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The Relationship between Managements' Forecasted EPS and Risk in the Companies Listed in Tehran Stock Exchange

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Abstract *Many of the changes in the value and risk of the companies at the capital market are affected by different and diverse data which are presented to the market by the companies. This paper attempts to examine the risk reaction to the publication of the forecasted profit by the management. The statistics population for this study consists of all companies listed in Tehran Stock Exchange whose related data were available for a period of six years, from 2007 to 2012. This is an implicational and quantitative study intending to test the proposed hypotheses by employing the Multiple Regression method. The research hypotheses have been developed based on the existence of the relationships among three dimensions of the forecasted profit including precision, validity and frequency whit two proxies of risk naming systematic and non-systematic risk. The research results indicated an inverse relationship between validity and frequency of forecasting profits whit non-systematic risk. However no significant relationship could be observed between all dimensions of forecasting profits by the management and the systematic risk.*

Key words Precision, frequency and validity of managements' forecasted EPS, systematic risk, unsystematic risk

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1. Introduction

The forecasts help the investors improve the process of their decision making and reduce their decision risks. They are interested in estimating the future benefits of their investment so that they can make a judgment about receiving the future cash profits as well as the value of their Shares. Beavers (1968) states that forecast can be made without decision but, decisions cannot be taken without forecasting. Having access or not to the data regarding to the companies and their stocks may affect the overall risk of the company. The data risk will decrease and the investors will act more confidently in their appraisal of the future cash flows provided that management as an informed person delineates the future of the company by forecasting the earning per share (EPS) for the stockholders.

Since the logical investors seek to maximize their return at an acceptable level of risk they need some criteria to predict their investment performance. There are some advanced methods for predicting stokes' performance. The methods of analyzing and predicting the performance of the companies fall into two technical and fundamental groups. In technical analysis just the price graphs, the volume of transactions, and the calculated prices are considered, whereas in the fundamental analysis the internal data of the company (such as EPS, the financial ratios, the development plans, and so on) and the external data of the company (like exports and imports, customs tariffs, the inflation rate, and so on) are employed. The technical methods are not very efficient in the capital market of Iran due to the restrictions such as the low volume of the transactions and the constraints of basis volume (Raee and Saeedi, 2004). So it may be inferred that the fundamental methods are more appropriate to analyzing the companies' performance particularly in the long term run. The EPS and its prediction as a fundamental analysis of a company can play a crucial role in forming the investors' opinions about their expected return. The relationship between forecasted EPS by the management and the company risk is examined in this study. It is expected that the

dissemination of these forecasts will decrease the total risk of the company and increase its market value. Therefore, the principle research question of the study can be rephrased as: Dose the forecast of EPS by the management affects the risk of the company? In other words, is there a significant relationship between the prediction of profit and the company risk?

In the rest of this paper, first the theoretical issues and then related literature and previous studies are reviewed. Then after, the research methodology will be elaborated and research hypothesis will be developed. In the following section, the collected data will be summarized, analyzed and the hypotheses will be tested. Finally, the research findings will be summed up and concluded and the research contributions, suggestions, and limitations are pointed out.

2. Theoretical background

Forecasting plays a significant role in making economic decisions. In an economic enterprise investors, creditors, managers, and other users of the financial statement rely on their own or others predictions. As most of the users of the financial statements cannot directly access the financial information, they have to depend upon the predictions provided by the management. Therefore, the Stock Exchange Organization of Iran forced the companies listed in Tehran Stock Exchange to predict their future profits as forecasted EPS.

The importance of the predicted profit depends on the extent of its deviation from the real amount. The less the deviation means that the prediction is more precise. Studies show that the financial market considerably appreciates the estimations that come true as it negatively reacts to the non-precise forecasts (Rees, 2007). When the real EPS overtakes the forecasted one, the market views it optimistically and interprets it as a good news, whereas when the real profit is lower than what is predicted, the company's value and credit is lessen (Payne, 2008).

