THE RELATIONSHIP BETWEEN THE QUALITY OF MANAGEMENT FORECASTS OF EARNINGS AND QUALITY OF EARNINGS IN LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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Abstract. Investors and financial analysts, regarded profit as one of the main criteria evaluating companies and tend to measure their company's future profitability to hold or sell their shares to make decisions; therefore profits expected, to judge the condition of a company. Considering that accurate predictions and timely, improve decision making by users of accounting reports. The aim of this study was to investigate the relationship between qualities predicts management of earnings and quality of earnings in the company has listed on the Tehran Stock Exchange. 164 companies over the 2010-2014, including the companies listed on the Tehran Stock Exchange have been tested. The findings suggest that there is a significant correlation between the management of earnings prediction accuracy and quality of earnings.

Keywords: accuracy profit forecast, profit forecast accuracy, earnings quality

1 Introduction

In today's world, accounting information systems play very effective role in the turnover of business activity. The majority of accounting information has reflected in financial reports. On the other hand, it has known as the center of the financial reports, essential financial statements. Financial Statements are of all the activities and events relating to a financial period (Harasani, 2010). Among the basic financial statements, profit and loss statements for containing index measure of economic activity, means profit, the focus of the whole range of such portfolios analysts, corporate executives and investors in the world. It is clear that profit status and importance are as an important item in the financial statements. However, focusing on the benefits and features it provides an incentive to manipulate and make a profit. Despite the phenomenon of profit management, which spread over the yearsbut the protests were less and less confront, the concept of "quality of earnings" appeared. Since then it used in the spotlight users of financial information to have better understand the situation of the company and financial decisions. It is also important prediction is that the fundamental element and key decision makers within the organization and outside the organization. Accordingly, the efficiency and effectiveness of each decision depends on the results of events. Thus, effective and efficient decision made based on predictions that its basis is correct. One of these predictions is Prediction profit that should provide logical information, reliable, and should be understandable, and relevant. Time and accurate predictions improved decision making by users of accounting reports.

1.1 Statement of the problem

Assessment of opportunities and risks in business activity and task management supervision involves understanding the nature of business activity, including the potential profitability of profit. Overall, the appeal of studying the current state of a company, the company depends on its potential to generate future income. Now the company is profitable and profitability will continue in the future, it is more attractive than to the company soon reduced the potential profits. In general, it argued that the most important criterion for selecting companies for investment decision making of investors, current and future profitability of the companies; So that investors in different investment strategies, mainly due to elect corporate profits (Naderi, 2006). Investors and financial analysts, profit considered as one of the main criteria and evaluating companies tend to measure future profitability of the company to hold or sell their shares decisions; thus, the profits expected, to judge the condition of a company. Forecasts

earnings per share in investments are of great importance (Mashayekh, 2007). Such information is important as the accounting income and its components when the people take decisions. Calculate the firm's net income affected by the practices and accounting estimates, therefore, there is a possibility of earnings manipulation by management. Accounting profit calculated and organized based on accrual numbers. According to the accrual approaches, the revenue and costs can report the profit. Since the accrual basis necessarily identifying income and costs are not base on receiving and paying money forecasts and estimates used in calculating profit. Therefore, it should note that number when deciding how much could be trusted.Managers are interested in maintaining Profit Increase. Because the rewards are often dependent on the firm's profit. The most important group of shareholders who are users of financial statements, their interests are in search profit information. We are investigating to study the relationship between accuracy and predictability of profit management and quality of earnings. The most important focus of this research is on quality management earnings and quality of earnings.

1.2 Importance and necessity of research

Investment Development on the one hand attracted people investment and lead them to productive sectors of the economy. On the other hand, according to investors, the investments will directed towards industries that profit is more or less risk that ultimately leads to optimal allocation of resources. Directors' authority to act on the application of the principles and compliance and the use of estimates and forecasts are among the factors that affect earnings quality. On the other hand, for reasons such as may be retained in the company, rewards and other factors, the director intentionally or unintentionally portray the situation of the company desired. So corporate profits are reporting under the principles of quality and competent managers, so in this respect the importance of evaluating earnings quality and will provide. It is very important that visitors can also use the survey results to assess the impact of the predict directors and predict on earnings quality (of the money).

1.3 Research purposes

The main objective of this study was to investigate the relationship between the quality of management forecasts of earnings and profits is quality.

Secondary objectives are as follows:

- 1. The relationship between management earnings forecast validity and quality of earnings.
- 2. The relationship between management earnings forecast accuracy and quality of earnings.
- 3. The relationship between management earnings forecast horizon and earnings quality.

