EXAMINING THE RELATIONSHIP BETWEEN DISCLOSURE LEVEL, OWNERSHIP STRUCTURE AND EARNING MANAGEMENT IN THE TEHRAN STOCK EXCHANGE

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ABSTRACT

Earnings are one of the basic elements of financial statements, which has always been of interest to different groups and it is used as a measure of continuity of activity, efficiency and revision of earnings contracts, predicting future cash flows for investment. Managers, to mislead shareholders on the actual economic performance of the firm, often manage earnings. Earnings management is a biased intervention on external financial reporting that is done to secure unusual earnings for shareholders or managers. Given the importance of earnings management in financial and accounting literature, in this study, we examine the effect of different internal and external mechanisms and disclosure level on earnings management. In this study, to estimate the model we have used the data of 143 firms listed on Tehran Stock Exchange, obtained by screening or systematic elimination over the 2005-2014 period. The results show that the impact of institutional ownership variable (as an external mechanism of corporate governance) on earnings management is positive and significant. The concentration of ownership (as an internal mechanism of corporate governance) on earnings management is positive and statistically significant. The impact of disclosure on earnings management is negative and significant. In addition, the results show that firm size is positively correlated with earnings management. The other two control variables, the ratio of market value to book value of equity and financial leverage have a negative impact on earnings management. Based on the results we suggest that institutional investors and major shareholders play a more active role in supervision and help to align the interests of shareholders and managers to decrease the agency problems and finally improve the firm's performance.

Keywords: *Disclosure, Earnings Management, Ownership Structure, Institutional Ownership, Herfindahl- Hirschman index*

INTRODUCTION

Earnings are one of the basic elements of financial statements, which has always been of interest to different groups and it is used as a measure of continuity of activity, efficiency and revision of earnings contracts, predicting future cash flows for investment. Managers, to mislead shareholders on the actual economic performance of the firm, often manage earnings. Earnings management, which is done through accounting's statistics manipulation or manipulation of actual activities, decrease the accuracy of its message and increase the risk and loss of confidence from outsiders and also will likely lead to information asymmetry and decrease investment efficiency. Earnings management not only hides the actual performance of a firm but also hides the real growth process, earnings and firms revenue that are used to predict future growth of the firm (McNichols and Stubben, 2008).

Jones and Sharma (2001) think that earnings management is a conscious action done to make corporate earnings appear normal to a favorable and intended level. In their view earnings management occur when managers manipulate a financial report and exchange structure to mislead some stakeholders about the economic performance of the firm or manipulating the results of a contract that is dependent on reported accounting statistics. Therefore, different stakeholders, consider earnings management undesirable and they're trying to limit managers' authority and manipulations by intensifying supervision on them. To this

end, shareholders consider conservatism as a regulatory and corporate governance tool that limits the earnings management on the accrual (Ansari *et al.*, 2013). The root cause of earnings management is the separation of ownership from management. This separation increases the possibility of opportunistic behaviors by managers and earnings management is a sample of these behaviors.

Furthermore, the objectives of accounting come from users' needs and demands for information and the main objective of accounting is expressing the financial and operational condition of the commercial unit to external users to help them at financial and investment decisions. The main tools of data transfer to this people are financial reports. Financial reports are important references to information that help economic decision making that managers, investors, creditors and other users use to satisfy their information needs (Mashayekh *et al.*, 2013).

The disclosure of information issue is not limited to a single echelon of financial users, but this issue involves a wide spectrum of people including professional associations, creditors, government, investors and other financial decision makers. Various analytical models made it clear that the amount of earnings management increases with the level of information asymmetry. Truman and Titman (1988) show that the lack of disclosure and the information asymmetry between the management and shareholders are the fundamental conditions for earnings management. Surveys show that the lack of disclosure and preparing information, by providing a rational context, in addition to preventing the disclosure of misleading information and ideas by other firm executives, prevent misleading information provided by other sources of information about the firm. Accordingly, there is a negative relationship between disclosure and earnings management (Cormier, Houle, and Ledoux, 2013). Therefore, if the required information disclosure by users is provided timely, complete and accessible then the management lacks the ability to manipulate earnings. Earnings management occurs when information disclosure is incomplete. As a result, managers by manipulating a series of important figures in accounting manipulate earnings or attempt earnings management.