During the recent decades especially after 1960 and start of the empirical studies some researchers such as Ball and Brown (1968) could rapidly initiate and evolve their theoretical foundations on the basis of positivism. One of the aims of accounting and preparing the financial statements is to provide the useful information to be employed in decision making. One of the important dimensions of that usefulness is the ability of forecasting the items of the financial statements.

The users of the financial statements have long been interested in the prediction of accounting profit and its variations as one of the effective factors in making economic decisions. The investors are in need of the useful data in order to make proper and accurate decisions. Among all kind of the information those pertaining to the EPS and predicted EPS represent are considered important and relevant indicators in the views of many users who tend to employ them in decision making. The forecasted EPS plays an important role in assessing the companies and it is used as a criterion for companies' performance measurement. This importance results from the exploitation of the profit in the appraising models of stocks (the supposed relationship between the profit and the cash flows), help to improve the capital market efficiency (the assumed linkage between the profit fluctuations and the price variations of the stocks), the assessment of payment potential (loans, interests and other obligations) organization's and management's performance measurement, the selection of accounting methods and the use of profit predictions in discussing the profit facilitation for the management decision making as well as the accounting financial and economic researches (Alavi, *et al.* 2006).

The next theoretical issue related to the topic of this study is risk. Generally speaking, risk consists of the danger which occurs due to uncertainties, so the more uncertainty means the greater risk (Raee *et al.,* 2004). Galitz sees risk as any kind of volatility in all kinds of income (1996). This definition clarifies the matter that the future probable changes for a particular index are risk, no matter it is loss or income.

Hary Markowitz introduced the numerical index of the risk for the first time based on the quantitative definition. He defined the risk as the standard deviation of the multiple periods for a variable. Beaver et.al (1968) has divided the risk types into three general categories:

1. Financial Risk: the possibility of losses which results from the financial structure and is measured by the financial leverage and size of the company,

2. Commercial Risk; is derived from trading, earning and working in a particular industry at a particular setting, and.

3. Systematic Risk or Beta Risk indicates the sensitivity of fluctuations in the securities return in exchange for the fluctuations in portfolio return of the market. It is obtained from the covariance of securities return (risky assets) with the market portfolio yield divided by the variance of the portfolio return.

The modern Investment Analysts divide the risk resources which lead to the change and dispersion of the return into two groups .The first group consist of the risks which have the general nature such as market risk or the fluctuation risk of the interest rate, whereas, the second group refers to the risks which the particular securities contain the financial and commercial risks. There exists a reasonable procedure for the division of the general risks its components and the distinction between the general parts (the market) and the specific parts (the particular stocks). The modern analysts call them systematic and unsystematic risks.

The systematic risk which cannot be omitted from the total risk of the whole valuable stocks is created because there are factors which affect the risk is rooted in the factors such as the changes in the economy, political and social settings, the interest rate, the consumers purchasing power and the general conditions of the market (Hejazi, 2007). The unsystematic risk is not associated with the changeability of the market and it is limited to the particular stocks.

This kind of risk depends on the causes such as trading risk, financial risk and liquidity risk. The following section briefly reviews the previous studies pertaining to the subject of this paper.

3. Literature Review

In 1960s the accounting studies were directed toward the positivisms. These theories require the underlying assumptions of behavioral and economical sciences explanations and forecasts. This branch of research concerns with the accounting investigations which cope with examining the relationship between the prices and accounting data. Cragg and Malkiel (1968) carried out one of the oldest studies about the profit forecast. They compared and contrasted the precision of the analysts' forecasts with the accuracy of the forecasts resulted from the time series models. They concluded that the analysts' forecasts were more accurate than forecasts of the time series models.