1.4 Hypotheses

The main hypothesis:

There is a significant relationship between the quality management forecasts of earnings and quality of earnings. Hypotheses:

- 1. Is there a significant relationship between the prediction validity of earnings management and earnings quality?
- 2. Is there a significant relationship between the management earnings forecast accuracy and earnings quality?
- 3. Is there a significant relationship between the forecast horizon management earnings and earnings quality?

2 Literature of review

Damghani (2013) in their study entitled Strategic earnings announcement, the anticipated timing of management with respect to the results of hypotheses testing viewed that in the first hypothesis, there is a significant inverse relation with the positive news since the announcement of earnings forecasts. Results related to control variables showed a significant correlation between predictions at the time fixed in holidays, and a significant inverse correlation between predictive validity predictions years ago with the announcement of this year's holidays. In relation to the second hypothesis, direct relation between positive news since the announcement of earnings forecasts and stock market existed in working days.

Basiri and Khanmohammadi (2013) in their study to evaluate the sustained growth of profits on stock price reaction to the feature's predictions earnings per share. Their results suggest that the sustained growth of profits on stock price reaction to the predictive characteristics affect earnings per share. In particular, the results showed that the capital market reaction to bad news and forecast earnings per share prediction horizon is different from other companies in companies with sustainable earnings growth.

Darabi and EmamJome (2014) in the study investigate the relationship of ownership structure on the accuracy of their earnings forecasts. The results of tests showed that the first hypothesis (there is a relation between ownership concentration and earnings forecast accuracy) and this hypothesis was confirmed. The second hypothesis (if the ownership of large shareholders are more the greater the accuracy of analyst earnings forecast by) and the third hypothesis (if the ownership of small shareholders' are more, the greater the accuracy of predictions profit-analysis) the second and third hypothesis were rejected.

Choi et al., (2008) showed that while short-term forecasts help investors had better predict short-term profits, these forecasts may help them better predict their future long-term profits. As a result, when the company predicts long-term (whether annual or quarterly), Future earnings response coefficient is higher. In addition, companies offering short-term forecasts predict higher future earnings responsible coefficient than companies without emissions.

Kim and Guiv (2010) assess the quality of their profits and stock returns with macroeconomic variables. They were accruals quality and earnings quality criteria and concluded that the quality of accruals addressing macroeconomic variables change. In fact, firms with low accruals quality, to the shock and macroeconomic developments are particularly vulnerable.

Dhu (2010) investigate the utilization of accruals to predict future earnings paid by management. The results of this study showed that managers generally stable in predicting benefit accruals overestimation addressing. In this study a negative relationship between forecasting errors and accruals managers of companies that profit forecast to a range (i.e., bases his prediction is between two numbers) would presented to; But this overestimation does not exist for companies that provide forecasts in the form of a certain sum.

Lee et al., (2011) showed that earnings management in stressed bankrupt companies with the lowest earnings quality was more opportunistically, While non-stressed non-bankrupt companies with the highest quality profit and stressed non-bankrupt companies with low earnings quality, earnings management more efficient and tend (more work for non-stressed non-bankrupt companies). The results also showed that in predicting future profitability profit is better than the quality of earnings management.

Tattoo (2012), the study examines the relationship between the quality of financial reporting and payment information asymmetry. The results indicate that the increase in earnings quality and financial reporting quality leads to high clarity information environment and reduce information asymmetry associated with the company's shares in the market.

The population, sample and sampling

The study population included 670 companies listed in Tehran Stock Exchange during the years 1389 to 1393 the following sampling, screening and impose restrictions have been selected. First, we started with the first restrictions so that companies were examples of companies that should accept prior to 1388 in exchange; then, these firms should not be financial institutions and banks. So companies other than financial institutions excluded from these companies; then the companies should not loss money.

3 Method of research

The method used in this research is correlation method. Because there is a relationship between the variable of interest and then we also used two methods of descriptive and inferential statistics. Descriptive statistics with reference to the financial data collected and summarized information is then used inferential statistics for hypothesis research.

The method of collecting and analyzing data

The required data collected in the following ways:

Library method: This method employed for data gathering in the field of literature. Therefore, by studying books, articles, thesis and search the Internet sites, the required information was collected.

The collection of required data to test the hypothesis using the new software and websites outcomes of research has done.

Enter data arranged in Excel in the Eviews software, and then descriptive and inferential statistics related to research variables obtained. If our data is not normal, normalization methods used to normalize the data. Inferential statistics can include the mean, variance, standard deviation, coefficient of skewness, kurtosis coefficient, the number of observations, etc. and inferential statistics including significant tests of the model, the significance of individual regression coefficients, correlation and test research hypotheses.

