THE EFFECT OF INCOME SMOOTHING ON TRANSPARENCY OF FINANCIAL INFORMATION, EQUITY RETURN, AND COST OF EQUITY IN COMPANIES LISTED IN TEHRAN STOCK EXCHANGE

*Maryam Al-Sadat Kamalnejad and Heydar Mohammadzadeh Salteh
Department of Accounting, Marand Branch, Islamic Azad University, Marand, Iran
*Author for Correspondence

ABSTRACT
In this study, the effect of income smoothing was examined on the transparency of financial information, stock returns and the cost of equity. In fact, this study sought to examine whether income smoothing had a significant impact on the transparency of financial information, stock returns and the cost of equity. The research population included all listed companies in Tehran Stock Exchange. A total of 113 companies were selected through systematic elimination and studied from 2007-2011. The Eckel model was used to measure income smoothing and the companies were classified into two smoother and non-smoother groups. Ranking score of the companies was based on the transparency issued by Tehran Stock Exchange. It was used to measure real return from abnormal return and to measure the cost of equity. It should be noted that in this study, simultaneous multiple regression was used to test the hypothesis. The results indicate that in 95% of confidence level, income smoothing has no significant effect on the transparency of financial information and return on equity, but it has significant effect on the cost of equity.

Keywords: Income Smoothing, Transparency of Financial Information, Return on Equity, Cost of Equity

INTRODUCTION
The development of economic activities and its increasing complexity followed by the appearance of great institutions and firms on one hand and the necessity of paying attention to exact accounting information and financial lists on the other hand, has made surprising changes in the accounting knowledge and has caused the evolution of new management and analytical methods in accounting. Formation of large firms has had two major consequences. On the one hand, the necessity of disjunction between ownership and management, and on the other hand uniform accounting methods for reporting, are felt more than ever before. The possibility of conflict between the profits of the managers and stockholders regarding the theory of representation and the effort of managers to show the level of short time profit higher has lead to investigating the reasons for the appearance of the subject. One of the dimensions of profit management is income smoothing which is conscious coordination of income to reach a proper process or level. This is performed in firms for many reasons and timely proper application of it can be a good help in the process of profit management. Two general approaches exist regarding the use of income smoothing.

On one side, the managers believe that the investors value the profit process which is more stable. As a result, this matter reduces their investment risk, but some accounting theorists instead of reporting the information have concealed it, and this is incorrect in terms of accounting. However, the real question is what makes some companies discuss about income smoothing.

Literature and Theoretical Framework
Income smoothing is an operation performed consciously by the management and is applied using specific tools in accounting in order to reduce profit fluctuations. As stated by Lopold E. B. income smoothing is rather a fallacious polite act seldom performed based on apparent lies, because income smoothing is generally obtained through the interpretation and definition of accepted accounting principles. In income smoothing, the profit is earned by moving incomes and expenses to change and regulate one or several financial periods. In fact, it can be said that income smoothing is a conscious act performed by the management. Hepworth (1953) in one of the first researches performed on income smoothing writes: “certainly, the owners and creditors in a financial unit, have more trust on managers.
that can offer more stable profits rather than those with considerable fluctuations in their report.” Hepworth relates income smoothing indirectly to the factor of stability which is one of the implicit assumptions in the definition of income smoothing. Hepworth (1953) was the first person to suggest smoothing as an accounting issue. He emphasized that the generally accepted accounting principles, have much freedom of interpretation to determine the rate of period profit. This freedom allows the manager to take action in relation to income smoothing. Accounting techniques for smoothing introduced by Hepworth include manipulating earnings in order to transfer income to the next year using the method of pricing the stocks, depreciation and non-tangible assets methods of calculating. The study by Hepworth on income smoothing as the first view is important and has been considered in most studies. "Gordon" in 1964, stated: "Management smoothes incomes to increase the satisfaction of shareholders of the company profitability."

