



The relationship of information asymmetry, Institutional ownership and Stock Liquidity with Income Smoothing in Tehran Stock Exchange

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ABSTRACT

Objective: In this study relationship between information asymmetry, Institutional ownership and Stock Liquidity by Income Smoothing in Tehran Stock Exchange is expressed. **Methodology:** So of the study by 94 companies listed on Tehran stock exchange, that include 470 company - years that During is the years 2010 up 2014. Smoothing in this research using discretionary accruals (modified Jones model) are calculated. The difference between bids to buy and sell shares representative information asymmetry. In this study, multiple linear regression model using F and t tests were used to test the hypotheses and for analyzing the data used spss statistics tools. **Results:** The Research indicated that there is not significant relationship between independent variables of Stock Liquidity and Institutional ownership and Income Smoothing. also the finding of study manifest a significant and direct relationship between information asymmetry and Income Smoothing. Firm size and financial leverage are control variables. **Conclusion:** Finally, Research had found not significant relationship between stated variables and Income Smoothing.

1. Introduction

Since according to financial statements have presented accounting standards will be prepared accrual basis, there is possibility in time of decision to manage and measure revenue and cost recognition and this may lead to income smoothing it's due the most important motivation for Income smoothing, valuable of companies depend on appropriate Income of that. In this case, Income smoothing, increase stock value in exchange and attract potential investors (Sheikh and Safarpur, 2007).

in a research that Jahanshad and his colleagues with title "A comparison on accounting variables in income smoother and non-income smoother firms by using Moses income smoothing behavior index. In duration of 2006-2011. have done, resulted shown the number of income smoothers companies 30% in beginning of eighties increase to 54% in middle of this decade. This rise shown the importance of income smoother companies in Iranian economy.

They have investigated relationship between kind of economic stimulus due to understand different aspects behavior in income smoothing.

therefore, for better understanding of income smoothing in Iran survey information of asymmetry relationship, Stock Liquidity and institutional ownership with income smoothing to help of manager for identify effective factors on income smoothing.

1.2 the theoretical basis and A review of the research background

1.2.1 concept of income smoothing

The literature review related to manage earning, explain the researcher's attempts indicate this subject why the manager has manipulated income, how manage income and what's result of this The consequences of ? The answer is big part of empirical research in accounting and financial report.

Levitt, (1998), named some tools and income management method:

1-1Present unofficial digits of alterations

2-Record deliberate mistake in ledger and impossibility to correction of that.

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3-Recognition and record the income before process completion.

1.2.2 information asymmetry

Information asymmetry accrue when one or few investors. They disposal some private information about value of the company (Brown and Hillegiest, 2007).

Information asymmetry, has various undesirable consequences such as reduce market efficiency, increase transaction costs weakness of market, low liquidity, overall increase transactions income in capital markets (Khoddami Pour and Ghadiri, 2011).

first information asymmetry hypothesis had raised in 1970 by 3 scientists named as Michael Spence , George Arthur Akerlof, Joseph Stiglitz.

1.2.3 Stock Liquidity

In most comprehensive definition, the market liquidity is ability of high volume trading, maximum speed minimum cost and price effect. Four aspect of liquidity have defined as: turn over, transaction speed, transaction cost, price effect (Karamanou and Vafeas, 2005).

1.2.4 Institutional ownership

Some researchers have classified institutional investors into two groups. According to them, the first group are investors that focus on short-term earnings and the second group include professional investors, who's relative advantage is in gathering and analysis of more data regarding future earnings which is not reflected in reported income. Thus, as the number of this type of investors increases in the capital market, the share prices will reflect more information regarding future returns and therefore information asymmetry logically should decrease (Thomas and Zhang, 2002).

Shareholders composition of various companies are different part of companies ownership belong to minority shareholders and individuals and different part of this ownership has provided to major shareholders, this group contrary to major shareholders due to contact with CEO and company manager and business strategies etc (Moradzadehfard et al., 2009).

According to paragraph No 27 Article of Iran's securities market roles (approved 28/6/86) institutional investors defined as:

Bank and insurance

Holdings, investment companies, Pension fund, financing corporate, investment funds registered with the Stock Exchange.

Substantire or legal person who has possession more than 5% or 5 billion Rial of the nominal value.

Government organizations and public

1.2.5 A review of the research background

Table 1. Summary of results research accomplished: Internal researches and external researches

| Name of Author | Year of research | Research results |
|--------------------|------------------|--|
| moradzadehfardatal | 2010 | The Relation of income management and institutional ownership: company flexibility to accruals management has reduced by increase in income management percentage. |
| maleknezhad | 2013 | The Relation reviews of income smoothing and stock liquidity: Result show that significant and negatively relationship between income smoothing and stock liquidity. |
| Babajani at al | 2015 | the Relation reviews of manage earnings and information asymmetry: index information asymmetry has affirmative impact on income management |
| Vayanos & Wang | 2012 | Information asymmetry impact on Return on Assets and liquidity: There is a significant relationship between information asymmetry or liquidity and Return on Assets. |
| Cormier at al | 2013 | The incidence of earnings management on information asymmetry in an uncertain environment: Some canadian evidence: There is a significant positive relationship between income smoothing and information asymmetry |

According to theoretical foundations and review of research, describe hypotheses as below:

First Hypothesis: There is a significant relationship between stock liquidity and income smoothing.

