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**Original article**

## **Studying effect of uncertainty on capital market reactions to income smoothing of companies listed on the Tehran stock exchange market**

**R. Moradi<sup>a\*</sup>, H. Jabbari<sup>b</sup>, 3. M. Dastgir<sup>c</sup>**

<sup>a</sup>Master of Science in Accounting, Department of Management, Esfahan Science and research branch, Islamic Azad University, Esfahan, IRAN.

<sup>b</sup>Assistant Professor, Department of Management, Kashan Branch, Islamic Azad University, Kashan, IRAN.

<sup>c</sup>Professor, Department of Management, Esfahan Branch, Islamic Azad University, Esfahan, IRAN.

\*Corresponding author; Master of Science in Accounting, Department of Management, Esfahan Science and research branch, Islamic Azad University, Esfahan, IRAN.

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### ABSTRACT

The main goal of current study is to investigate effect of uncertainty on capital market reactions to income smoothing of companies listed on the Tehran Stock Exchange Market. Period of 5 consecutive years is from 2007 to 2011. Reserche's dependent variable is capital market reactions which has been measured based on earnings response coefficients according to the model proposed by Collins et al. (1994). Fundamental independent variables consist of uncertainty condition and income smoothing. Due to Habib et al. (2011), uncertainty level based on net income fluctuations has been measured and to evaluate income smoothing, discretionary accruals have been used. In total, findings are showing that uncertainty has the negative effect on capital market reactions. In another word, investors and activators in capital market have paid attention to uncertainty in companies of statistic sample and have considered this information in investing decisions. Also, findings indicate that informational content of income smoothing has had positive effect on capital market reactions under condition of uncertainty. Recent findings indicate this issue that managers' attempts in order to decrease effects of uncertainty have appropriate consequences and probably lead to improve

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investors' reaction to the published information of companies.

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## 1. Introduction

The company's failure to achieve the expected profit rate will rapidly decrease stock price. Companies which reach expected profit, are welcomed by investors. Excessive attention to the net profit figure makes the users unaware of the fact that the final profit is the result of a long process of accounting that at each stage, it is possible to be directed the managers. On the other hand, accounting standards in some cases has provided loophole in the timing and measurement of revenues and costs. Excessive attention of investors to the net profit encourages management to act aggressively in applying accounting standards in order to maintain sustainable growth in profits. Goel and Thakor (2003) came to this conclusion that majority of investors need liquidity in future deadlines and are forced to sell their stock. They found that while the variability of cash flows and consequently reported earnings instability is high, expected loss for shareholders who sell their shares to access to liquidity is low. In the current study, capital market reaction to income smoothing is investigated in uncertainty. So, determining information benefits of income smoothing is one of the necessities of current study. Another necessity of this research is attention to uncertainty as one of the factors out of company and out of control of manager in determining financial report guidelines. With the expansion of trade and industry and create a gap between owners and enterprise managers, conflict in benefit of managers and proprietors is clearly perceived. This conflict is driven from difference in their objectives so that each side is trying to maximize its benefits. Since, part of managers' premium is determined based on income rate, so they try to maintain growth of their income. Theoretically, managers' attempts to decrease income fluctuation and instability and create sustainable growth rate, is interpreted as income smoothing (Kapopoulos, P. and S. Lazaretou, 2007). The most important incentive of income smoothing is this belief that companies which have an appropriate income trend and their profit hasn't suffer major changes, have more market value in comparison with similar companies. Smoothing causes increase in company's shares value in exchange and attract investment potential for company's shares (Arya et al, 2008). Experimental evidences suggest that managers may soothe income using fabricated techniques such as the use of discretionary accruals like time manipulating and amount of revenues from the sale. A pattern of sustained growth in corporate profits has the information advantage for investors and other users of the company's information and potentially increases their ability to predict future profits (Habib et al, 2011). Environmental uncertainty is the rate of change or fluctuation in the environment where the company will operate in and it can include customers, competitors, government regulations and labor unions (Tang, 1979). Organization theory defines environmental uncertainty as shortage of information for decision making. So, when managers don't have required information to make decision, they consider operational environment of civil company as an unpredictable environment and environmental uncertainty occurs (Hach, 1997). In the area of financial reporting, Gush and Olsen (2011) found that environmental uncertainty stimulates managers to smooth income in order to reduce information asymmetry. They suggested that potential managers react to uncertainty and change their financial reporting behavior. According to agency theory, the existence of information asymmetry between shareholders and managers is inevitable. This is due to the separation of ownership from management. Evidences show that potential uncertainty is related to information asymmetry. In this context, Sar (2002) showed that companies' market value is driven from information asymmetry among investors about future cash flows and degree of asymmetry is intensified while uncertainty among investors is more. Environmental uncertainty directly or indirectly impact on company's performance. Elevating of uncertainty will intensify volatility of performance criteria. This issue makes it difficult for investors to predict profit and companies' future cash flows. If corporate managers don't react timely in order to adjust these fluctuations, information asymmetry among investors will be increased (Gush and Olsen, 2011). Fluctuations due to the unstable and uneven profits increase the probability of investors' losses because of uninformed trading and causes to show less kin to

