

The Effect of Institutional Investors on Estimation Value of Financial Statements of Companies in Tehran Stock Exchange

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Abstract

The purpose of this study is to evaluate the effect of institutional investors on the financial statements of the predictive value of listed companies in Tehran Stock Exchange. According to the owners of institutional and professional investors, their presence may cause monitor management. This can lead to profitability rather than focusing on short-term goals, according to the company's long-term value maximization. The study period is from 2006 to 2010 and 85 companies were selected to test the hypothesis. The methodology based on purpose of this research, is applied and based on the correlation between variables is correlation research. Before hypothesis testing and tests to check the validity of data variance anisotropy, *Chow* test and *Hausman* test was discussed. The result of statistics with use of combination data shows that institutional investors in ownership instruction is determined as most main mechanism in improvement of financial statements.

Resumen

El propósito de este estudio es evaluar el efecto de los inversores institucionales de los estados financieros del valor predictivo de las sociedades cotizadas en la Bolsa de Valores de Teherán. De acuerdo con los propietarios de los inversores institucionales y profesionales, su presencia puede causar administración de monitor. Esto puede conducir a la rentabilidad en lugar de centrarse en los objetivos a corto plazo, de acuerdo con la maximización del valor a largo plazo de la compañía. El período de estudio es de 2006 a 2010 y se seleccionaron 85 empresas para probar la hipótesis. La metodología basada en la finalidad de esta investigación, se aplica y se basa en la correlación entre las variables y la investigación de correlación. Antes de la prueba de hipótesis y ensayos para comprobar la validez de anisotropía varianza de datos, se discutió el test de *Chow* y la prueba de *Hausman*. El resultado de la estadística con el uso de datos de combinación muestra que los inversores institucionales en la instrucción la propiedad se determina como la mayoría mecanismo principal en la mejora de los estados financieros.

Keywords: Institutional Investors, Estimation Value, Ownership Concentration.

Jel Codes: G15, G17, G32, M40

1.- Introduction

The objectives of accounting and financial reporting emerge from the users need of future information. The main objective of financial reporting and financial operations is expression of the economic effects of events on the status and performance of the business to help potential and actual users for financial decision making. The main instruments for transfer this information to the people are basic financial statements, including balance sheets, profit and loss and cash flow sheet that are the final products of accounting and financial reporting process(Ahmadpoor and championships , 2009).

The profit is the most main financial statements that in use of decide for performance measures and economic value. The profit is one of the most important term in financial statements which is one of the indicators for decision and operation evaluation of the firms. The aim of report information about profit is to provide useful information to measure management performance, anticipate the future perspective of the firm and future distribution of share profit, the basis for tax identification , reviewing pricing of the products and so on .

In addition the factor of profit to evaluation the company, the quality of profit (potential and the rate of profit growth and possibilities of future profits) should also be considered. Different measures have been presented for profit quality such as income stability, predictability and volatility of the criteria that consider the relationship between earnings and accruals and cash flows. One of the criteria that is under less consideration is framework of qualitative characteristics that examine the quality of profit based on characteristics quality of data (relevance and reliability). This study studies the predictability of financial statements .

2. Theoretical Background

Managers, financial analysts and investors are devoted the most attention to the company reported profit. Managers will enjoy the keeping of benefit to the growing trend because their bonus depends on the amount of profits in companys. Financial analysts are involving in business processing and interpretation of information and understanding of the quality of earnings is essential part of the process. The good news about corporate profits affect the stock price significantly and it is unlikely that the sensitivity about profit-based performance evaluation decreases. On the other hand, focus on net income caused lack of attention to other indicators of performance evaluation, while it

should also be noted that the reported net income is the finale result of extensive process of accounting for managers or not (Rastegar, 2008).

Company autonomy involving the relationship between investors managers and accountants that certify the investor rights and correct performance and avoide the probably abuse.

Company autonomy is generally believed that the presence of institutional investors may lead to behavior change . It is has been thought that the presence of the institutional investors would lead to behavior of the firms. Bushee (1998) identified institutional investors as a great institutional investors such as banks, and insurance companies, investing companies and etc.

Mag(1998) states that institutional investors use of their ability to monitor management is related to amount of their capital. Bartov et al. (2000) also argue that institutional owners are professional investors who have long-term goals. According to amount of capital and professional institutional investors, their presence may cause monitor management .This can lead to maximizing the firm value for long-term rather than focusing on short-term profitability goals. Whatever the level of institutional ownership is higher, better management can monitor and this is a direct connection. Bushee (1997) argues that institutional investors monitor the firm implicitly through gather information and evaluation of management decisions making and explicitly through managing the operation of the firm.