Gordon et al., (1966) investigated the relationship between accounting procedures for tax credits of investment (income smoothing tool) with a growth rate of earnings per share and return on equity (profit smoothing goals). Results indicate important connection between the two components that support income smoothing. On the other hand, Dopuch and Drake (1966) investigated the income and loss from the sale of capital items and did not find significant income smoothing. Archibald (1967) studied depreciation methods, and confirmed smoothing among the sample companies. Copeland (1968) offered a definition of what a good smoothing design shall provide and discovered that increasing the time series, reduces non-classified smoothers. Copeland and Licastro in 1968 in their research on non-integrated branches reached the conclusion that income smoothing does not happen. Cushing (1969) performed a study on changes in accounting policies and concluded that income smoothing is done. Dascher and Malcom (1970) concluded that deliberate smoothing is performed purposefully in the pharmaceutical industry. The two researchers also studied unexpected items and confirmed smoothing. White's research in 1970 on voluntary decision between two or more accounting procedures showed that income smoothing is not done. Barefield and Comiskey (1972) studied the accounting of non-integrated branches (like the research by Lindsky and Copeland in 1968) and found evidence of income smoothing. Biddleman (1973) showed that companies use tools such as asset and debit exchange, retirement expenses, research and development expenses and sales and marketing expenses for income smoothing. In another study, Gay et al., (1989) announced that investors often stay away from companies that experience high deviations from profits or high-risk companies. Booth et al., (1996) concluded that smoother companies abnormally have high returns compared to non-smoother companies. Stolovy et al., (2000), investigated the relationship between income smoothing and "stock price". They suggest that companies are required to report certain items in the future by using authorized methods for income smoothing according to the principle of consistency. In fact, companies that smooth income are required to disclose it because in each accounting period they use different selection methods. These disclosures indicate a lack of consistency, leading to the loss of future profits and the decrease of the stock price. Huang et al., (2009) studied the potential effect of artificial and real smoothing on firm value. Their results show that firms values decrease by artificial smoothing and increase by real smoothing. Hung (2011) concluded that income smoothing has strong negative effect on sensibility of corporation investment and stock price and this negative effect is a stimulus for arbitrary and non-arbitrary income smoothing. He also discovered that income smoothing improves the performance of investment in companies by decreasing the effect of reduction in investing market value. Linda (2012) performed a research on the relationship between income smoothing and transparency of financial information, stock returns, and cost of equity. To show income smoothing, she used arbitrary
commitment items and her results indicated that income smoothing in corporations has abnormal return in case of the announced returns and also showed that income smoothing reduces the cost of expected equity and return.

**Transparency of Financial Information**

Various definitions are offered for transparency. Transparency is defined in Webster's dictionary in 1972 as: "The institutional openness (easy access to the company's operations), the open nature of institutions (clarity), honesty and availability of easy understanding." In this definition, openness of institutions means access to the company's operations, and the openness of the organization means clarity of information. These three variables are closely related to each other and cannot be considered in isolation. Also, many other definitions have been proposed according to the concept that they are based on, that can be distinguished into three categories as follows:

A) Definitions based on stakeholder information: Vishwanath and Kaufmann (1999) and Kaufmann (2002) have defined transparency as "timely and reliable increased flow of economic, social and political information, which is available to all relevant stakeholders". Vishwanath and Kaufmann (1999) have described lack of transparency as "the intentional blocking of access to information, providing incorrect information or failure to ensure the adequacy of relevance and quality of the provided information". The Organization for Economic Cooperation and Development has a broader perspective and states transparency as "the relationship between companies and other interest groups".

B) Definitions Based on Accountability: The specialized research group at the University of Brookings defines transparency as "the degree of openness of the institutes, i.e. the monitoring and evaluation of individuals' actions within the company (including directors) by the people outside the company (i.e. shareholders)". Florini's (1999) definition of transparency accountability has become more prominent. He defines transparency as "the disclosure of information by companies that are relevant to their assessment". In his view, transparency is a tool to facilitate the process of evaluating companies’ performance. The right emphasis on the access to information (with regard to the privacy of both producer and consumer) and the possibility of using this information to evaluate the performance of these companies is more prominent. In fact, transparency is closely related to accountability and the reason of demand for transparency is that the market considers companies responsible for the taken policies and their performance (Blurr and Kaufman, 2005).