Ball and Brown (1968) are the first ones who studied the informational content of the income. Beaver (1968) also investigated the aforementioned concept and found that income declaration causes abnormal changes in the stock prices. Elton and Gruber (1972) also compared the precision of the analysts' forecasts with the accuracy of time series models' forecasts. They concluded that the forecasts of the time series models more accurate than analysts' forecasts. Their results were contrary to the findings of Cragg and Malkiel (1968). Richard (1977) made a comparison of the error in the analysts' forecasts with that of the time series models for 92 firms. He obtained the forecast errors from difference of the forecasted and real profits and then concluded that the forecast errors of the analysts was 14.8 percent less than that of the time series models. Ruland (1978) also compared the managers' forecasts with those of the analysts and time series models from 1964 to 1973 and concluded that the managers' forecasts were more accurate than that of the analysts, yet the difference was not so significant. Furthermore, if the analysts forecast were announced before the managers it would be of less accuracy than it were declared after the managers' forecasts. The comparison of the two forecasts with the time series models indicated that the analysts forecast was not superior to the time series models when it was declared before the managers' forecasts.

Baginski and Hassel (1997) tested the correlation between the magnitude (size) and the accuracy of the managers' forecasts in a study. They argued that the large companies tended to have the access to the data with low prices .The data allow them to suggest a better forecast. Thus they believed that there is a direct relationship between the company size and the accuracy of the management forecast.

Hartnett and Romcke (2000) supposed that there is an inverse relationship between the auditors' reputation and the error of the management's forecast. They reasoned that the large institutes of auditing help the managers to provide better forecasts so that the forecast error becomes less and less. They also raised the hypothesis that the complexity of the industry in which the company operates, significantly affects the forecast risk and the accuracy of the management forecast might decrease. They also found that

the companies which were active in one field made lest forecast errors in comparison to the corporations which worked on diverse fields.

Vivian (2009) surveyed a large sample of companies from 1996 to 2006 so as to obtain a significant inverse relationship between the accuracy and the error of the management forecast .The relationship tended to be weaker for the short term temporal horizon and stronger for the long term temporal horizon. Hutagaol and siauw (2009) assessed the factors effective in the error of profit forecast and pricing the first issuance of the public stock exchanges in a sample of 124 stocks in Indonesian Stock Exchange from 1997 to 2005. They examined the factors of the temporal interval in forecasting the size of the company, the quality of auditing, the industry type, and the activity levels. They concluded that the temporal interval of forecasting was related to the forecast error, while the company size had an inverse significant relationship with the forecast error of profit.

Several studies have been carried out pertaining to the profit forecast in Iran. Mashayekh and shahrokhi (2007) examined in the managers accuracy of the profit forecast and its determinants. Their project consisted of 639 observations where they utilized the method of mean differences to appraise the forecasts of 279 firms during 2002.The findings of their study indicate that there exists a significant difference between the managers forecast error and the forecast error based on the random step model. Furthermore, the comparison of the difference between the means of two models is expressive of higher precision in the managers forecast than the forecast in terms of the random step model.

Sabet (2005) surveyed the effects of the five factors including the firm size, the extent of the financial crisis, the growth rate, the external financing, and the control of prices in the upon the management's bias in profit forecasting. The finding of his research demonstrated that on average the profit forecasts of the firms were made optimistically and the external financing could effect on the profit forecast.

Akbari (2008) has invested the variables affecting the credits of the profit forecasts by the management in the period of 1996 to 2007. The results of his enquiry reveal that first of all the announcement of the negative news (the predicted profit less than the past) leads to more reaction in the price of the stocks than that of the positive news. In other words the range of the credit and trust in negative news is greater than the positive news in the viewpoint of the market participants

Jahankhani and Safarian (2003) investigated the reaction of the stock market to the declaration of the forecasted EPS in Tehran Stock Exchange and found out that the forecasted EPS has informational content and lead to the change of prices and volumes of the stock transactions incurred in the firms listed in Tehran Stock Exchange. Kordestani and Bagheri (2009) used two method of cross-sectional and panel data collection to evaluate the relationship of the economic value added and cash increase with the error of the profit forecast. They also found a negative association between the error of profit forecast and the operating income. Malekian *et al.* (2010) conducted a research entitled "the factors affecting the precision of the forecasted profit by the companies." The results of their study displayed a negative correlation between the forecast period, the financial gear, and the company age with the forecast precision.

