

The Survey of the Relationship between Management Expected Profits and Disclosure Quality Associated with Market Surprise

Roya Darabi¹ and Saeid Gholami²

¹Accounting Department,
South Tehran Branch, Islamic Azad University,
Tehran, Tehran Province, Iran

²Department of Management,
Arak Branch, Islamic Azad University,
Arak, Arak Province, Iran

Copyright © 2013 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: In the present study, we deal with the survey of the relationship between the management forecasted profits and disclosure quality with the market surprise in Tehran's securities market. Since managers, analysts and investors pay a greater attention to the companies' reported profit in a way that they use it to evaluate the company's performance and also because the decision-making for purchasing, maintain, or the sale of the stock shares is of a great importance for the investors, and from among other evidences and information, the capability to forecast the stock return rate has a greater influence on such decision-making, the aim of the present study is the survey of the relationship between the management forecasted profits and the disclosure quality with market surprise in the companies accepted in Tehran's Securities Exchange. To reach the aforementioned objective three hypotheses are being proposed in which it has been dealt with the profit forecast accuracy, getting surprised with the management announced profit and systematic risk with stock price response. To test the study hypotheses, the data from 116 companies accepted in Tehran's Securities Exchange was selected based on the goal-oriented systematic sampling method and the data from the time span from 2001 to 2011 was used to statistically test the hypotheses in the form of multiple-regression and the data panel was used in two softwares, namely SPSS17 and Eviews7.

The obtained results are suggestive of a significant and reverse relationship between the profit forecast accuracy and the stock price response and there is a direct relationship between getting surprised from the management announced profit and the systematic risk with stock price response.

KEYWORDS: Management Predicted Profits, Disclosure Quality, Market Surprise, Behavioral Finance, Accuracy.

1 INTRODUCTION

From among the information that the companies' financial data users pay attention to in their decision making one can refer to the information related to the companies' stock return. In between, any kind of information which is somehow related to the companies and their function and financial status can be effective on the stock return. For this reason, various studies devoted to the changes in the companies' stock return have been undertaken and we have dealt with the stock return behavior in confrontation with the diffusion of the companies' related information by taking advantage of various methods.

It is expected that the accounting profit is part of the data which is being used by the investors to assess the venture-taking and return. Therefore, it can be predicted that accounting profit and specially the difference between predicted net profit and the realized net profit during various periods has information content. Also, the expectation of the price

fluctuations and as a consequence information content such as investors response in comparison to the management forecast and measures have been compared with the forecast undertaken in reality which in the current study will measure the investors responses in a different manner.

Prospective Stock return is seeking for the management forecast and the effect of the undertaken disclosure quality from these forecasts which in the end leads to the investors surprise in case of good news announcement or bad news relative to the confronted conditions. The forecast have turned into wonders for the investors and make them respond excessively to the performed forecasts. Management forecast is based on the company business strategy and the degree of the awareness of all of the performed forecasts and such forecast will lead to abnormal returns. This strong return has been estimated based on the conventional assets pricing and the subtraction of the transaction costs. We also predict that these abnormal returns are stemmed from the good or bad news forecast and finally they are based on the amount of the investors being conservative and their awareness of such activities and the company background in comparison to the announced news related to the predicted profits. These responses, in fact, are the investors surprise in view of the announced news in relation to the management forecasts [1].

2 REVIEW OF LITERATURE AND RESEARCH BACKGROUNDS

Ng, Tuna and Verdi [1] in a study named 'management forecasts, disclosure quality and market efficiency' dealt with the survey of the getting surprised from predicted profits by the management and the systematic risk with stock market responses. The study results are indicative of the direct and significant relationship between management forecast with getting surprised. And, there is a significant and direct relationship between the accuracy of the profit forecast as an indication of the disclosure and the stock price response.

Bloomfield, Libby and Nelson [2] dealt with the survey of the investors' reliance amount on the time series components of the previous profits. Their study results showed that the investors rely excessively on the information obtained from the previous profits in order to do the forecasts and this leads the investors to expected errors in the forecast process.

