

## **A SURVEY ON THE RELATIONSHIP BETWEEN INSTITUTIONAL OWNERSHIP WITH CONSERVATISM, FORECAST EARNING ERROR AND EARNING FORECAST ABILITY**

**Hasan Shabih<sup>2</sup>, Dr.Naghi Fazeli<sup>2</sup>, Dr.Khosrow Faghani Makerani<sup>2</sup>**

<sup>1</sup>Department of Accounting, Faculty of Management and Accounting, Research and Science Branch, Islamic Azad University, Semnan, Iran

<sup>2</sup>Assistant Professor and Faculty Member, Department of Accounting, Faculty of Management and Accounting, Research and Science Branch, Islamic Azad University, Semnan, Iran

### **Abstract**

Institutional investors' transactions are sensitive to current earnings news. Hence, there are lots of incentives for managers to avoid reducing dividends. Therefore, when the company's stock ownership is focused among a few investors (especially institutional investors), the problems over separation of ownership and control are reduced. When the shares owned by institutions to increase, leaving company aside would cost more because major stock sales require wholesale discount. Hence, because these stocks have high monetary value, if institutional investors remain inactive or being unaware of the poor performance of the company existing in portfolio, investors are exposed to greater losses than investors who have less interest in a company. In this study, a survey on the relationship between "Institutional ownership" and "Conservatism, Forecast error and The Ability of Earnings to Predict Future Earnings and Cash" at Tehran stock exchange has been addressed. For this, three hypotheses have been proposed so that data assigned to 106 companies among listed companies in Tehran stock exchange using Systematic sampling have been used to test research hypotheses, and data during 2006-2012 have been used to carry out statistical test. Multiple regression techniques on panel data have been the statistical method used in this study. The results from findings indicate that there exists a direct relationship between "Institutional ownership" and "Conservatism, Forecast error", and an inverse relationship between "Institutional ownership" and "The Ability of Earnings to Predict Future Earnings and Cash".

**Keywords:** Institutional ownership, Conservatism, Forecast error, Earning forecast ability

### **Problem statement**

One of the criteria for investors to buy and hold shares of a company can be considered, that is, benefits anticipated by management that will be introduced every three months. In this regards, the main topics that will be referred include the ability to forecast earnings and forecast error predicted by management. Whenever a company enjoys greater ability to predict earnings and smaller errors to forecast earnings, in this case, it can be stated that the investors' and buyers' expectations of company's stock have been met better; this stems from the high importance which lies in ability to forecast earning and error in earnings that both these are ultimate aim of investing in a company's stock, further mentioned important due to a high influence that institutional investors can have on processes which go on in company's activity. As implied, institutional ownership is introduced as one of the factors affecting an ability to predict the earning, forecast earning error and earnings conservatism. Not unexpected that the increase in

institutional ownership in a corporation leads to an increase in conservatism as well as an increase in ability to forecast earnings, so that the more ability to forecast earnings increases, the error to forecast earnings reduces. This study intends to investigate whether institutional ownership would affect forecast earnings error and earnings conservatism or not?, and whether institutional ownership can be a factor affecting earnings conservatism or not?

## **Literature review**

Tsai, H. and Z. Gu (2007) in their study for years 1999-2003, "The Relationship Between Institutional Ownership and Casino Firm Performance." found that Institutional investors in the casino companies may help investors to the industry resulting from the separation of management and ownership to reduce agency problems. Moreover, financial institutions are willing to lower the financial leverage of the larger casino companies to invest.

Kamran Ahmad (2007) observed the effect of main factors on the forecast error in the profit existing in the companies involving the primary stock supply in the Dhaka stock exchange; Through the multi-varied regression analysis, the results of his study showed that there is an inverse relation between the economic growth circumstances and the profit forecast error, which there is also a positive relation between the company's lifetime and the profit forecast error.

In his research, Rosalinda (2009) studied the relation between the corporate governance and conservatism in creating financial lists. The results of his research showed that there was a poor relation between the corporate governance and the increase of conservatism in creating financial lists, and that the independence of audit committee and the size of directors board has no effect on the increase of conservatism in creating financial lists.