C) The definition of transparency with an emphasis on the execution of rules and regulations: WTO declares that the agreements to ensure access to transparency in international trade involve three core pre-requirements: (1) information about the laws, regulations and other procedures shall be made public, (2) stakeholder groups be informed of laws and regulations and the changes, and (3) ensuring that laws and regulations are run integrated, impartial and reasonably.

Common to all above definitions is "availability of information" and "ability to communicate and send and receive information" for each of which a brief description is presented:

**Availability of Information**

One of the main criteria for efficiency in resource allocation decisions and economic growth is the availability of information. General rules ensure that the information is readily available, but the "availability" of information is an important aspect of achieving transparency. Companies can facilitate the access to information. So, companies have enough motivation to release information. Based on signaling theory, if companies avoid providing information about their performance, the market interprets such act as “bad” news and reduces the price of that stock. So, the companies would have enough motivation to provide information.

On the other hand, if delay in providing information or limiting the access to the information have financial profits, the companies would have enough motivation to conceal information. As stated by Vishwanath and Kaufmann (1999), “availability” of information is kept as hostages in order to obtain financial profits. In such circumstances, the need for timely and equitable dissemination of information in a way that is readily available would emerge.
Stock Returns
Stock return is a deciding criterion in stock. Stock return alone has information content and most investors – potential and actual – use them in financial analysis and prediction. One of the most important and widespread researches in financial markets is explaining the behavior of the stock return. Detecting influencing factors on the stock return has always attracted many researches. In this regard, researchers have achieved various perspectives on the behavior of stock returns. One of the first models offered in the course of modern financial theories is CAPM capital assets pricing model, which became known as financing communities in the 1960s by three researchers called Sharpe, Lintner, and Masyn. According to this model, the only factor that explains the stock returns is systematic risk shown with beta coefficient. CAPM model has been taught for years as one of the most useful financial models in textbooks in financial management and investment in universities around the world.

Cost of Equity (Cost of Capital)
The concept of the cost of capital is based on the premise that the purpose of a corporation is to maximize shareholder wealth. Alternative concepts would be discussed if the principle of the cost of capital (depending on application) is observed.
Each company has its own risk and return (corporations whose purpose is to obtain profit). Each of the investor groups, such as bondholders, who prefer stock and common stock, seek a measure of the rate of return that is appropriate to the risk associated with it.
The cost of capital is the minimum rate of return that the company shall acquire to provide returns for investors.
The research conducted by Michelson et al., (1999) in economic environment of America, is also the basis of the current study. In this study the relationship between income smoothing and firm return is examined. The above mentioned researchers also assumed that the market reaction to smoother corporations is positive return and they selected 358 firms of s and p index from 1980 to 1991 and distinguished four levels of income (operating income after depreciation, interest before tax reduction, profit before unexpected items and net profit) based on Eckel model for each of the four profit levels with separation of smoother and non-smoother corporations. The abnormal return of the smoother and non-smoother corporations is determined for each level of profit and mean abnormal return for them is compared using T-test. They also investigated the effect of variables like industry type and corporation size on gaining abnormal profit. To investigate the effect of industry type, companies were classified in 8 stages, and F test was used for testing. To investigate the effect of corporation size in abnormal return, the mean abnormal return of large and small corporations were investigated using T-test and finally concluded:
1 - There has been smoothing in the sample.
2 – Smoother companies have higher abnormal returns than non-smoother companies.
3 - Reaction of market to small companies that had smoothing operation was more than larger firms.
4 - There is a relationship between type of industry and smoothing.
5 - Larger firms have performed more smoothing operation than smaller firms.

Research Hypotheses
In this research the main hypotheses are made as classified in the following:
1) Income smoothing affects the transparency of financial information.
2) Income smoothing affects stock returns.
3) Income smoothing affects the cost of equity.

Statistical Sample
In this study, systematic elimination method was used for sampling and the inclusion criteria for samples are as follows:
1- The fiscal year ends in March 20.
2- The company should not have had fiscal year changes from 1997 to 2011.
3- The company should have been constantly present at the Tehran Stock Exchange from 1997 to 2011.
4- Stop in trading symbol should not have been more than two months.
Research Article

5- The company should not be an investment company or bank. Consequently, a total of 113 companies were selected as the study population.