Table (1): how to calculate the variables related to quality management earnings predictions

Variable names	How to calculate variables
The validity of management forecasts	Differences between actual EPS forecast
Accurately predict Management	$\mathbf{y}_{\mathbf{p}}$:The first year earnings forecast x
	y= <u>y p - y o</u> ×100
	y_p y_0 : The real benefits of X according to financial statements
Management forecast horizon	The time interval for predicted earnings per share offered by companies to the financial statements defined in days.

4 Results of testing hypotheses

4.1 Main hypothesis testing and results

The main hypothesis:

There is a significant relationship between the quality management forecasts of earnings and quality of earnings.

Regression models used to prove the original hypothesis would be as follows:

ACCR $_{it}$ = $\beta_0 + \beta_1 MFQ_{it} + \beta_3 Size + \beta_4 Lev + \beta_5 IO + \beta_6 PRO + \mathcal{E} (1)$

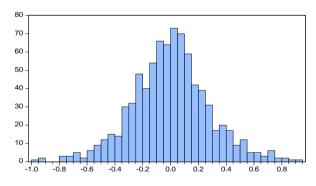
Table ((2)	main	hypothesis	test results

Variable name	Symbol	Coefficient factor	standard deviation	T-statistic	Prob.
Profitability	PRO	0.01	0.00	7.96	0.00
Quality management earnings forecast	MFQ	0.00	0.00	2.03	0.04
Financial Leverage	LEV	0.53	0.07	7.98	0.00
investment opportunities	Ю	0.00	0.00	-2.89	0.00
size of the company	FIRM_SIZE	0.00	0.02	0.14	0.89
Fixed amount	С	0.34	0.10	3.54	0.00
		F statistic			19.9296
		Significance level	[0
Durbin-Watson statistic					2.116116
Hausman test					46.28877
Significance level					0
The coefficient of determination					0.79
Adjusted coefficient of determination					0.74
Statistic F (Chow)					7.814187
Significance level					0

F statistic is less than the accepted level of error (5%) and total regression model is significant. To select the type of execution model (fixed effects and random effects) used the Hausman test, since less than 5%, significance level for this test so fixed effects model will used for regression analysis.Durbin-Watson statistic ranges from 5.1 to 5.2, which indicates there is no correlation between the model errors. Due to the low level of probability (Prob.) and T-statistic of the level of acceptable error for the variable quality of management earnings forecast. So, the test results show that the variable quality of management

forecasts of earnings and quality of earnings was a significant correlation. The results of that study, among other control variables such as variables, Profitability, financial leverage, investment opportunities are significant relationship with the dependent variable earnings quality. The coefficient of determination and adjusted coefficient of determination shows the model variables explained 74 percent of dependent variable.

The main hypothesis remains regression



Series: Standardized Residuals Sample 1389 1393 Observations 820 Mean 2 44e-18 0.001690 Median Maximum 0.948656 Minimum -0.986615 0.278633 Std. Dev. 0.055179 Skewness Kurtosis 3.767000 20.51601 Jarque-Bera Probability 0.000035

Figure (1) histogram distribution

4.2 The first sub-hypothesis test and its results

ACCR $_{it}$ = $\beta_0 + \beta_1 MFA_{it} + \beta_3 Size + \beta_4 Lev + \beta_5 IO + \beta_6 PRO + \epsilon$ (2)

Hypothesis 1)

There is a significantrelationship between the earnings qualityand the accuracy of management earnings forecasts.

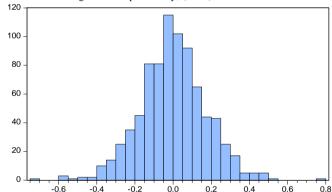
Regression models used to prove the first hypothesis would be as follows:

Variable name	Cumbal	Coefficient factor	standard deviation	T-statistic	Prob.
	Symbol				
Fixed amount	С	-1.10	0.28	-3.86	0.00
Profitability	PRO	0.01	0.00	5.47	0.00
Financial Leverage	LEV	0.21	0.10	2.17	0.03
investment opportunities	Ю	0.00	0.00	0.95	0.34
size of the company	FIRM-SIZE	0.28	0.05	5.77	0.00
The accuracy of management forecasts	MFA	0.00	0.00	1.22	0.22
F statistic					9.025228
	Significance level				
Durbin-Watson statistic					2.119974
Hausman test					
Significance level					0
The coefficient of determination					0.699618
Adjusted coefficient of determination					0.6221
Statistic F (Chow)					19.679775
Significance level				0	

Table (3) first sub-hypothesis test result

F Limer statistical significance (Chow) is less than acceptable error, panel for panel data regressions model selected.F statistic is less than the accepted level of error (5%) and total regression model is significant.To select the type of execution model (fixed effects and random effects) used the Hausman test, since less than 5%, significance level for this test so fixed effects model will used for regression analysis.Durbin-Watson statistic ranges from 5/1 to 5/2, which indicates there is no correlation between the model errors.Due to the high level of probability, (Prob.) T-

statistic of the level of acceptable error for the variable prediction accuracy of the test results show that, there is not profit between the prediction accuracy of management and quality management. The results of that study, the control variables, firm size, financial leverage and profitability are correlated with the dependent variable.