invest in companies' shares by investors. As a result, the liquidity of the shares and subsequently the company's market value will be reduced. Under normal circumstances, when a company starts to smooth income, pattern of reported profits indicates the manager's attitude and his estimation toward future company's performance. The income smoothing for firms operating in high uncertainty potentially is an attempt to maintain a firm position among the company's invest suppliers and might not be based on managers estimation of company's future vision. Due to this fact, it seems that uncertainty is influential on the attitude of investors about sustainable and smoothed earnings (Habib et al, 2011). So the research's main question is as following:

What is the effect of uncertainty on capital market reaction to income smoothing?

### 1.1. Literature review

Sankaran and Svbramanyam (2007) found that risk-averse managers smooth income to be able to minimize inefficiency in investing through this. They claim that income smoothing reveals secret information related to future profits of company and this will probably cause the desired response of capital market. Gvyl and Thakur (2009) in the study came to conclusion that companies with high variability in cash flows pay cash bonus to their board of managers. They showed that in some circumstances, paying bonus to the managers for creating smoothed income is desirable. They claim that most of stockholders are investors with short-term vision and might intend to sell stocks in near future. Because this kind of investors has liquidity needs which are so commonly associated with the conditions and characteristics of their stock. Laflind et al (2011) argue that the opportunistic use of income smoothing may leave a negative impact on the transparency of reported accounting data. Economic result of this lack of transparency is its effect on investors' satisfaction to trade company's share. As a result of low or declining transparency, liquidity will be decreased and liquidity risk and capital cost will be increased. The high cost of transactions involving stocks with low liquidity may lead to vagueness and a lack discovery of share price. Chen (2012) investigated impact of income smoothing on information uncertainty, stock return and capital cost. Results show that income smoothing leads to decrease in information uncertainty of enterprise. Evidences indicate that market values the income smoothing and considers reward for enterprises which smooth income. So that enterprises which smooth income, have significantly high abnormal returns in the period of profit declaration. Ultimately, income smoothing decreases capital cost of enterprise. Teraker and Zarovin (2012) showed that income smoothing might provide context for investors to extract information from profit. Also, if managers intentionally manipulate profit numbers, income smoothing probably causes creating vagueness in profit information, because this manipulation is selective and potentially hides the actual events comprehensible to stakeholders. Fransis et al (2013) express that smoothing trends toward desired profit because probably causes decrease in uncertainty about future cash flows. Nevertheless, they point that among all tendencies based on accounting, the relation between income smoothing and information risk compared with relation between accruals quality and information risk is weaker. Hejazi et al (2011) in his study entitled "income smoothing and information uncertainty" argue that variability of managers' prediction has economic value in the viewpoint of investors. Results show that there is a 95% significant negative relation between income smoothing and information uncertainty of enterprise. The adjusted coefficient of determination shows that discretionary accruals as a criterion of income smoothing to total discretionary accruals, are more able to explain information uncertainty of enterprise. Rahmani and Bahsiri Manesh (2011) in the study argue that companies' managers try to decrease fluctuations profitability of company through income smoothing in order to increase certainty of investors and provide their expectations. Obtained results from their research show that stock price of companies which smooth income more, has more information about profitability rate and future cash flows. Forooghi and Ahmadi Nejad (2012) in the study evaluated the impacts of environmental uncertainty on the performance and profitability of companies and executives' response to these factors. Research's findings show that environmental uncertainty creates many fluctuations in performance and profitability of companies and managers smooth income using discretionary accruals in order to prevent negative effects of these fluctuations.