Research Methodology

The purpose of this research is that of the applied research and the methodology of the research is of after-event correlation type. The following basic multivariate regression model was used to test the hypotheses:

\[ \frac{CV\Delta I}{CV\Delta S} = \beta_0 + \beta_1 \ln(\text{Size}) + \beta_2 \text{Car}_{it} + \beta_3 \text{Vo}_{it} + \beta_4 \ln(\text{BM}) + \beta_5 \text{Leverage} + \beta_6 \text{Std}(\text{CFO}) + \epsilon \]

Where:

1- \(\ln(\text{Size})\) = the natural logarithm of assets

2- \(\ln(\text{BM})\) = the ratio of book value to market equity

3- \(\text{Leverage}\) = the ratio of long-term debts to total assets

4- \(\text{Accruals}\) = the income before extraordinary items minus the cash from operations divided by total assets of the first period

5- \(\text{Std}(\text{CFO})\) = operating cash

In a simple definition of income smoothing, it could be stated that it is a sort of conscious act performed using specific tools in accounting in order to reduce income fluctuations.

In this study, two measuring criteria, which were previously applied by Lioz et al., (2003); Francis et al., (2004) and Linda (2012), were used to determine the percentage of smoothing, as the following:

The dependent variable is smoothed income where the variability of the operating profit (\(\Delta I\)) is compared to the sales variability (\(\Delta S\)) and measured by the Eckel index.

Eckel index calculation formula for earnings manipulation is as follows:

\[ I.S = \frac{CV\Delta I}{CV\Delta S} \]

(\(\Delta I\)) : Profit changes over several periods

(\(\Delta S\)) : Changes in sales over several periods

(CV) : Coefficient of variation for the intended variable (obtained through standard deviation divided by the mean of the same variable).

Transparency of Financial Information

In this study, scores of the annual ranking of the quality of information disclosure at Tehran Stock Exchange, is the criteria to separate firms to those with low and high levels of transparency of financial information. This method is also applied in the research performed by Gelb and Zarvin (2002); and Lin et al., (2007). The ranking of corporations is performed based on the time of offering financial information regarding the prediction about the return of each share, financial statements which were not audited for 3.6 and 9 months, the comments on financial statements in the middle of the 6 month period, financial statements which were not audited at the end of the year and the difference between forecast and actual performance audit. Moreover, in case of failure to provide timely audited year-end financial statements and the timing of dividend payments to shareholders, a negative score is considered for each day delayed (Stock Exchange of Tehran, 2008).

Stock Return

Stock return is the total of all benefits that belong to the stock in the period and can be considered compared to the first price of the stock or its last price to calculate the total return.

To calculate the abnormal return, the simple market model used by Ghaemi et al., and Linda (2012) was used as follows:

\[ CAR = (R_t - RM_t) \]

\[ CAR = \text{Abnormal return} \]

\(R_t\) = is calculated as follows:
Research Article

\[ R_{it} = \frac{P_1 - P_0 + DPS + (P_1 - 1000)A + P_1B}{P_0} \times 100 \]

Where:
- \( R_{it} \) = actual return of firm i in period t
- \( P_{it} \) = stock price at end of the period t
- \( P_0 \) = stock price at the beginning of the period t
- DPS = dividends per share
- \( A \) = percent of capital increase through cash and receivables
- \( B \) = percent of capital increase through retained earnings and reserves (In the above formula, 1000 is the nominal value per share)

Calculation method for \( R_{mt} \) is as follows:

\[ R_{mt} = \frac{TEDPIX_t - TEDPIX_{t-1}}{TEDPIX_{t-1}} \times 100 \]

\( R_{mt} \) = market return in period t

TEDPIX = Price return and cash dividend in period t

The difference between the actual return and the market return is indicative of abnormal returns.

