THE STUDY OF RELATIONSHIP BETWEEN INFORMATION ASYMMETRY AND CONCENTRATION OF OWNERSHIP WITH PROFIT MANAGEMENT IN THE LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

Negin Haji Azandaryani¹, Darush Javid², Hosein Soleimani³

¹M.a student of accounting, Department of Accounting, Malayer Branch, Islamic Azad University, Hamadan, Iran
²Assistant professor in accounting, Islamic Azad University, Malayer, Accounting faculty, Malayer, Iran. Corresponding Author
³Assistant professor in statistics and mathematics, Islamic Azad University, Malayer, mathematics faculty, Malayer, Iran

Abstract
Generally, it is supposed that the presence of institutional investors may lead to the change in company's behavior. The purpose of this study is to study the relationship between information asymmetry and ownership concentration with profit management in 119 listed companies in Tehran Stock Exchange. The period of study is from 2006 to 2011. At the first hypothesis of the study, it is predicted that there is a significant relationship between ownership concentration and information asymmetry. Results represent a significant relation between this variable with information asymmetric. In other words, with increasing of ownership concentration during the study period, information asymmetry in the sample companies increased. During the second hypothesis, it is predicted that there is a significant relationship between profit management and information asymmetry and ownership concentration. Results confirm the second hypothesis. According to the achieved results, it is recommended to investors and analysts to pay attention to factors such as combination of ownership and information asymmetry of companies along with the figures given by the companies and capital market for short-term and long term investment decisions.

Keywords: Information Asymmetry - Ownership Concentration - Profit Management

Introduction:
The combination of different companies' shareholders varies. Some part of Companies' ownership is in the hand of petty shareholders and factual persons. The other parts of the stocks are in the hands of managers and some parts are in the hands of major shareholders which are known as the institutional shareholders. Institutional investors are those great investors such as banks, insurance companies and investor companies (Noroush -2005 - Page 56). Generally, it is supposed that the presence of institutional investors may lead to the change in company's behavior. The influence of institutional investors on management decisions regarding financial decisions may be due to the concentration of ownership and its obvious and exact outcome, i.e. ownership concentration and behavior control and the decision of companies' managers are caused by major shareholders (Mag Velarg -1998 - pp. 9-8).

Jiang and Kim, 2000, stated that in those companies in which there are ownership concentrations, valuable internal information about the future business prospects of the company and its business strategies will be available exclusively through direct
communication between the managers and companies owner of the shares. The transmission of information will often be available to a shareholder companies through channels such as the Joint Board members and thereby the majority of investor companies access to these information. Meanwhile, the only information source of petty shareholders is the financial reports published by corporation's managers.

**Theoretical Foundations:**

Ownership structure theory in experts' point of view, shareholders should always apply an effective and exact monitoring on management. Of course, in any case, the shareholders can be inactive by selecting the managers and consigning decision making power to them under any condition which its intensity and weaknesses will depend largely on performance, accuracy and careful decisions of other shareholders (Bushner, 1993, pp. 133-121).

Definitions of company governance: There is a variety of definitions for corporate governance: from limited definitions which focus on companies and their shareholders to comprehensive definitions. Corporate governance defines as follows:

It is the process of monitoring and control to ensure the performance of company's director in accordance with the profits of shareholders (Parkenson, 1994, p 39).

Kizy and Wright wrote in 1993: "Corporate governance is: Structures, processes, cultures and systems that provide the success of organization."

Corporate governance system can be defined as the rules, regulations, institutions and procedures that determine in favor of which people and how the companies are governed (Megnsin, 1994, p 74).

Combination of ownership and corporate governance: Ownership structure has been considered as one of the important issues of corporate governance. Structure ownership or shareholders' combination means the way of shares' distribution and ownership's right in the perspective of vote right and capital in addition to the nature and entity of shares' owners. Ownership structure of a company is important in various aspects and in the first instance two variables are defined including internal shareholders or shareholders in the hands of internal shareholders and external shareholders. (Sarin et al -2000 - Page 83)

Combination of ownership and major shareholders: The existence of major shareholders in the ownership combination can have positive and negative consequences for the company. Perhaps Berle and Means were the first persons who discussed about this issue in 1932 and claimed that there is a type of negative relationship between decentralization and the broadness of ownership with company's performance. According to them, the larger the number of shareholders is and their ownership percentage is less, the weaker is the company's performance.

