Advances in mathematical finance & applications, 4 (4), (2019), 1-18 DOI: 10.22034/amfa.2019.1869165.1227



Published by IA University of Arak, Iran Homepage: www.amfa.iauarak.ac.ir

A Corporate Perspective on Effect of Asymmetric Verifiability on Investors' Expectation Differences

Erdal Karapinar^a*, Said Mosai^b, Faeqeh Taherinejad^c

^aDepartment of Medical Research, China Medical University, Taichung, Taiwan ^bDepartment of Accounting, Islamic Azad University, Arak, Iran. ^cDepartment of Financial Engineering, Islamic Azad University, Arak, Iran.

ARTICLE INFO	Abstract
Article history: Received 19 May 2019 Accepted 07 October 2019	Investigating the performance of companies is one of the most important issues for the users of accounting information. The purpose of this study is to provide evidence about the effect of asymmetric appropriateness on investors' expecta- tions. The results of the research on accepted companies listed in the Tehran
Keywords: Investors' Differences Expectations Asymmetric Verifiability Company Outlook Behavioral Finance Representation	Stock Exchange during the period from 2012 to 2016. To collect data, a library method was used and referring to financial statements, explanatory notes and monthly stock exchange of the Stock Exchange. Using Cochran sampling method, 120 firms were selected as the statistical sample. To analysis the data, multivariate regression analysis was used to confirm the rejection and research hypotheses (Eviews software). The results showed that asymmetric accountability leads to different expectations of investors about the Corporate Perspective, and the negative relationship between asymmetric verification (conservatism) and investors' controversy is weaker with the release of good news and gets worse by the publication of bad news. The results are consistent with the documentation referred to in the theoretical framework of financial research and literature, such as the theory of Corporate Perspective and the concepts of behavioural and finan-

cial behaviour, and the publication of good and bad news has a significant role.

1 Introduction

Managers are in charge of strategic decisions and operational planning of their companies. Because of rapid changes and fierce competition in business environment, varied strategies adopted by managers determine the future of their companies. Therefore, review of performance of companies is one of the subjects to which accounting information users pay attention and results of performance reviews form the basis of many decisions made in and out of profit units. In order to develop better performance measurement criteria, numerous studies have been conducted in different academic and research centers during past few years (e.g. factors related to a profit statement which contribute to investors' differences). One of the factors contributing to investors' differences is information asymmetry. Guay and Verrecchia [13] suggest that profit statements provide some information which enables traders to make more informed judgments than other traders on performance of companies. As Bamber and Cheon [6] argue, pre-disclosure private information differences cause heterogeneity of appeal in beliefs based on

^{*} Corresponding author Tel. : +905056319984

E-mail address: erdalkarapinar@yahoo.com

announcement of profit. Sustainability of profit is one of the characteristics of profit quality based on accounting information. It helps investors evaluate future profits and cash flows of a company. Jokar [15] found that the behavior of past profit figures with some of these processes can be justified is an effective step to find a better model for predicting profit. Other studies deal with uncertainty as second determining factor of disagreement about profit statements. They suggest that uncertainty of information quality is a factor which increases disagreement. Although significant contributions to understanding of differences of investors' expectations, the subject has not been understood completely. Information asymmetry and uncertainty as two factors contributing to disagreement on profit announcement suggest that conservatism influences these factors and consequently, it affects investors' expectation differences [10]. Despite of the fact that numerous studies on investors' disagreements in Iran have been conducted, effect of releasing good and bad news on relevant studies has been neglected in them. The contribution of present study is determining the effect of conservatism which reduces information asymmetry. In addition, bad news which are less likely to draw attention will create less uncertainty. The effects of conservatism on profit credit suggest that if other conditions are presumed fixed, profit statements of more conservative companies are associated with lower disagreements among investors. Therefore, the primary goal of present study is determining the effect of asymmetric verifiability on investors' expectation differences from corporate perspective.

Different studies have been domestically conducted on subject of present study. For instance, one could point to studies concerning investors' different opinions on price direction and volume of trading. The results suggest that investors' optimistic and pessimistic beliefs exert positive and negative effects on trend of market trading respectively. In addition, the authors found out that investors' optimistic and pessimistic beliefs do not influence market price trend significantly. Derakhshande & Aliahmadi, [12] performed the pricing of capital assets by presuming information heterogeneity. The results suggest that there is a positive correlation between relative prices and monthly return. In addition, findings suggest that price-conditioned strategy performs better than buy-and-hold strategy. Rostami et al. [21] presented a conservative reporting based on value relevance of accounting information. The results suggest that there is a significant association between conditional conservatism and relevant value of accounting information. Therefore, the first hypothesis is denied but the second hypothesis is supported. Biranvand & Hematfar, [8] presented a valuation of stock and investors' disagreement. In this study, investors' behavior is examined under two strategies of fundamental analysis and follow-up. The results of this study use monthly data, suggest that investors are moving between these two strategies, and at some point in time investors follow the trend, forcing fundamental analysis to take their expectations and beliefs in and take along with them a strategy to follow the trend. This shift in strategy has been close to the past due to the greater returns of the strategy to follow the trend toward fundamental analysis in the past. Rai et al. [20] investigated the effect of conservatism on association between temporal asymmetry of profit and market value to book value of stock. In order to study the profit asymmetry time, the relationship between this criterion and the ratio of market value to book value of shares as a wellknown criterion of conservatism has been investigated [16]. However, none of above studies dealt with effect of asymmetric verifiability on investors' expectation differences. On the other hand, there are numerous aspects in this field which require further studies so that error of existing studies is reduced. Different studies point to varied solutions to differences in investors' expectations. Two determining factors of disagreement about statements include asymmetric information (which enables more informed traders to make different judgments on performance of company from other traders) and uncertainty of released information quality (which results in different interpretations). This is while previous studies suggest that conservatism is very useful for debt holders and contractual objectives and effect of conservatism on stock market and investors' valuation deserves further discussion. In fact, standard setters are highly against conservative reporting since biased information is provided to investors. This viewpoint is supported by some previous studies that suggest lack of delay while taking conservatism into account will impose subversive effects on information content of accounting values. Therefore, different claims are raised in most studies concerning effect of conservatism on efficiency of stock market [3, 11]. At the moment, a new wave of studies is dealing with the subject and they suggest that conservatism occurs in response to information asymmetry in stock market. In general, results of these studies suggest that conservatism is beneficial to stockholders because it is used in financial accounting reports for further assessment of values of companies. Since previous studies have not paid attention to investors' reaction to accounting information disclosure under effect of conservatism, this is a key problem in accounting studies since the goal of financial reporting is providing useful information to financial users. So, determining if asymmetric verifiability (conservatism) contributes to the goal or not is highly significant. In this study, effects of accounting conservatism on investors' disagreement and/or lack of consensus on dates of announcing profits will be reviewed. The primary question of this study is "Does conservatism can resolve these problems and reduce the disagreements by improvement of information setting?" Conservatism reduces investors' disagreements by improving information access and conservatism is accompanied with lower disagreement on dates of announcing profits. Although a company can complement reported results by additional disclosure of unreported good news, if reported results are partial the investors will have different expectations of corporate perspective. This suggests that the negative association between asymmetric verifiability (conservatism) and investors' disagreement will be weaker in the case of releasing good news [10]. The individuals and entities involved in this issue are Privatization Organization of Iran, Iranian National Tax Administration (INTA), investors, shareholders and managers (whose decisions are influenced by asymmetric verifiability), researchers and academic students (for contributing to studies on the subject) as well as other uses of financial statements. Based on this approach, the most significant question and the primary question of present study are concerned with determining the effect of asymmetric verifiability on investors' expectation differences from corporate perspective.