On the other hand, shareholders and ownership structure combination are considered as one of the important issues of corporate governance, which affects the motivation of managers and so it can have a significant impact on the performance of any firm. Corporate governance set the internal and external control mechanisms of firms and determines how and by whom the firm is managed (Shahiki Tash *et al.*, 2012).

Overall, the corporate governance includes legal, cultural and institutional arrangements that determine the firm's direction of motion and performance. The elements are present here are shareholders and their ownership structure, members of board and their combination, the management that is driven by the CEO or the managing director and other stakeholders that have the possibility of affecting the firm (Namazi, Kermani, 2008).

The corporate ownership structure can be very diverse and a range of natural and legal stakeholders can play a role in the structure. The presence of natural stakeholders of a family or household, having a high percentage of stock or ownership of the firm's, show that the board is somewhat under family ownership. In general, firms can be classified into two categories of family and nonfamily firms. Family firms, with a longer investment horizon, incur more potential cost compared to advantages of timely and quality information disclosure and thus preferred less disclosure. Legal owners, have a better access to information and can have a surveillance on the management and as a result, the agency problems between management and shareholders decreases and given the supervision and information disclosure role of alternatives (substitution) by the firm, other shareholders use the family owners monitor on managers freely. As a result, there is less demand for public information. Therefore, family firms disclose information with a lower volume and quality (Chen *et al.*, 2008).

Eventually, we can state that corporate disclosure as a control mechanism leads to reduced conflict between the interests of various stakeholders. Corporate disclosure reduces the information advantage of knowledgeable shareholders as well as the information asymmetry on the cost of capital. Managers often face the problem of adverse selection due to the asymmetry of information between different market segments. On the other hand, ownership structure is an effective control by shareholders. Owners of any part of the firm can mobilize more resources to oversee the management and protection of investment. According to these, the main problem in this study is the effect of corporate disclosure and ownership structure on the earnings management in listed firms on the Tehran Stock Exchange.

LITERATE REVIEW

The studies conducted on the subject and its aspects inside and outside the country is ample and we mention some:

Domestic studies:

Namazi and Kermani (2008) examined the impact of ownership on the performance of listed firms in Tehran stock exchange and found that there is a significant and negative relationship between institutional ownership and firm performance, also there is a significant relationship between private property and performance, but the nature of this relationship cannot be determined.

Karami (2008) using a sample of 61 firms in the 1998- 2004 period examined the relationship between institutional ownership and information content of earnings of listed firms in Tehran stock exchange. His results show that the number of institutional ownership will not improve the information content of corporate earnings and can even reduce it, while the level of institutional ownership will not reduce the information content of earnings, but will increase it.

Moradzadeh *et al.* (2009) examined the relationship between the number of institutional investors and their concentration with earnings management and come to the conclusion that there is a negative significant relationship between institutional ownership of shares and earnings management.

Etemadi and Farajzade (2012) state that earnings management, regardless of its direction increase conservatism. Meanwhile, firms that take action to decrease earnings management report a higher conservative earnings the show over conservatism. Further, firms that attempt over earnings management through the accrual report a lower conservatism.

Mehrazin *et al.* (2013) examined the relationship between family ownership, nonfamily ownership of businesses and earnings management using the data from 31 firms in Tehran stock exchange during the 2004-2011 period. In their study, after the separation to their respective industries, an equal number of firms from the same industries were selected randomly and put in the non- families group. To test the hypothesis, the modified Jones model (Dechow, Sloan and Sweeney, 1995) to measure earnings management used and the multivariate regression and the student T- test was used for statistical comparison between the two independent groups. The results indicate that there is a significant relationship between ownership structure and earnings management and on average, non- family firms are doing more earnings management.

Kashanipoor *et al.* (2014) examined the relationship between the board's structure and voluntary disclosure of ownership in the firm. The sample consisted of 148 firms in 2012 and the statistical method used to test the statistical hypotheses was a multivariate regression. The findings show that there is a positive and significant correlation between the "ratio of non- executive members" and "corporate ownership" with voluntary disclosure. There is no significant relationship found between the "size of the board", "property management" and "institutional ownership" with the voluntary disclosure.