## 2. Materials and methods

The research is descriptive and correlational. This study is applied one in terms of objective, in which reporting behavior of the managers of capital market reaction based profitmaking units is taken into consideration. Also, the present study is descriptive in terms of gathering information and in which financial information of companies in the sample is collected using a library method.

### 2.1. Research hypotheses

The first hypothesis

Uncertainty is effective on the capital market reaction.

The second hypothesis

Uncertainty is effective on capital market reactions to profit smoothing.

The third hypothesis

Uncertainty is effective on the capital market reaction to the information content of profit smoothing.

### 2.2. Variables and their calculation

The dependent variable of present study is capital market reaction which is based on earnings response coefficient and is measured based on the model proposed by Collins et al (1994). Key independent variables include uncertainty and income smoothing. According to Habib and colleagues (2011), the level of uncertainty is based on sales revenue and discretionary accruals were also used for measuring income smoothing.

Measurement of income smoothing

To estimate the quality of abnormal accruals, the Jones's modified model is used. This model has been presented by Dichou and colleagues (1995), and it has been used in several studies (e.g. Dichou and Schrand, 2010; Dyfvd, 2010). In accordance with the Jones's modified model, discretionary accruals are calculated in several steps as follows. In the following regression model is fitted.

in which

Accruals: Total Accruals (difference between net profit and operating cash flow)

$\Delta$ Sales: Change in sales revenue compared to the prior period

TA: total assets

PPE: Total book value of property, machinery and equipment

ROA: the ratio of return on assets (net income divided by total assets)

Residuals of the regression model indicate involuntary accruals, and its difference with total accruals reflects discretionary accruals (DA). According to Habib and colleagues (2011), income smoothing is obtained by examining the correlation coefficient between discretionary accruals (DA) with the cash component of income (PDI) which is indicated by the following hypotheses test model.

$PDI = NI - DA$

Decomposition method of income smoothing and calculating smoothing information content

Habib and colleagues (2011) have suggested that a part of income smoothing has information that improves the investors' ability to predict future profits, and the other part of smoothed income is worthless information for investors. The level of income smoothing in accordance with the following procedures were decomposed into two parts. First, the model of income response coefficients is fitted.

$R_t = \beta_0 + \beta_1 X_t + \beta_2 X_{t-1} + \beta_3 X_{t+1} + \beta_4 RET_t + \epsilon_t$

In the above regression model, coefficient  $\beta_3$  reflects income response coefficient. The coefficient values, after fitting, are shown by the symbol CR in the following model.

$IS_t = \beta_0 + \beta_1 CR_t + \epsilon_t$

After the fitting of above regression model, its predictor variables are used to calculate the information content of income smoothing, according to the following equation (Habib et al, 2011).

$IS - INFO_t = \beta_0 + \beta_1 CR_t$

How to measure the level of uncertainty

Berge and Lawless (1998) suggested that environmental uncertainty can be caused by factors outside the company, and also due to internal factors. Thus, the researchers considered the volatility of the sales as a measure for the level of uncertainty. According to Habib and colleagues (2011) the following equation is used to measure the level of uncertainty.

$$CV(Z_i) = \frac{\sqrt{\sum_{k=1}^5 \frac{(Z_i - \bar{Z}_i)^2}{5}}}{\bar{Z}}$$

CV: coefficient of variation of sale

Z: Sales of Company

Z: 5-year Mean sale

Level of uncertainty is calculated by the above relationship for each year-company, and is imported in hypotheses test model with EU symbol (Habib et al, 2011).

### 2.3. Method of hypothesis testing

Hypotheses test model is extended model of income response coefficient, which has been modified by adding independent and control variables to test the hypotheses. The model is derived from a study by Habib et al (2011) that is used to decide on the hypothesis after fitting.