The relationship between ownership structure and capital market efficiency: ownership structure is associated with the degree of capital market efficiency in this point that the higher degree of market efficiency and full, accurate and timely disclosure of company's information in the market can reduce the negative impacts of ownership combination in cases such as representation, the difference between the bid price for buying or selling, and so on.

The role of institutional ownership on information asymmetry: Several studies have been conducted in this regard that it can be pointed out to research conducted by Jacobson and Aaker (1993) and Jiang and Kim (2000) among them. The first study deals with the comparative study of information asymmetry between Japan and the U.S. capital market. Results show that the Japanese stock market reflects data related to future profits earlier than U.S. stock market in stock price. The second study deals with the effects of information asymmetry between managers and shareholders in relation to the timing and amount of profits.
Major and institutional shareholders as an observer: According to Roe (1990), in a combination of widespread ownership, any of shareholders have little incentive to monitor the company's management, because in this case every person who wants to monitor, he should pay the relevant costs, this happened while the other shareholders also use its profits, So, the extent and nature of the agency issue depends on the combination of ownership directly. Many authors including Shleifer & Vishny (1986) Admati, et al (1993), Huddart (1993) Maug (1998) and Noe (2002) believe that the inclusion of major shareholders in the monitoring and control activities cause the limit of the agency issue potentially.

The impact of ownership concentration on share prices: with regard to institutional investors as professional shareholders, Walther (1997) proceed to the forecasts of the profit which expected to pay and the results of their researches show that the present people in the market are professional shareholders in the forecast of the profit of those companies who have institutional shareholders, they mainly focus on the forecast of analysts rather than time series models.

Information asymmetry and market efficiency: information asymmetry is generated when the shareholders do not access to confidential information which are available for company's managers. The existence of adequate information in market and reflection of information in a rapid and timely manner on the price of securities has a close relationship with market efficiency.

Profit management: profit management is generally applied to showing partial views of company's management in transposition of income and cost accounting records or taking into account the expense or transfer them to later years so that it makes the company has a procedure of profits without major changes during some fiscal years. This paper discusses about the leveling methods on one hand and on the other hand it deals with the other works such as qualitative characteristics of information and more disclosure which makes the managers is not successful in the leveling processes.

Managers' motivation for oriented reporting: motivated managers' motivation for untrue reporting can be associated with three variables used in the economic literature. These three variables are company size, income taxes, and debt contracts. In addition to the three variables mentioned, two other variables that can be managers' motivation, including profit variability, and deviation of the operational activities.
### An Overview of Research Literature:

#### Research relevant to ownership concentration and information asymmetry and profit management

#### External Research

<table>
<thead>
<tr>
<th>No</th>
<th>Researchers</th>
<th>Research</th>
<th>Research Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Demsezolin 1985</td>
<td>The study of concentrated ownership</td>
<td>There is not significant relation between the concentrated ownership and accounting profit.</td>
</tr>
<tr>
<td>2</td>
<td>Short 1994</td>
<td>The study of profitability’s measure at companies which are under the control of the owners.</td>
<td>The companies which are under the control of owners have higher productivity than the companies under the control of the managers.</td>
</tr>
<tr>
<td>3</td>
<td>Forth et.al 2002</td>
<td>The study of relationship between controlling mechanisms in guidance of companies and company ‘s performance</td>
<td>There is a significant relation between the controlling mechanisms in guidance of companies and company’s performance.</td>
</tr>
<tr>
<td>4</td>
<td>Libya Matthew Vorab 2003</td>
<td>The study of active companies at Toronto Exchange</td>
<td>Before the declaration of profit, the domain of bid price of shares’ purchase and sale has been increased.</td>
</tr>
<tr>
<td>5</td>
<td>Lui Chiovil 2004</td>
<td>The study of active companies at Euronext Paris Exchange</td>
<td>The extent domain of bid price of shares’ purchase and sale can be observed before its announcement.</td>
</tr>
<tr>
<td>6</td>
<td>Chambers 2005</td>
<td>The study of stability forecast of accruals and cash flows</td>
<td>Investors make an effort to predict the stability of accruals and cash flows but they are not able to reflect them in the prices. Profit stability is influenced by the amount and the sign of accruals.</td>
</tr>
<tr>
<td>7</td>
<td>Dichouras 2005</td>
<td>The comparison of stability of profits based on balance approach sheet and profit and loss approach</td>
<td></td>
</tr>
</tbody>
</table>