Second hypothesis: There is a significant relationship between institutional ownership and income smoothing.

Third hypothesis: There is a significant relationship between information asymmetry and income smoothing.

The research model is as follow:

Income Smoothing = $\alpha_0 + \alpha_1$ Liquidity stock + α_2 Institutional ownership + α_3 Information asymmetry + α_4 size + α_5 leverage + e

Income Smoothing (the dependent variable) Liquidity stock (independent variable) Institutional ownership (independent variable) Information asymmetry (independent variable)

Size= Company size (control variable) Leverage =Financial Leverage (control variable)

This research among the applied research as based objective with help of event follows approach and In this study, the comparative method to understand the study theoretical principal and from the inductive method To data collection and test hypotheses was used. In this study, data both library research and databases methods was used. In library method the articles used in this research through the Internet have been received. The data that are required to calculate variables, through the Tadbirpardaz, Rahavard Novin databases, financial reports provided by Tehran stock exchange and other data obtained through the site www.rdis.ir (site of the Stock Exchange rganization) is collected (Richardson, 2000).

In data analysis model, the information after collection and then processed by statistical methods as follows using spss software are analyzed and for creation use excel software (Copland, 1968).

2.1 Statistical Society

According to the purposes of research and study population, in this study, a census method is used, which means that sample of all members community are considered and their required indicators examined during the 2010 to 2014. So, due to research territory where the Tehran Stock Exchange, considered and given the research nature and also some inconsistencies among companies listed on the Tehran Stock Exchange, the member firms which have the following conditions, as the research community chosen: in the period under consideration do not have change financial period, and are not Investment companies, financial Intermediaries, banks& leasing, the financial information required especially, the notes accompanying the financial statements are available (Stolowy and Bereton, 2004).

due to mentioned limitations, a number of 470 years - The company has been selected as the study population that given to availability all information relevant to companies in this study, from all the companies of study population (470 years), as a sample to test research hypotheses have been used.

2.2 Research variables

Table 2operational definition research variables and how to computing them.

| Variable name | Variable type | how to computing | Source of data mining |
|------------------------|---------------------|---|--|
| Income Smoothing | dependent variable | $(DA_t = TA_t/A_{t-1} - NDA_t)$ | Balance sheet |
| information asymmetry | independentvariable | $(AP - BP)/((AP + BP)/2)$ | Tehran stock exchange information |
| Institutional wnership | independentvariable | Stock percentage belong to major shareholders | Tehran stock exchange information and The notes accompanying FinancialStatements |
| Stock Liquidity | independentvariable | Stock companies ranking has announced | Tehran stock exchange information |
| Company size | Control variable | Logarithm of total assets | Balance sheet |
| Financial Leverage | Control variable | Long-term debt-to-total assets ratio | Balance sheet |

3. Discussion and results

3.1 Descriptive statistics

Since data analysis is usually with summarized statistics computing such as Mean and Standard deviation takes, so, In order to review and initial data analysis, the first the data related to descriptive statistics of the studied dependent and explanatory variables are presented in Table 3. When overview of the data analyzed in this study were obtained.

Table 3: Descriptive statistics of variables used in the study

| Property Variable | Average | Middle | SD | Max | Min |
|-------------------------|---------|--------|------|-------|-------|
| Income Smoothing | 0.14 | 0.14 | 0.15 | 0.68 | -0.36 |
| Stock Liquidity | 197 | 200 | 98 | 420 | 2 |
| Institutional ownership | 0.51 | 0.51 | 0.28 | 0.9 | 0.06 |
| information asymmetry | 1.72 | 1.56 | 0.74 | 4 | 0.26 |
| Company size | 14.07 | 13.92 | 1.52 | 19.11 | 10.51 |
| Financial Leverage | 0.08 | 0.05 | 0.09 | 0.57 | 0 |

3.2 Hypothesis test results

Use ANOVA for significant regression test

Table 4: Model Summary

| R | R Square | Adjusted R Square |
|-------|----------|-------------------|
| 0.126 | 0.016 | 0.005 |

Table 5: ANOVA

| Model | Sum of Squares | df | F | Sig. |
|-------|----------------|----|---|------|
|-------|----------------|----|---|------|

| | | | | |
|------------|--------|-----|-------|------|
| Regression | 0.185 | 5 | 1.496 | .002 |
| Residual | 11.454 | 464 | | |
| Total | 11.638 | 469 | | |

Covered the F statistic is significant at the level error of 5% so, The regression model is adequately (is less than error coefficient considered (0.05)).

Table 6: Check the normality of variables (Kolmogorov-Smirnov)

| Z | Sig. |
|--------------------|-------|
| Kolmogorov-Smirnov | 0.132 |

Table (6), the z statistic (0.132), represents the normal distribution of residuals is meaningful. independent predictor variables is default of regression analysis. Less than 10 in statistic is result of VIF test, hence infrastructure regression is accepted in this assumption.