### 2.4. First and second hypotheses test model

RET: Annual Return of Company's Stocks (stock returns include changes in share price over a fiscal year plus dividends and other benefits which is calculated through RahavardNovin software for companies in the sample).

RETt3: is a simple three -year average return on equity

X: annual reported net profit divided by the market value of the Company

Xt3: is a simple three -year average net profit

IS: The amount of income smoothing as a variable affecting earnings response coefficient

EU: the level of uncertainty for each year-company which is calculated based on the equation given in Section B.3 (as basic independent variable and effective on earning response coefficients)

SIZE: firm size as a control variable (natural logarithm of total assets).

GROWTH: ratio of market value to book value of equity shares of the company as control variable (market value of shares is acquired by multiplying the price per share at the end of the financial year in the number of treasury shares).

EARNSTD: standard deviation of net income as a control variable (SD of profit is calculated for each company over 3 years).

In above regression model, coefficients  $\beta_1$  to  $\beta_4$  reflect the factors of profit response model. According to Tucker and Zaroween (2006) and consistent with Habib and colleagues (2011);  $\beta_3$  is the coefficient of profit reaction and other variables are imported in the regression model to improve its fitting. Accordingly, the coefficient  $\beta_8$  represents the reaction of capital market to income smoothing, and the coefficient  $\beta_{13}$  reflects the capital market reaction to the uncertainty that is used to decide on the first hypothesis. Also, the coefficient  $\beta_{18}$  shows the impact of uncertainty on capital market reaction to income smoothing and is used to decide on the 2nd hypothesis. Coefficients  $\beta_{20}$  and  $\beta_{25}$  reflect the impact of the control variables on the reaction of capital market.

### 2.5. The third hypothesis test model

According to Habib et al (2011), Income Smoothing is degraded into two sections: informative and the remaining (non- informative). Informative part, as the information content of income smoothing, is considered in the hypotheses, is imported in testing hypotheses model as well is used to decide on the third hypothesis.

IS-INFO: informative part of income smoothing as a key independent variable affecting earnings response coefficient (calculated in paragraph B.2)

Other variables have already been explained.

According to Habib and colleagues (2011), coefficient  $\beta_{15}$  indicates the impact of uncertainty on the capital market reaction to the information content of income smoothing and is used to decide on the third hypothesis.

## 3. Results and discussion

The study population consists of all firms listed in Iran’s capital market. Sampling method is screening (FAsystematic)wherespecific terms and conditions are defined to the companies in the sample. Table 1 represent the selection and extraction of suitable research sample according to the methods of sampling and data issues raised conditions and the information contained in the stock. As a result of the actions and considerations in sampling, 125 participants were selected from the population. Research duration is 5 consecutive years, thus the final sample size is 625 year-company.

**Table 1**

Selection and Extraction of sample.

The number of companies that have a presence in the years 1386 till 1390 in stock	265
The number of companies not included in investment companies and banks.	204
The number of companies that their fiscal year end is ended in March	162
The number of companies has not been changed during the fiscal year studying	141
The number of companies that their trading symbol have been active during the study period.	125
The number of companies that their data have been collected (final sample)	125

**3.1. The first hypothesis test results**

The first hypothesis predicted that uncertainty has an impact on the capital market reaction. To test this hypothesis, earnings response coefficient regression model (as a model for measuring capital market reactions)is developed by adding independent and control variables. The results of the regression model fitting to test this hypothesis are presented in Table 2.

**Table 2**

Results of statistical analysis for the first hypothesis test.

<b>Adjusted R2</b>	<b>Durbin-Watson statistic</b>	<b>F-statistic</b>	<b>Significant level of F</b>
<b>0.397</b>	<b>2.381</b>	<b>35.274</b>	<b>0.000</b>
<b>variable</b>	<b>The size of the coefficient <math>\beta</math> (standardized)</b>	<b>T-statistics</b>	<b>The significance level (P-value)</b>
X t	0.32	4.001	0.000
X t-1	0.077	0.255	0.799
Xt3	0.62	5.088	0.000
RET t3	0.334	6.578	0.000
EUt	0.039	0.85	0.396
EUt*Xt	-0.957	-4.38	0.000
EUt*Xt-1	0.216	1.633	0.103
t*UE3Xt	-0.78	-4.657	0.000
EUt* RET t3	0.323	5.529	0.000
SIZEt*Xt	-0.28	-0.889	0.374
MTBt*Xt	-0.002	-0.066	0.942
EARNSTDt *Xt	0.183	2.946	0.003

