

# Investigating the Relationship between the Institutional Ownership and Conservative Elements in Tehran Stock Exchange

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## Abstract

The institutional ownership has been one of the most important elements of capital markets worldwide so that most of these investments are done by this organization. This research investigated the effect of institutional ownership on the conservative elements in Tehran Stock Exchange. The Hypotheses of this research were developed by using the conservative theories of Basu (e.g. Basu, 1997) and the models presented by Lara et al (e.g. Lara et al., 2007). Using the data of financial statements and stock prices of 115 companies approved in Tehran Stock Exchange during 2008 to 2013 and multivariate linear regression analysis, the results showed that the institutional ownership of companies does not affect the conservative elements.

**Keywords:** Institutional Ownership, Conservatism, Corporate size, Operational Accruals, Non-operational Accruals

## Introduction

With regard to the economic aspects of the data, the financial reporting and the accounting system play important role in capital market. The financial reporting aims to provide the information that the investors need. Using the accounting data, the investors and users can predict the future function of corporate and use it for rating the corporate. Feltham et al. considered the conservatism in reporting the operational assets as one of the key factors of evaluating companies. Some researchers investigated the effect of conservatism on corporate value (e.g. Feltham et al., 1995). Guili et al showed that the loss is recognized earlier than the profit and unconditional conservatism has been increased

(e.g. Guili et al., 2000). Conservatism as one of the accounting limiting principles has been used by the accountants for a long time and despite the criticisms, it has retained its position. The conservatism principle causes to select and apply methods among different methods in order to have the net profit and total assets of corporate increase. On the other hand, based on this principle, the corporate should not use the methods which manifest their revenues more and expenses and debts less than expected.

## Statement of the problem

Accordingly, conservatism means the difference in choosing policies and good and bad news. Good news means the positive stock return or the events which result in increasing the profit and bad news means the negative stock return which result in decreasing the profit. Thus, conservatism is defined as the process of decreasing the profit and underestimating the assets in response to the bad news and conversely, reducing the profit and overestimating the assets response to the good news (Basu, 1997, p. 50). One of the most fundamental issues in determination of corporate value is the structure of their ownership. The structure of ownership is a criterion to assess the centralized ownership and also it is the collective ownership which is defined as the huge number of the shareholders. The shareholders are classified into different groups, one part of ownership is under the control of shareholders and legal entities, and this group relies on the financial statements at hand in order to supervise the function of managers of companies while other part of the ownership is in hands of the expert shareholders which in contrast to the first group, the internal information about the future viewpoints and the

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commercial strategies and long term investments is obtained by connecting directly to the manager of the company. The institutional shareholders are the individuals or the institutes which sell and buy the huge amount of the securities; such as the private and state banks, pension funds, insurance companies and the organization of welfare funds, the investment companies and the institutes which invest on the public companies. So, the institutional shareholders are the biggest shareholders of the public companies, these shareholders are potential to effect on the activities of the managers directly from the ownership and indirectly from dealing the stocks. Accordingly, the direct and indirect effect of the institutional shareholders is important. Understanding the relationship between the ownership and conservatism can be significant, too. As we know, the conservatism includes the sum of the accruals, operational accruals, and non-operational accruals, so it is essential to investigate the relationship between these elements and institutional ownership in order to consider the conservatism under the influence of the institutional ownership.

## Review of the Literature

Rahmani et al in a research entitled "the relationship between the institutional ownership and liquidity in Iran", investigated the relationship between the level of institutional ownership, concentrating on the institutional ownership by liquidity. In this research, for the variable of institutional ownership, both variables of level and ownership concentration were used. So, in this research, both theories of information or dealing efficiency and adverse selection were approved. From the methodological point of view, this research is one of the major sources used (e.g. Rahmani et al, 2010). In this research, LaFond et al investigated the relationship between the informed and uninformed shareholders with regard to the informational asymmetry and finally they concluded that lack of informational asymmetry between the informed and uninformed shareholders leads to bringing the conservatism in financial statements about (e.g. LaFond et al, 2007). Watts has experimented the conservatism in accounting so that he explained the conservatism in four frames including contractual, legal lawsuit, tax and accounting principles (FASB and SEC) explaining. The results of these investigations suggest the importance of these four explaining. Watts states that there is a common property between these financial factors and that is called an "Asymmetric loss functions" (e.g. Watts, 2003). Ball investigated the relationship between the conservatism and the profit-seeking motivations of managers resulting in the loss. In this research, the agency issues result from the lack of alignment in the interests of managers and shareholders. Ball mentioned that due to the tenure and limited insights, and in order to get more bonuses by representing more profit, the managers seek to choose the projects having the negative net value and cause the loss for a long time (e.g. Ball, 2001). Ahmed et al suggest the relationship between the conservatism and corporate governance with regard to the combination of Board of Managers, which on one hand, there is positive relationship between the number of foreign managers involving in the combination of Board of Managers and conservatism and on the other hand, this relationship is negative (e.g. Ahmed et al, 2005). Lara et al examined the relationship between the conditional accounting conservatism and the capital cost; the results of this study suggest a negative relationship between the conditional conservatism and capital cost. Finally, the results of this study approves that the conservatism leads to decreasing the informational asymmetry and capital cost. This research suggests that the less the level of conservatism is, the more will be the return as the shareholders expect (e.g. Lara et al, 2007). Jennings et al have performed a research entitled "institutional ownership, information and liquidity". What has been investigated specifically in this study is the relationship between the institutional ownership adverse selections in informational asymmetry. Generally, the results of this study showed that attending the institutional owners leads to reducing the informational asymmetry. Selecting the samples including 3576 American companies (1071 companies from NYSE, 323 companies from AMEX and 2182 companies from NASDAQ) (e.g. Jennings et al, 2002). Jacoby et al investigated the relationship between the ownership dispersion (percentage of block shares in hand of shareholders) and stock liquidity. The results of their study suggest that more ownership dispersion leads to improving the stock liquidity (e.g. Jacoby et al, 2010). Calculating the price gap in October of 1984, 1988, and 1992, Kothare et al found the positive relationship between the institutional ownership and price gap in marketing. They found that the dealings be-