2 Theoretical Principles and Literature Review

Since this study is concerned with determining the effect of asymmetric verifiability on investors' expectation differences from corporate perspective, the contracting theory of conservatism and prospect theory could be used. The role of prospect theory in financial behavior could be supposed to be similar to utility theory in standard finance. In other words, it is one of the primary elements of financial behavior. The behavioral finance knowledge regarded as application of psychology in financial knowledge has turned into a major subject in past two decades. One of the fields of this knowledge is theory of prospect which explains individuals' judgments and decisions under uncertainty conditions. As an alternative of standard models of finance, the theory explains the observed behavior of people in

Vol. 4, Issue 4, (2019)

a different manner since people show different trading behavior depending on their location in profit and loss area. The prospect theory describes the ways people evaluate profit and loss. Based on this theory, investors evaluate their profits and losses based on reference points of their choices. In this theory, investors follow S-shaped value function. The concave part of the function (risk avoiding) is concerned with range of profits but within the range of losses the function shape is convex (risk-taking). There are three hypotheses concerning theory of prospect. First, investors pay attention to past events and prices in their decisions and define their profit and losses in relation to reference point. Second, value function of losses has higher slope than value function of profit. Third, total value of profit or loss does not vary as profit increases or loss decreases. Contractual interpretation refers to conflict of interests between parties of contract and profit unit. The contracts include managers' contract as well as contract of debt to shareholders and other creditors. Each of the parties seek their own interests. The company managers and accountants are mostly prosecuted for overstating revenues and assets rather than understating them. In addition, accounting regulators believe that cost of overstating revenues and assets is higher than their benefits. In addition, association between reported profit and taxes could cause certain inclinations in terms of different identification of costs and revenues [19].

From viewpoint of behavioral finance, there are different factors which cause people to make nonoptimal decisions. So, investors should understand the significance of these factors in their decisions and determine if this type of orientations is involved in their past and future decisions. In the next step, they seek to find irrationalities of other investors' behaviors so as to optimally benefit from their mistakes in future trades [17]. Conservatism limits managers' opportunistic behaviors and increases their discipline in financial reporting process. Managers' commitment to conservative reporting and their limited exaggeration of profit report will increase validity of information. In contrast, conservatism provides negative information which managers are not willing to provide. By registering lower profit, conservatism does not allow managers to hide bad news through their biased behavior [5]. As a result, conservatism reduces information asymmetry. In addition, bad news which is less likely to attention will create lower uncertainty. These effects of conservatism on profit validity suggest that if other conditions remain fixed the profit statements of more conservative companies are associated with lower disagreements among investors. This requires testing the first hypothesis of present study which suggests, "From corporate perspective, asymmetric verifiability influences investors' expectation differences in the case of releasing bad news".

However, there are many reasons behind paradoxical effects of conservatism on release of good news which should be addressed. As Guay and Verrecchia [13] argued, managers are motivated to release good news through other profit reports. In addition, it is predicted that effect of first hypothesis will weaken as good news is released. On the other hand, corporate commitment to updating bad news will influence investors to higher extent if reports contain bad news. In this study, the evidence will be tested through the second hypothesis which suggests, "From corporate perspective, negative effect of asymmetric verifiability on investors' expectation differences will weaken by release of good news while bad news adds to the effect".

H.1-From corporate perspective, asymmetric verifiability influences investors' expectation differences in the case of releasing bad news.

H.2- From corporate perspective, negative effect of asymmetric verifiability on investors' expectation differences is weakened by release of good news but the effect will get stronger as bad news are released.

3 Literature Review

Saqafi and Jamalianpur [22] in "Significance of classification variation to profit management" supported the hypothesis concerning existence of classification change. Therefore, maintaining financial reporting quality and lack of issuing biased reports requires significant attention to classification of items by regulators and other relevant entities. Derakhshande and Aliahmadi [12] in "Evaluation of the role of investors' disagreements in price direction and trading volume in capital market" reviewed the effect of investors' optimistic and pessimistic beliefs of market price trend and stock market trading trend. The statistical population of present study includes the companies listed on Tehran Stock Exchange and statistical samples were 50 companies with higher market values during 2010-2014. The test of hypotheses was done through multivariate regression and time-series data. The results suggest that investors' optimistic and pessimistic beliefs exert positive and negative effects on trend of market trading respectively. In addition, the authors found out that investors' optimistic and pessimistic beliefs do not influence market price trend significantly. Rostami et al. [21] in "Test of pricing of capital assets by presuming heterogeneous information in Tehran Stock Exchange" studied the applications of heterogeneous information for equilibrium pricing of assets and choosing optimal portfolio. The theoretical framework of this study is directly associated with linear logical expectations equilibrium theory Admati. In contrast to traditional paradigm of pricing of assets and logical expectations, the present study pays a lot of attention to a new paradigm of heterogeneity and limited rationality. In this study, correlation between relative prices and future return of price-conditioned portfolios will be determined. Then, performance of the price-conditioned portfolios and buy-and-hold portfolios during 2008-2014 will be compared. The results suggest that there is a positive correlation between relative prices and monthly return. In addition, findings suggest that price-conditioned strategy performs better than buy-and-hold strategy.