Cost of Equity

The cost of equity is the dependent variable in this research. The model used to calculate the cost of equity in this research is the Gordon model, which is derived from the following valuation model (Damudaran, 2002).

\[ V_0 = \frac{D_1}{K_{e-g}} \]

So that:

- \( V_0 \) = current value of the stock
- \( D_1 \) = dividend expected for the next year
- \( K_e \) = expected rate of return for shareholders
- \( g \) = expected growth rate

Assuming \( P_0 = V_0 \), after insertion of known factors including the stock price, expected dividends next year and expected growth rate, the expected rate of return on equity (cost of equity) is calculated as follows:

\[ K_e = \frac{D_1}{P_0} + g \]

So that:

- \( P_0 \) = share price at the beginning of the year

In Gordon’s model, the returns from dividend are obtained through dividing the expected return of the next year by the stock price at the beginning of the period.

To calculate the expected dividends, predicted dividends per share are considered and then, the expected dividend is measured on a five-year period based on the average ratio of the dividends to total income. Then, the expected dividend per year is calculated by multiplying the ratio of expected profits per share.

\[ PDPS_t = PEPS_t \times d_t \]

PDPS: expected dividend in year t
PDPS: expected dividend per share in year t (based on the announcements published by companies through stock exchange)

\[ d_t \]: the ratio of dividends to earnings per share for year t. The expected rate of return from dividends is calculated as follows:

\[ \text{dividend yield} = \frac{PDPS_t}{P_0} \]
How to Measure Growth Rate
The second factor determining the cost of equity in Gordon’s model is the growth rate. When using this model, assuming that dividends will grow at a fixed rate, the growth rate is typically calculated using the dividend growth rate. But since the Iranian companies do not follow a fixed dividend policy, the dividend growth rate in Gordons’ model is not viable. In general, sales growth rate compared with a profit growth rate and dividend growth rate is more stable and predictable. This is due to the low influence of accounting procedures on sales compared with the profit. Evidence shows that historical sales growth is much more useful than historical growth of earnings for use in predictions (Damudaran). Accordingly, in this research to measure the growth rate, sales growth rate was used. For this purpose, growth rate is calculated using the geometric mean of sales growth during the years 1997 to 2011 as follows:

\[ g = \left( \frac{S_{86}}{S_{90}} \right)^{\frac{1}{4}} - 1 \]

Research Findings
Descriptive Statistics
The results of the descriptive analysis of the data are presented in Table 1.

<table>
<thead>
<tr>
<th>Title</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Variance</th>
<th>Standard deviation</th>
<th>Mean</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency of financial information</td>
<td>93033</td>
<td>13.67</td>
<td>454.004</td>
<td>15.93</td>
<td>63.66</td>
<td>565</td>
</tr>
<tr>
<td>Stock returns</td>
<td>14570.17</td>
<td>-2198.9</td>
<td>7092141.69</td>
<td>2663.10</td>
<td>3047.6</td>
<td>565</td>
</tr>
<tr>
<td>Cost of equity</td>
<td>33.11</td>
<td>-23.08</td>
<td>69</td>
<td>10.65</td>
<td>8</td>
<td>565</td>
</tr>
<tr>
<td>Logarithm of company size</td>
<td>8.00</td>
<td>4.291</td>
<td>.451</td>
<td>.67</td>
<td>5.93</td>
<td>565</td>
</tr>
<tr>
<td>Book to cost of equity market ratio</td>
<td>10940</td>
<td>.0000</td>
<td>.162</td>
<td>.402</td>
<td>.627</td>
<td>565</td>
</tr>
<tr>
<td>Long-term debt to total assets ratio</td>
<td>.928</td>
<td>.0007</td>
<td>.058</td>
<td>.240</td>
<td>.331</td>
<td>565</td>
</tr>
<tr>
<td>Accruals</td>
<td>.68</td>
<td>-.3666</td>
<td>.026</td>
<td>.161</td>
<td>.056</td>
<td>565</td>
</tr>
<tr>
<td>Mean deals</td>
<td>966540</td>
<td>1644.0</td>
<td>3295328</td>
<td>180536.1</td>
<td>144586</td>
<td>565</td>
</tr>
<tr>
<td>The ratio of total assets to operating cash</td>
<td>.49</td>
<td>-.23</td>
<td>.013</td>
<td>.112</td>
<td>.096</td>
<td>565</td>
</tr>
<tr>
<td>Profit CV</td>
<td>1.57</td>
<td>.079</td>
<td>.084</td>
<td>.290</td>
<td>.576</td>
<td>565</td>
</tr>
</tbody>
</table>