Juan Manuel García Lara et al.(2009) in a study entitled "The Economic Determinants of Conditional Conservatism", studied the economic determinants of conditional conservatism. Consistent with prior literature, we find that contracting induces only conditional conservatism and litigation induces both conditional and unconditional conservatism. We extend prior evidence by Qiang (2007) by showing that taxation and regulation induce not only unconditional conservatism, but conditional conservatism as well. We show that in certain scenarios taxation and regulation create incentives to shift income from periods with high taxation pressure and high public scrutiny to periods with lower taxation pressure and lower public scrutiny. These income shifting strategies are implemented by recognizing current economic losses that, given managerial incentives to report aggressively, would not have been recognized otherwise, or by delaying the recognition of current economic gains that would have been recognized had circumstances been different. Ball and Brown (1968) were the first ones who used these kinds of the researches. They observed the relation between the annual profit and abnormal rate of return, and they concluded that the profit involves the informational content. It means that the changes in the stock price for a particular period rely on the unexpected value on that period.

Ball and Shivakumar (2005) established the accrued-cash flow relation model to examine the accounting conservatism of earnings, and they thought that accruals could confirm the economic profit and loss timely, and tested the existence of accounting conservatism through the model and drew a conclusion that the conservatism is caused by accruals. Afterwards, Basu's (1997) earnings

-stock return model and Ball and Shivakumar's (2005) accrued-cash flow model were mainly used overseas to study the conservatism of accounting earnings extensively and thoroughly. Ball and Robin (2003) in a research "The characteristics of accounting earnings" indicate that in determining the quality of accruals (quality of earnings) the effect of decision made and

implemented by managers is more than reporting standards because the quality of these factors is effected the management practices and policies and managers regarding his intensions can show their quality higher or lower and hence effect the cost of capital. Gioly and Hayn (2000) used the book-to-market ratio, the characteristics of earnings distribution and the accumulative amount of non-operational accruals and the changes of symbol to measure accounting conservatism, and thought that the systematic difference between the operating cash flow and accounting earnings exists, the difference is caused by the non-operational accruals. Watts (1993) is the earliest man who conducts systematic research on accounting conservatism, he mainly studied the reasons of the formation of the conservatism , and thought that accounting conservatism primarily arises from the debt contract and subject to the regulatory and legal effect, but his primary method is normative research method, and didn't find the method of empirical research metering accounting conservatism, but he thought that accounting conservatism can be inspected through empirical research. The legal systems of the United States have changed since 1966, which supplied an opportunity that tested whether legal proceeding is a factor of conservatism or not.

Hugun & Muslo(2000) investigated impact of accounting conservatism on quality of information environment in surrounding the firm. In this regards, they investigated market response to analytic predictions. To measure conservatism, they used earning asymmetry response, a method introduced by Basu(1997), and modified it to measure conservatism in forecasting earning by financial analysts. Given analysis of over 20000 cases observed, they concluded that accounting conservatism can effectively play a major role in enhancing information environment in surrounding company. Because, empirical findings indicated the market response especially institutional investors would be more sever to forecasts by more conservative analysts rather than response to forecasts by other analysts. Hamilton et al(2005) investigated the relationship between any change between partners and audit Institutions regarding earning quality. They forecasted that in a situation while continuously partners, managers and audit Institutions changing, earning quality would be higher and their reports would be more conservative (Shahabi, 2011, p. 65).

Mehrani et al.(2010) in a study entitled the relationship between type of institutional ownership and conservative accounting, states, institutional investors regarding their ownership in companies' stocks also affect them, and besides enjoy incentives to supervise the processes which go on throughout the companies. More conservative accounting processes inhibit managers from opportunistic behavior and optimism over measure in supplying earning, and lead to reporting more reliable earnings. This study aims to determine impact of involvement by institutional owners on more conservative accounting processes. Considering the fact that institutional investors are not all the same and each has different impact on companies' accounting processes, this study investigates the relationship between different types of institutional ownership and conservatism by classifying institutional investors to active and inactive ones. To investigate these relationships, two regression models including Basu model and Ball and Shivakumar model have been used. The findings from study indicate a positive relationship between institutional ownership and earning conservatism, i.e. the more institutional ownership increases, companies tend to use more conservative processes. As a result, it can state that investors are the supervisors that persuade managers to earning report with higher quality. Further, after the institutional owners classified into active and inactive ones, a positive significant relationship was found between inactive institutional ownership and earning conservatism. Notably, no reliable result was found in relation to active institutional ownership.