#### Internal investigation

<table>
<thead>
<tr>
<th>No</th>
<th>Researchers</th>
<th>Research</th>
<th>Research Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rahman Seresht and Mazloumi in 1998</td>
<td>The study of the relation between management performance of corporate investors with the ownership share of these institutions in listed companies at Tehran Stock Exchange</td>
<td>Differences in ownership structures could explain part of the variation in company performance.</td>
</tr>
<tr>
<td>2</td>
<td>Noroush and Ibrahimi Kordlo 2005</td>
<td>The study of the relationship between the combination of shareholders with information symmetry and the usefulness of performance accounting standards</td>
<td>In companies which have more institutional ownership, with the comparison with companies by lower institutional ownership, stock prices cover more future</td>
</tr>
<tr>
<td></td>
<td>Authors</td>
<td>Title</td>
<td>Findings</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Kurdistani and Amir Beigi 2008</td>
<td>The study of the relationship between time asymmetry of the profit and ratio of market value to book value of shares.</td>
<td>There is a negative significant relationship between the time asymmetry of the profit and ratio of market value to book value of shares. (MTB)</td>
</tr>
<tr>
<td>4</td>
<td>Reza Zadeh and Azad in 2008</td>
<td>The study of the relationship between information asymmetry and conservatism in financial reporting</td>
<td>There is a positive and significant relationship between information asymmetry among investors and applied conservatism level in financial reporting.</td>
</tr>
<tr>
<td>5</td>
<td>Samayee 2003</td>
<td>The study of the relationship between the leveling of profit and adjusted returns based on risk</td>
<td>In confidence level, 90% of the companies that do leveling profit have higher abnormal returns averagely.</td>
</tr>
<tr>
<td>6</td>
<td>Qaemi et al 2003</td>
<td>The study of the effect of profit leveling on the stock returns of listed companies in Tehran Stock Exchange</td>
<td>There is no significant difference between leveling companies and non leveling companies in the terms of unusual returns.</td>
</tr>
<tr>
<td>7</td>
<td>Ibrahim Kordlor and Hassani Azar Dariani 2006</td>
<td>The study of profit management at the time of initial offering of shares to the public in accepted companies in Tehran Stock Exchange</td>
<td>Managers manage the companies’ profits in the year before initial offer and within the first offering year of shares to public.</td>
</tr>
</tbody>
</table>
Research hypotheses
The first main hypothesis:
1 – There is a significant relationship between ownership concentration and information asymmetry.

The second main hypotheses:
2 - There is a significant relationship between profit management and information asymmetry and ownership concentration.

Research Methodology:
This research discusses about the study of relationships between variables, and it is based on historical data after the confirmation of existence this relationship in the current situation. So, it can be classified as post-event. The type of present study is correlation and based on regression equations. From the type of classification of researches based on goal, this research is in the group of applied researches. In this study, it has been used listed companies on the Stock Exchange Tehran stock to collect data of research hypotheses. It is discussed about the test, analysis and results interpretation of research hypothesis for decision making after the extraction of required data through software Tadbir Pardaz and Novin Rahavard and the study of the basic financial statements of listed companies in Tehran Stock Exchange during the years 2012 - 2007 and databases of Exchange Organization and data aggregated in EXCEL columns and variable's calculation. Moreover, in this research it has been used SPSS21 software for testing the hypothesis and the other analysis have been done by applying statistical methods such as descriptive and correlation statistics (correlation coefficient, coefficient of determination), analysis of regression and testing its coefficients, correlation analysis and testing its coefficients and the significant equality test of Multiple coefficient correlation. Theoretical data collection tool for this study is through library resources including internal and external publications, and it is through website, and raw data collection tool in this research is databases (Rah Avard Novin software) and archive of Stock Exchange.