Analysis of Hypotheses Testing Results
The First Hypothesis
Because the dependent variable is at two levels and the independent variable is at special scale, a Logistic Regression is used to test the first hypothesis. In order to determine the effect of independent variables on dependent ones and the overall fit of the model, Chi-Square statistics were employed. The value of Chi-Square equaled to 57.602 and its significance level was 0.000. As long as the significance level is less than 0.05, the regression model is significant. Nigel Kirk's R^2 is equal to R^2 (coefficient of determination) in linear regression and indicates the percentage of variation in dependent variable which is determined by independent variables. Its value is estimated 0.142, i.e. 14.2% of variations in dependent variable are pertained to independent variables.
Table 2: Testing the significance of Logistic Regression for the effect of smoothing on transparency

<table>
<thead>
<tr>
<th>Chi-Square statistics</th>
<th>Degrees of freedom</th>
<th>Significance level</th>
<th>Cox &amp; Snell's R²</th>
<th>Nigel Kirk's R²</th>
<th>The percentage of Detection Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>57.602</td>
<td>6</td>
<td>0.000</td>
<td>0.097</td>
<td>0.142</td>
<td>63.9</td>
</tr>
</tbody>
</table>

Table 4-18: Logistic regression coefficients for the smoothing effect on transparency

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coefficient B</th>
<th>Standard Error</th>
<th>Wald statistics</th>
<th>Degrees of Freedom</th>
<th>Significance Level</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoothing</td>
<td>0.023</td>
<td>0.228</td>
<td>0.007</td>
<td>1</td>
<td>0.935</td>
<td>1.023</td>
</tr>
<tr>
<td>Size of firm</td>
<td>-0.561</td>
<td>0.167</td>
<td>11.258</td>
<td>1</td>
<td>0.001</td>
<td>0.570</td>
</tr>
<tr>
<td>Book-to-Market Ratio</td>
<td>0.311</td>
<td>0.260</td>
<td>1.430</td>
<td>1</td>
<td>0.232</td>
<td>1.365</td>
</tr>
<tr>
<td>Long-term debt ratio</td>
<td>2.388</td>
<td>0.475</td>
<td>25.246</td>
<td>1</td>
<td>0.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Mean of trading</td>
<td>0.000</td>
<td>0.000</td>
<td>0.791</td>
<td>1</td>
<td>0.000</td>
<td>0.203</td>
</tr>
<tr>
<td>Coefficient of profit variation</td>
<td>-1.581</td>
<td>0.356</td>
<td>19.753</td>
<td>1</td>
<td>0.000</td>
<td>89.208</td>
</tr>
<tr>
<td>Constant</td>
<td>4.491</td>
<td>1.108</td>
<td>16.442</td>
<td>1</td>
<td>0.001</td>
<td>0.569</td>
</tr>
</tbody>
</table>

This results show no significant effect of income smoothing on the transparency of financial information. Regarding the results of researches mentioned above and in the description of the variables, more than 80% of the stock exchange companies are smoothing, i.e. offer their profit to the market with small changes to show that they are stable so that the investors and creditors trust them for investing and crediting. Due to the competitive structure of the stock market, no smoothing effect was observed on the transparency of information at confidence level of 95%. According to the results of the first hypothesis, the results of this survey are consistent with the results of the survey performed by Linda (2012) (the absence of significant smoothing effect on the transparency of financial information).

