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