Study Population and Statistical Sample:
The statistical population of this research is all companies listed in Tehran Stock Exchange (505 companies) during 2006-2011. And by using the method of systematic removal sampling (purposive) of the statistical population of the research, the following eligible companies were elected as sample:
1. Manufacturing companies which attends in stock exchange during the period of 2007 to 2012.
2. Companies that their fiscal year ended in the middle of March.
3. Companies who did not change their fiscal year during the period of study.
4. Companies whose shares are traded at least once a year.
5. Companies who their trading symbol is not transferred to the informal Board of stock exchange.
6. Companies that their fiscal information is available in the period of study.
7. Companies that complete the required information fully for this study in the period 2007 To 2012.

According to the mentioned requirements, 119 companies were selected in the period of 2007 to 2012 as statistical sample.

Model and Variables of the Research
ASBit = α0 + α1 INSit + α2MTB + α3Size + α4Lev + α5Beta + α6 LGDEBTit + ε
DACit = α0 + α1 DINSit + α2 ABSit + α3 ABSit * DINSit + α4MTB + α5Size + α6Lev + α7Beta + α8 LGDEBTit + ε

2 – Definition of the Variables:
Profit management: TACC
Information asymmetry: ABS
Concentration of ownership: INS
Logarithm of debt sum: LGDEBT
Size of Company: size
The ratio of stock market value to book value M / B:
Financial leverage Lev:
Systemic Risk Standard Beta:

3 - Classification of Variables:

\[ Y \longrightarrow \text{TACC} \quad \text{Dependent variable} \]

\[ X_1 \longrightarrow \text{ABS} \quad \text{Independent Variable} \]

\[ X_2 \longrightarrow \text{INS} \quad \text{Independent Variable} \]

\[ X_3 \longrightarrow \text{LGDEBT} \]

\[ X_4 \longrightarrow \text{size} \]

\[ X_5 \longrightarrow \text{M/B} \]

\[ X_6 \longrightarrow \text{Lev} \]

\[ X_7 \longrightarrow \text{Beta} \]

4 The method of variables measurement:
The method of measurement of dependent variable 1 is as follows:
The Method of measuring profit management (dependent variable)
It has been used of discretionary accruals as an indicator of profit management. These items will be calculated by the regression residual of whole accruals on sales of property and equipment (independent variables).
It will be used of model Dechow, P et al (1995) which has been developed and modified by Kothari, Leone, & Wasley (2005) to measure the discretionary accruals. This model is as follows:

\[ \text{TACC} = \alpha_1 \left( \frac{1}{\text{TAi}_t-1} \right) + \alpha_2 \left( \frac{\Delta \text{REV} \text{i}_t}{\text{TAi}_t-1} \right) + \alpha_3 \left( \frac{\text{PPTI}_t}{\text{TAi}_t-1} \right) + \varepsilon \]

In the above equation:
TACC: The Sum of Accruals (net operating profit after tax - cash flow from operating activities)
\( \Delta \text{REV} \): Change in annual sales
PPE: the net value of property, machinery and equipment
\( \text{TAi}_t-1 \): Book value of total assets
\( \varepsilon \): The remaining of regression

In the above model the regression residual (\( \varepsilon \)) is accruals (DisAccr) which is used as reporting quality index (research independent variable) in hypothesis testing. Whatever this value is higher, the accruals quality is lesser.
The method of calculation of the independent variable 1 is as follows:
The method of measuring information asymmetry (dependent variable)
To Measure the information asymmetry between investors and managers, we have used the model that Venkatesh p. C & R Chiang (1986) designed for determine the domain of bid price of order and sale of shares. This model has been used in several studies. The Qaemi and
Vatan Parast (2005), Ahmadpoor and Parsaiyan (2006) also have used this model to measure the information asymmetry in Iran.

This model is as follows:

\[
\text{ABS}_{it} = \frac{\text{AP}_{it} - \text{BP}_{it}}{\text{AP}_{it} + \text{BP}_{it}} \times 100
\]

In which:

- \(\text{SPREAD}\) \(\text{ABS}_{it}\): The difference domain for bid price of order and sale of shares
- \(\text{AP}\): The annual average of bid price of sale of company's shares
- \(\text{BP}\): The annual average of bid price of purchase of company's shares

The method of calculation of the independent variable 2 is as follows:

The method of measuring the ownership concentration level (dependent variable)

Ownership Concentration Level = the numbers of shares of the largest shareholder / the total number of company’s published shares