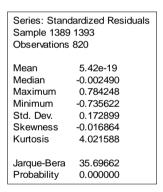


Figure (2) remains the distribution histogram of regression hypothesis

4.3 The second sub-hypothesis test and its results

Hypothesis 2)

Regression models used to prove the original hypothesis would be as follows:

ACCR _{it}=
$$\beta_0 + \beta_1 MFE_{it} + \beta_3 Size + \beta_4 Lev + \beta_5 IO + \beta_6 PRO + \epsilon$$
 (3)

There is a significant relationship between earnings quality and management earnings forecast accuracy.

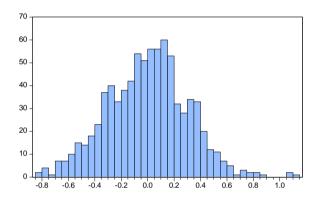
Table (4) second sub-hypothesis test results

Variable name	Symbol	Coefficient factor	standard deviation	T-statistic	Prob.
profitability	PRO	0.01	0.00	8.46	0.00
Financial leverage	LEV	0.54	0.07	8.14	0.00
Investment opportunities	IO	0.00	0.00	-2.92	0.00
Size of the company	FIRM-SIZE	0.00	0.02	0.17	0.87
The accuracy of profit forecast	MFE	0.04	0.02	1.79	0.01
Fixed amount	С	0.33	0.10	3.44	0.00
F statistic				19.71985	

Significance level		
Durbin-Watson statistic		
Hausman test		
Significance level		
The coefficient of determination		
Adjusted coefficient of determination		
Statistic F (Chow)		
Significance level	0	

F Limer statistical significance (Chow) is less than acceptable error, panel for panel data regressions model selected.F statistic is less than the accepted level of error (5%) and total regression model is significant.To select the type of execution model (fixed effects and random effects) used the Hausman test, since less than 5%, significance level for this test so fixed effects model will used for regression analysis.Durbin-Watson statistic ranges from 5/1 to 5/2, which indicates there is no correlation between

the model errors. Due to the low level of probability (Prob.) and T-statistic of acceptable error level for management to predict accurately variable test results show that the prediction accuracy of earnings quality management and significant correlation. The results of that study, among the control variables, firm size, financial leverage and profitability are correlated with the dependent variable.



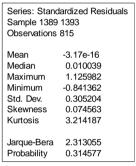


Figure (3) histogram distribution remains the second hypothesis regression

4.4 The third sub-hypothesis test and its results: Hypothesis 3)

There is a significant relationship between earnings quality and management earnings forecast horizon.

Regression models used to prove the original hypothesis would be as follows:

ACCR $_{it}\!\!=\!\!\beta_{0}\!+\!\beta_{1}MFH_{it}+\beta_{3}$ Size + $\beta_{4}Lev$ + $\!\beta_{5}$ IO + β_{6} PRO + ϵ (4)

Table (5) third sub-hypothesis test results

Variable name	Symbol	Coefficient factor	standard deviation	T-statistic	Prob.
profitability	PRO	0.01	0.00	8.66	0.00
Financial leverage	LEV	0.55	0.07	8.24	0.00
Investment opportunities	IO	0.00	0.00	-3.00	0.00
Size of the company	FIRM-SIZE	0.00	0.02	-0.02	0.99
profit forecast horizon	MFH	0.00	0.00	-0.13	0.90
Fixed amount	С	0.36	0.11	3.26	0.00
F statistic					
	Significance level				
		Durbin-Watson stati	stic		0.739492
Hausman test					
Significance level					
The coefficient of determination					0.103475
Adjusted coefficient of determination					0.097969
Statistic F (Chow)					7.900142
	Significance level				

F Limer statistical significance (Chow) is less than acceptable error, panel for panel data regressions model selected.F statistic

is less than the accepted level of error (5%) and total regression model is significant. To select the type of execution model (fixed

effects and random effects) used the Hausman test, since less than 5%, significance level for this test so fixed effects model will used for regression analysis. Durbin-Watson statistic in the range of 5/1 to 5/2 is not to suggest that there is a correlation between the model errors. Due to the high level of probability (Prob.) and T-statistic of the level of acceptable error for the

variable prediction horizon manage test results demonstrated that there is not a profit forecast horizon and quality management. The results of that study, among the variables of control, investment opportunities, financial leverage and profitability are correlated with the dependent variable.

