

Effect of Financial Leverage and Investment Diversification on Income-Increasing Earnings Management

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Abstract: Accounting earnings continuously as one of the measures of financial decision making is important for investors and creditors. Directors based on different reasons such as audit report request and create conditional paragraphs in debt contract on behave of the firm's financial creditors, information asymmetry between financial creditors and directors, investment diversification and so on, make earnings management. Therefore, different methods so as to managing earnings are used by managers. One of these methods is using flexibility of accounting standards (positive or income-increasing earnings management). The purpose of this research is to investigate the effect of financial leverage (debt ratio) and investment diversification on income-increasing earnings management. In the line of the aim of study, three hypotheses were developed. To test these hypotheses, the sample was selected among companies listed on the Tehran Stock Exchange during period from 2002 to 2008. In this study, discretionary accruals have been applied to measure income-increasing earnings management and to test the hypotheses of the study, multivariate regression using panel data method have been applied. The findings indicate that directors' tendency decreases so as to commit earnings management with increasing in financial leverage and increasing investment diversification. In addition, the results point out that directors' tendency increases to commit earnings management with contemporaneous increasing in financial leverage and investment diversification.

Key words: Income-increasing earnings management • Discretionary accruals • Financial leverage • Investment diversification • Information asymmetry

INTRODUCTION

Based on financial reporting theoretical concepts, the financial statements objective is to present summarized and categorized information with regard to business enterprise' financial position, financial performance and financial flexibility that would be useful to a wide variety of financial statements' users on economics making-decisions. In other words, involving in the economics decision making by financial statements users, requires evaluation ability of companies in order to create cash flow, time and its creation certainty which this evaluation is made easier through concentrate on company's financial position, financial performance and cash flows and use of them in predicting expected cash flows and financial flexibility measurement. Moreover, financial statements reflex the results of the management stewardship function or their accountability instead of resources which are available to them [1]. In this regard

and in historical trend of accounting, accounting earnings has played the most important role in presenting relevant information with financial performance and investors' decision making. Under the accrual accounting system, directors manage considerably the time of recognition some of the expenses such as advertisements, development and research and revenues. Therefore, it allow managers to determine earnings in different time periods which this kind of performance on the side of managers is called earnings management and earnings management is related to the importance of earnings amount for the invertors decision making. One of the fundamental factors in earnings management test in firms is to estimate the choice factor and is to do the managers' opinion in determining earnings. The review of the literature based on earnings management indicates existence of various approaches with different characters in estimating and measuring management's choices in earnings determination. One of the most important

approaches is based on the application non-discretionary accruals as index so as to determine and deter earnings management in business enterprises [2]. According to the prior research, non-discretionary has been considered as measure for income-increasing earnings management. Some of these studies indicate an inverse relationship between debt and income-increasing earnings management for the reason that firms' managers with level of high debt are constrained by firm's creditors in doing earnings management due to more control [3-8]. The results of the other studies show a direct relationship between debt and income-increasing earnings management when firms' directors want to prevent from violation of debt contract because, in debt contracts put conditions paragraphs (e.g. firm's operating earnings must not be less than a certain level) which provide directors an incentive so as to do earnings management [9- 12]. On the other side, earnings management can be like agency cost, because this cost is created due to information asymmetry between financial creditors and directors [13]. According to the transparency hypothesis, increasing investment diversification is led to complexity in organizational structure and increasing information asymmetry between financial creditors and managers for the reason that, from one side, financial creditors for the decision making in firms financing are need to be provided by information resources in order to examine the accuracy of the items mentioned in firm financial statements particularly income statements. And on the other hand, accessible to information for the firm's directors and financial creditors are not the same that led to information asymmetry between directors and financial creditors. And in firms containing investment diversification, the quantity of information asymmetry intensify due to some information regarding financial statements as to these firms are related to the information revealed in financial statements of subsidiary or affiliated firms. Therefore, increasing investment diversification is increasing the quantity of information asymmetry between managers and financial creditors which it is incentive in committing earnings management and the incentive is doubled under circumstance that directors' compensation is related to their performance [14]. Based on the transparency hypothesis, the quantity of the information asymmetry is increased in firms involving investment diversification and monitoring costs as regards to directors' duties is increased with increasing in the level of the investment diversification contemporaneously. Therefore, firms' directors containing investment diversification and high

financial leverage have a tendency to commit earnings management with the purpose of indicating firms' performance better [14]. Taking into consideration, the importance of the earnings for the financial statements users particularly firm's financial creditors and also firm's financial leverage and investment diversification affect directors' tendency so as to manage earnings. Consequently, this question is raised with regard to earnings management that how is the effect of firm's financial leverage and investment on income-increasing earnings management.