## **Research Methodology**

This study in terms of goal is of applied research types. The research method in terms of nature and content is of correlation type. This study has been carried out in framework of deductive – inductive arguments. This is in a way that theoretical foundations and literature review have been carried out using library studies, articles and websites in deductive form, mentioned that data collection to confirm and reject the hypotheses has been carried out using inductive form. In this study, the data related to 106 firms has been consisted of the statistical population, and analyzed during 2006-2012 so as to investigate the relationship between variables to test the research hypothesis. Data computed using Excel software and analyzed using Eviews 7 software as a linear regression technique.

## **Research hypotheses**

According to research questions, the hypotheses as follows have been defined:

Forecast earning error and The Ability of Earnings to Predict Future Earnings and Cash”

- There exists a significant relationship between Institutional ownership and Conservatism.
- There exists a significant relationship between Institutional ownership and Forecast earning error.
- There exists a significant relationship between Institutional ownership and The Ability of Earnings to Predict Future Earnings and Cash.

## **Data Collection**

Data needed in this study has been collected through referring to financial statements and company's annual financial statement notes, and further data has been gathered through Databases and software available in the market and the website of the Stock Exchange.

## **Statistical population and sample**

Statistical population consists of the companies listed in Tehran stock exchange, and statistical sample consists of 106 companies during 2006-2012, regarding the limitations as follows:

- 1- Financial year ends to end of March per year are trading halts not to be in the period of study.
- 2- Not to be of Finance and investment brokerage firms.
- 3- Includes the data needed in this study.

## **Research models**

**Earning conservatism:** According to study by Jenkins (2008), Basu model (1997) is used to measure Conservatism. In this regards, Conservatism is considered as time asymmetry in reporting bad news than good news. Basu(1997) utilizing the model as follows perceived that earning asymmetry in reflecting bad news and good news leads to different degrees of stability.

$$NI = \beta_0 + \beta_1 DR + \beta_2 RET + \beta_3 Ret * DR + \varepsilon$$

Where NI, RET and DR equals to net income before extraordinary items divided by market value of equity, annual return of company stock, and dummy variable in a way that considered for the companies with  $RET < 0$  equals to 1 and otherwise equals to 0. Basu(1997) believes that earnings response to bad news is earlier than earning response to good news, that is,  $\beta_2 < \beta_1 + \beta_3$  and as a result  $\beta_3 < 0$ . He called  $\beta_3$  time asymmetry coefficient that indicates earning conservatism.

Now to test the first hypothesis, the regression model by Kung Wang and colleagues (2010) has been used:

$$NI_t = \beta_0 + \beta_1$$

Where INST, RET and DR equals ordinary shares provided for institutional owners of the firm i at the end of year t, annual Return of company stock and dummy variable in a way that considered for the companies with  $RET < 0$  equals to 1 and otherwise equals to 0.

Institutional ownership: according to the definition provided and used in studies by Rubin (2007) and Quito (2009), to calculate Institutional ownership, total shares provided for banks and insurance companies, holdings, investment companies, pension funds, asset financing companies and investment funds, governmental entities and public companies divided to total stock, and a percent or value for Institutional ownership is obtained.

To test second hypothesis, the regression model as follows is used:

$$FE_t = \beta_0 + \beta_1$$

Note that FE equals earning forecast error.

Earning forecast error has been calculated using the formula:

$$FE = \frac{|YEPS_{t-1} - FORE_{t-1}|}{P_{t-1}}$$

t-1,  $YEPS_{t-1}$ =t-q,  $FORE_{t-1}$ =t-1, and  $P_{t-1}$ =t-1 equals to indicating the financial year before dividend Ad is declared, The real income for the year, Anticipated average earnings available in the last month of the financial year, Stock price on the last day of the financial year, respectively.

To test the third hypothesis, the regression model as follow is used:

$$EFA_t = \beta_0$$

Note that EFA equals to earning forecast ability.