Biranvand and Hematfar [8] in "Effect of conditional conservative reporting on relevance of accounting information" studied the association between conditional conservatism and relevance of accounting information. In their work, conditional and unconditional conservatism classification was used. In order to study the association in Iranian capital market, the statistical population includes companies listed on Tehran Stock Exchange. Then, systematic removal method was adopted to exclude those companies which do not provide the necessary information of our study which led to selection of 111 companies as samples. Then, study variables were identified and data analysis of the data collected with Rahavard-Novin Software was done. In order to test the hypotheses, SPSS Software was used to analyze the collected data was through inferential and descriptive statistics (e.g. correlation analysis). The results suggest that there is a significant association between conditional conservatism and relevant value of accounting information. Therefore, the first hypothesis is denied but the second hypothesis is supported. Davalu [9] studied the role of corporate dividend policy in risk of stock price downfall. The results suggested that lack of transparency and fall of stock price solely occurs in the case of excessive pricing. Young [23] in "Capital market frictions and conservative reporting: Evidence from short selling

Vol. 4, Issue 4, (2019)

constraints" addressed this subject too. The study was concerned with the way the rules of capital market regulation are affected by conditional conservative rules of financial reporting. The results suggested that fewer constraints of short selling leads to lower conditional conservatism. The conclusion contributes to understanding the way market regulations influence accounting choice. In addition, probable negative effects of stock market friction on breakdown of financial reporting were suggested. Atiase et al. [4] in "Differences in prior beliefs, differential interpretation and the consensus effect of quarterly earnings signals and trading volume" studied the three potential sources of business. They found out that all of those three factors (i.e. prior heterogeneous beliefs, different interpretations, and consensus effect of news" influence trading volume positively. Therefore, they support the theoretical model of financial economists. Abderrazak and Bacha [1] in "Investor emotional biases and trading volume's asymmetric response" studied the presumably dynamic association between trading volume and investors' inclinations. Two emotional measures of false self-confidence and optimism-pessimism criterion were reviewed in this study. The nonlinear dynamic approach and asymmetric reduction model were used to study non-linear short and long term association between investors' inclination and liquidity of stock market. The findings suggest that there are long-term reaction of asymmetric market liquidity to investors' inclinations. In short term, stock market liquidity shows rapid and asymmetric reaction to changes of false self-confidence while optimism and pessimism exert short-term influence on trading volume. Peng et al. [18] in "Accounting accruals, heterogeneous investor beliefs, and stock returns" addressed the way accruals of a company influences investors' disagreements and stock return. The findings suggest that heterogeneity of investors' beliefs exert more effect on value of a company if a company undergoes higher increase of accounting accruals. In addition, future return of stocks increases after announcement of profit when accounting accruals of a company adds a degree to heterogeneity of investors' beliefs. Finally, effect of investors' disagreements resulting from future accruals of stock is more vivid when short-term selling constraint is applied. In general, experimental findings of the study suggest that accounting accruals determine all heterogeneity of investors' beliefs.

4 Methodology

This is an applied study in terms of its methodology. It is characterized by quantitative data, combined runtime and inferential logic of study. It is a descriptive-correlational survey conducted during 2012-2016. This study is concerned with Tehran Stock Exchange and it covers a five-year period. By applying the limitations represented in Table 1, 394 companies were selected as samples.

Table 1. Statistical Topulation alter Applying Elimitations.	
Sampling Steps	Number
Number of companies engaged in stock exchange during 2012-2016	394
Number of companies that are among investment firms, banks and insurance companies.	106
Number of companies with financial year not ending in March 29th or with modified financial	114
year end during period of study.	
Statistical population of study	174

Table 1: Statistical Population after Applying Limitations.

In order to determine the size sample of present study, Cochran's formula was used. Here, n refers to statistical sample, N is statistical population and Z refers to normal value of the variable correlated with intended confidence level. Regarding 95% confidence interval, the value of Z is equal with 96.1. In addition, σ refers to variance of population which is equal with 5.0. The value of allowable error (ϵ) is

equal with 0.5. Drawing on Cochran's sample-size formula, the statistical samples are 120 companies. the transaction information was collected companies selected by sampling method based on Cochran formula in which totally obtained 600 year-firm data Therefore, 600 data was collected per each variable of this study [2].

$$n = \frac{N \times z^{2} \alpha_{/2} \times \delta^{2}}{(N-1)\varepsilon^{2} + z^{2} \alpha_{/2} \times \delta^{2}}$$

$$n = \frac{174 \times 1.96^{2} \cdot 5_{/2} \times .5^{2}}{(174 - 1).05^{2} + 1.96^{2} \cdot 5 \times .5^{2}}$$
(1)

In this study, data collection was done through library review. Data concerning theoretical discussions of this study was collected through review of sources, publications, domestic and foreign sources of books and online sources. Therefore, data of present study was collected through library review, using Rahavard-novin Software, visiting Tehran Stock Exchange and review of financial statements of companies listed on Tehran Stock Exchange during 2012-2016. In addition to review of basic financial statements, the information of financial statements was taken from website of the stock exchange.

5 Model and Research Variables

In this study, estimation of effect of asymmetric verifiability on investors' expectation difference from corporate perspective and test of research hypotheses were done through following models:

Regression model of first hypothesis is as shown in the following:

$$\begin{split} DIS_{i,t} = B_0 + B_1 Cons_{i,t} + B_2 SURPRISE_{i,t} + B_3 SIZE_{i,t} + B_4 LEV_{i,t} + \\ B_5 MB_{i,t} + B_6 BAD_{i,t} + B_7 Cons_{i,t} BAD_{i,t} + B_8 DISP_{i,t} + \\ B_9 FOLLOW_{i,t} + B_{10} LIQ_{i,t} + B_{11} ABN_A CCR_{i,t} + B_{12} EX_D IR_{i,t} + \\ B_{13} DUAL_{i,t} + B_{14} BOARD_{i,t} + \epsilon_{i,t} \\ H_0: \beta_1 = 0 \\ H_1: \beta_1 \neq 0 \end{split}$$

$$(2)$$

Regression model of second hypothesis is:

$$\begin{split} DIS_{i,t} = B_0 + B_1 Cons_{i,t} + B_2 SURPRISE_{i,t} + B_3 SIZE_{i,t} + B_4 LEV_{i,t} + \\ B_5 MB_{i,t} + B_6 gGood_{i,t} + B_7 Cons_{i,t} Good_{i,t} + B_8 DISP_{i,t} + \\ B_9 FOLLOW_{i,t} + B_{10} LIQ_{i,t} + B_{11} ABN_A CCR_{i,t} + B_{12} EX_D IR_{i,t} + \\ B_{13} DUAL_{i,t} + B_{14} BOARD_{i,t} + \varepsilon_{i,t} \\ H_0: \beta_{7bad} \leq \beta_{7good} \\ H_1: \beta_{7bad} > \beta_{7good} \end{split}$$
(3)

Vol. 4, Issue 4, (2019)

The variables used in above equations are described in Table 2.