3. Literature Review

Wong (2006) study the impact of board structure on earnings management and institutional investors in Malaysia companies during the period from 2003 to 2001. His study suggests that there is no relationship between institutional investors and management of profit .

Velury and Jenkins (2006) studied the relationship between institutional ownership of shares and profit earning quality between the years of 1999 to 1992 .Their sample consists of 4238 firm-years. The results showed there is significant positive relationship between institutional ownership and profit earnings quality. also, they showed there is a significant negative relationship between ownership orientation and profit quality.

Niu(2006) examined the impact of corporate governance characteristics on accounting profit quality in Canadian firms for the period of 2004 to 2001. Features of his investigation were concentration on ownership and management ownership. He showed in his research that corporate governance mechanisms enhances the quality of profit.

Jaggi et al.(2007) in their study examined the relationship between independance of directors and profit management in Hong Kong Stock Exchange. They showed that the presence of unqualified

managers in board member of the firm lead to less opportunity of profit management and cause the increase of reported quality of profit.

Osma and Belen (2007) were studied the impact of board composition on profit management in Spanish companies during the period of 2001 to 1999. Their results showed there is a negative correlation between composition of the board and profit management investment managers that are considered to be institutional investors , causing a decrease in opportunity of profit management and improve the quality of profit quality.

Almedia(2007) examined the impact of corporate governance on the profit quality of Brazilian companies for the period of 2005 to 2000. His study showed that corporate governance will improved the quality of profit.

Hashim and Devi (2008) examined the relationship between corporate governance, ownership structure and earnings quality in Malaysian companies for the years of 2005-1999. Their results showed There is a significant positive relationship between institutional ownership of share and profit quality and institutional shareholders increase significantly enhance the quality of benefit. also, they showed there is no relationship between the existence of non-executive managers in board of directors and profit quality.

Zafar et al.(2009) examined the combined company's board of directors and profit management in Pakistan companies during the period of 2007 to 2003. Their results showed that there is a significant negative relationship between profit management and institutional investors.

Mashayekh and Ismaili (2006) studied the relationship between profit quality and some aspects of the accepted company's guiding principles in Tehran Stock Exchange. The findings of this study showed that based on 95% confidence level, there is no relationship between the quality of profit and ownership percentage of board members and the number of non- mandated board members. Their results showed that the general principles of governance doesn't have an important role in improving the quality of profit.

Ahmadpoor and Ahmadi (2008) studied the combination of both qualitative information together as a criteria for evaluating the quality of companys profits. In this study both components of relevance and quality of information for evaluation of companies' profit quality. Research result suggests that the profit response coefficient (ERC) and the companies' explanatory power of profit (R^2) in the company's portfolio with high relevant and reliable portfolio are significantly higher than company's portfolio with low relativity and reliability portfolio.

Shururzy and Nikoomaram (2010) in a study of "*providing a model for assessing the quality of profit quality by using theoretical concepts of financial reporting in Iran,*" in the period of 2008 to 1999 concluded that there is no significant diffidence between the earnings response coefficient (ERC) and power of profit explanatory (R^2) in the company's portfolio with high and low profit quality. The results

also showed that the users of accounting information focus on reliability feature when making decisions.

4 . Research Hypotheses and Methodology

To examine this study, the following hypothesis is considered:

- ❖ There is a significant relationship between institutional investors and value of financial statements' anticipation.

This study collect data based on libraries documents. In library-based data section of this research, the theoretical study provided by Persian and Latin books and magazines and then gathered data of selected companys provided by visiting the company 's financial statements, notes explanatory and *Dena* and *Tadbirpardaz* software and also by financial information of companies on the published CDs.

4-1. Research Sample and Population

The population in this study is all accepted companys in Tehran Stock Exchange. In this study, the reason of selection a sample of data is that the information of them are more available and based on the regulation and standard of Tehran Stock Exchange, these information are more homogeneous. First of all, all the companies have selected that they can participate in the sample then all the participating companies that does not meets any of the following conditions are removed and finally all the remaining companies were selected for testing .

- 1) The financial year end to March each year.
- 2) Fiscal year has not changed.
- 3) company actively involved in the exchange stock market during the period of study.
- 4) Related information is available for data extraction.
- 5) The Company is not investing type or financial broker (due to different capital structure).

Given the above limitations and after taking a random sampling, 85 companies were selected to test the hypothesis. The time period of this research is 2006 to 2010. The information of operational cash flow in 2011 was also used.