International studies

Chung *et al.* (2002) examined the institutional control and earnings management of lost opportunities and they concluded that institutional investors avoid engaging management accruals for smoothing of earnings in order to achieve the desired level of earnings. Wong (2006) shows that concentrated ownership, slows the flow of information of accounting for the external people. Likewise, information asymmetry reduces the accounting disclosure and family members in the firm will have the motivation and opportunity to manipulate earnings. Thus, a lower earnings quality is created for family ownership.

Rubin (2007) consider two criteria for ownership structure: the percentage of internal shares (in the hands of managers) and the percentage in the hands of institutional investors institution and how much is the concentration of shares for each? He concludes that the relationship between stock liquidity and ownership structure is in conjunction with institutional investors rather than internal shareholders, thus the stock liquidity is positive related to the total ownership of institutional shareholders, however, when institutional shareholdings are in blocks, this the relationship is negative.

Siregar and Utama's results (2008) in the Jakarta stock exchange showed that managers tend to do efficient earnings management. Also with firms that are family- owned and do not belong to a trade group, managers tend to manage earnings more. In contrast, the size of the firm, corporate governance and institutional shareholders have no effect on the managers' tendency for earnings management. Pereira's (2009) results using a logistics model show that there is a significant relationship between the existence of a board of directors with expertise in finance and institutional owners with demonstration favorable opinions by independent auditors.

Abdollahmohammadi *et al.* (2010) examined the earnings management priorities of family and nonfamily firms in Norwegian firms between 2000 and 2007. the results showed that family firms attempt income smoothing more than nonfamily firms, in addition, family firms with high financial leverage tend to perform earnings management more than non- family firms with have high financial leverage.

Klai and Omri (2011), using the data from listed firms on the Tunisia's stock exchange concluded that the improvement of corporate governance mechanisms (the board's features and ownership structure), increase the quality of financial reporting. Elemans *et al.* (2012) found a significant and negative relationship between ownership concentration (block-holder ownership) and with disclosure and a significant and positive relationship between institutional ownership and voluntary disclosure but observed no significant relationship between ownership management and voluntary disclosure. Garcia *et al.* (2012) using the data of American firms, examined the impact of conservatism on earnings management based on accruals and real earnings management. Alexandrina (2013) shows that banking organizations with more non- executive managers than other members of the board of directors and higher experience have more regular meetings and disclose more transparent information.

Uyar *et al.* (2014) found a positive relationship between voluntary disclosure and variables such as (size of a firm, size of audit firm, the non- executive managers ratio, corporative and institutional ownership) and a negative relationship between voluntary disclosure and lever and minority shareholders ownership and eventually a significant relationship between voluntary disclosure and variables such as (profitability, firm's age, size of board).

THE MODEL

The following models are used to test research hypotheses:

$$DA_{it} = \beta_0 + \beta_1 Dscore_{it} + \beta_2 Inst_{it} + \beta_3 HHI_{it} + \beta_4 Size_{it} + \beta_5 ROA_{it} + \beta_6 MB_{it} + \beta_7 LEV_{it} + \varepsilon_{it} \quad (1)$$

In which *DA* is the discretionary accruals which is measured by the total assets and shows the earnings management.

Dscore is the disclosure score of the firm, in this article we use the scores and indices information provided by the Tehran stock exchange. This index is the average of three reliability scores, adjusted reliability indices and points to the timeliness score.

$INST_{i,t}$ is the corporate ownership that is the ratio of the total stock of institutional shareholders divided by total shares shareholders at the end of fiscal year. By institutional shareholders, we mean legal shareholder that are mediators between individuals and firms and attempt to develop their equity portfolios on their behalf. This variable is the ratio of the total shares owned by institutional shareholders divided by the firm's total stock.

HHI: Herfindahl-Hirschman represents the concentration ratio of shareholders.

Size is the size of the firm that is obtained by the logarithm of the total assets.

ROA is the return on assets index that is derived from the division of earnings before interest and corporation tax on the total assets.

MB is the ratio of market value to book value of firm equity.