Regression model determination coefficient is 0.397 indicating that this model has been able to explain 39.7% of changes in stocks revenue of the companies in the sample through independent and control variables. Also, the results show that Durbin-Watson statistic is between 1.5and2.5 and therefore, there is no strong self-correlation between the errors of the regression model; and the lack of self-correlation between the errors, as one of the basic assumptions of the regression about fitted model, will be accepted.

Significance level of F-statistic for the model is less than test’s error level of ( $\alpha=0.05$ ), and hence the estimated regression is statistically significant and the relationships between variables is linear. The estimated coefficient for the variables X t and Xt3, which respectively represent the relationship between stock returns and net profit (loss), and also net three-year average earnings (loss), is 0.32 and

0.62 with significance level of 0.000 which is less than 0.05 (test error). These findings suggest a direct and significant relationship between these factors. Also, the coefficients obtained for the variables  $EUt * Xt$  and  $EUt * Xt3$ , which represent the effect of information uncertainty on the capital market reaction, are negative and significant. These findings suggest that information uncertainty adversely affects the capital market reaction to the reported earnings information.

Overall, the results showed that the uncertainty over the research has had a negative effect on the reaction of the capital market. This finding is consistent with claims in the first hypothesis, and the hypothesis is accepted at 95% confidence level.

### 3.2. The second hypothesis test results

The second hypothesis claims that uncertainty is effective on capital market reaction to income smoothing. The results of the regression model fitting to test this hypothesis are shown in Table 3.

**Table 3**  
Results of statistical analysis to test the second hypothesis.

Adjusted R2	Durbin Watson statistic	F-statistic	Significant level of F
<b>0.297</b>	<b>2.364</b>	<b>21.746</b>	<b>0.000</b>
variable	The size of the coefficient $\beta$ (standardized)	T-statistics	The significance level (P-value)
X t	0.07	1.09	0.276
X t-1	0.466	1.473	0.141
Xt3	0.1	1.309	0.191
RET t3	0.595	16.678	0.000
EUt	0.039	1.128	0.26
ISt	-0.073	-1.093	0.275
ISt*Xt	0.465	0.768	0.443
ISt*Xt-1	0.266	1.709	0.088
ISt*Xt3	-0.651	-1.155	0.248
ISt* RET t3	0.241	2.508	0.012
ISt*EUt*Xt	-1.203	-0.857	0.392
ISt*EUt*Xt-1	-0.395	-1.147	0.252
ISt*EUt*Xt3	1.473	0.963	0.336
ISt*EUt* RET t3	-0.167	-1.409	0.159
SIZEt*Xt	-0.701	-2.238	0.026
MTBt*Xt	-0.009	-0.248	0.804
EARNSTDt *Xt	0.181	1.395	0.163

The results show that estimated coefficient for the variables X t and Xt3, which respectively represent the relationship between stock returns and net profit (loss), and also net three-year average earnings (loss), is higher than 0.05 (test error). These findings suggest no significant relationship between these factors. Also, the coefficients obtained for the variables  $ISt * EUt * Xt3$  and  $ISt * EUt * Xt-1$  and  $ISt * EUt * Xt$ , which represent the effect of information uncertainty on the capital market reaction, are not significant statistically. These findings suggest that income smoothing level in sample companies is not effective on capital market reaction to the uncertainty.

Overall, the results showed that the uncertainty over the research has had no effect on the reaction of the capital market to the income smoothing. This finding is consistent with claims in the second hypothesis, and the hypothesis is accepted at 95% confidence level.

### 3.3. The third hypothesis test results

The third hypothesis claims that uncertainty is effective on capital market reaction to income smoothing information content. The results of the regression model fitting to test this hypothesis are shown in Table 4.

**Table 4**

Results of statistical analysis to test the third hypothesis.