The Second Hypothesis

In order to investigate the effect of income smoothing on stock return, Simultaneous Multiple Regression was employed. The results are demonstrated in the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Testing results of Model 2</th>
<th>Coefficient B</th>
<th>T statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>13.018</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Smoothing</td>
<td></td>
<td>-.018</td>
<td>-.451</td>
<td>.652</td>
</tr>
<tr>
<td>Book-to-market Ratio of Equity</td>
<td>-.343</td>
<td>-.8626</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Long-term debt to total assets ratio</td>
<td>-.059</td>
<td>-1.435</td>
<td>.152</td>
<td></td>
</tr>
<tr>
<td>Operating cash flow to total assets ratio</td>
<td>.033</td>
<td>.808</td>
<td>.420</td>
<td></td>
</tr>
</tbody>
</table>

F statistics | p-value | Camera statistics | Coefficient of determination and adjusted coefficient of determination
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19.452</td>
<td>0/0</td>
<td>1.689</td>
<td>r² = .122</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Adj r² = .116</td>
</tr>
</tbody>
</table>

© Copyright 2014 | Centre for Info Bio Technology (CIBTech)
Research Article

These results show no effect of income smoothing on stock returns. The most efficient markets in European and American studies have been conducted on the effect of income smoothing on stock returns, whose results indicate a significant impact on stock returns. However, the structure of Stock Exchange and Iranian policy in addition to economic and political factors, compared to income smoothing, have more impact on stock returns, which is confirmed by the present research results. According to the results of the first hypothesis, the results of this study are consistent with results of a research by Ghaemi et al., (2000) on the lack of significant influence of smoothing on stock return, and are inconsistent with the results of the research by Linda et al., (2012) on the influence of smoothing on stock return.

The Third Hypothesis
To investigate the effect of income smoothing on the cost of equity, a Simultaneous Multiple Regression was used.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Testing results of Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>T statistics</td>
</tr>
<tr>
<td>Constant</td>
<td>2.318</td>
<td>.021</td>
</tr>
<tr>
<td>Smoothing</td>
<td>-.145</td>
<td>-3.348</td>
</tr>
<tr>
<td>Logarithm of firm size</td>
<td>-.105</td>
<td>-2.431</td>
</tr>
<tr>
<td>Book-to-market Ratio of Equity</td>
<td>.011</td>
<td>.260</td>
</tr>
<tr>
<td>Coefficient of income variation</td>
<td>-.041</td>
<td>-.949</td>
</tr>
<tr>
<td>F statistics</td>
<td>p-value</td>
<td>Camera statistics</td>
</tr>
<tr>
<td>3.570</td>
<td>0/0</td>
<td>2.272</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusion
The results of testing the third hypothesis suggest that income smoothing has a significant negative impact on the cost of equity. As discussed in previous chapters, the cost of equity is the cost of funds demanded by shareholders and bondholders who supply part of the company's capital. The results show that by increasing income smoothing, the cost of equity that the company pays reduces and managers keep the cash resources of the company for their intended activities so as to have less need for outside funding. According to the results of the first hypotheses, the results of this research are consistent with the results of the investigation carried out by Linda (2012) based on a significant smoothing effect on stock equity.

Practical Suggestions of the Research
Regarding the literature review in this study, conducting the research step by step and analysis of the results from testing the hypotheses, unclear and complicated points were discovered. Some of these cases involve the Stock Exchange, etc. In addition, based on the findings of this study, suggestions are made for future researchers to carry out more extensive studies:
1 - According to the theory and the previous research, it was expected that the criteria for measuring corporate transparency, provided by Stock Exchange, could show the effect of income smoothing on the openness of information. However, this study did not find a relationship between these two variables. It is recommended to the Stock Exchange to offer mechanisms for measuring the transparency of corporate information in order to express the effect of income smoothing on information transparency.
2 - According to the research results, as most companies have many years of income smoothing and exert
little change in their profits, and based on the second hypothesis testing, it was observed that smoothing had no significant effect on stock returns; this is because based on performed smoothing, most companies can provide more stable returns. Therefore, it is suggested that buyers and investors use other measures of company performance for decision-making.

3 - The third hypothesis results showed that there is an inverse relationship between income smoothing and the cost of equity. Therefore, we can conclude that smoothing makes the cost of equity less paid. It is therefore recommended to investors aiming to make a profit in the short term to invest in companies that are not smoothed.

To reduce representation problems and loss, the creditors consider monitoring before and after contract on the company credits, financial information transparency, stock return and cost of equity in order to reduce risk of capital return, and allocate funds to the most efficient sectors of the economy.

REFERENCES

Dashar, Paul E. and Malcolm, Robert E. 1970 pp.253-4