Literature Review: In accounting historical evolution, accounting earnings has had the most important role for investors in presenting information related to the financial performance and decision making and for that reason, accounting earnings is vital for directors and has generated an incentive for directors so as to manipulate earnings. This manipulation of earnings is considered as earnings management in accounting literature but, it is difficult to present a clear definition of earnings management for the reason that it is not determined limitation between earnings management and financial frauds. Financial fraud is deletion or intentional manipulation of main realities or accounting data which led to judgment change or user's decision making change by use of the data. Earnings management can be accomplished in restriction of GAAP and it has no consistent with scientific definitions mentioned above but it seems to be a hazard for all time that earnings management would have consequences such as financial fraud for firms. Now, the most important point which it is necessary to be noted is that there is a clear conceptual difference between fraudulent accounting activities and judgments and estimates which put into the conceptual of the GAAP and could be used accurate earnings management. But in the second case, it is a little difficult to distinguish between legal earnings management and financial fraud owing to lack of objective evidence based on intention and purpose management [15]. In this research, earnings management has been used as income-increasing (positive) kind of earnings management and has been applied the proper relationships of income-increasing (positive) earnings management calculation. Earnings management is considered relatively as one of the new subject and has been paid attention to by directors and one of the topics which is raised in the area of accounting earnings. This theme has been formed in accounting after the beginning of the twentieth century by accounting theorists in different studies. Every one of

these studies has raised special dimensions such as earnings manipulation, earnings smoothing and finally earnings management and in the following some of these studies are described. [16] examined the effect of financial leverage on doing opportunistic behaviors and earnings management on the side of the management in firms with high free cash flows. The results from the study indicated that increasing leverage led to decreasing opportunistic behaviors and decreasing earnings management in firms with high free cash flows. [17] examined the effect of financial leverage and free cash flow and firm growth on earnings management. The results indicated that firm experiencing an increase in financial leverage during a five years period gradually compared to those which had high leverage degree in the same period, has performed less earnings management. [18] reviewed the relationship between earnings management and investment diversification. The results indicated that investment diversification was not led to information asymmetry and has no significance positive relationship with earnings management. [19] examined the relationship between earnings management with information disclosure and compensation and debt contract. The findings of this study indicated that firms' directors who carry out information disclosure voluntary have less likely to commit earnings management whereas directors due to increasing compensation and preventing from debt contract cancelation have more tendency to commit earnings management. The study carried out by [14] resulted in increasing financial leverage and investment diversification is decreased firm management's tendency to commit income-increasing earnings management and increasing financial leverage in firms with investment diversification is increased firm management's tendency to commit income-increasing earnings management. [20] in their study resulted that there is no positive significance relationship between liabilities to equity ratio and earnings management. Meanwhile, the results of the test of ownership and compensation hypothesis indicated absence of significance relationship between the mentioned variables and earnings management. [21] resulted that income tax and variation in operating activities are mainspring for smoothing earnings using discretionary accruals and unlike other researchers in developed countries, debt ratio to total assets (financial leverage) and earnings variability do not have so much importance as earnings smoothing incentives. [22] resulted that there is a negative significance relationship between financial leverage (debt) and earnings smoothing and there is a more negative significance relationship between financial leverage and earnings smoothing in

firms possessing more high free cash flow. [23] resulted that there is no significance difference between the quantities of the earnings management in firms which always have high financial leverage degree and those which involved in increasing financial leverage steadily and free cash flow and firm's growth are effective in doing directors' opportunistic behavior and earnings management.

Research Hypotheses: In order to reply the question of the research, the following hypotheses are put forward:

Hypothesis 1: Financial leverage has an influence on income-increasing earnings management in companies listed in Tehran Stock Exchange.

Hypothesis 2: Investment diversification has an influence on income-increasing earnings management in companies listed in Tehran Stock Exchange.

Hypothesis 3: Financial leverage and investment diversification have an influence on income-increasing earnings management in companies listed in Tehran Stock Exchange.