The method of calculation of the independent variable 3 is as follows:

Natural logarithms of the sum debt of company I in year \(t\): \(\text{LGDEBT}_{it}\)

The method of calculation of the independent variable 4 is as follows:

Natural logarithm of company's assets (Company's size) of Company I in year \(t\): \(\text{Size}_{it}\)

The method of calculation of the independent variable 5 is as follows:

Common stock book value / market value of the common stock = \(\text{M} / \text{B}\)

The method of calculation of the independent variable 6 is as follows:

The ratio of debt to assets (financial leverage) of company I in year \(t\): \(\text{Lev}_{it}\)

The method of calculation of the independent variable 7 is as follows:

Measure of systematic risk of the company I in year \(t\): \(\text{Beta}_{it}\)

Description of Findings

In this part of the research findings, the studied companies’ performance in a random sample is described based on fundamental statistical indicators. In table 4-2, a summary of the findings description are listed:

Table 2 the findings’ description =

<table>
<thead>
<tr>
<th>Indicators Variables</th>
<th>Number</th>
<th>At least</th>
<th>Maximum</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>INS</td>
<td>462</td>
<td>0.0841</td>
<td>0.977</td>
<td>0.592</td>
<td>0.134</td>
</tr>
<tr>
<td>Lev</td>
<td>462</td>
<td>0.168</td>
<td>0.955</td>
<td>0.459</td>
<td>0.176</td>
</tr>
<tr>
<td>DIN * ABS</td>
<td>462</td>
<td>-0.683</td>
<td>3.065</td>
<td>0.121</td>
<td>0.335</td>
</tr>
<tr>
<td>ABS</td>
<td>462</td>
<td>-0.953</td>
<td>3.879</td>
<td>0.259</td>
<td>0.402</td>
</tr>
<tr>
<td>Beta</td>
<td>462</td>
<td>-5.1</td>
<td>15.17</td>
<td>0.266</td>
<td>1.423</td>
</tr>
<tr>
<td>Size</td>
<td>462</td>
<td>9.797</td>
<td>18.194</td>
<td>13.173</td>
<td>1.426</td>
</tr>
<tr>
<td>LGDEBT</td>
<td>462</td>
<td>8.758</td>
<td>18.088</td>
<td>12.717</td>
<td>1.44</td>
</tr>
<tr>
<td>DIN</td>
<td>462</td>
<td>0</td>
<td>1</td>
<td>0.58</td>
<td>0.493</td>
</tr>
<tr>
<td>MTB</td>
<td>462</td>
<td>1.29</td>
<td>8.315</td>
<td>2.832</td>
<td>0.958</td>
</tr>
<tr>
<td>DAC</td>
<td>462</td>
<td>-16.167</td>
<td>4.748</td>
<td>0</td>
<td>0.997</td>
</tr>
</tbody>
</table>
The descriptive analysis of the research variables is listed in the table above. Descriptive statistics of ownership concentration variable indicates that, on average, 2.59% of the shares of the statistical sample companies are in the hand of major shareholder. Descriptive analysis of variable information asymmetry suggests that the level of information asymmetry in the statistical sample companies is low, because the average number of these variables has a long distance with their maximum amounts.

DIN variable is a dummy variable that takes a value of zero and one. Minimum and maximum values obtained in the descriptive analysis represent the mentioned nature of this variable. The average of this variable is 0.58. This founding indicates that more than half of statistical sample companies are taken value 1 and the level of their ownership concentration is greater than the average of this variable for all companies.

Discretionary accruals variable is profit management index in which the negative numbers indicates low magnification and positive numbers indicate an over magnification view of profits. The figures of this variable include the residual of the regression model of Dechow et al, 1995. As shown in Table 2, the average of these figures is zero. This finding verifies one of the regression assumptions base on being zero of average of errors and their being normal.

Discriptive analysis related to the controlling variables of research indicates that statistical sample companies are equal on the average in terms of the amount and volume of assets and liabilities, because the standard deviations of both variables are low. The average of the variables in the ratio of market value to book value is far from its maximum value. These finding indicates that in all these companies have limited growth opportunities.

The obtained average of financial leverage indicates that approximately 45.9% of the capital structure of the statistical sample companies is debt. Descriptive statistics of Variable Beta shows that the statistical sample companies are varied in terms of systemic risk, because the range of this variable is expanded.