Variable	Definition
DIS it	Investors' expectation differences (disagreements)
SUMATO it	First proxy of investors' disagreement
SUVit	Second proxy of investors' disagreement
AMATOit	Third proxy of investors' disagreement
Consit	Measurement of asymmetric verifiability (conservatism) of company-year based on new model for
	calculation of accounting conservatism
SUPERISEit	Absolute value of abnormal stock return in time window [+1, -1]
SIZEit	Size of company
Mbit	Ratio of market value to book value
LEVit	Financial leverage
BADNit	Dummy variable of bad news
GoodNit	Dummy variable of good news
DISPit	Analyst's distribution of prediction
FOLLOWit	Number of predictions
LIQit	Liquidity index
ABN-ACCRit	Mean abnormal accruals in past 3 years
EX-DIRit	Percentage of executives in management board
DUALit	Dual duties of managing director
BOARDit	Size of management board

Table 2: Variables of Research Model

Dependent Variable

 DIS_{it} refers to investors' expectation difference which is determined through following equation. Here, $SUMATO_{it}$ is first proxy of investor's disagreement.

$$SUMATO_{it} = \frac{TO_{it} - E(TO_{it}RET_{it} \cdot TO_{mt})}{SD_{i}}$$
(4)

The variable TO_{it} refers to real turnover of a company which is determined through following equation:

$$TO_{it} = \alpha + \beta_1 |RET_{it}|^+ + \beta_2 |RET_{it}|^- + \beta_3 TO_{mt} + \varepsilon_{it} \quad (-55 \le t \le -5)$$
(5)

In above equation, T refers to time period of announcing profit.

The stock turnover of a company TO_{it} is determined through following expression:

$$TO_{it} = VOL_{it}/share_{it}$$

In above equation, voli refers to trading volume of stock i, share denotes the number of issued stocks, and TO_{mt} signifies the logarithm of stock turnover of capital market. If return is positive, the sign of coefficient B1 is positive $|RET_{it}|^+$ but negative sign of coefficient B1 signifies that return is negative ($|RET_{it}|^-$). The expected stock turnover $E(TO_{it}RET_{it} \cdot TO_{mt})$ is calculated in the following manner:

(6)

(7)

$$E(TO_{it}|RET_{it} \cdot TO_{mt}) = \hat{\alpha} + \hat{\beta}1|RET_{it}|^{+} + \hat{\beta}2|RET_{it}|^{-} + \hat{\beta}3|TO_{mt}| \quad (-1 \le t \le +1)$$

In following expression, SD refers to standard deviation of turnover of a company's stock and SUV_{it} signifies second proxy of investors' disagreement.

$$SUV_{it} = \frac{Volume_{it} - E(Volume_{it}|RET_{it})}{SD_i} \quad (-1 \le t \le +1)$$
(8)

In above equation, $Volume_{it}$ refers to logarithm of real trading volume (Rial-based value of trading) and $E(Volume_{it}|RET_{it})$ denote expected trading volume (Rial-based of trading) based on regression of logarithm of volume trading on stock return.

$$E(Volume_{it}|RET_{it}) = \hat{\alpha} + \hat{\beta}1|RET_{it}|^{+} + \hat{\beta}2|RET_{it}|^{-} \quad (-1 \le t \le +1)$$
(9)

In following equation, $AMATO_{it}$ refers to third proxy of investors' disagreement.

$$AMATO_{it} = \frac{MATO_{it} - E(MATO_{it})}{SD_i} \quad (-1 \le t \le +1)$$

$$(10)$$

MATO in following expression signifies adjusted stock turnover.

$$MATO_{it} = \left(\frac{Vol}{Shs}\right)it - \left(\frac{Vol}{Shs}\right)mt \quad (-55 \le t \le -5) \cup (-1 \le t \le +1)$$

$$\tag{11}$$

In above equation, $\binom{Vol}{Shs}$ *it* refers to ratio of trading volume to number of stocks, $\binom{Vol}{Shs}$ *mt* denotes ratio of trading volume to total number of stocks in the market, $E(MATO_i)$ is mean adjusted turnover, and SD_i denotes standard deviation of adjusted turnover [10].

Independent variable

Consit is an independent variable in this research, asymmetric verification is based on the relationship between the first three levels of conservatism, conservatism, using three accrual-based methods (Level 1) based on non-operational accruals (Level 2) and based on stock market value (Level 3) was investigated.

First Asymmetric Verification (Conservatism)= Save inventory depreciation/ Total inventory Second asymmetric verifiability (conservatism)= Possible Debt/ Total Debt

Third Asymmetric Verification (Conservatism)= (Possible Debt/ Total Debt)*(Total Asseet / Total Debt)

After identifying other components that are used in practice for observing the principle of asymmetric verification (conservatism), all components are combined together and the asymmetric assertion (conservatism) is obtained. [21].

Vol. 4, Issue 4, (2019)

aggreate consevatism. = $\sum_{i}^{n} = XI$

Control Variables

 $SURPRISE_{it}$: absolute value of abnormal stock return in time window [+1, -1].

Abnormal return is product of difference between real return (Rit) and expected return (E(Rit)) (mathematical expectation of stock return).

$$R_{it} = \frac{(1+\alpha)P_{t+1} + D - P_t}{P_i}$$
(13)
Where we have:

Where we have:

a: Percentage of capital increase

Pi+1: Price at time t+1

 P_t : Price at time t

D: Paid cash dividend

 $SIZE_{it}$: Natural logarithm of total assets at end of financial year.

Mb_{it}: Ratio of market value to book value.

 LEV_{it} : leverage as ratio of total liability to total assets at the end of financial year.

DISO_{it} :Distribution of analyst's prediction.

 $FOLLOW_{it}$: Number of predictions (number of predicting profit of each stock annually or seasonally for company-year; companies with no prediction in a year have zero $FOLLOW_{it}$: for the year).

LIO_{it} :Liquidity index.

$$ILLIQ_{i,m} = \frac{1}{D_{i,m}} \sum_{d=1}^{d_{i,m}} \frac{|R_{i,d,m}|}{P_{i,d,m}V_{i,d,m}}$$
(14)

 $R_{i.d.m}$: Stock return of company i in day d of month m.

 $P_{i.d.m}$: Stock price of company i in day d of month m.