Azad and Khaleghimoghaddam (2004) reviewed the informational content of the profit forecast in 58 manufacturing corporation in Tehran Stock Exchange and 606 reports of earnings in the period of 1997 to 2002. They confirmed a significant relationship between the forecasted profit and real ones. They also found a significant correlation between the predicted earnings by the companies and the stock returns.

Ashtab (2010) investigated the relationship between the error of the earnings forecast and uncommon return of the stocks in the newly listed companies. The investigation results were showed a positive correlation between the two variables and asserted the informational content of earnings forecast.

Alinaghian (2010) assessed the relationship between the error of the earnings forecast and the business and financial risks in the companies listed in Tehran Stock Exchange. She studied the unsystematic risk by two risk criteria, namely business risk and financial. The financial risk was measured by three criteria, the leverage ratio, the current ratio, and total assets. The results of the enquiry confirmed the correlation between the error of the earning forecast and tow variables of the leverage ratio and total assets. However, the association of the forecast error with the current ratio could not be confirmed.

The brief review of the empirical investigations regarding the area of this study shows that still many aspects of the issue need much more investigation. As much as we studied, no study could be found that has systematically investigated the correlation between the earning forecast and the risk of the companies.

The research gap in this field is more noticeable in the capital market of Iran. Although Alinaghian (2010) has studied the relationship between the error of the profit forecast and the financial risk, it seems that categorizing the earnings forecast into frequency, precision, and credit of the forecast on one hand and itemizing the risk into systematic and unsystematic components on the other hand can open a better horizon for the research in this area and may give a better insights to the interested users.

4. Research Methodology

This is an applied research in terms of the purpose of the study, so a deductive approach is used to test the proposed relationships between the variables. The research population consists of all companies which have been active in Tehran Stock Exchange during 2007 to 2012. The population has been filtered based on the following characteristics:

1. They ought to be listed in Tehran Stock Exchange from the onset of 2007.
2. Their fiscal year should end at the end of the Iranian calenderer year.
3. They should not be bank or financial institution, or insurance company.
4. Their audited financial statements should be available.

Employing the above mentioned criteria, left us 133 companies that needed data were collected from their documents.

4.1. Hypotheses Development

The empirical evidences indicate that the variations or changes in forecasting the profit have affected the company return and risk during the fiscal year. The companies also take different policy measures in forecasting the issued earnings. Graham *et al.* (2009) found that those companies which obtained the predetermined and expected profits more probably have had higher frequency of forecasting earnings. The frequency of profit forecasts results from the managers revising their previous forecasts. It also causes the managers send to the investors the data and information they have currently gathered with regard to future functions of the company. That is why the frequency of forecasts provides us with both the informational content and their being on time. Consequently, it will influence the investors' responses to the published forecasts and stimulate their decisions for their investments.

Kim and Verchia (2009) pointed out when the precision of the publicly disseminated data was improved the liquidity of the stocks would increase. They proposed that by complete disclosure the companies could potentially benefited in the capital market. Easly and Ohare (2004) found that the firms are decreasing their cost of capital by publishing more precise information. The results of their study showed that the capital market positively reacts to the precise information and they could get their needed capital more easily and less expensive. So it is expected that the forecast precision would influence the investors' reaction and consequently the risk should be decreased.

Managers may have various motivations for disseminating their profit forecast and these motivations affect the validity and reliability of the data, however only the valid forecasts would decrease the uncertainties regarding the companies' future perspective and resource allocations in the capital market. Rougers and Staken (2005) showed that investors' reactions to the currently disseminated data depend on the validity of the previous forecasts. Graham *et al.* (2005) believe that the arbitrary and more valid forecasted discloser will assist the companies to reduce their investing risks.