LEV is the financial leverage that is the total debt divided by the assets' value; β represents the coefficients of the regression model, ε is error component of regression model; i represents the firm and t represents the time period.

The concentration of ownership: it is the distribution of stock among different shareholders of the firm, the fewer is the number of shareholders, the ownership is more concentrated. In this study, the concentration of ownership calculated using the Herfindahl-Hirschman index as follows:

$$HHI = \sum_{i=1}^n \left(\frac{X_i}{X} \right)^2 \quad (2)$$

This index is calculated using the sum of the square of share percent of shareholders, the size of the index is a number between zero and one. The closer it is to one, it indicates the greater concentration and in return the closer it is to zero, it indicates the lesser concentration is. (Hasas Yegane *et al.*, 2008), with the increase in the amount of concentration the ownership increases, and in the case that all the shares belong to a person it maximizes.

DATA

The statistical population includes the listed firms at stock Tehran stock exchange during the 2004-2014-time period. This study considered the considered firms should have the following characteristics.

1. In the period of the study don't have changes in the fiscal year.
2. They fiscal year end at the 20th of March (29th of Esfand).
3. The data and information used in this study at least contain five consecutive years.
4. The firm is not a member of the Banking, financial intermediation, and insurance industries because:
 - A) The high leverage ratios of non-financial firms is a sign that shows the firm's financial risk, while this is completely normal for financial firms, therefore, if financial firms also used in the analytical process, it leads to incorrect result about the relationship between variables.
 - B) The method of accounting used in financial firms differs from that of used in non-financial firms. Accordingly, the employed interpretations and justification used for fundamental factors of these two groups are different.

Based on these, 143 firms in the 2004 to 2014 period selected as the sample using systematic sampling (screening). The data used in this study is extracted from the website of the Tehran stock exchange using the Rahavard Novin software

In this study, we use panel data regression to analyze the results. The use of panel data allows us to use and test more complex models than the cross- sectional data or time- series models which is a solution to reduce the key econometric problems in empirical research. In this regard, the Eviews software package has been used for the tests.

DESCRIPTIVE STATISTICS

Table 1 summarizes the descriptive statistics (including mean, median, maximum and minimum value, standard deviation, the coefficient of skewness and kurtosis coefficient) and the Jarque–Bera statistic for variables related to data and relevant variables for the 2004-2014 period that was used in the experimental section of this study. The Jarque–Bera statistic and the reported probability shows a normal statistical distribution of data in this article.

Table 1- the summary of descriptive statistics of the data and variables used in the model

	INST	DSCORE	ROA	SIZE	MB	LEV	DA	HHI
Average	69.0327	52.5898	0.1559	13.4710	2.8722	0.6248	-0.1130	0.3146
Median	77.3550	54.0000	0.1357	13.3196	1.9944	0.6363	-0.000	0.3946
Max Value	100.000	100.000	0.6757	18.5434	130.83	3.0604	3.72561	1
Min Value	0.00000	-13.000	-0.3211	9.6749	-26.2953	0.0127	-4.86	0
Standard Deviation	26.7309	24.6071	0.1293	1.4434	5.66759	0.2292	0.10404	0.2125
Skewness Coefficient	-1.2219	-0.1216	0.7609	0.7164	14.0406	2.1677	-1.168	0.7489
Kurtosis Coefficient	3.5241	2.1264	4.5058	3.9967	292.4423	22.1628	8.490	-0.2867
Jarque–Bera statistic	405.4957	51.1229	323.508	215.417	5975957	27294.1	215.401	48.12296
probability	0.00000	0.0000	0.00000	0.00000	0.00000	0.00000	0.00000	0.000000
Observations	1558	1492	1694	1697	1696	1697	1697	1558

Note: In the Table above: INST is the ratio of institutional ownership shareholders, DSCORE is disclosure score. ROA is return on assets that is derived from the division of earnings, size is the firm's size that is obtained from the logarithm of total assets; MB is the ratio of market value to book value, LEV represents the ratio of financial leverage (dividing the liability to total assets, DA is earning management; HHI is the Herfindahl- Hirschman index that shows

Source: Authors Calculated

In addition, Table 2 shows Pearson's correlation coefficient for dependent and independent variables. As can be observed, the correlation coefficient of institutional ownership, disclosure, the ratio of market value to book value and leverage of firms with the dependent variable i.e. earnings management is negative and the correlation between size variable and the ratio of market value to book value is positive. To test the hypothesis in this study, we use multivariate regressions. Therefore, first, the unit root tests carried out on the variables and then the proper specification tests is performed to select the appropriate model.