Table 3 the normality test of asymmetric information variable

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Kolmogorov-Smirnov Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Test Statistic</td>
</tr>
<tr>
<td>Level of information asymmetry ( ABS )</td>
<td>0.078</td>
</tr>
</tbody>
</table>

Regarding the obtained significant level from Kolmogorov-Smirnov test which is more than the test error level (α=0.05), H0 hypothesis of test can be accepted. Therefore, the values related to level of information asymmetry follows of distribution close to the normal distribution.

Table 4 the results of statistical analysis for the regression models of first hypotheses test

| ASBit = a₀ + a₁ INSIt + ε |
|---------------------------|----------------|----------------|----------------|
| R² | Watson camera statistic | F Statistics | F Significant Level |
| 0.108 | 1.611 | 4.951 | 0.026 |
The obtained results of the first hypothesis test for estimated regression models are listed in the above table. The regression model which has been used for the test of first hypothesis includes some of controlling variables as well as fundamental independent variable. The test of hypothesis has been done in to separate models. None of the controlling variables have been entered into the regression test in the first model.

The result of the statistical analysis shows that the determination coefficient of the first model is the amount of 0.108 and this model could explain 10.8% of the changes of dependent variables through independent variable. Watson camera statistic is from 1.5 to 2, so there is no correlation between the errors of the regression model. Based on the results, determination coefficient regression model has significantly increased by entering the controlling variables and it reached to the rate of 0.309. So 30.9% information asymmetry of the statistical sample companies has been due to the concentration of ownership and controlling variables used in the regression model during the period of study.

Table 5 Results of statistical analysis for the coefficients of the first hypothesis test model

<table>
<thead>
<tr>
<th>Variable</th>
<th>The size of the coefficient</th>
<th>T Statistics</th>
<th>P-value Significant Level</th>
<th>The linearity tests</th>
<th>Tolerances</th>
<th>Variance inflation factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>INS</td>
<td>0.271</td>
<td>2.311</td>
<td>0.021</td>
<td>0.998</td>
<td>1.002</td>
<td></td>
</tr>
<tr>
<td>LGDEBT</td>
<td>-0.005</td>
<td>-0.466</td>
<td>0.641</td>
<td>0.994</td>
<td>1.006</td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.012</td>
<td>1.963</td>
<td>0.018</td>
<td>0.921</td>
<td>1.086</td>
<td></td>
</tr>
<tr>
<td>MTB</td>
<td>0.145</td>
<td>1.04</td>
<td>0.299</td>
<td>0.966</td>
<td>1.035</td>
<td></td>
</tr>
<tr>
<td>Lev</td>
<td>0.017</td>
<td>1.044</td>
<td>0.299</td>
<td>0.966</td>
<td>1.035</td>
<td></td>
</tr>
<tr>
<td>Beta</td>
<td>0.012</td>
<td>1.963</td>
<td>0.018</td>
<td>0.921</td>
<td>1.086</td>
<td></td>
</tr>
</tbody>
</table>
variables in the second model of first hypothesis test showed a direct and significant relationship between ownership concentration and information asymmetry. As it is listed in the table above, coefficient of INS variable is 0.271 which has increased a little compared to the previous model. Results show that the relationship between the variables of debt and growth opportunities with the logarithm of level of information asymmetry is reversed and relationship of financial leverage with this variable is positive and significant. Based on the obtained results, the variables of company size and risk do not have a significant effect on information asymmetry, because the level of significance of these variables is over 0.05. So, these variables can be deleted from the hypothesis model. Two latest column of the above table show the result related to linear tests between the independent variables. The lack linear is the other classic regression hypothesis and it is criteria for model validity. The values of linear statistics for all independent variables are close to 1 which indicates the lack of strict linear among the independent variables. Based on the achieved results of the first hypothesis, no convincing evidence found for the acceptance of the hypothesis H0. In other words, at a confidence level of 95%, it can be claimed that there is a significant relationship between ownership concentration and information asymmetry. Consequently, the first hypothesis of this study is accepted at this level of confidence.