tween institutions are done by having the informational advantages in hand (e.g. Kothare et al,1995) . Results from the study of Bushee showed that the companies in which the percentage of institutional ownership is low, the managers tend to decrease the expenses of research and development and consequently, raising the profit as the same level of last year. In companies which their percentage of institutional ownership is high, the motivation of managers to manage the profit decreases due to the lack of investment on research and developmental activities. So, we can conclude that attending the institutional ownership leads to decreasing the profit management and consequently conservative accounting (e.g. Bushee ,1998) . Chi et al found that there is a positive relationship between the institutional ownership and conservatism. Based on their findings, the companies with less institutional ownership have fewer demands for conservative accounting. They also concluded that, there is more inclination to conservatism if the role of managing director and chairman of board of managers is not distinguished (e.g. Chi et al ,2007). Ajinkya et al suggest that the more percentage of institutional ownership is the conservatism for prediction of profit increases. Based on their findings, the more percentage of the irresponsible managers is, the more conservative will be this prediction (e.g. Ajinkya et al , 2005).

## Methodology

The aim of the present study was practical and the branch of quasi-experimental and it was ex post facto which was performed based on the real information of stock market and the financial statements of companies approved in Stock Exchange. The Hypotheses of this research were developed by using the conservative theories of Basu and the models presented by Lara et al . The statistical population of the present study was all the companies approved in Tehran Stock Exchange during 2008-2013 and the samples of this research were selected based on the criteria; first, they should be approved since 2008, second, they should not be included in the investment companies; third, their financial year ends at the end of Esfand (March). The investment companies and financial intermediation were excluded from the study. So, with regard to these limitations, 115 companies were selected as the statistical sample. For testing the hypotheses, the multivariate linear regression model was used

and the required data were collected using the information of financial statements of samples and Rahavard Novin software. After calculating in Excel, SPSS20 was used to analyze the data.

### Research Hypotheses

First hypothesis: There is positive and significant relationship between the institutional ownership and sum of the accruals.

Second hypothesis: There is positive and significant relationship between the institutional ownership and sum of operational accruals.

Third hypothesis: There is positive and significant relationship between the institutional ownership and sum of non-operational accruals.

### The variables of the research

Conservatism is a criterion for selecting the principles and processes of accounting in case of vagueness and uncertainty. In case of facing with uncertainty, the methods should be chosen and applied which lead to saving the least fortune of profit. In fact, in case of uncertainty and dilemmas, the revenues and assets should be detected lately and the expenses and debts early. Choosing and applying these conservative methods is possible by means of accrual accounting. For instance, detecting the loss resulting from decreasing the inventory values effects just on the accruals and does not effect on the cash flows. Based on the above mentioned issues, the non-operational accruals were used for assessing the conservatism. Non-operational accruals are used because the accrual accounting is a channel for conservative operations and on the other hand, authorizing on behalf of the managers, in case of uncertainty, paves the way for conservative operations. Using this criterion depend on the hypothesis that is the level of uncertainty relating to the nonoperational accruals is more than the uncertainty relating to the operational accruals. Sum of the accruals, operational accruals (working capital) and non- operational based on the model of Guili and Hyne (2000) is as following:

- 1)  $ACC_{it} = NI_{it} + DEP_{it} - CFO_{it}$
- 2)  $OACC_{it} = \Delta AR_{it} + \Delta I_{it} + \Delta PE_{it} - \Delta AP_{it} - \Delta TP_{it}$
- 3)  $NOACC_{it} = ACC_{it} - OACC_{it}$