Table 2 Correlation results between variables

Correlation	INST	DSCORE	ROA	SIZE	MB	LEV	DA	HHI
INST	1.000000							
DSCORE	0.060938	1.000000						
ROA	0.149727	0.288016	1.000000					
SIZE	0.219997	-0.016004	-0.031387	1.000000				
MB	0.048035	0.017639	0.191362	-0.016074	1.000000			
LEV	0.067680	-0.224855	-0.413874	0.063727	-0.010414	1.000000		
DA	-	-	0.191362	0.149727	-	-	1.000000	

	0.219997	0.016004			0.016004	0.013004		
HHI	0.334584	0.347374	0.167795	0.191362	0.149727	0.001387	0.001317	1.000000

The variables are introduced in Table 1

The unit root test results

Here the discussed model in section 3 is estimated using the unbalanced panel data of 143 firms. First, we need to confirm that the variables are stable. When regression is estimated for a time-series non-stationary with variables, there is always the possibility of false regression. As a result of the use of econometric models using no stationary data would lead to invalid F and T-tests and lead to false inferences about the model estimation.

In regression models when the number of observations of time series for each sections or units is high, we can examine the stationary of variables using the time series unit root test for each firm separately. However, when the periods of data are little the strength of unit root tests diminish significantly. In such cases using the panel unit root tests for data is necessary. It is possible that different test methods of unit root test based on the panel data give contradictory results. The methods used in this study, are as follows:

1. Levin, Lin and Chu Test (2002, LLC)
2. Im, Pesaran and Shin test (IPS, 2003)

The results of the unit root test for the variables are presented in Table 3, as shown in the Table, the template variables are stationary or have no unit root or they are $I(0)$. Now that we made sure that the variables are stable (stationary) we can now estimate the model and there is no need to use the co-integration test.

Table 3: Results of unit root tests for the variables

Variable	LLC: T- Stat (P- value)		IPS: W-stat (P- value)	
	With Intercept and trend	With Intercept	With Intercept and trend	With Intercept
INST	- 30.6483 (0.000) ***	- 29.5073 (0.000) ***	- 6.01593 (0.000) ***	- 14.9155 (0.000) ***
DSCORE	- 29.2912 (0.000) ***	- 7714.72 (0.000) ***	- 5.09088 (0.000) ***	- 741.373 (0.000) ***
LEV	- 21.8595 (0.000) ***	- 12.1713 (0.000) ***	- 4.32832 (0.000) ***	- 4.38456 (0.000) ***
ROA	- 19.6193 (0.000) ***	- 14.1187 (0.000) ***	- 6.34468 (0.000) ***	- 8.14432 (0.000) ***
SIZE	- 233.704 (0.000) ***	- 1343.90 (0.000) ***	- 17.9843 (0.0000) ***	- 173.337 (0.0000) ***
MB	- 38.9077 (0.000) ***	- 42.3055 (0.000) ***	- 10.0663 (0.000) ***	- 19.5552 (0.000) ***
DA	- 5.09088 (0.000) ***	- 7714.72 (0.000) ***	- 4.38456 (0.000) ***	- 29.2912 (0.000) ***
HHI	- 15.1895 (0.000) ***	- 5.13168 (0.000) ***	- 4.19839 (0.000) ***	- 5.77661 (0.000) ***

- Note: In The Chart Above, *** is the significance level at the 1% level, ** is the significance level at the 5% level and * is the significance level at the 10% level.