The results of the second hypothesis:

Table 6 normality test of discretionary accruals

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Kolmogorov-Smirnov test</th>
<th>Degrees of freedom</th>
<th>Significant level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discretionary accruals (DAC)</td>
<td>The statistic</td>
<td>0.213</td>
<td>627</td>
</tr>
</tbody>
</table>

Regarding the achieved significant level of Kolmogorov-Smirnov test which is higher than the test error level (0.05), the hypothesis H0 of test can be accepted. Therefore, the value related to discretionary accruals variables follows a distribution close to a normal distribution.

Table 7 the results of statistical analysis for the regression models of the second hypothesis test

\[
\text{DACit} = \alpha_0 + \alpha_1 \text{DINSit} + \alpha_2 \text{ABSit} + \alpha_2 \text{ABSit} \times \text{DINSit} + \varepsilon
\]

<table>
<thead>
<tr>
<th>F level</th>
<th>Significance</th>
<th>F-Statistics</th>
<th>Watson camera statistic</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td></td>
<td>19.118</td>
<td>1.978</td>
<td>0.181</td>
</tr>
</tbody>
</table>

\[
\text{DACit} = \alpha_0 + \alpha_1 \text{DINSit} + \alpha_2 \text{ABSit} + \alpha_3 \text{ABSit} \times \text{DINSit} + \alpha_4 \text{MTB} + \alpha_5 \text{Size} + \alpha_6 \text{Lev} + \alpha_7 \text{Beta} + \alpha_8 \text{LGDEBTit} + \varepsilon
\]

<table>
<thead>
<tr>
<th>Level of significance</th>
<th>F level</th>
<th>Significance</th>
<th>F-Statistics</th>
<th>Watson camera statistic</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td></td>
<td>15.252</td>
<td>1.923</td>
<td></td>
<td>0.315</td>
</tr>
</tbody>
</table>

The results of the second hypothesis are listed in the table above. In testing of this hypothesis, two regression models were examined. In the first model, none of the controlling variables entered into the regression model. Statistical analysis shows that the determination coefficient of the model is the rate 0.181, and this model could explain 18.1% of the changes of dependent variable through the changes of independent variable. Watson camera statistic is close to 2, so there is no correlation between the errors of the regression model.

The results of analysis of regression for variance which will be decided on them based on F-Statistic are listed in two latest columns of the table for examined models in the second hypothesis test. Level of significance for F-statistic is less than the error level test (α=0.05).
so, as the result hypothesis H0 is rejected and the estimated models is linear based on significance statistics and the relation between the research variables. The following table shows the results of statistical analysis for the coefficients of the independent variables of the second hypothesis test. These results show the type, intensity and significance of the relation between each independent variables entered into the regression model with the dependent variable.

$$DACit = \alpha_0 + \alpha_1 \text{DIN}it + \alpha_2 \text{ABS}it + \alpha_3 \text{ABS}it*DINit + \alpha_4 \text{MTB} + \alpha_5 \text{Size} + \alpha_6 \text{Lev} + \alpha_7 \text{Beta} + \alpha_8 \text{LGDEBT}it + \varepsilon$$

<table>
<thead>
<tr>
<th>Variable</th>
<th>The size of the coefficient</th>
<th>T Statistics</th>
<th>Significant level ( P-value )</th>
<th>The linearity tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN</td>
<td>-0.039</td>
<td>-0.603</td>
<td>0.547</td>
<td>0.867</td>
</tr>
<tr>
<td>ABS</td>
<td>0.558</td>
<td>5.383</td>
<td>0.000</td>
<td>0.47</td>
</tr>
<tr>
<td>ABSit * DINS</td>
<td>0.013</td>
<td>2.011</td>
<td>0.020</td>
<td>0.517</td>
</tr>
<tr>
<td>LGDEBT</td>
<td>-1.1</td>
<td>-2.163</td>
<td>0.031</td>
<td>0.902</td>
</tr>
<tr>
<td>Size</td>
<td>0.061</td>
<td>2.929</td>
<td>0.004</td>
<td>0.923</td>
</tr>
<tr>
<td>0.54</td>
<td>054/0</td>
<td>1.963</td>
<td>0.047</td>
<td>0.902</td>
</tr>
<tr>
<td>Lev</td>
<td>-0.033</td>
<td>-0.184</td>
<td>0.854</td>
<td>0.91</td>
</tr>
<tr>
<td>Beta</td>
<td>-0.018</td>
<td>-0.857</td>
<td>0.392</td>
<td>0.959</td>
</tr>
</tbody>
</table>

Based on the achieved results of the second hypothesis test, no convincing evidence has been achieved to accept the hypothesis H0. In other words, at confidence level of 95%, it can be claimed that there is a significant relationship between profit management and the information asymmetry and ownership concentration. Consequently, the second hypothesis of this research is accepted at this confidence level.