4-2. Testing The Hypothesis

For estimation of research models *Panel Data* method was used. This method combines time series data with cross sectional data that today researcher use it widely. In many cases, researchers used this method when the issue can not be analyzed by time series or cross sectional solus, or when the number of data is low. The necessity to combination of cross-sectional and time-series data are due to the more number of observations, enhancing the degree of freedom, reduce heteroscedasticity and multicollinearity among variables (Hsiao, 2003). Regression models estimation with panel data depends on our assumptions about the intercept and the coefficient of the error term of the model . Due to the assumptions of the coefficients of the regression model, there are three common methods for estimating the created model .The methods are:

- 1) Common Effect Model (CEM)
- 2) Fixed Effect Model (FEM)
- 3) Random Effect Model (REM)

In order to choose between fixed effects and random effects model, the *Hausman* test is used and to choose between the common effect and the fixed effects *F* test is used (Green, 2000).

In addition, a review of the classical assumptions for linear regression are also required. Among the most important of these assumptions, the assumptions about the variance heteroscedasticity of disturbance terms of the model, the correlation between the independent variables in the regression model and disturbing terms. To test the Heteroscedasticity, *Arch* test is used and to verify the durability of data, *Im-Pesaran-Shin* is used.

5 . Variables and Research Model

5-1 . Estimation Value or Feedback Value

Estimation value is quality of information that will help users of financial statements to estimate future events of a company with higher accuracy and confidence level. feedback value is also the quality of information that enables users to confirm or correct prior expectations. The importance of feedback value or estimation value will be obvious when people use accounting profit to estimate the operational cash . Dechow (1994) in their study expressed that current profit is greater factor in forecasting future cash flow. The following model has been used for forecasting the feedback value or estimation value of accounting profit (Velury and Jenkins, 2006).

$$CFO_{it+1} = \alpha_0 + \alpha_1 EARN_{it} + \alpha_2 EARN_{it} * INSOWN_{it} + \alpha_3 EARN_{it} * CONS_{it} + \alpha_4 GROWTH_{it} + \alpha_5 DEBT_{it} + \alpha_6 LOSS_{it} + u_{it}$$

which *CFO* represent operational cash, *EARN* represent net income, *INSOWN* represent the sum of institutional shareholders, *CONS* represent the sum of the share percent of stockholders which is over 5 percent, *GROWTH* represent the change in total assets between year *t* and *t-1*, *DEBT* represent official ratios of debt in long-term on total assets, and *LOSS* is 1 when the company has loss in the year of *t* and otherwise is zero.

6 . Descriptive Statistics

Table 1 shows the descriptive statistics of the variables. Net profit average is 12 percent. This value indicates that the performance of the companies during the period of this study were positive and has been 12 percent of total companies' assets in average. Institutional investor average is 57 percent and it shows that more than of half companies' capital is belongs to institutional investors during the period of this study. Ownership concentration variable is equal to 75 percent. *Long-term debt / total assets* ratio also show that about 11 percent of total assets are provided by long-term debt.

Table 1) Descriptive statistics for variables

| | Minimum | Maximum | Median | Mean |
|-------------------------|---------|---------|--------|-------|
| Net profit | -0.249 | 0.627 | 0.102 | 0.12 |
| institutional investors | 0 | 0.98 | 0.63 | 0.571 |
| ownership concentration | 0 | 1 | 0.805 | 0.757 |
| Change in Assets | -0.96 | 3.555 | 0.127 | 0.175 |
| debt / asset ratio | 0.033 | 0.67 | 0.06 | 0.109 |
| Operational cash | -0.433 | 0.815 | 0.08 | 0.091 |

Source: Research results

7. Durability Test

Before analysis the hypothesis, durability testing have been studied. Reliability of research variables means that the mean and variance of variables is fixed between different years. Hence, using these variables in the model will not lead to spurious regression. To do this test, we use *Im-*

pesaran-shin which the results are presented in the following table. Results indicate that based on probability of less than 5 percent, all variables durable in the duration of this study.

Table 2: Test of Variables Durability

| <i>Description</i> | <i>Im-pesaran-shin</i> | |
|-------------------------|------------------------|------------|
| | Probability | Statistics |
| Net profit | 0.000 | -26.79 |
| institutional investors | 0.000 | -23.75 |
| ownership concentration | 0.000 | -26.42 |
| Change in Assets | 0.000 | -22.14 |
| debt / asset ratio | 0.000 | -27.03 |
| Operational cash | 0.000 | -29.73 |

Source: research Results

8 . Variance Heteroskedasticity, Test

In the researches always terms are assumed that if these conditions do not exist, the statistic tests will be questioned. One of these terms which is estimated by least squares regression is associated with *Heteroscedasticity*. In this study, Arch test is used to estimate the heteroscedasticity and the results in Table 3 is presented. The result of observation shown that based on F statistics test which was more than 5 percent, H_0 is accepted. Hence, variance homogeneity of model is accepted and research models has not heteroscedasticity.