In above equation, the variables are:

ACC: Accruals; NI: Net Income before the unexpected items; DEP: Depreciation; CFO: Cash flow Operations;  $\Delta AR$ : Account receivable; OACC: Operational Accruals;  $\Delta I$ : Inventory change;  $\Delta PE$ : Prepayment change;  $\Delta AP$ : Account payable change;  $\Delta TP$ :

Tax payable change; NOACC: nonoperational accruals

While the operational accruals originate from the continuous activities of companies, the non-operational accruals include the increased expenses resulting from estimation changes, loss and gains of selling the assets and the loss from decreasing the values of fix assets, incomes transferring to the incoming periods and capitalizing the expenses. Small amount of non-operational accruals suggest the high conservatism.

## Results

### *Investigating the normality of the variables*

As the normality of variables leads to the normality of the residuals, it is essential to control its normality before fitting the model. To examine this hypothesis, Kolmogorov – Smirnov test was used. Based on this model, when P value is less than 5%, the null hypothesis is rejected in 95% CI.

**Table 1. Kolmogorov – Smirnov test (K-S)**

Model	No.	Mean	SD	Kolmogorov – Smirnov	P value	Model
Accruals	684	45/10	84/1	099/1	178/0	Accruals
Operational Accruals	684	69/10	048/2	479/1	125/0	Operational Accruals
Non-Operational Accruals	684	97/10	924/1	597/1	120/0	Non-Operational Accruals

Based on Table 1, as the P value for Accruals, Operational Accruals, and Non- Operational Accruals is more than 5 % (Sig > 0.05), so the null hypothesis that is normality of variable is not rejected.

First hypothesis: There is positive and significant relationship between the institutional ownership and sum of the accruals.

$$ACC_{i,t} = \beta_0 + \beta_1 OWNER_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 CAPINT_{i,t} + \beta_4 ETR_{i,t} + \beta_5 GROWTH_{i,t} + \beta_6 LEVERAGE_{i,t} + \beta_7 ROA_{i,t}$$

$OWNER_{i,t}$ : Ownership of company i in year t whether it is institutional or not. So that for the companies with institutional ownership (more than 50 % of stocks in a company), number 1 was dedicated.

$SIZE_{i,t}$ : Size of corporate i in year t which equals the natural logarithm of corporate assets.

$CAPINT_{i,t}$ : The investment intensity in company i for year t which is obtained from dividing the net fixed assets by the book value of assets at the end of period.

$ETR_{i,t}$ : Effective tax rate in company i for year t which is obtained from dividing the tax price by operating profit

$GROWTH_{i,t}$ : Development of company i for year t which is obtained from the asset changes at the end of period compared to the beginning of period.

$LEVERAGE_{i,t}$ : The leverage of company i for

year t which is obtained from dividing sum of debt by sum of assets.

$ROA_{i,t}$ : Rate of return on asset in company i for year t which is obtained from dividing the net profit by the assets at the end of period.

Table 2, shows the variance analysis between the institutional ownership and sum of accruals. Based on this output, the significance of regression model is approved. As the Sig is less than 5%, the hypothesis about the linear relationship between these two variables is approved and the regression model is correct. Also P value for institutional ownership is 0.332 which is more than 0.05, so the null hypothesis is not rejected. In other words, the relationship between the accruals and institutional ownership is not significant. Among the control variables in this research, both variables of effective tax rate with P value 0.606 and company development with P value of 0.053 have no significant relationship with dependent variable of accruals but other independent variables have significant relationship with accruals, so that the corporate size and rate of assets in return have significant relationship, but investment intensity and financial leverage has negative relationship. So the first hypothesis is rejected based on 95%CI. The Durbin-Watson statistics is 1.976 and it shows that the errors are independent and there is no correlation between the errors and the hypothesis related to the correlation between errors is re-

jected and we can use the regression. The regression equation of the first hypothesis is as follows:

$$ACC_{i,t} = -1/53 + 0/091OWNER_{i,t} + 0/921SIZE_{i,t} - 0/879CAPINT_{i,t} + 0/597LEVERAGE_{i,t} + 0/694ROA_{i,t}$$

The second hypothesis: There is significant relationship between the institutional ownership and sum of operational accruals.

$$OACC_{i,t} = \beta_0 + \beta_1 OWNER_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 CAPINT_{i,t} + \beta_4 ETR_{i,t} + \beta_5 GROWTH_{i,t} + \beta_6 LEVERAGE_{i,t} + \beta_7 ROA_{i,t}$$