Table 7: Collinearity Statistics

| Variable | VIF |
|-------------------------|-------|
| Stock Liquidity | 1.443 |
| Institutional ownership | 1.008 |
| information asymmetry | 1.381 |
| Company size | 1.064 |
| Financial Leverage | 1.011 |

Independence evaluation of error components in the model is in next step. Durbin–Watson statistic value is (1.759) and the remain uncorrection have confirmed.

Coefficients results are as follows:

Table 8: Coefficients

| Model | Unstandardized Coefficients | | Standardized coefficients | t | Sig. |
|-------------------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| (Constant Model) | .050 | .077 | ---- | .653 | .514 |
| Stock Liquidity | .000 | .000 | -.061 | -1.105 | .270 |
| Institutional ownership | -.010 | .026 | -.019 | -.403 | .687 |
| information asymmetry | .024 | .012 | .111 | 2.045 | .041 |
| Company size | .005 | .005 | .047 | .981 | .327 |
| Financial Leverage | .114 | .087 | .060 | 1.301 | .194 |

Table (8), In third hypothesis, Beta coefficient is positive that represent significant connection between information asymmetry and income smoothing.

4. Conclusion

this study examines the relationship information asymmetry, Institutional ownership and Stock Liquidity by Income Smoothing. Therefore, in this study, eventually using of the information inserted in the text and the notes accompanying Tehran Stock Exchange and Rahavarde Novin software (470 years-company) for the test hypotheses during the 2010-2014 is used. According to test hypotheses the following results have been obtained:

Table 9: Results

| hypothesis | P-Value | Test results |
|---|---------|-------------------------|
| There is a significant relationship between stock liquidity and income smoothing. | .270 | Hypothesis refusal |
| There is a significant relationship between institutional ownership and income smoothing. | .687 | Hypothesis refusal |
| There is a significant relationship between information asymmetry and income smoothing. | .041 | Hypothesis verification |

Table 10: Related research

| hypothesis | Test results | Related research |
|---|-------------------------|--|
| There is a significant relationship between stock liquidity and income smoothing. | Hypothesis verification | Maleknezhad (2012) |
| There is a significant relationship between information asymmetry and income smoothing. | Hypothesis verification | Ahmadpur et al (2013) |
| The incidence of earnings management on information asymmetry in an uncertain environment | Hypothesis verification | Cormier, D., Houle, S., Ledoux, M.J. (2013). |

About first hypothesis rejection: during research period in companies which examined, increase or decrease stock liquidity doesn't have any effect on income smoothing by management. If the manager do income smoothing due to it absorb investors with minimum fluctuations, But unlike expectations, Investors are real income more attention. Until the unreal income. and no change in stock liquidity.

Likewise, the second hypothesis has rejected due to theoretical definition. Although the most stock of Iranian company belongs to institutional shareholders. But presence of this group doesn't have any impact on income smoothing by management. Finally based on listed theoretical foundations, information asymmetry has undesirable result like market efficiency reduce, transaction costs increase, market weakness, low liquidity generally transactions profit reducing in capital market. Information asymmetry have presented in this topic and important impact of that on economical discussion. the asymmetric information has a significant negative impact on the relationships between firm value and investment. Therefore in a position where information asymmetry is high, managers will make conservative estimates of market information. The information asymmetry can potentially lead to large errors or risks.

High information asymmetry create inefficient information this defective process so 'isn't desirable because from company one negative point sent to market and company facing problem to absorb financial resources. With information asymmetry increase between company management and shareholders do the income smoothing by management for compensation of income decrease and low liquidity, so increase income smoothing due to information asymmetry.

4.1 Research finding

Firm size and financial leverage are control variables. but finally, not found significant relationship between control variables and Income Smoothing.

4.2 Research limitations

1- Of course, any study due to 100% environmental conditions is not certainly and is faced with limitations. The first limitation that can be said is the most important limitation of this study, the characteristic of quasi-experimental research in social sciences is common. In other words the effect of other variables that their control is out of available researcher and the possibility of an impact on results are not ruled out. The results of current study can be generalized to the stock companies. Therefore generalization of results to out of stock companies should be done cautiously.

2- Information gathered in this study includes the companies listed in Tehran Stock Exchange during the period 2010 to 2014, the number of observations as to increase information and test results will be higher and consequently the validity of research results, may different results achieved by increasing the time period.

4.3 Suggested solutions

4.3.1 Suggestions for future researches

This research about board characteristic on income smoothing connection with knowledge and competence of members.

4.3.2 Proposals based on the results

practical suggestions with regard to the issue, decrease in stock of capital market, increase transaction costs, market weakness as the result of information asymmetry, present of significant relationship between information asymmetry and income smoothing is result of recent research, Inform to shareholders, analysts, financial investor, in decision, consider information asymmetry as the main point to increase income smoothing. Official and member of stock exchange can applies result of this research. In fact according to result percentage of establish rules to reduce information asymmetry and due to it reduce income smoothing.

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