<b>Adjusted R2</b> <b>0.388</b>	<b>Durbin Watson statistic</b> <b>2.261</b>	<b>F-statistic</b> <b>24.304</b>	<b>Significant level of F</b> <b>0.000</b>
<b>variable</b>	<b>The size of the coefficient</b> <b><math>\beta</math> (standardized)</b>	<b>T-statistics</b>	<b>The significance level</b> <b>(P-value)</b>
X t	-0.038	-0.589	0.556
X t-1	0.46	1.472	0.142
Xt3	0.082	1.011	0.313
RET t3	0.573	16.75	0.000
EUt	0.049	1.433	0.152
IS-INFOt	-0.184	-2.725	0.007
IS-INFOt*Xt	0.015	0.06	0.952
IS-INFOt*Xt-1	0.167	1.861	0.063
IS-INFOt*Xt3	-0.212	-0.94	0.348
IS-INFOt* RET t3	0.387	4.88	0.000
IS-INFOt*EUt*Xt	-0.287	-2.475	0.014
IS-INFOt*EUt*Xt-1	-0.566	-2.163	0.031
IS-INFOt*EUt*Xt3	0.687	2,556	0.0111
IS-INFOt*EUt* RET t3	-0.287	-2.588	0.01
SIZEt*Xt	-0.708	-2.317	0.021
MTBt*Xt	0.031	0.815	0.415
EARNSTDt *Xt	0.216	1.72	0.086

The results show that estimated coefficient for the variables X<sub>t</sub> and X<sub>t3</sub>, which respectively represent the relationship between stock returns and net profit (loss), and also net three-year average earnings (loss), is higher than 0.05 (test error). These findings suggest no direct and significant relationship between these factors. Also, the coefficients obtained for the variables IS-INFO t\*EUt\*Xt3 and IS-INFO t\*EUt\*Xt-1 and IS-INFO t\*EUt\*Xt, which represent the effect of uncertainty on the capital market reaction to the information content, are significant statistically. In this while, variable coefficient IS-INFO t\*EUt\*Xt3, which is the basis for deciding on the third hypothesis, is positive and significant. Accordingly, it can be found that uncertainty is positively effective on the capital market reaction to the income smoothing information content. This finding is consistent with claims in the third hypothesis, and the hypothesis is accepted at 95% confidence level.

#### 4. Conclusions

Research's findings show that information uncertainty has had undesired impact on capital market reaction to information of reported profit by companies. In this regard, Choi (2010) showed that fluctuations of market's uncertainty cause change in stock price response to companies' unexpected profit. So, at first, it seems that investors and activators of capital market recognize uncertainty and are able to detect companies which are facing these conditions. Secondly, probably information published by companies with high uncertainty has less reliability in the viewpoint of investors and activators of capital market. As a result, the rate of relevance of the figures in this group of companies is less.

However, the findings indicate that information uncertainty hasn't had impact on capital market reactions to income smoothing of companies. In this regard, Dymytrpvl and Stereo (2009) found that indicators of profit management based on discretionary accruals play considerable role in increase of companies' stock price. However, according to the findings of the present study, MojtahedZade and Valizadeh (2011) found that between income smoothing and future stock returns of companies, there is no significant relationship. So, it can be concluded that probably investors and activators of capital market have had a correct evaluation form corporate financial reporting environment. Therefore, they haven't



relied on information of companies having symptoms of profit management and haven't considered them in their investment decisions. Also, findings show that information uncertainty has had positive impact on capital market reaction to information content of income smoothing. These findings indicate that capital market responses to information content of income smoothing only in uncertainty. These findings implicitly explain enterprise managers' behaviors and also reflect concerns of capital market in uncertainty. So, it is possible that managers of companies with high uncertainty take income smoothing into consideration in order to compensate consequences due to uncertainty on market price. Also, it seems that investors and activators of capital market have paid attention to uncertainty in companies and because of inability to predict cash flows of companies with high uncertainty, managed profit has information advantages for them.

### **Practical recommendations emerged from the research**

According to findings of the first hypothesis based on this issue that uncertainty has impact on capital market reaction, it is recommended to investors and activators of capital market to investigate companies' information environment in terms of uncertainty before investing. In this regard, based on present study, they can use fluctuation in sales to access and compare uncertainty level of each company.