Rougers and Staken (2005) demonstrated that the investors adjusted their appraisal in terms of the validity of the disseminated forecasts. In addition, those companies which sought to disseminate the deceiving forecasts might encounter with undesired reactions in the capital market. On the other hand, it is anticipated that the companies which publish more valid forecasts may benefit in the capital market.

Thus and based on aforementioned explanations the research hypotheses are proposed as follows. The hypotheses are divided into two main hypotheses based on systematic and unsystematic risks.

H1. There is a significant inverse relationship between the management forecasted EPS and the company systematic risk.

This hypothesis could and should be divided into three sub-hypotheses as below:

H1-1. There is a significant inverse relationship between the frequencies of management forecasted EPS and the company systematic risk.

H1-2. There is a significant inverse relationship between the precision of management forecasted EPS and the company systematic risk.

H1-3. There is a significant inverse relationship between the validity of the management forecasted EPS and the company systematic risk.

H2. There is a significant negative relationship between the management forecasted EPS and the company unsystematic risk.

This hypothesis also could and should be divided into three sub-hypotheses as below:

H2-1. There is a significant inverse relationship between the frequencies of management forecasted EPS and the company unsystematic risk.

H2-2. There is a significant inverse relationship between the precision of management forecasted EPS and the company unsystematic risk.

H2-3. There is a significant inverse relationship between the validity of the management forecasted EPS and the company unsystematic risk.

In the next section the variables of this study is defined and the methods to measuring them are explained.

4.2. Variable Measurements

The research variables are defined and elaborated into three categories as independent, dependent, and control variables.

Dependent Variables

Systematic and unsystematic risks are dependent variables of this research. They will be operationalized as follows.

The systematic risk is inherent component of the total risk in the securities which has been caused by the factors that affect the price of the securities and it is measured by β. Any changes in the economic situation, political and social settings, interest rates, consumers' purchase power, and the general conditions of the market are the inevitable sources of the systematic risk (Hejazi, 2007).

The unsystematic risk is a component of the securities' return variations which is not related to the changes in the whole market. This risk is exclusive to the kind and category of the securities and results from the factors such as the commercial, financial, and liquidity risks (Alinaghian, 2010).

Independent Variables

Frequency, precision, and validity of the managements' forecasted EPS are independent variables of this research and measured as follows.

The frequency of the forecasts is the total number of forecasts and revisions made by the management from beginning to the end of the financial period (Grahum et al.2009).

The precision of the forecast is measured by the natural logarithm of the squared difference of the forecasted EPS and the actual EPS divided by the squared forecasted EPS. The smaller results mean the higher precision (Gounopoulos, 2004).

The Validity of forecast is the extent of compatibility of the forecasted EPS with the actual EPS. In other words, the differences between the forecasted EPS and the actual EPS of the previous year is the indicator of the managements forecast validity (Stoken, 2000)

Control Variables

Control variables in this research are size, financial leverage, company growth, and the ROA (return on assets). They are measured as follows.

Size of the company determines the volume and the activity domain of the company .The larger companies commit less risk because they are more in touch with the stakeholders and have better management control systems (Saeedi et.al 2011).

Financial leverage is calculated as: Total Debt divided by Shareholders Equity. *Company Growth* is estimated by the difference of the current and previous years' sales divided by the previous years' sale.

Return on Assets is computed as Operating Income divided by the Total Assets of the company.

4.3. Data analyzing and hypotheses testing

The multiple regressions has been employed to analyze the data in this study and panel data were used in order to assessment the hypotheses.

Before going any further, Chow and Hasman tests have been administered to clarify the procedure for how to use the panel data. In addition the following tests have been employed to control the prerequisites of the accuracy of the regression model:

Kolmogorov-Smirnov Test to determine that the distributions of the dependent variables are normal.