Table 3: Test of variance anisotropy

| | Significance Level | Statistics |
|-----------|--------------------|------------|
| Arch test | 0.745 | 0.106 |

Source: Research Results

9. Chow test

Figure 4 shows the results of the Chow test. The test result shows that the amount of F statistics and significance level represent the rejection of H_0 (Integration Model). In other words, there is a single or a group effects and panel data method (fixed effects) should be used for model estimation.

Table 4: Test results Chow

| Testing Results | Significance level | statistics | Test |
|---------------------|--------------------|------------|------|
| Fixed Effects Model | 0.000 | 8.07 | F |

Source: Research Results

10. Hausman Test

Table 5 shows the result of Hausman test. Results shows that significance level of F statistics is less than 5 percent. Hence, H_0 hypothesis rejected and based on *Chow* and *Hausman* tests, *Fixed Effects Model* must be used for model estimation.

Table 5: Hausman test result

| Results | Significance level | Statistics | Test |
|---------------------|--------------------|------------|----------|
| Fixed Effects Model | 0.0001 | 27.80 | χ^2 |

11 . Significant test of the equation of the regression

In the multiple regression equation, if no relationship between a dependent variable and independent variables exist, all the coefficients of the independent variables in the equation are equal to zero. With multivariate regression model, the decision making rule are as follows :

$$H_0 = B_1 = B_2 = B_3 = \dots B_k = 0$$

$$H_1 = B_k \neq 0 \quad i = 1, 2, \dots, m \text{ (At least one of the } B \text{ is non-zero)}$$

With significance level of %95 , if calculated F statistics of the regression equation be bigger than given value of F , H_0 will rejected and otherwise, H_0 will accepted.

12 . Durbin-Watson test

For serial correlation in the error terms of *Durbin-Watson* test is used. Durbin-Watson is based on first-order autocorrelated error model. This model can be expressed as follows :

$$t = P\epsilon_{t-1} + V_t\epsilon$$

Which P represent autocorrelation parameter with the value of $-1 \leq p \leq +1$ and V_t is independent variable assuming $V_t \approx N(0, \sigma^2)$. In this model, when p is positive, the correlation is positive and when p is negative, there is negative autocorrelation. When $p=0$, there is no autocorrelation. *Durbin-Watson* test uses the following assumptions:

$$H_0: p = 0$$

$$H_1: p \neq 0$$

$p = 0$ assumption means that there is no serial correlation and hypothesis $p \neq 0$ means serial correlation exists.

13 . Model Test Results

This study examines that what is the impact of institutional investors on the relationship between profit and operational cash. Table 6 shows the results of hypothesis testing. Table shows that whole model is confirmed at error level of 1 percent. Durbin-Watson test also confirmed that there is no correlation between disturbance terms. The results show that this positive correlation is significant. *Institutional investors* coefficient is positive and significant and shows that existence of institutional investors cause improvement in the financial statements forecasting. In other words, the companies which have institutional investors in their capital structure, their financial statements have more *estimation value*. In table 6, the results for equation (1) is presented.

Table 6: Results of hypothesis testing research

| | P-Value | Coefficient |
|--------------------------------|---------|-------------|
| Intercept | 0.06 | 0.09 |
| Net Profit | 0.000* | 0.443 |
| Institutional Investors Profit | 0.022** | 0.224 |
| Ownership Concentration Profit | 0.238 | -0.185 |
| Change in Assets | 0.105 | -0.009 |
| Debt Ratio | 0.000* | 0.071 |
| Dummy Variable | 0.000* | 0.068 |
| Adjusted R ² | 0.478 | |
| F statistics | 48.802 | |
| F significance | 0.000 | |
| D.W | 1.842 | |

Source: Research Results

* Means significant at 1% tolerance

** Means significant at the 5% error level

14 . Conclusions and Recommendations

The overall objective of this study was to investigate the relationship between *institutional investors* and the *financial statements estimation value*. Board Accounting Standards have been used in the conceptual framework for financial statements estimation value. The study period is 2006 to 2010 and 85 companies were selected for testing the hypothesis. Before hypothesis testing, Chow and Hausman tests were used and validity of data and variance heteroscedasticity were discussed.

As Velury and Jenkins (2006) studied the relationship between institutional ownership of shares and profit earning quality between the years of 1999 to 1992, the results showed there is significant positive relationship between institutional ownership and profit earnings quality. also, they showed there is a significant negative relationship between ownership orientation and profit quality. By using panel data fixed effects model, the results of this study and *Velury and Jenkins* (2006) is the same and it shows that existence of institutional investors in companies' ownership is the most important company governance mechanism and cause improvement in financial statements estimation value.

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