MATERIALS AND METHODS

The scientific research based on "aim" and "nature and method" are usually categorized. The present study from the viewpoint of aim is applied and from the viewpoint of nature is descriptive and correlation. In the present study, panel data analysis has been applied. F test has been used so as to determine data type of pool and data panel and in case that data were from the type of data panel, Hausman test has been used in determination of use of fixed effect method or random effects. The Durbin-Watson test has been used so as to determine the first autocorrelation. F test has been applied to test the significance of the relationships. Adjusted R^2 was used to determine explanation power of variances of dependent variable by use of independent variables. T test was applied to test significance of variables coefficient and to test hypotheses of study.

Sample and Statistical Population: The sample for this study comprises firms listed on the Tehran Stock Exchange (TSE) for each of the years 2002, 2008, but due to lagging some information regarding variables, data concerning fiscal year 2000 and 2001 has been used. Firms Included in the sample must be a subsidiary or affiliated firm which have a control or considerable influence on the

investor's firms. In order to compare the information, the fiscal year must be at the date of 19 March every year (the end of fiscal year in Iran). All financial firms including banks, insurance and financial dealer are excluded because this industry is regulated and is likely to have fundamentally different cash flow and accrual processes. Firms with insufficient data are also eliminated. After adjusting for outliers, the sample comprises 41 firms. Financial and accounting data needed to compute the discretionary accruals are obtained from firms' annual financial statements and accompanied notes of firms' listed in Tehran Stock Exchange on databases such as RahavardNovin and TadbirPardaz and website of Securities and Exchange Organization of Iran (SEO).

Data Collection Tools and Data Analysis Method: In this study, the variables are categorized in three groups including independent, dependent and control variables which are described in the following:

Dependent Variable: In this study, income-increasing earnings management is considered as dependent variable and discretionary accruals used by [24] considering total assets with a lag has been applied to calculate income-increasing earnings management as presented in the following:

$$TA_{i,t} / A_{i,t-1} = \alpha_0(1/A_{i,t-1}) + \alpha_1(\Delta REV_{i,t} / A_{i,t-1}) + \alpha_2(\Delta PPE_{i,t} / A_{i,t-2}) + \alpha_3(\Delta ROA_{i,t} / A_{i,t-2}) + \varepsilon_{i,t} \quad (1)$$

Where:

$A_{i,t-1}$ = Total assets offirm I in the year $t-1$
 ΔREV_{it} = Changes in revenue from sale of firm I in the year t
 PPE_{it} = Net plant, property and equipment for the firm i in the year t
 $ROA_{i,t-1}$ = Assets return of Firm i in the year $t-1$
 Ta_{it} = Total discretionary for the firm i in the year t which is calculated using the following relation:

$$Ta_{i,t} = (\Delta CA_{i,t} - \Delta CL_{i,t} - \Delta cash_{i,t} + \Delta STD_{i,t} + \Delta TP_{i,t} - \Delta Dep_{i,t})$$

Where:

$\Delta CA_{i,t}$ = Change in current assets of firm I in year t
 $\Delta CL_{i,t}$ = Change in current liabilities of firm I in year t

$\Delta Cash_{i,t}$ = Change in cash of firm I in year t
 $\Delta STD_{i,t}$ = Change in current section of long term liabilities of firm I in year t
 $\Delta TP_{i,t}$ = Change in payable tax of firm I in year t
 $Dep_{i,t}$ = Change in tangible assets depreciation expense of firm I in year t

Independent Variables: In this study, financial leverage (DEBT), investment diversification (DIV) and contrary effect of investment diversification (DEBT×DIV) have been considered as independent variables.

DEBT: Financial leverage (debt ratio); the variable is calculated by divided total debt by total assets in this study.

DIV: (Investment diversification); dummy variable and its calculation is in this way that if a firm has an investment diversification is one, otherwise; zero. Investment diversification means that sample firms would have invested in subsidiary or affiliated firms operations which are different from invertor's firms or locations which are in countries different from investor's firms or in two situations that is to say operations and locations of firms.

DEBT×DIV: (Contrary effect variable of investment diversification and financial leverage); this variable is calculated by financial leverage multiply by investment diversification.

Adjusting (Control) Variables: In this study, adjusting variables including firm size (LOGA), tax effective rate (EFTAX), industry firms size (GROU), debt difference (IDEBT), equity difference (ICAP) and Auditing proxy (BIGAU) are described as follows:

LOGA : Size proxy; log assets
EFTAX : Tax effective rate; tax expense divided by earnings before tax
GROU : Group companies size
IDEBT : Debt difference; difference between the quantity of the increasing company's debt in one year compared to prior year and the average of this creasing in debt for the sample companies.
ICA : Equity difference; difference between the quantity of the increasing company's equity in one year compared to prior year and the average of this increasing in equity for the sample companies.