 $V_{i.d.m}$: Trading volume of company i in day d of month m.

 D_{im} : Number of days of trading stocks of company i in month m.

ABN_ACCR_{it} :Mean abnormal accruals of past 3 years.

$$\frac{^{TA}_{it}}{^{A}_{it}} = \beta_1 \frac{1}{^{A}_{t-1}} + \beta_2 \left(\frac{^{\Delta REV}_{it}}{^{A}_{t-1}} - \frac{^{\Delta AR}_{it}}{^{A}_{t-1}} \right) + \beta_3 \frac{^{PPE}_{it}}{^{A}_{t-1}} + \beta_4 \frac{^{NI}_{it-1}}{^{A}_{t-1}} + \epsilon_{it}$$
(15)

In above equation, TA refers to total abnormal items calculated as net profit before unexpected items minus operating cash flow. ΔREV refers to variation of sales, ΔAR denotes variation of receivable accounts, and PPE signifies property, machineries and equipment. In addition, NI_{it-1} refers to total income, At-1 represents total asset and EX_DIR_{it} :shows number of executives in management board. The variable of dual duties of directing manager $DUAL_{it}$: is a dummy variable which is equal with 1 if directing manager of a company is head of its management board. Otherwise, the variable is equal with zero. The variable $BOARD_{it}$:signifies the size of management board or number of management board members. [14].

Moderator Variable

 BAD_{it} :refers to dummy variable of bad news. If abnormal stock return in time window [+1,-1] around announcement of profit is negative, BAD_{it} :is equal with 1. Otherwise, it is equal with zero.

The dummy variable of good new $(Good_{it})$: is equal with 1 if abnormal stock return in time window [+1, -1] around notification of profit is positive. Otherwise, value of the variable is equal with zero.

6 Data Analysis

Table 3 and Table 4 show descriptive statistics of main variables of present study.

	First proxy of in-	Second proxy of in-	Third proxy of in-	Measurement of	Absolute Value of Ab-
	vestor's disagree-	vestor's disagree-	vestor's disagree-	Asymmetric Verifia-	normal Stock Return
	ment	ment	ment	bility	
	SUMATOit	SUVit	AMATOit	Consa	SURPRISEi
Mean	6.313350	0.202367	0.246433	50.49423	0.884795
Median	5.380000	-0.240000	0.360000	3.720000	0.450000
Max	31.35000	12.83000	1.780000	4175.190	6.060000
Min	-1.010000	-6.590000	-1/780000	0.00000	81.93000
SD	4.007227	2.730907	0.988649	345.2112	10.71386
Skewness	1.660109	0.808146	0.391759	11.43778	-7.218007
Kurtosis	9.260768	4.935599	2.118606	136.3826	54.76146
Jack-bra	0.125859	0.158859	0.345885	0.485889	0.725586
Probability	0.858855	0.855455	0.645856	0.822555	0.185586
Total	3788.010	121.4200	147.8600	30296.54	-530.8769
Total SD	9618.664	4467.252	585.4782	71383311	68757.33
Observations	600	600	600	600	600
Section	120	120	120	120	120

Table 3: Data Analysis (Part 1)

Table 4: Data Analysis (Part 2)

	Size of Company	Leverage	Ratio of Market Value to Book Value	Dummy Variable of Bad News
	SIZEit	LEVit	MBit	BADNit
Mean	6.224750	0.469050	4.506850	0.326667
Median	6.250000	0.440000	4.305000	0.000000
Max	6.460000	0.550000	6.480000	1.000000
Min	5.960000	0.410000	2.570000	0.000000
SD	0.159268	0.052375	1.289689	0.469386
Skewness	0.264441	0.576079	0.075485	0.739170

Vol. 4, Issue 4, (2019)

Advances in Mathematical Finance and Applications [11]

Table 4: Continue

	Size of Company	Leverage	Ratio of Market Value to Book Value	Dummy Variable of Bad News
	SIZEit	LEVit	MBit	BADNit
Kurtosis	2.168126	1.600638	1.907297	1.546373
Jack-bra	0.248880	0.825555	0.325555	0.154559
Probability	0.765566	0.118866	0.685878	0.855459
Total	3734.850	281.4300	2704.110	196.0000
Total SD	15.19436	1.643159	996.3153	131.9733
Observations	600	600	600	600
Section	120	120	120	120

The implication of first hypothesis is effectiveness of asymmetrical verifiability on investors' expectation difference from corporate perspective as bad news is released.

Table 5: Results of Modelling First Hypothesis based on First Proxy of Investor's Disagreement under Condition of Bad News Release

Variable		Coefficient	SD	t-statistic	Probability
Intercept	B0	106.5520	22.61292	4.711999	0.0000
Measuring asymmetric ver- ifiability	Consit	-0.012700	0.001745	-7.278432	0.0000
Measuring absolute value of abnormal stock return	SURPRISEit	-0.022075	0.008132	-2.714518	0.0069
Size of company	SIZEit	-0.133944	0.030370	-4.410408	0.0000
Leverage	LEVit	-0.437266	0.087006	-5.025688	0.0000
Book to market value ratio	MBit	0.140146	0.017817	7.865636	0.0000
Dummy variable of bad news	BADit	0.901647	0.209730	4.299090	0.0000
Dummy variable of bad news for measuring asym- metric verifiability	Cons _{it} BADit	-0.013033	0.001780	-7.321370	0.0000
Analyst's distribution of prediction	DISP i,t	0.005674	0.000294	19.31674	0.0000
Number of predictions	FOLLOWi,t	-0.212377	0.091920	-2.310452	0.0213
Liquidity index	LIQi,t	-0.306682	0.245978	-1.246787	0.2131
Mean abnormal accruals in past 3 years	ABN-ACCRi,t	-0.419817	0.992727	-0.422892	0.6726
Percentage of executives in management board	EX-DIRi,t	0.247096	0.079326	3.114960	0.0020
Dual duty of directing man- ager	DUALi,t	-1.254886	0.956592	-1.311830	0.1902
Size of management board	BOARDi,t	-5.632271	5.729358	-0.983054	0.3261
R-squared			0.86	Durbin-Wat- son	2.45
Adjusted R-squared			0.85	F-probability	0.000

Table 5 suggests, the whole model is statistically significant. Since the variable of "measuring asymmetric verifiability" (-0.012) for the model is significant and negative, H0 hypothesis is denied. This means that asymmetric verifiability results in investors' expectation difference based on first proxy under condition of releasing bad news about corporate perspective.