Source: Findings

Model estimation and findings

The results in the model where the dependent variable is earnings management based on discretionary accrual along with diagnostic tests are presented in Table 4. The F test results in Table 4 shows that the null hypothesis i.e. there is no heterogeneity or personal effects in both cases rejected and the regression model should be calculated using the panel data. In the next step before estimating the final model, randomness or fixed individual effects is tested and whether random effects are a uncorrelated model with exogenous variables or not? For this case typically Hausman test (1978) is used that is a test of choice between fixed and random effects. Hausman test results statistic that is based on the chi-square is reported in Table 4. If there is no correlation then the model with random effects should be used, if there is a correlation then the model with fixed effects is more specific. If the probability value is higher than 0.5 or 0.10, the null hypothesis cannot be ruled out. As a result, a higher probability value shows that the model with random effects is a better specification and the low probability shows that the model with fixed effects is a better specification. According to the reported Hausman test, the null hypothesis is not confirmed, thus the model with fixed effects is a better specification. In addition to F test and Hausman test, the Durbin- Watson statistic model can examine the specification. The Durbin- Watson statistic reported near the value 2.

The results show that there is a significant and negative relationship between institutional ownership and earnings management, in other words, by increasing the percentage of institutional ownership, the flexibility of the firm for the accruals management reduces and this cause the earnings content information rise. This result is consistent with the Moradzadeh *et al.*'s results (2009) where they found a negative and significant relationship between institutional ownership and earnings management. While the results Rajgopal *et al.* (2002) shows that the increase in institutional ownership would reduce incentives for managers to manipulation earnings and at thereby increasing the earnings content information. But the results of Fan and Wong (2002) for East Asian firms is the opposite of the results of two mentioned studies. Fan and Wong's (2002) results show that by increasing the level of institutional ownership the earnings information content reduces. In Iran Karami's (2007) results are consistent with the results of Fan and Wong (2002).

The results can be interpreted from the theatrical perspective as the following; in the corporate governance literature the issue of institutional shareholders can be considered from two perspectives: 1) the efficient supervision concept and 2) the convergence of interest's concept. These two concepts derived from the results of a lot of research that's conducted on institutional shareholders as such that from the perspective of efficient supervision, the existence of institutional shareholders leads to the establishment of corporate governance and the agency cost decreases. Meanwhile, the drop in volatility of stock return and the assumption of the existence of a reverse relationship between institutional shareholders and volatility is understandable (Fakhari and Taheri, 2010).

Some institutions such as investment firms and independent investment consultants are under less pressure from the investing corporative side and are better at supervision, discipline, and control of firms. These institutional investors are called no sensitive to pressure. Using this classification, most of the share ownership of non-sensitive to pressure investors lead to better decisions management. Institutional investors have the opportunity, resources and the ability to monitor, regulate and impact on firm performance and pay more attention to selfish behavior. Adept institutional investors, compared to non-institutional shareholders, are more capable of detecting earnings management. They have access to relevant and timely information.

Table 4: The results of estimating the model

variables	Coefficient	t statistic
INTERCEPT	.2660	(1.1026)

INST	- 0.0108	(- 2.7401) ***
HHI	0.22692	(2.9726) ***
SIZE	0.025289	(- 2.13074) **
DSCORE	- 0.443129	- (4.10681) ***
ROA	.0639	(1.1324)
MB	- 0.0693	(1.6916) *
LEV	- 1.632906	(- 6.92833) ***
R ²	0.5817	
F- statistic [probability]	614.3155 [0.000]	
Durban- Watson statistic	1.804	
F- stat. no fixed effect	2.4688 [0.000] ***	
Hausman test χ^2 Stat.	18.6878 [0.0047] ***	
suitable specification	(FE) fixed effects	
Observations	1492	

Note:

- The variables are introduced in Table 1.
- The numbers in parentheses are the values of t statistic and the number in brackets indicates the probability.
- *, **, *** show the rejection of the null hypothesis at 10 %, 5% and 1 % significance levels respectively. (In the above Table, *** is the significance level at the 1% level, ** is the significance level at the 5% level and * is the significance level at the 10% level).

Source: Findings

In the regression model, Herfindahl's index is positive and significant, as the results show, the increased concentration increases earnings management. As mentioned in the literature, the concentration of ownership by increasing supervision and eliminating free-riders cause positive changes at the firm, but other mechanisms can act in opposite manner to this. One of the issues that are discussed more is that the big stakeholders and owner-managers may use their control power for personal and lead to the exploitation of other shareholders. The results of this paper are consistent with the second view (competing hypotheses of the active monitoring hypothesis).