BIGAU : Big auditor; dummy variable and if the auditor is audit Organization is equal to one and otherwise zero.

The Regression Used to Analyze Data: After calculation of discretionary accruals based on equation (1), discretionary accruals as dependent variable are entered in the regression applied in this study. This regression is based on the regression presented in the study carried out by Rodriguez and Hemmen(2010). This regression using panel data is as following:

$$DAC_{i,t} = \alpha_0 + \alpha_1 DEBT_{i,t} + \alpha_2 DIV_{i,t} + \alpha_3 DEBT \times DIV_{i,t} + \alpha_4 LOG AT_{i,t} + \alpha_5 EFTA_{Xi,t} + \alpha_6 GROU_{Xi,t} + \alpha_7 IDEBT_{Xi,t} + \alpha_5 ICAP_{Xi,t} + \epsilon_{i,t} \quad (2)$$

Where

$DAC_{i,t}$: Discretionary accruals

The explanatory variables are as follows that the first two variables as independent variables and others as adjusting variables are considered

- DEBT: total debt/total assets
- DIV is a dummy variable with value 1 if the firm is diversified and zero otherwise
- $DIV \times DEBT$: interacting variable between DEBT and DIV
- LOGTA: Log of total assets
- EFTAX: Effective tax rate
- GROU: number of affiliated firms/total revenues
- DEBT: difference between debt increase and the meansample of the debt increase
- ICAP: difference between equity plus securities increase and the mean sample of the equity plus securities increase.
- BIGAU: big auditor; dummy variable and if the auditor is audit Organization is equal to one and otherwise; zero.

Analysis: Before equation goodness of fit, the method of equation goodness of fit (1) is determined atfirst. In order to test the type goodness of fit, F test and if it is needed, the Hausman test has been applied. The test results are summarized in Table 1. The results indicate that F is 0.8737 and p-value is more than 0.05 for the equation (1). Therefore, Pooled data method for the equation goodness of fit (1) and Generalized Least Squares for the deteroskedasticity of variance have been used.

After determination the type of regression goodness of fit method, regression goodness of fit completed by use EvIEWS.6. The results of the EvIEWS.6 output are summarized in Table 2.

According to the results reflexed in the Table 2, the result indicates coefficient of variables including changes in revenue (REV_t / A_{t-1}) and net property, plant and equipment (PPE_t / A_{t-1}) and concept term are meaningful at the level of 95% confidence and inverse coefficient of total assets ($1/A_{t-1}$) and return on assets (ROA_{t-1} / A_{t-2}) are not meaningful and based on the F calculated and p-value<0.05, it can be said that this regression is meaningful at level of 95% confidence. In other words, this regression has a high validity and consistent with the Durbin-Watson (DW=2.16) indicate that there is no autoregression between residuals. Furthermore, determination coefficient of this regression is 16% which shows 16% of variances of dependent variable are explained by independent variables. After steps of regression goodness of fit (1), discretionary accruals are calculated by using deference between real amount and fitted amount (fitted equation residuals) which this amounts are considered as dependent variable in equation (2).

Research Hypotheses Test: In order to analyze data and test the hypotheses of the study, the following regression has been applied:

$$DAC_{i,t} = \alpha_0 + \alpha_1 DEBT_{i,t} + \alpha_2 DIV_{i,t} + \alpha_3 DEBT \times DIV_{i,t} + \alpha_4 LOG AT_{i,t} + \alpha_5 EFTA_{Xi,t} + \alpha_6 GROU_{Xi,t} + \alpha_7 IDEBT_{Xi,t} + \alpha_5 ICAP_{Xi,t} + \epsilon_{i,t} \quad (3)$$

The Hypotheses Are Follows:

Hypothesis 1: Financial leverage has an effect on income-increasing earnings management in firms listed in Tehran Stock Exchange.

Hypothesis 2: Investment diversification has an effect on income-increasing earnings management in firms listed in Tehran Stock Exchange.

Hypothesis 3: Financial leverage and investment diversification have an effect on income-increasing earnings management in firms listed in Tehran Stock Exchange.

Before testing the study hypotheses, the equation (3) fit method has determined in the beginning. In order to test the type of goodness of fit, in the beginning the F and then in case of need, Hausman-test has been applied.