To measure earning forecast ability, Simple linear prediction (Sloan) is used in this study.

Note that earning, cash flows, and accruals equal to operating earnings, operative cash flow, and firm's total accruals.

Modified Jones model to calculate accruals is used in this study. Modified Jones model to calculate accruals would be as follows:

Where  $TA_{t,i}$ ,  $\Delta CA_{t,i}$ ,  $\Delta CL_{t,i}$ ,  $\Delta CASH_{t,i}$ ,  $\Delta STD_{t,i}$ ,  $DEP_{t,i}$  and  $A_{t-1}$  equal to total accruals of firm  $i$  at year  $t$ , change in Current assets of firm  $i$  in year  $t-1$ , Change in current liabilities of firm  $i$  in year  $t-1$ , Change In Cash of firm  $i$  in year  $t-1$ , Change in long-term debt of firm  $i$  in year  $t-1$ , Depreciation expense of firm  $i$  at year  $t$ , and total book value of assets of firm  $i$  at year  $t-1$ .

### Analysis of research hypotheses

Regression calculations of Basu model's earning Conservatism and Sloan model's earning forecast ability.

To test research hypotheses, first Basu model's earning Conservatism has to be calculated, and then the calculations associated to Basu model's earning Conservatism have been proposed as follows:

Calculations on Basu model are earning Conservatism: to test research hypotheses, first coefficients of Basu model's earning Conservatism have to be calculated and entered to the statistical model so as to investigate model and provide statistical test. The results from estimating coefficients to calculate Basu model's earning Conservatism would be as follows:

Table 1. The results from estimating coefficients of Basu model's earning Conservatism

| Variables                          | Estimated coefficient | Standard error          | t-test statistics | Significance level of t-test |
|------------------------------------|-----------------------|-------------------------|-------------------|------------------------------|
| DR                                 | 0.078455              | 0.004982                | 15.74700          | 0.0000                       |
| RET                                | 0.028503              | 0.002943                | 9.685672          | 0.0000                       |
| RET_DR                             | 0.583535              | 0.031793                | 18.35440          | 0.0000                       |
| C                                  | 0.002897              | 0.001918                | 1.510062          | 0.1315                       |
| Determination coefficient          | 0.389466              | Durbin-Watson statistic |                   | 2.272008                     |
| Adjusted determination coefficient | 0.386984              |                         |                   |                              |
| Leamer F-statistic                 | 156.9261              |                         |                   |                              |
| F-statistic Probability            | 0                     |                         |                   |                              |

The results from estimating Basu model's earning Conservatism indicates that significance level of t-test statistics for independent variables at significant level defined in Basu model is smaller than 5%, thus coefficient estimated for variables above is significant.

Hence, given 95% confidence level, it can deduce that independent variables of Basu model's earning Conservatism have to be entered into regression equation. Probability of f-statistics indicates that the whole model is statistically significant. Since Durbin-Watson statistic ranges from 1.5 to 2.5, thus auto-correlation error does not exist.

According to above, t-statistics for variable "Basu model's earning Conservatism" is significant at 95% confidence level, that the p-values obtained in columns state this fact. The regression equation is as follows:

Given the coefficients obtained in regression equation above, Basu model's earning Conservatism can be calculated, and then testing the research hypotheses can be addressed; as clearly shown,

$\beta_2 < \beta_2 + \beta_3$  and as the result  $\beta_0 < \beta_3$  comes true, indicating the earning conservatism exists in studied companies.

calculations on Sloan model's earning forecast ability: the results from estimating coefficient to calculate Sloan model's earning forecast ability are as follows:

Table 2. The results from estimating coefficients of Sloan model's earning forecast ability

| Variables                          | Estimated coefficient | Standard error          | t-test statistics | Significance level of t-test |
|------------------------------------|-----------------------|-------------------------|-------------------|------------------------------|
| ACCRUALS                           | 1004.520              | 138.1515                | 7.271143          | 0.0000                       |
| CASHFLOW                           | 1.611546              | 0.001781                | 905.0967          | 0.0000                       |
| C                                  | -1411.736             | 43.23048                | -32.65604         | 0.0000                       |
| Determination coefficient          | 0.999242              | Durbin-Watson statistic |                   | 2.441420                     |
| Adjusted determination coefficient | 0.999240              |                         |                   |                              |
| Leamer F-statistic                 | 417290.9              |                         |                   |                              |
| F-statistic Probability            | 0                     |                         |                   |                              |