Durbin-Watson Statistics to specify the lack of correlation for the residuals in the regression.

Coefficient of determination (R^2) as a measure to assessing the explanatory power of the model.

Fisher statistics to estimate the goodness of fit and significance of the whole model.

Practically speaking, the collected data were firstly put into Excel to carry out the data screening. Then the statistics software of Eviews8 was employed for advanced data analyzing and hypotheses testing.

Test of the first hypothesis

The first hypothesis is: *There is a significant inverse relationship between the management forecasted EPS and the company systematic risk.* The above main hypothesis was divided into three sub hypotheses in which the independent variable was separated into three components as frequency, precision, and validity.

To test the hypotheses the below model which is borrowed from Rougers and Stoken (2005) is employed.

$$SR_{i,t}=\alpha_1 + \beta_1 F_{i,t} + \beta_2 P_{i,t} \beta_3 V_{i,t} + \beta_4 Size_{i,t} + \beta_5 Lev_{i,t} + \beta_6 Growth_{i,t} + \beta_7 ROA_{i,t} + e_{it} \quad (1)$$

Where:

SR is systematic risk,

F is frequency of Managements' forecasted EPS,

P is precision of Managements' forecasted EPS,

V is validity of Managements' forecasted EPS,

Size is the company size,

Lev is financial leverage,

Growth is company growth,

ROA is return on assets.

Prior to taking any further action, the researchers examined the normalization of the dependent variables. Table 1 exhibits the amount of statistic Kolmogorov-Smirnov test and its significance level. With regard to the significance level obtained from Kolmogorov-Smirnov test, it is possible to accept the null hypothesis and normal distribution of the variables because the significance level is higher than the error level of the test (0.20).Thus the amounts related to the variables follow a distribution close to the normal distribution.

Table 1. Test of variable Normality (Kolmogorov-Smirnov)

Description of parameters	**Variables**	
	Systematic Risk	**Unsystematic Risk**
Number	798	798
Test criterion	0.846	1.094
Significance Level	0.284	0.268

Regarding the results gained from the test of regression model described in Table (2), it is noticeable that the amount of p-value pertaining to fisher statistic (prob f-statistic) is equal to 0.000 and indicates that the model is correct at the confidence level of 95 percent. The adjusted coefficient of determination here (R^2) is equal to 0.39003 and states that approximately 39% of the changes of the dependent variable is explained with the independent variables. It also shows an acceptable level of explanatory power for the regression model. Durbin-Watson statistics (1.99) also indicates that there is no significant inter-correlation between the residuals of the mode as the acceptable statistics are limited to 1.5 to 2.5.

As Table 2 shows, the coefficients of the independent variables for the frequency of managements' forecasted EPS is equal to -0.067 and its significance number (P-value) tends to be 0.196. With regard to the t static and p-value of the variable the results demonstrate the lack of significance in the coefficient at the level of 5 percent error. So, the findings reveal that there is no significant relationship between the frequency of managements' forecasted EPS and the systematic risk. Then, the first sub-hypothesis of the first hypothesis is not confirmed.

Table 2. Results of data analysis for the test of the first hypothesis

Dependent Variable-Systematic Risk				
Variable	Coefficient	Standard Deviation	T statistic	p-value
C	-2.618	1.202	-4.163	0.0000
F	-0.067	0.045	-1.102	0.196
P	-0.053	0.131	-1.236	0.217
V	0.048-	0.117	-1.033	0.342
Size	-1.26	1.04	-4.308	0.0017
Lev	0.917	0.709	4.715	0.0011
Growth	0.736	0.647	5.004	0.0000
ROA	-0.633	0.0973	-5.214	0.0000
Durbin-Watson statistic		1.992		
Prob (F-statistic)		0.000		
Adjusted R-squared		0.39003		