Table 1: Results from Effects Test

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
$TA_{it} / A_{it-1} = \alpha_0(1/A_{it-1}) + \alpha_1(\Delta REV_{it} / A_{it-1}) + \alpha_2(\Delta PPE_{it} / A_{it-2}) + \alpha_3(\Delta ROA_{it} / A_{it-2}) + \varepsilon_{it}$			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.739637	(40,242)	0.8737
Cross-section Chi-square	33.102356	40	0.7718

Table 2: Results from relation of calculation of discretionary accruals

Dependent Variable: TA				
Method: Panel EGLS (Cross-section weights)				
Sample: 1381 1387				
Cross-sections included: 41				
Total panel (balanced) observations: 287				
Linear estimation after one-step weighting matrix				
White cross-section standard errors & covariance (d.f. corrected)				
$TA_{it} / A_{it-1} = \alpha_0(1/A_{it-1}) + \alpha_1(\Delta REV_{it} / A_{it-1}) + \alpha_2(\Delta PPE_{it} / A_{it-2}) + \alpha_3(\Delta ROA_{it} / A_{it-2}) + \varepsilon_{it}$				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.050269	0.017934	2.803027	0.0054
A	140.2492	3546.806	0.039542	0.9685
REV	0.072567	0.036510	1.987580	0.0478
PPE	-0.136957	0.039192	-3.494475	0.0006
ROA	2048.754	19836.76	0.103281	0.9178
Weighted Statistics				
R-squared	0.160030	Mean dependent var		0.048250
Adjusted R-squared	0.146697	S.D. dependent var		0.234259
S.E. of regression	0.226684	Sum squared resid		14.49081
F-statistic	6.502364	Durbin-Watson stat		2.115091
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.026779	Mean dependent var		0.030279
Sum squared resid	14.59994	Durbin-Watson stat		2.194335

Table 3: Results from data analysis

Redundant Fixed Effects Tests			
Test cross-section fixed effects			
$DAC_{it} = \alpha_0 + \alpha_1 DEBT_{it} + \alpha_2 DIV_{it} + \alpha_3 DEBT \times DIV_{it} + \alpha_4 LOG AT_{it} + \alpha_5 EFTA_{Xit} + \alpha_6 GROU_{Xit} + \alpha_7 IDEBT_{Xit} + \alpha_8 ICAP_{Xit} + \varepsilon_{it}$			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.753835	(40,237)	0.8577
Cross-section Chi-square	34.371932	40	0.7210

Table 4: Results from data analysis

Dependent Variable: DAC4				
Method: Panel EGLS (Cross-section weights)				
Sample: 1381 1387				
Cross-sections included: 41				
Total panel (balanced) observations: 287				
Linear estimation after one-step weighting matrix				
White cross-section standard errors & covariance (d.f. corrected)				
$DAC_{it} = \alpha_0 + \alpha_1 DEBT_{it} + \alpha_2 DIV_{it} + \alpha_3 DEBT \times DIV_{it} + \alpha_4 LOG AT_{it} + \alpha_5 EFTA_{Xit} + \alpha_6 GROU_{Xit} + \alpha_7 IDEBT_{Xit} + \alpha_8 ICAP_{Xit} + \varepsilon_{it}$				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
	0.232007	0.116487	1.991694	0.0474
DEBT	-0.244348	0.075661	-3.229494	0.0014
DIV	-0.069937	0.032871	-2.127646	0.0342
DIVDEBT	0.124508	0.064545	1.928993	0.0508
LOGA	-0.015319	0.022812	-0.671508	0.5025
EFTAX	0.087890	0.041410	2.122450	0.0347
GROU	-1.264164	0.474076	-2.666583	0.0081
IDEBT	-1.42E-09	6.50E-09	-0.217832	0.8277
ICAP	2.24E-08	9.58E-09	2.339506	0.0200
BIGAU	0.027946	0.019672	1.420606	0.1566

Table 4: Continue

Weighted Statistics			
R-squared	0.172342	Mean dependent var	0.000238
Adjusted R-squared	0.142201	S.D. dependent var	0.227241
S.E. of regression	0.222395	Sum squared resid	13.70024
F-statistic	6.400154	Durbin-Watson stat	2.162840
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.038989	Mean dependent var	-1.63E-05
Sum squared resid	14.03070	Durbin-Watson stat	2.247534

The results summarized in Table 3 indicate that for the equation (3), F is 0.8577 and p-value is less than 0.05 (p-value>5%). Pooled data method has been used so as to fit regression and in order to meet heteroskedasticity of variance, generalized least square (GLS) has been used.

After determination the type of method of regression goodness of fit, regression fit completed by use Eviews.6. The results of the Eviews.6 output are summarized in Table 4.