The results from estimating coefficients of Sloan model's earning forecast ability indicates that probability of t-test for independent variables of coefficients of Sloan model's earning forecast ability is less than 5%, thus coefficients estimated are significant. Hence, given 95% confidence level, it can deduce that independent variables of Sloan model's earning forecast ability have to be entered into regression equation. Probability of f-statistics indicates that the whole model is statistically significant. Since Durbin-Watson statistic ranges from 1.5 to 2.5, thus auto-correlation error does not exist.

According to above, t-statistics for variable "Sloan model's earning forecast ability" is significant at 95% confidence level, that the p-values obtained in columns state this fact. The regression equation is as follows:

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Given the coefficients obtained in regression equation above, Sloan model's earning forecast ability can be calculated, and then testing the research hypotheses can be addressed.

### F- Leamer and Hausman tests

To select among Panel data and data compilation methods, F-leamer test has been used. Given F-leamer,  $H_0$ -the hypothesis of similarity of width of origins (compilation data) against  $H_1$ -the opposite hypothesis, difference on width of origins (Panel data method) is considered. A summary of results of F-leamer test has been provided as follows.

Table 3. Results of F-leamer test

| Result of test | Probability | F-leamer statistic | Research models | $H_0$ hypothesis |
|----------------|-------------|--------------------|-----------------|------------------|
|----------------|-------------|--------------------|-----------------|------------------|

|                            |       |        |         |                                                                            |
|----------------------------|-------|--------|---------|----------------------------------------------------------------------------|
| H <sub>0</sub> is rejected | 0.000 | 21.412 | Model 1 | compilation data(width of origins of all the sections equal to each other) |
| H <sub>0</sub> is rejected | 0.000 | 25.541 | Model 2 |                                                                            |
| H <sub>0</sub> is rejected | 0.000 | 27.411 | Model 3 |                                                                            |

As the results show, the significance levels of F-leamer test at all research models is less than 5%. Hence, H<sub>0</sub>(compilation model) is not confirmed for any of the models, that is, individual and/or group effects exist, and then Panel data method can be a better choice to estimate models.

Hausman test that is calculated to recognize whether the difference on sectional units are fixed or random, distribution of chi - square with degrees of freedom equal to the number of independent variables is considered.

Table 7. Results of Hausman test

| Result of test             | Probability | statistic | Research models | H <sub>0</sub> hypothesis |
|----------------------------|-------------|-----------|-----------------|---------------------------|
| H <sub>0</sub> is rejected | 0.4125      | 4.8549    | Model 1         | Random effects model      |
| H <sub>0</sub> is rejected | 0.4056      | 4.1024    | Model 2         |                           |
| H <sub>0</sub> is rejected | 0.3154      | 5.542     | Model 3         |                           |

As the results indicate, according to the research models, the significant level of Hausman test to determine using the fixed effects model against the Random effects model is more than 5%. Hence, H<sub>1</sub> hypothesis (Random effects model) is rejected, and this has been measured as the lack of relationship between regression error, and variables are independent. According to the results of Chow and Hausman test, the most proper method to measure parameters and test hypotheses can be the very Random effects model.

### A summary on analyses in terms of each hypothesis

Followed by F-leamer and Hausman tests, and determine estimation method (Panel data and data compilation methods), the models are estimated. The results from estimating models used in the study have been defined as follows:

### Testing the first hypothesis

The first hypothesis statistically is defined as follow:

H<sub>0</sub>: There does not exist a significant relationship between Institutional ownership and Conservatism.

H<sub>1</sub>: There exists a significant relationship between Institutional ownership and Conservatism.

The results from estimation indicate that t-significance level for independent variables is less than 5%, thus estimated coefficient for the variables above is significant statistically. Positive significant coefficient of institutional ownership indicates a direct relationship between the variable above and earning conservatism, so the first hypothesis is confirmed at 95% confidence level. This means that there exists a significant relationship between Institutional ownership and Conservatism. Determination coefficient indicates Explanatory power of the independent variables that enable to define the changes in dependant variable.