Also, according to findings of the first hypothesis, it is suggested to the managers, in the case of facing information uncertainty, try not to inform investors. For example, they have to try to prevent severe and frequent adjustments of predicted and published data.

According to findings of the second hypothesis based on this issue that uncertainty hasn't had impact on capital market reaction to income smoothing, it is recommended to investors to try to accurately and carefully consider the published information by companies with greater uncertainty and investigate financial reporting environment of these companies before making decision based on these information.

According to findings of the third hypothesis based on this issue that uncertainty has impact on capital market reaction to the information content of income smoothing, it is recommended to investors and users of financial information to try to consider profit management of firms with high uncertainty and measure rate of its information advantages. It is suggested to future researchers to study in the following cases:

Investigating effect of information uncertainty on the quality of financial reporting by listed companies in the capital market of Iran.

Investigating effect of information uncertainty on the error rate of expected profit of listed companies in the capital market of Iran.

Investigating relation between information uncertainties with capital market reaction to the real profit management of listed companies in the capital market of Iran.

### **References**

- Hejazi, R., Roohollahfitasi., Mohammad, b.K., 2011. Smoothing the profit and uncertainty information. Accounting and Auditing investigation, Tehran University. Facul. Manag. Stud., Volume 18, Number 63.
- Rahmani, A., Nazanin, B.M., 2011. The effect of smoothing the profit on the knowledge of the stock price. J. finance. account., Third year, third Number, Serial Number 9.
- Foroughi, D., Mostafa, A.N., 2012. The relationship between environmental uncertainty and the use of managers from discretionary accruals in companies listed in Tehran Stock Exchange. J. Account. Audit. Res., Year IV, No. 14.
- Arya, A., Glover, J.C., Sunder, S., 2008. Are unmanaged earnings always better for shareholders? Account. Hor., 17, 111-116.
- Chen, L.H., 2012. Income Smoothing, Information Uncertainty, Stock Returns, and Cost of Equity. Work. Paper., ARIZONA.
- Collins, D.W., Kothari, S.P., Shanken, J., Sloan, R., 1994. Lack of timeliness and noise as explanation for the low contemporaneous returns-earnings association. J. Account. Econom., 18(3), 289-324

- Dechow, P.M., Ge, W., Schrand, C., 2010b. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *J. Account. Econom.*, 50 (2-3), 344-401
- Habib, A., et al., 2011. Environmental uncertainty and the market pricing of earnings smoothness, *Advances in Accounting. incorporate. Adv. Int. account.*, doi:10.1016/j.adiac. 2011.04.003
- Hatch, M.J., 1997. *Organization theory: Modern, symbolic and postmodern perspectives*. Oxford: Oxford University Press.
- Kapopoulos, P., Lazaretou, S., 2007. Corporate Ownership Structure and Firm Performance: Evidence from Greek firms. "*Corporate Governance. An Int. Rev.*", Vol. 15, No. 2, pp.144-158.
- Goel, A., Thakor, A., 2009. Why do firms smooth earnings. *J. Bus.*, 76, 151-192.
- LaFond, R., Lang, M., 2011. Ashbaugh-Skaife H. Earnings Smoothing, Governance and Liquidity. *Int. Evidenc. Work. Paper*.
- Ghosh, D., Olsen, L., 2008. Environmental uncertainty and managers' use of discretionary accruals. *Account. Organizat. Soc.*, 34(2), 188–205.
- Saar, G., 2002. Investor uncertainty and order flow information. Working Paper Series New York University, NY: Salomon Center., S-02-31.
- Sankar, M.R., Subramanyam, K.R., 2007. Reporting discretion and private information communication through earnings. *J. Account. Res.*, 39, 365–386.
- Tucker, J., Zarowin, P., 2012. Does Income Smoothing Improve Earnings in Formativeness. *The Accounting Rev.*, 81(1), 251-270.
- Tung, R.L., 1979. Dimension of organizational environment: An exploratory study of their impact on organizational structure. *Acad. Manag. J.*, 22, 672–693.