The effect of the firm's size control variable on earnings management is positive and reinforce this view that in big firms the management categories are greater and this lead to an increase in the gap between top managers and lower levels employees and leads to weak connections between this levels and finally weakness in their person relations. In addition, large firms due to the existence of monthly and seasonal reports procedure and regulation, middle managers of the firm pay attention to short - term activities more than long- term. The need to short term earnings and effort to achieve it is among other reasons that at large firms manipulate data to make it look successful, ie earnings management techniques are used. The results are shown in Table 4 and 1 percent increase in the size, assuming other conditions are fixed, and increases earnings management by 0.032. On the contrary point of view, confirmed in this study, there is another view that states the larger firms have better and more efficient tools for the control of managers to provide transparent information or larger firms bring to existence fixed performance standards to control the organization.

However, the estimation results in Table 4 show that the disclosure score has a negative impact on earnings management, the results of this study are consistent with those of the theory that state there is a negative relationship between disclosure and earnings management (Cormier *et al.*, 2013). Based on the previous studies on earnings management increase in proportion to information asymmetry level. Truman

and Titman (1998) showed that non-disclosure and information asymmetry between management and shareholders is a fundamental condition for earnings management. Surveys show that the lack of disclosure and preparing information, by providing a rational context, in addition to preventing the disclosure of misleading information and ideas by other firm executives, prevent misleading information provided by other sources of information about the firm. If the disclosure of the needed information for that users is timely, complete and accessible then the management will lose its ability to earnings manipulation. Earnings management occurs when the disclosure of information is incomplete, as a result, managers can manipulate some facts and figures on the earnings.

The coefficient of profitability variable (the ratio of the operating income before deduction of any taxes to the total assets) as an indicator of opportunistic behavior of managers is positive, but despite a high T statistic, it is not significant. This result is partly because firms with high earnings used earnings management techniques to the extent. The coefficient equity value variable on earnings management is negative and significant at the 90 percent confidence level.

Financial leverage (the ratio of total liability to total assets) and is negative and statistically significant. This means that the increase in financial leverage reduces earnings management. These results are consistent with Jensen's (1986) results that states the increase in financial leverage due to stress from liabilities contracts, causes a decrease in opportunistic behavior from the managers and makes them more cautious.

CONCLUSION AND POLICY IMPLICATIONS

Earnings are one of the basic elements of financial statements, which has always been of interest to different groups and it is used as a measure of continuity of activity, efficiency and revision of earnings contracts, predicting future cash flows for investment. Managers, to mislead shareholders on the actual economic performance of the firm, often manage earnings. Earnings management, which is done through accounting statistics manipulation or manipulation of actual activities, decrease the accuracy of its message and increase the risk and lack confidence of outsiders and also will likely lead to information asymmetry and decrease investment efficiency. Earnings management not only hides the actual performance of a firm but also hides the real growth process, earnings and firms revenue that are used to predict future growth of the firm.

Given the importance of earnings management in financial and accounting literature, in this study, we examine the effect of different internal and external mechanisms and disclosure level on earnings management. To answer this question and pursuing our objectives we use the data of 143 firms listed on the Tehran Stock Exchange, which selected using the screening or the systematic elimination method during the 2004- 2014 period.

The results show that the impact of institutional ownership variable (as an external mechanism of corporate governance) on earnings management is positive and significant. The concentration of ownership (as an internal mechanism of corporate governance) on earnings management is positive and statistically significant. The impact of disclosure grant on earnings management is negative and significant. In addition, the results show that firm size is positively correlated with earnings management. The other two control variables, the ratio of market value to book value of equity and financial leverage have a negative impact on earnings management. Based on the results we suggest that institutional investors and major shareholders play a more active role in supervision and help to align the interests of shareholders and managers to decrease the agency problems and finally improve the firm's performance. For further extension of this study we suggest that researchers in the future carry out this method on different groups of institutional investors (banks, insurance firms, government, private insurance firms, governments and investment funds) and examine the impact of each or any group of institutional owners on earnings management or, compare different industries with each other.

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