F-statistics indicate that the whole model is significant statistically because f-statistics is less than 5%. Since, Durbin–Watson statistic is not between the range 1.5-2.5, there exist auto-correlation in model.

Regression equation is as follows:

$$NI_t = 5.145$$

One of the simple criteria to recognize the linearity is the use of correlation coefficients between explanatory variables. If correlation coefficients between explanatory variables be relatively great, relatively severe co-linearity would come to realize. Yet, if having small correlation coefficients, there would be co-linearity. Correlation coefficient between some of variables is greater than 0.5, indicating co-linearity exists between some variables. Hence, these variables would be omitted from regression model, and model would be studied once more, and then statistical test would be complete.

### **Testing first hypothesis (followed by removing variables with co-linearity)**

The first hypothesis is defined as follows:

$H_0$ : There does not exist a significant relationship between Institutional ownership and Forecast earning error.

$H_1$ : There exists a significant relationship between Institutional ownership and Forecast earning error.

The results from estimation indicate that probability of t-test for independent variables is less than 5%, thus estimated coefficient for variables above is significant. This means that variables above are factors affecting determination of earning conservatism.

Positive significant coefficient of institutional ownership indicates a direct relationship between the variable above and earning conservatism, so the first hypothesis is confirmed at 95% confidence level using adjusted variables. This means that there exists a significant relationship between Institutional ownership and earning Conservatism. Determination coefficient indicates explanatory power of the independent variables that enable to define the changes in dependant variable for about 87.06%. F-statistics indicate that the whole model is significant statistically because f-statistics is less than 5%. Since, Durbin–Watson statistic is not between the ranges 1.5-2.5, there does not exist auto-correlation in model.

Regression equation is as follows:

$$NI_t =$$

One of the simple criteria to recognize the linearity is the use of correlation coefficients between explanatory variables. If correlation coefficients between explanatory variables be relatively great, relatively severe co-linearity would come to realize. Yet, if having small correlation coefficients, there would be co-linearity. Correlation coefficient between some of variables is less than 0.5, indicating co-linearity is just little. Hence, as autocorrelation exists between independent variables, thus testing second and third hypotheses regardless of independent variables would enjoy auto-correlation.

### **Testing the second hypothesis**

The first hypothesis statistically is defined as follow:

$H_0$ : There does not exist a significant relationship between Institutional ownership and Forecast earning error.

H<sub>1</sub>: There exists a significant relationship between Institutional ownership and Forecast earning error.

The results from estimation indicate that t-significance level for independent and adjusted variables is less than 5%, thus estimated coefficient for the variables above is significant statistically. This indicates that variables above can determine Forecast earning error. Positive significant coefficient of institutional ownership indicates a direct relationship between the variable above and Forecast earning error, so the second hypothesis is confirmed at 95% confidence level. This means that there exists a significant relationship between Institutional ownership and Forecast earning error. Determination coefficient indicates explanatory power of the independent variables that enable to define the changes in dependant variable for 84.78%. F-statistics indicate that the whole model is significant statistically because f-statistics is less than 5%. Since, Durbin–Watson statistic is between the ranges 1.5-2.5, there does not exist auto-correlation in model.

Regression equation is as follows:

$$FE_t =$$

One of the simple criteria to recognize the co-linearity is the use of correlation coefficients between explanatory variables. If correlation coefficients between explanatory variables be relatively great, relatively severe co-linearity would come to realize. Yet, if having small correlation coefficients, there would not be co-linearity. Correlation coefficient between some of variables is less than 0.5, indicating co-linearity is just little.

### **Testing the third hypothesis**

The first hypothesis statistically is defined as follow:

H<sub>0</sub>: There does not exist a significant relationship between Institutional ownership and The Ability of Earnings to Predict Future Earnings and Cash.

H<sub>1</sub>: There exists a significant relationship between Institutional ownership and The Ability of Earnings to Predict Future Earnings and Cash.