Variable		Coefficient	SD	t-statistic	Probability
Intercept	B0	-63.68565	14.33088	-4.443945	0.0000
Measuring asymmetric ver- ifiability	Cons _{it}	-0.001960	0.000951	-2.061761	0.0398
Measuring absolute value of abnormal stock return	SURPRISEit	-0.018758	0.003817	-4.914967	0.0000
Size of company	SIZEit	0.911040	0.192194	4.740209	0.0000
Leverage	LEVit	0.215931	0.054158	3.987077	0.0001
Book to market value ratio	Mbit	-0.153807	0.109692	-1.402169	0.1615
Dummy variable of bad news	BADit	0.812391	0.124186	6.541709	0.0000
Dummy variable of bad news for measuring asym- metric verifiability	Cons _{it} BADit	-0.002191	0.000961	-2.280433	0.0230
Distribution of analyst's prediction	DISPi,t	7.57E-05	0.000179	0.421999	0.6732
Number of predictions	FOLLOWi,t	-0.216637	0.061380	-3.529465	0.0005
Liquidity index	LIQi,t	0.230864	0.142923	1.615302	0.1069
Mean abnormal accruals in past 3 years	ABN-ACCRi,t	0.234831	0.620149	0.378668	0.7051
Percentage of executives in management board	EX-DIRi,t	0.175170	0.050456	3.471763	0.0006
Dual duties of directive manager	DUALi,t	-0.135315	0.052846	-2.560548	0.0108
Size of management board	BOARDi,t	-4.082733	3.449509	-1.183570	0.2372
R-squared			0.71	Durbin-Wat- son	1.79
Adjusted R-squared			0.63	F –probability	0.000

Table 6: Results of Modelling First Hypothesis based on Second Proxy of Investor's Disagreement in Case of Bad News Release.

The probability of F-statistic suggests that the whole model is statistically significant. Since the variable of "measuring asymmetric verifiability" (-0.0019) in the model is significant and inverse the zero hypothesis (H0) was denied. This implies that asymmetric verifiability contributes to investors' expectation difference based on second proxy under the condition of releasing bad news about corporate perspective.

Table 7: Results of modelling first hypothesis based on third proxy for investors' disagreement at the time of releasing bad news.

Variable		Coefficient	SD	t-statistic	Probabil-
					ity
Intercept	B0	14.15099	8.141908	1.738043	0.0829
Measuring asymmetric verifiability	Cons _{it}	-0.000979	0.000331	-2.960451	0.0032
Measuring absolute value of abnormal stock	SURPRISEit	-0.007193	0.003523	-2.041583	0.0418
return					
Size of company	SIZEit	-0.178301	0.010989	16.22555	0.0000
Leverage	LEVit	-0.557937	0.031061	-17.96278	0.0000
Book to market value ratio	MBit	0.168550	0.064674	2.606150	0.0094
Dummy variable of bad news	BADit	-0.818455	0.080324	-10.18940	0.0000

Table 7:	continue
----------	----------

Variable			Coefficient	SD	t-statistic
Dummy variable of bad news for measur-	Cons it BADit	0.001175	0.000344	3.415650	0.0007
ing asymmetric verifiability					
Analyst's distribution of prediction	DISP i,t	-0.000321	0.000126	-2.556596	0.0109
Number of predictions	FOLLOWi,t	0.032467	0.029336	1.106736	0.2690
Liquidity index	LIQi,t	-0.530060	0.047059	-11.26377	0.0000
Mean abnormal accruals in past 3 years	ABN-ACCRi,t	-0.684158	0.288355	-2.372624	0.0181
Percentage of executives in management	EX-DIRi,t	-1.313052	0.284682	-4.612339	0.0000
board					
Dual duties of directive manager	DUALi,t	0.274173	0.146887	1.866549	0.0626
Size of management board	BOARDi,t	0.281250	2.124429	0.132389	0.8947
R-squared	R-squared		0.58	Durbin-Watson	3.43
Adjusted R-squared			0.46	F-probability	0.000

The probability of F-statistic suggests that the whole model is statistically significant. Since the variable of asymmetric verifiability (-0.00097) is significant and inverse, the zero hypothesis (H0) is denied. This means that asymmetric verifiability contributes to investors' expectation difference based on third proxy for the condition of release of bad news about corporate prospect. The results of testing the second hypothesis suggest that effect of asymmetric verifiability on investors' different expectation of corporate prospect reduces as good news is issued but issuing bad news add to the effect (See Tables 6 and 7).

Table 8: Results of Modelling Second Hypothesis based on First Proxy for Investors' Disagreement at Time of Releasing Good News.

Variable		Coeffi-	SD	t-statistic	Proba-
		cient			bility
Intercept	B0	107.4537	22.61921	4.750549	0.0000
Measuring asymmetric verifiability	Cons _{it}	-0.000333	0.000322	-1.034078	0.3016
Measuring absolute value of abnormal	SURPRISEit	-0.022075	0.008132	-2.714518	0.0069
stock return					
Size of company	SIZEit	-0.133944	0.030370	-4.410408	0.0000
Leverage	LEVit	-0.437266	0.087006	-5.025688	0.0000
Book to market value ratio	Mbit	0.140146	0.017817	7.865636	0.0000
Dummy variable of good news	Goodit	-0.901647	0.209730	-4.299090	0.0000
Dummy variable of good news for measur-	Cons it Goodit	-0.013033	0.001780	-7.321370	0.0000
ing asymmetric verifiability					
Analyst's distribution of prediction	DISP i,t	0.000567	0.000294	1.931674	0.0540
Number of predictions	FOLLOWi,t	-0.212377	0.091920	-2.310452	0.0213
Liquidity index	LIQi,t	-0.306682	0.245978	-1.246787	0.2131
Mean abnormal accruals in past 3 years	ABN-ACCRi,t	-0.419817	0.992727	-0.422892	0.6726
Percentage of executives in management	EX-DIRi,t	0.247096	0.079326	3.114960	0.0020
board					
Dual duties of directive manager	DUALi,t	-1.254886	0.956592	-1.311830	0.1902
Size of management board	BOARDi,t	-5.632271	5.729358	-0.983054	0.3261
R-squared			0.62	Durbin-Watson	2.45
Adjusted R-squared			0.52	F-probability	0.000

The value of F-statistic suggests that the whole model is statistically significant. Since coefficient of dummy variable for bad news in the case of measuring asymmetrical verifiability (Table 5) is not higher than coefficient of dummy variable of good news for measuring asymmetrical verifiability (Table 6)

zero hypothesis is supported. This implies that negative effect of asymmetrical verifiability on investors' difference of expectation of corporate prospect does not becomes weaker as good news is released while issuing bad news will not reinforce the effect.