**Table 2. The results of regression analysis between accruals and institutional ownership**

P value	Statistics t	Coefficient	Model
0/000	-3/728	53/1-	Constant coefficient
0/322	0/922	091/0	Institutional ownership
0/000	30/470	921/0	Corporate size
0/000	-3/661	879/0-	Investment intensity
0/606	0/516	128/0	Effective tax rate
0/053	-1/937	100/0-	Corporate development
0/019	-2/345	597/0-	Financial leverage
0/000	4/271	694/0	Rate of return on asset
	150/983		Statistics F
	0/000		P value
	0/610		Coefficient determination
	0/606		Adjusted Coefficient determination
	1/976		Durbin-Watson

Table 3 shows the variance analysis between the institutional ownership and sum of operational accruals. Based on this output, the significance of regression model is approved. As the Sig is less than 5%, the hypothesis about the linear relationship between these two variables is approved and the regression model is correct. Also P value for institutional ownership is 0.152 which is more than 0.05, so the

null hypothesis is not rejected. In other words, the relationship between the operational accruals and institutional ownership is not significant. Among the control variables in this research, just the variable of effective tax rate has no significant relationship with operational accruals (because its P value was more than 0.05) but other control variables have significant relationship with sum of operational accruals, so the second hypothesis is rejected. The Durbin-Watson statistics is 2.036 and it shows that the errors are independent and there is no correlation between the errors and the hypothesis related to the correlation between errors is rejected and we can use the regression.

The regression equation of the second hypothesis is as follows:

The third hypothesis: There is significant relationship between the institutional ownership and sum of non-operational accruals.

$$NOACC_{i,t} = \beta_0 + \beta_1 OWNER_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 CAPINT_{i,t} + \beta_4 ETR_{i,t} + \beta_5 GROWTH_{i,t} + \beta_6 LEVERAGE_{i,t} + \beta_7 ROA_{i,t}$$

**Table 3. The results of regression analysis between the operational accruals and institutional ownership**

P value	Statistics t	Coefficient	Model
0/000	-4/469	192/2-	Constant coefficient
0/152	1/434	153/0	Institutional ownership
0/000	25/927	921/0	Corporate size
0/000	-3/942	103/1-	Investment intensity
0/058	1/898	547/0	Effective tax rate
0/000	3/897	236/0	Corporate development
0/037	2/088	635/0	Financial leverage
0/001	3/350	628/0	Rate of return on asset
	129/826		Statistics F
	0/000		P value
	0/582		Coefficient determination
	0/578		Adjusted Coefficient determination
	2/036		Durbin-Watson

**Table 4. The results of regression analysis between the non-operational accruals and institutional ownership**

P value	Statistics t	Coefficient	Model
0/000	-3/772-	-1/645-	Constant coefficient
0/338	0/959	0/091	Institutional ownership
0/000	29/762	930/0	Corporate size
0/034	-2/121	-0/526	Investment intensity
0/969	0/039	-0/010-	Effective tax rate
0/004	2/911	0/155	Corporate development
0/793	-0/262	-0/069	Financial leverage
0/000	5/459	0/916	Rate of return on asset
	156/244		Statistics F
	0/000		P value
	0/618		Coefficient determination
	0/614		Adjusted Coefficient determination
	2/05		Durbin-Watson

Table 4 shows the variance analysis between the institutional ownership and sum of non-operational accruals. Based on this output, the significance of regression model is approved. As the Sig is less than 5%, the hypothesis about the linear relationship between these two variables is approved and the regression model is correct. Also P value for institutional ownership is 0.338 which is more than 0.05, so the null hypothesis is not rejected. In other words, the relationship between the non-operational accruals and institutional ownership is not significant. Among the control variables in this research, the

variables of effective tax rate and the financial leverage have no significant relationship with non-operational accruals but other control variables have significant relationship with sum of non-operational accruals, so the second hypothesis is rejected. The Durbin-Watson statistics is 2.050 (based on Table 4-12) and it shows that the errors are independent and there is no correlation between the errors and the hypothesis related to the correlation between errors is rejected and we can use the regression.

The regression equation of the third hypothesis is as follows:

$$\text{NOACC} = -1/645 + 0/091\text{OWNER} + 0/031\text{SIZE} - 1/103\text{CAPIN} - 0/526\text{CAPINT} - 0/069\text{LEV} + 0/916\text{ROA}$$

## Conclusion

Based on the hypotheses, it was predicted that the conservatism decreases by increasing the institutional ownership. What is concluded from the result of hypotheses test subjected to the relationship between the independent variables and control variables and dependent variable in Tehran Stock Exchange during 2008-2013, is that accounting conservatism does not have significant relationship with the kind of ownership and other results from this study showed that among the control variables, there is not significant relationship between the effective tax rate and operational and non-operational accruals. And there is no significant relationship

between the financial leverage and operational and non-operational accruals, there is not significant relationship between the corporate development and accruals but there is significant relationship between other control variables and operational and non-operational accruals.

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