The results from estimation indicate that t-significance level for independent and adjusted variables is less than 5%, thus estimated coefficient for the variables above is significant statistically. This indicates that variables above can determine earning forecast ability. Negative significant coefficient of institutional ownership indicates an inverse relationship between the variable above and earning forecast ability, so the third hypothesis is confirmed at 95% confidence level. This means that there exists a significant relationship between Institutional ownership and earning forecast ability.

Determination coefficient indicates explanatory power of the independent variables that enable to define the changes in dependant variable for 25.62%. F-statistics indicate that the whole model is significant statistically because f-statistics is less than 5%. Since, Durbin–Watson statistic is between the ranges 1.5-2.5, there does not exist auto-correlation in model.

Regression equation is as follows:

$$EFA_t :$$

One of the simple criteria to recognize the co-linearity is the use of correlation coefficients between explanatory variables. If correlation coefficients between explanatory variables be relatively great, relatively severe co-linearity would come to realize. Yet, if having small correlation coefficients, there would not be co-linearity. Correlation coefficient between some of variables is less than 0.5, indicating co-linearity is just little.

## **Conclusion**

According to the studies conducted during 2006-2012 and findings from research, the results indicated that probability of F-leamer test for the first model of research became smaller than 5%, so the hypothesis on compilation model was not confirmed. It means that there did not exist individual and/or group effects so that data panel method was used to estimate models. Furthermore, Hausman test probability to determine use of fixed effects model against random effects model reported greater than 5%. Hence, hypothesis on fixed effects model was rejected. This means there exist no relationship between estimated regression error and independent variables, so random effects model was used to measure parameters and test hypotheses. Thereafter, the first research hypothesis based on the estimations obtained was tested regarding regression model. The results from research indicate that institutional investors regarding their ownership in companies' stocks also affect them. Furthermore, a positive significant relationship found between inactive institutional ownership and earning conservatism followed by dividing institutional owners in active and inactive.

According to the studies conducted during 2006-2012, and findings from research, the results indicated that F-leamer statistic for the second model of research became less than 5%, so the hypothesis on compilation model was not confirmed. It means that there did not exist individual and/or group effects so that data panel method was used to estimate models. Furthermore, Hausman test probability to determine use of fixed effects model against random effects model reported greater than 5%. Hence, hypothesis on fixed effects model was rejected. This means there does not exist any relationship between estimated regression error and independent variables, so random effects model was used to measure parameters and test hypotheses.

The results from this research hypothesis was in compatible with the results from the study by Karami(2008), that he examined the relationship between institutional ownership and information content of earnings using linear regression model where further examined the impact of supervision role by institutional investors on Information content of earnings- consequently the study by Karami indicated that level of institutional ownership does not reduce information content of earnings, but there would be this possibility that might lead to an increasing information content of earnings. The results of study by Karami are totally in accordance with the results of this study.

According to the studies conducted during 2006-2012, and findings from research, the results indicated that F-leamer statistic for the third model of research became less than 5%, so the hypothesis on compilation model was not confirmed. It means that there did not exist individual and/or group effects so that data panel method was used to estimate models. Furthermore, Hausman test probability to determine use of fixed effects model against random effects model reported greater than 5%. Hence, hypothesis on fixed effects model was rejected. This means there does not exist any relationship between estimated regression error and independent variables, so random effects model was used to measure parameters and test hypotheses. The result of tests resulted in confirming in third hypothesis, that is, there exists a negative correlation between earning forecast ability and institutional ownership in Tehran stock exchange.

## **Suggestions**

According to result from Shareholders and other investors, it is suggested to estimate conservatism, the companies consider institutional ownership as one of the factors affecting

company conservatism, and considering the fact that the relationship between institutional ownership and earning conservatism obtained direct, it has to draw into attention this fact that the more institutional ownership increases, earning conservatism increases. Further, the ones who follow bold monetary and fiscal policies have to make attempt not to invest in companies owned high institutional ownership, because the firms take step to provide more conservative earnings. Furthermore, according to result from study, it is suggested to shareholders and investors to have more ability so as to forecast their earning if tended for investment, have to attempt to maintain and purchase companies stock owned lower institutional ownership, and this lies in a fact that the more institutional ownership reduces, earning forecast ability increases whereby higher return of their investments can be obtained.

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