Variable		Coeffi-	SD	t-statistic	Proba-
		cient			bility
Intercept	B0	13.33254	8.119551	1.642029	0.1013
Measuring asymmetric verifiability	Cons _{it}	-0.000196	9.88E-05	1.981704	0.0481
Absolute value of abnormal stock return	SURPRISEit	-0.007193	0.003523	-2.041583	0.0418
Size of company	SIZEit	-0.178301	0.010989	-16.22555	0.0000
Leverage	LEVit	-5.579367	3.106070	-1.796278	0.0731
Book to market value ratio	MBit	0.168550	0.064674	2.606150	0.0094
Dummy variable of good news	Goodit	-0.818455	0.080324	-10.18940	0.0000
Dummy variable of good news for measur-	Cons it Goodit	-0.001175	0.000344	-3.415650	0.0007
ing asymmetric verifiability					
Analyst's distribution of prediction	DISP i,t	-0.000321	0.000126	-2.556596	0.0109
Number of predictions	FOLLOWi,t	0.032467	0.029336	1.106736	0.2690
Liquidity index	LIQi,t	-0.530060	0.047059	-11.26377	0.0000
Mean abnormal accruals in past 3 years	ABN-ACCRi,t	-0.684158	0.288355	-2.372624	0.0181
Percentage of executives in management	EX-DIRi,t	-0.131305	0.028468	-4.612339	0.0000
board					
Dual duties of directive manager	DUALi,t	0.274173	0.146887	1.866549	0.0626
Size of management board	BOARDi,t	0.281250	2.124429	0.132389	0.8947
R-squared			0.85	Durbin-Watson	2.43
Adjusted R-squared			0.84	F-probability	0.000

Table 9: Results of Modeling Second Hypothesis based on Second Proxy of Investors' Disagreement in Case of Issuing Good News.

The probability of F-statistic suggests that the whole model is statistically significant. Since coefficient of the dummy variable of bad news for further measurement of asymmetrical verifiability (Table 6) is higher than coefficient of dummy variable of good news for further measurement of asymmetrical verifiability (Table 9) zero hypothesis (H0) will be denied. This implies that negative effect of asymmetric verifiability on investors' different expectations of corporate prospect reduces by release of good news but the effect will reinforce by release of good news.

Table 10: Results of Modelling Second Hypothesis based on Third Proxy of Investors Disagreement under	r
Condition of Releasing Good News.	

Variable		Coeffi-	SD	t-statistic	Proba-
		cient			bility
Intercept	B0	-62.87326	14.32491	-4.389085	0.0000
Measuring asymmetric verifiabil-	Cons _{it}	-0.000230	1.36E-05	-16.90485	0.0000
ity					
Absolute value of abnormal stock	SURPRISEit	-0.018758	0.003817	-4.914967	0.0000
return					
Size of company	SIZEit	0.911040	0.192194	4.740209	0.0000
Leverage	LEVit	0.215931	0.054158	3.987077	0.0001
Book to market value ratio	MBit	-0.153807	0.010969	-14.02169	0.0000
Dummy variable of good news	Goodit	-0.812391	0.124186	-6.541709	0.0000
Dummy variable of good news for	Cons it Goodit	-0.002191	0.000961	-2.280433	0.0230
measuring asymmetric verifiabil-					
ity					
Analyst's distribution of predic-	DISP i,t	7.57E-05	0.000179	0.421999	0.6732
tion					
Number of predictions	FOLLOWi,t	-0.216637	0.061380	-3.529465	0.0005

Table 10: Continue

Variable		Coefficient	SD	t-statistic	Probabil-
					ity
Liquidity index	LIQi,t	0.230864	0.142923	1.615302	0.1069
Mean abnormal accruals in past 3 years	ABN-	0.234831	0.620149	0.378668	0.7051
	ACCRi,t				
Percentage of executives in management	EX-DIRi,t	0.175170	0.050456	3.471763	0.0006
board					
Dual duties of directive manager	DUALi,t	-1.353149	0.528461	-2.560548	0.0108
Size of management board	BOARDi,t	-4.082733	3.449509	-1.183570	0.2372
R-squared			0.71	Durbin-Watson	1.79
Adjusted R-squared			0.63	F-probability	0.000

The probability of F-statistic suggests that the whole model is statistically significant. Since coefficient of the dummy variable of bad news for further measurement of asymmetrical verifiability (Table 6) is higher than coefficient of dummy variable of good news for further measurement of asymmetrical verifiability (Table 9) the zero hypothesis (H0) will be denied. This implies that negative effect of asymmetric verifiability on investors' different expectations of corporate prospect reduces by release of good news but the effect will reinforce by release of good news.

7 Discussion and Conclusion

This study intends to determine the effect of asymmetrical verifiability on different expectation of investors from corporate prospect. The obtained results are supported by evidence of theoretical framework of the study as well as relevant financial literature. Therefore, the first hypothesis suggesting that "asymmetrical verifiability contributes to investors' different expectation of corporate prospect" is denied. Armstrong et al. [3] in "Effect of conservative reporting on investor disagreement" studied if conditional conservatism of company influences investors' disagreement of dates of notifying dividend or not. The findings suggest that a high percentage of institutional investors' ownership and a higher level of commitment to conservatism contribute to second case. This matches with results of present study. Based on tests of second hypothesis, one may conclude that asymmetric verifiability influences investors' different expectations of corporate prospect significantly. Based on negative coefficients of the variable of asymmetric verifiability, an inverse association between asymmetric verifiability and investors' different expectations of corporate prospect can be inferred. In addition, negative association between asymmetric verifiability (conservatism) and investors' different expectations is reduced by distribution of good news but the association increases as bad news is released. Basu [7] in "The conservatism principles and asymmetric timeliness of earnings" addressed the same subject. In conservative accounting, bad news influences earnings at higher rate but the effect cannot be sustainable. In addition, good news requires more time to be reflected in earnings but reflection of good news in future will have more sustainability. These findings are relatively supported by results of present study. In sum, conservatism causes good news to be inclined downward or be published with delay. The effect adds to undesirable consequences of information and disagreements between investors. However, there are numerous reasons for paradoxical effect of conservatism on good news which should be addressed. As Guay and Verrecchia [13] argued, managers are motivated to release good news through other earning reports (e.g. release of news and predictions). Limitations constitute essential part of every study

because the same limitations provide the conditions for further studies. This study is not an exception to this principle. There are limitations to process of conducting a study. One of the limitations is lack of control of some factors affecting results of present study (e.g. effect of certain variables such as economic factors, political conditions, global economic conditions and regulations) which are beyond researchers' reach and which might influence the associations. Another limitation is non-adjustment of items of financial statements due to inflation which might affect the results of study. Finally, annual adjustments and some conditional paragraphs in accounting report (e.g. factors affecting measurement and identification of financial events) might influence the results of present study. However, none of above limitations disrupt the research result and the study still has suitable internal and external validity. It is recommended that future studies address the effect of asymmetrical verifiability on investors' different expectations of corporate prospect and compare the association in different industries. Since no comprehensive study on the subject has been conducted domestically, it is recommended to conduct this study in longer term. In addition, effect of financial and non-financial variables on investors' different expectations of corporate prospect could be studied through other methods such as profit, neural network and multi-factor analysis.