In addition, the coefficient of the independent variable of the precision of managements' forecasted EPS (P) is equal to -0.053 and its P-value (prob) is 0.217. So, based on these statistics we can say there is no significant relationship between the independent and independent variables and the second sub-hypothesis of the first hypothesis is also rejected. Finally, the coefficient of the independent variable for the validity of managements' forecasted EPS (V) is equal to -0.048 and its P-value (prob) computed as 0.342. With regard to t statistic and P-value of the variable the results point out to the lack of significance for the coefficient at 5 percent error level. These findings show that there is no significant relationship between the validity of managements' forecasted EPS (V) and the systematic risk, so the third sub-hypothesis is also rejected. However, the negative sign of the coefficients for all the independent variables show that the relationship is inverse, although not significant.

The Second major Hypothesis

The second hypothesis proposed as: *There is a significant inverse relationship between the management forecasted EPS and the company unsystematic risk.* The above main hypothesis was divided into three sub-hypotheses in which the independent variable was separated into three components as frequency, precision, and validity. The aforementioned regression model is also used to test this hypothesis.

$$USR_{i,t} = \alpha_1 + \beta_1 F_{i,t} + \beta_2 P_{i,t} \beta_3 V_{i,t} + \beta_4 Size_{i,t} + \beta_5 Lev_{i,t} + \beta_6 Growth_{i,t} + \beta_7 ROA_{i,t} + e_{it} \quad (2)$$

Where:
USR is systematic risk,
F is frequency of Managements' forecasted EPS,
P is precision of Managements' forecasted EPS,
V is validity of Managements' forecasted EPS,
Size is the company size,
Lev is financial leverage,
Growth is company growth,
ROA is return on assets.

With regard to the results produced from testing the regression model and described in Table 3, it is seen that the amount of p-value pertaining to F statistic indicates the significance of the whole regression model and equates 0.000. It indicates that the model is significant at the confidence level of 95 percent. The adjusted coefficient of determination (R^2) for the model is 0.37624 and states that approximately 38% changes of the dependent variable can be explicated by the independent variables of the model. This represents an acceptable extent of explanatory power of the regression model. Durbin-Watson statistic is also 1.887 which expresses the lack of inter-correlation between the residuals.

Table 3. Results of data analysis for the test of the second hypothesis

Dependent variable –the unsystematic risk				
Variable	Coefficient	Standard Deviation	T statistic	p-value
C	5.345-	4.163	5.439-	0.0000
F	-0.110	0.365	-4.165	0.0000
P	-0.099	0.340	-3.456	0.001
V	-0.093	0.332	-3.040	0.003
Size	2.436-	1.678	-4.74	0.021
Lev	0.973	0.769	3.82	0.0016
Growth	0.792	0.563	5.411	0.0000
ROA	0.074-	0.325	-5.73	0.0000
Durbin-Watson statistic		1.887		
Prob (F-statistic)		0.000		
Adjusted R-squared		0.37624		

As can be seen in Table 2 the coefficient of the first independent variable, frequency of managements' forecasted EPS (F) is equal to -0.110 and its P-value is 0.000. Considering t statistic and P-value of the variable, the results display at the significance level of 95 percent. These findings show that there is a significant association between the frequency of managements' forecasted EPS (F) and company's unsystematic risk. Therefore, the first sub-hypothesis of the first hypothesis is confirmed.

In addition, the coefficient of the second independent variable, the precision of managements' forecasted EPS (P) is -0.099 and its P-value is 0.001. With regard to t- statistic and P-value of the variable the results represent the significance of the coefficient at 5 percent error level. Based on these findings, the hypothesis of H1-2 which expresses the existence of an inverse and significant relationship between the precision of managements' forecasted EPS (P) and company's unsystematic risk is accepted. In the end, the coefficient of third independent variable, the validity of managements' forecasted EPS (V) is -0.093 and its P-value is -0.003. According to t-statistic and P-value of the variable, the significance of the association at the error level of 5 percent is confirmed. So, it indicates that there is a significant relationship between the validity of managements' forecasted EPS (V) and company's unsystematic risk. Based on above-mentioned analyses it can be summarized that the first hypothesis is rejected, but the second one is confirmed. In the final section, the implications of these findings are discussed.