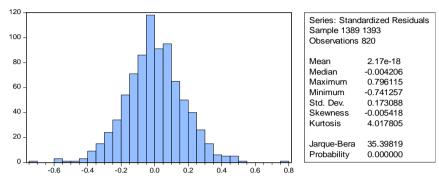


Figure (4) remains the distribution histogram regression third hypothesis

The results of data analysis and hypothesis testing

4.5 Main hypothesis testing results and similar results

There is a significant relationship between earnings quality and predictionsquality management earnings.

Table (6): The main hypothesis and results of similar research

Researcher name, year	research title	Research results
KhaleghiMoghaddam	Information Content of	Research results confirm the relationship between stock returns and earnings
and colleagues (2002)	predict corporate profits	forecast confirmed;So profit is expected to information content. As well as
		other research findings, show that There is a significant difference. The rate of
		abnormal stock returns (17 weeks along with weather forecasts).
existence Research	The effect of quality	There is a significant positive relationship between the quality management
	management earnings	forecasts of earnings and quality of earnings.
	forecast on earnings	
	quality	

$\begin{tabular}{ll} 4.6 The first sub-hypothesis test results and similar Research results \\ \end{tabular}$

First hypothesis: there is a significant relationship between the earnings quality and the validity of management earnings forecasts.

Table (7): results of the first sub-hypothesis and similar studies

Researcher name, year	research title	Research results
Akbari (2008)	The variables affecting the reliability of earnings forecast by management	The results show the relationship between forecast accuracy benefit in the prior period and the size of the company's profit forecast reliability by management approved.
Kato and others (2009)	Study of optional profit forecast by management of companies listed on the exchange in Japan	The results showed that, often the first prediction was actually more profit but forecast earnings during the year, adjusted and reduced. In addition, the average time and information to predicted, But companies with weak earnings forecast and managers with optimistic and weak forecasts have low information load and have low reliability.
Resent research	The effect on earnings quality management earnings forecast accuracy	The accuracy of management earnings forecast and there is no significant relationship between earnings quality.

4.7 The second sub-hypothesis test results and similar Research results

The second sub-hypothesis: there is a significant relationship between earnings quality and management earnings forecast accuracy.

Researcher	research title	Research results
name, year		
Namazi (2007)	To investigate the factors affecting the accuracy of management earnings forecast Companies listed on Tehran Stock Exchange	It Showed that there is a relationship between earnings growth, sales growth, asset growth, profit forecasts in the past, financial leverage, stock prices and profit forecast accuracy; But there is no relationship between the dividends paid and the size of company profit forecast accuracy. The results of multiple regression model showed that there is a relationship between financial leverage to accurately predict revenue growth and profit.
Mknvmy (2009)	Biased investigation and the accuracy of forecasting earnings forecast based on the provisions dealing with the Canadian Co-management	The results show that the forecast handled significantly positive bias (well realistic) than other surveyed had forecast. But about the accuracy of prediction, were not significant
Resent research	The effect on earnings quality management earnings forecast accuracy	There is a significant positive relationship between earnings quality and management earnings forecast accuracy.

The third sub-hypothesis: there is a significant relationship between management earnings forecast horizon and earnings quality.

Table (9): results of the third sub-hypothesis and similar studies

Researcher name, year	research title	Research results
Ravi Lonkani, Firth Michael (2005)	Factors Affecting the earnings forecast error on a company-by newcomer Thailand Stock Exchange	They variables are size, age, income dispersion coefficient and the time horizon is earnings forecast. The results showed that there is a positive relationship among variables such as firm size and time horizon predictions error of prediction profit profitable.
Resent research	Horizon predict effect on earnings quality management earnings	There is no significant relationship between management earnings forecast horizon and earnings quality.

5 Conclusion

The results of the original research hypothesis suggest that there is a direct relationship between the quality management forecasts of earnings and quality of earnings. Therefore, investors in investment companies invest the quality of management forecasts and profits that are higher; this indicates that the share of cash these companies are higher.so, the more accurately predict higher management earnings, higher earnings quality themselves. Therefore, in calculating the predictive accuracy of management earnings expected to and actual earnings for-money has agreed. So companies that accurately predict of profits are high, Profit expected to is not much different from actually happened profit. Therefore, these companies the right place for investment and risk-free.

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