References

- [1] Abderrazak, D. Bacha, S., Investor emotional biases and trading volume's asymmetric response: A non-linear ARDL approach tested in S&P500 stock market, Journal of Financial Economics.2016, 5(1), P.21-39. Doi:10.1080/23322039.2016.1274225.
- [2] Agah, M., Malekpoorb, H., Investigating the Effect of Financial Constraints and Different Levels of Agency Cost on Investment Efficiency, Advances in Mathematical Finance and Applications, 2017, 2(4), P.31-47. Doi: 10.22034/amfa.2017.536264.
- [3] Armstrong, C.S., Guay. W. R, Weber. J. P., *The role of information and financial reporting in corporate gov*ernance and debt contracting, Journal of Accounting and Economics, 2010, **50** (2-3), P.179-234. Doi:10.101 6/j.jacceco.2010.10.001.
- [4] Atiase. R., Dontoh, A, Gift, M. J., Differences in prior beliefs, differential interpretation and the consensus effect of quarterly earnings signals and trading volume. Journal of Accounting, 2016, 31(4), P.483–514. Doi: 10.1177/0148558X15623416.
- [5] Balakrishnan, K., Watts, R, Zuo, L., The effect of accounting conservatism on corporate investment during global financial crisis, 2016, 43(5-6), P. 513–542. Doi: 10.1111/jbfa.12206.
- [6] Bamber. L., S, Cheon. Y. S., *Differential price and volume reactions to accounting earnings announcements*, The Accounting Review, 1995, **70**(3), P. 417-441.
- [7] Basu, S., *The conservatism principle and the asymmetric timeliness of earnings*," Journal of Accounting and Economics, 1997, **24**(1), P. 3–37. Doi: /10.1016/S0165-4101(97)00014-1.
- [8] Biranvand, M., Hematfar, M., Effect of conditional conservative reporting on relevance of value of accounting information, First National Conference of Stance of Management and Accounting in Modern Business World, Economics and Culture, Islamic Azad University Press, 2013, 395, P.32-43. Doi: 20142317/element-31195.

Vol. 4, Issue 4, (2019)

- [9] Davalu, M., *Excessive pricing, Lack of transparency and falling stock prices*. Financial Management Perspective, 2017, 17, P.87-111.
- [10] D'Augusta, C., Redigologo. G., Do managers use voluntary disclosure to explain the earnings effects of accounting conservatism? The role of bundled forecasts, 2015. Doi :10.2139/ssrn.2670745.
- [11] Dechow, P., Ge. W, Schrand, C., Understanding earnings quality: A review of proxies, their determinants and their consequences, Journal of Accounting and Economics, 2010, **50**, P.344-401. Doi:10.1016/j.jacceco.2010.09.001.
- [12] Derakhshandeh, S. H, Ahmadi, S. A. *Evaluation of role of investors' beliefs in price direction and trading volume in capital market*, Journal of Financial Knowledge in Analysis of Securities, 2017, **4** (10), P. 51-63.
- [13] Guay. W, Verrechia, R. E., Conservative disclosure. Working paper, Waharton School of Business, University of Pennsylvania.2007. Doi: 10.2139/ssrn.995562.

[14] Izadinia, N., Ramsheh, M. *The role of stock trading on liquidity of stock in Tehran Stock Exchange*, Journal of Accounting advances, 2011, **1** (3), P.1-27. Doi: 10.22099/jaa.2011.3387.

[15] Jokar, H., Shamsaddini, K., Daneshi, V., *Investigating the Effect of Investors' Behavior and Management on the Stock Returns*: Evidence from Iran. Advances in Mathematical Finance and Applications, 2018, 3(3), P. 41-52 Doi: 10.22034/amfa.2018.544948

[16] Kordestani, G., Amirbaigi-langarodi, H., *Conservatism in financial reporting: Association of lack of concurrence of earning and market to book value ratio as two criteria for evaluation of conservatism*, Journal of Accounting Studies and Auditing ,2008, **15**(52), P.89-106.

- [17] Mosavi, S. M., Aghababai, F., *The effect of Overconfidence on Investors Behaviors: Evidences from Tehran Stock Exchange*, Scientific Research Quarterly of financial Knowledge of Analysis of Securities, 2017, 10(34), P.25-37.
- [18] Peng. E., Yan. E, Yan. M., Accounting accruals, heterogeneous investor beliefs and stock returns, Journal of Financial Stability, 2016, 24 (c), P.88-103.Doi:10.1016], /j.jfs.2016.04.011.
- [19] Pourzamani, Z., Mansoor, F., *Effect of disclosure quality, conservatism and their mutual effect on capital cost of typical stocks*, Journal of Financial Accounting Studies, 2015,6(7), P.85-102.
- [20] Rai, R., Islami Bidgoli, G., Mirzabiati, M., Valuation of stock and behavioral heterogeneity of shareholders in Tehran Stock Exchange, Journal of Accounting Knowledge, 2011, 2(5), P.103-126. Doi: 10.22051/jera. 2015.1889.
- [21] Rostami, M. R., Baikzadeh, L., Azhdari, F., Test of pricing capital assets by presuming heterogeneous information in Tehran Stock Exchange, Journal of Financial Engineering and Management of Securities, 2016, 7 (27), P. 71-86.
- [22] Saqafi, A, Jamalianpur, M., *The significance of phenomenon of classification change in earning management*. Journal of Experience of Financial Accounting, 2018, **14** (57), P. 1-23. Doi: 10.22054/qjma.2018.8911.

[23] Young, A., *Capital market frictions and conservative reporting: Evidence from short selling constraints*. Financial Research Letters, 2016, **17**, P. 227-234.Doi: 10.1016/j.frl.2016.03.016.