5. Discussions and Conclusions

The results of hypothesis testing for the first hypotheses and its sub-hypotheses show that although the coefficient between the dependent and independent variables is negative and displays a proper direction, it is so weak that it is not considered to be statistically significant. Thus these hypotheses are rejected. In other words, based on the findings of the research there is no significant correlation between the frequency, precision, and validity of managements' forecasted EPS and the systematic risk.

Although the results of the second and third sub-hypotheses which do not confirm the significant relationship between the precision and validity of managements' forecasted EPS and the systematic risk do not support Yaghishi's findings (2009), it does not seem to be very unreasonable. As it was mentioned

earlier, the systematic risk is related to the general nature of all entities and businesses. If the earnings forecast fails to affect the reduction of this kind of risk seriously, it should not be seem so strange.

Moreover, the nature of economic activities within the countries holding various economic and political conditions is probably able to influence the results of the hypotheses. For instance, the intensive inflationary conditions and the imposed sanctions against the Iranian economy during the past years may be effective in shaping the results of these hypotheses. In fact, many companies have been forced to stop their transactions considerably, therefore their forecasts about the future become subject to errors. When the precision of the forecast comes down, it endangers the validity of the management's forecasted EPS.

The results of test of the second hypotheses and its sub-hypotheses revealed that there is an inverse and significant relationship between various dimensions of management's forecasted EPS and the unsystematic risk. In other words, the frequency, precision and validity of management's forecasted EPS may reduce the unsystematic risk which refers to the special risk of the respective industry or company.

Test results of the second hypothesis support the findings of Botoson and Harris (2000) in this area. They found that the increase in the forecast frequencies could improve the timeliness and informational content of the forecasted EPS. Furthermore, when the information is provided several times, the management will prepare more relevant data for the market. These advantages would decrease the company' risk and future cash flows uncertainties. Graham et al. (2005) also stated that the disclosure of the valid information would reduce the data risk of the company. Izadinia and Aligholian (2010) came to the similar conclusion when they examined the relationship between the precision of the earnings forecasts and the commercial and financial risks. They concluded that the firms which encountered with the higher financial risk would be more probably involved in the troubles of the precision for the earnings forecasts. Companies' whit high degrees of commercial risks could not more likely achieve to their forecasted earnings. During the recent years many investigations have been carried out to investigate the relationship between the effects of risk and the financial and nonfinancial variables, yet no study has been conducted in Iran to examine the relationship between the frequency, precision and validly of managements' forecasted EPS and the risk of the company so far. Besides, the results of this study showed that the distinction between the systematic and unsystematic risk might resulted in different consequences in different economies with regard to the rest of the variables. Thus, the results of this study may be important and attractive for internal and external users of the organizations' information who make economic decisions and assess the continuity of the activities in their corporation with regard to the frequency, precision and validity of the managements forecasted earnings.

It is essential to pay attention to the limitations of this research, as they may also affect the results of the study. Other variables such as the changes in the state regulations, the movement of managers, weaknesses in the budgeting systems, and the selected time period for data collection that may be affected by the trading stages, speculative bubbles, political tensions, or the state decisions about the Stock Exchange are likely to influence the research results. Those variables have not been focused upon because of the restrictions of the time and money in this study. Finally, as an important suggestion to the future studies, it is offered to the future researchers in this field to replicate this study as the results of the first hypothesis is not compatible with previous studies and it is a distinctive finding. The inclusion of the above–mentioned variables in the forthcoming enquiries may open some new horizons in the field of accounting for those who are willing to pursue the future studies in this area.

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