Table 9 summary of achieved results of hypotheses testing

<table>
<thead>
<tr>
<th>Summary of hypotheses</th>
<th>Model</th>
<th>Coefficient of determination</th>
<th>Statistics F</th>
<th>The coefficient of major independent</th>
<th>Significant Level</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: There is a significant relationship</td>
<td>A</td>
<td>0.108</td>
<td>4.951</td>
<td>0.261</td>
<td>0.026</td>
<td>Approval of H1</td>
</tr>
</tbody>
</table>
The main purpose of this study is to investigate the relationship between information asymmetry and profit management ownership concentration in listed companies at Tehran Stock Exchange. It was used 119 active companies in information at Tehran Stock Exchange during the period 2007-2012 on the study, for analysis of data, it was used regression model of data panel with fixed effects method, in this respect, and ownership structure has been examined in the term of ownership concentration. This means that if the major shares of company are in the hand of special individuals does it lead to information asymmetry. The findings achieved of the research results explains that by increasing of ownership concentration during the period of study, information asymmetry increases in the statistical sample companies, in the second hypothesis of this study, we also sought to investigate whether ownership concentration in companies with asymmetric information environment makes profit management or not? The results of the regression model assumptions indicate a significant positive relationship between information asymmetry and profit management. In fact, the companies which have asymmetric information environment have been more willingness to manipulate the profit through discretionary accruals. The achieved results of research hypothesis towards the fulfilment of mentioned goals are as follows:

**The Analysis of the results achieved from the first hypothesis**

The results of the first hypothesis showed that at statistical sample companies under study, the level of information asymmetry is elevated by increasing concentration of ownership. The above finding indicates the role of major shareholders in the information environment of companies. This role, depending on the motivation and ability of shareholders can be positive or negative. According to the study of Chidambaran, & John (2000), the large institutional investors can acquire confidential information through companies' managers and transfer them to the other shareholders. But, for accepting this monitoring it is required that large investors maintain their shareholders for relatively long time in order to have enough shares to adjust Free-rider problem of the other shareholders from this monitoring.

**Analysis of the results of the second hypothesis**

The second hypothesis test results showed that the relationship between information asymmetry and profit management in companies with high ownership concentration are
lower in comparison with other companies. In other words, in these companies, information asymmetry has less effect on profit management than other companies. This result confirms the monitoring role of major shareholders on the managers of corporations.

Many authors, including Sholeifei & Vishny (1986) Admati, et al (1993), Huddar (1993) Maug (1998) and Noe (2002) believe that the inclusion of major shareholders in the monitoring and controlling activities potentially cause the limit of agency issue. These authors also expressed that all shareholders to be profit by the interest of monitoring activities which done by observed shareholder with no cost, so the only major shareholders have an incentive to monitor.

Limitations of the study
1. Due to the severe crisis in the stock market in 2007 and 2011, many companies suffered from the trade interruption for more than 6 months. So, the population under study was also affected.
2. The lack of an efficient capital market in Iran, as an intervention factor can affect the results of the study in a way that it is not possible to be controlled by the researcher. This subject is one of the existing strait in implementation of research which relies on capital market research including the present research.
3. The generalization of result achieved from this research should also be cautious because it seems that many variables are involved in the level of information asymmetry between different investors of so it would be difficult to explain and to control all the variables.

Suggestions for the future research
1. The study of the relation between profit quality and information asymmetry by using accruals model of Dechow and Dichev
2. The study of the relation between the quality of mandatory and optional disclosure with information asymmetry

Resources


3. Ariane Chapelle. , 2004, " Block investments and the race for corporate


7. Campbell, Kevin, 2,002, " Ownership Structure and the Operating Performance of Hungarian Companies ",


9. Control in Belgium ", Universite Libre de Bruxelles, Belgium.