The review of financial leverage effect on income-increasing earnings management is put forward in the first hypothesis. In accordance with the results reflexed in the table 4, financial leverage coefficient (DEBT) is -0.24 representing inverse effect of financial leverage on income-increasing earnings management and is consistent with theory foundations. As indicated the probability of this variable is 0.0014 (p-value<0.05) which indicating financial leverage coefficient is meaningful at the level of 95 percent of confidence, consequently, it can be concluded that financial leverage has an influence on income-increasing earnings management. Therefore, the first hypothesis is confirmed. The review of investment diversification effect on income-increasing earnings management is put forward in the second hypothesis. Compliant with the results reflexed in the Table 4, investment diversification coefficient (DIV) is -0.0699 displaying inverse effect of investment diversification on income-increasing earnings management, however, is not consistent with theory foundations. As it is showed the probability of this variable is 0.034 (p-value<0.05) which investment diversification coefficient is meaningful at the level of 95 percent of confidence, consequently, it can be concluded that investment diversification has an influence on income-increasing earnings management. Therefore, the second hypothesis is confirmed.

The interaction effect of financial leverage and investment diversification on income-increasing earnings management is put forward in the third hypothesis. According to the results reflexed in the Table 4, interaction coefficient of investment diversification and

financial leverage (DIV*DEBT) is 0.124 showing direct effect of interaction variable of investment diversification and financial leverage on income-increasing earnings management and is consistent with theory foundations. As it is showed the probable of this variable is 0.05 which this coefficient is meaningful at the level of 95 percent of confidence, so, it can be concluded that interaction variable of investment diversification and financial leverage has an influence on income-increasing earnings management. Therefore, the third hypothesis is confirmed. It is noted that among three out of six control variables have an influence. Equity difference variable (ICAP) and effective tax rate (EFTAX) have a direct effect and group size proxy variable (GROU) has an inverse effect on income-increasing earnings management. According to the results reflexed in the Table 4, this result indicates that F calculated is more than F in the table (p-value<0.05). Therefore, it can be concluded that this regression is meaningful at the level of 95 percent of confidence. In other words, this regression has a high validity and according to the Durbin-Watson (DW=2.16) indicating no autoregression between residuals and determination coefficient is 17% which shows 17 percent of variances of dependent variable is explained by independent variables.

CONCLUSION

Increasing financial leverage (debt ratio) decrease firms' tendency for decreasing earnings management because, firms' directors are constrained on creditors' behalf with request of audited financial reports and also take into consideration conditional paragraphs in debt contract are constrained in applying earnings management and increasing in financial leverage will lead to decrease in earnings management.

Based on the transparency hypothesis, increasing investment diversification is led to complexity in organizational structure and increasing the quantity of information asymmetry between directors and financial creditors. For the reason that on one side, financial

creditors need to information resources in order to review the accuracy of items inserted in firm's financial statements for decision-making in financing firms and on the other side, the quantity accessible to information for the directors and financial creditors of firm are not the same which is led to information asymmetry between directors and financial creditors and in firms including investment diversification, the quantity of information asymmetry is intensified due to relating to some information regarding financial statements these firms to information published in affiliated or subsidiary firms' financial statements. Therefore, increasing investment diversification makes the quantity of information asymmetry between directors and financial creditors intensify which itself is motivation for directors in order to commit earnings management.

Firms listed in Tehran Stock Exchange included during period from 2002 to 2008 have been selected as population sample. In this study, the relationship between financial leverage, investment diversification and earnings management has been examined experimentally. In this study, three hypotheses have been tested. The first hypothesis states the effect of financial leverage on income-increasing earnings management in firms listed in Tehran Stock Exchange and the second one mention that investment diversification influence on income-increasing earnings management in firms listed in Tehran Stock Exchange and the third one point out that financial leverage and investment diversification have an effect on income-increasing earnings management in firms listed in Tehran Stock Exchange.

The results of this study indicate that financial leverage has an inverse effect on income-increasing earnings management. It means that firms' directors with high financial leverage are constrained in managing earnings. Investment diversification has an inverse effect on income-increasing earnings management. In other words, firms' directors with the quantity of high investment diversification are constrained in managing earnings. The contrary variable of the investment diversification and financial leverage have and direct effect on income-increasing earnings management. In means that increasing financial leverage in firms with investment diversification are motivation for directors in managing firm's earnings or in other words in firms with investment diversification, increasing financial leverage create an incentive factor for directors in managing firm's earnings.

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