Best and Best [3] dealt with the survey of the information content of the predicted net profit change statement by making use of the predicted error standardized model and they used Tobin's Q to measure the shareholders' responses. To do so, they used the fifteen-day data regarding the net profit change statement. To make their study more meaningful and significant, they divided the net profit change statement in to two groups: the decrease and increase in the predicted net profit statement. They considered many control variables in their studies such as stock price, assets market value, the amount of the difference in the stock profit statement. They came to this conclusion that the market reacts to the net profit statement and the stock profit change statement possesses information content.

Collins and Kothari [4] dealt with the relationship between systematic risk and the profit response coefficient and they found out that the only reductive factor for the profit response coefficient is the systematic risk (β). Besides, they figured out that the growth opportunities rate factor has a positive effect on the ERC. In fact, their study showed that as ERC makes a swift test of the relationships between price and return feasible which is a latent financial valuation, some of the simultaneous ERC differences can be elaborated by incorporating the systematic risk variables.

Xie [5] , [6] seeking to find new models for the profit forecasts and developing the extant payment models, stated that the income forecasts can suffer from entering personal factors in the forecasts dispersion. He referred to the purging of the personal analysis about the profit forecasts reports. He dealt with the development and the presentation of models to standardize the profit forecasts.

Brid [7] surveyed the importance of accounting information for predicting profit change. He gathered his information from the companies based in the U.S.A., England and Australia. His final model financial proportions which are chosen based on the step-wise regression ratios are as follows:

- Asset output ratios,
- Change in the sales to inventories,
- Change in total assets,
- Change in inventories,
- Change in capital expenditure to total assets,
- Operating profit to sales,

Profit before tax on sales,
 Cash to debts ratio,
 Net profit to sales,
 Equity return.

Beaver, Clarke and Wright [8] studied the amount of market response. They examined a sample of 276 companies for a 10-year period from 1965 to 1974. Comparing unexpected changes in stock abnormal return, these three researchers concluded that the stronger the intensity of the changes in the unexpected net profit, the stronger the response of the securities market. This conclusion is consistent with the application of capital assets pricing pattern and with the method based on the utility of the information from the decision-making point of view. The more changes in the unexpected profit, on average, more investors rethink their attitude towards the positive orientation related to the company's prospective profitability strength.

Management earnings forecasts are increasingly common voluntary public disclosures through which managers can influence price formation in the equity markets. Many papers have examined the short-term returns in response to management forecasts to draw inferences from investors' immediate reaction to the forecasts (e.g., [9], [10], [11], and [12]). Although these papers show that management forecasts are informative, they do not address whether the market under reacts or overreacts to them. We address this question by examining the future long-term abnormal returns following management forecasts. In addition, we study the influence of disclosure quality on the magnitude of these returns.

Brav and Heaton [13], relaxing the assumption those investors has complete information, propose rational structural uncertainty as another explanation for under reaction to news. In their model, rational investors with incomplete information about the structure of the economic environment react in a Bayesian manner. Any under reaction then occurs as a result of mistakes or risk premia that arise from incomplete information. As noted by Brav and Heaton, the similar mathematical properties and empirical predictions of rational structural uncertainty and the behavioral models make it difficult to empirically distinguish which of these models best explain under reactions to news.

Bartov, Radhakrishnan, and Krinsky [14] in a study dealt with the investor sophistication and patterns in stock returns after earnings announcements. Their study shows that the institutional holdings variable is negatively correlated with the observed post-announcement abnormal returns. Their findings also show that traditional proxies for transaction costs (i.e., trading volume, stock price) as well as firm size have little incremental power to explain post-announcement abnormal returns when institutional holdings is an explanatory variable. If institutional ownership is a valid proxy for investor sophistication, these findings suggest that the trading activity of unsophisticated investors underlies the predictability of stock returns after earnings announcements. However, tests evaluating the validity of institutional holdings as a proxy for investor sophistication yield only mixed results.

Rogers [15] studied the disclosure quality and management trading incentive. Using the changes in market liquidity to proxy for disclosure quality, he found that trading incentives are associated with disclosure quality choices. Tests were performed across three disclosure samples: management forecasts, conference calls and press releases. Consistent with a desire to reduce the probability of litigation, he found evidence that managers provide higher quality disclosures before selling shares than they provide in the absence of trading. Consistent with a desire to maintain their information advantage, he found some, albeit weaker, evidence that managers provide lower quality disclosures prior to purchasing shares than they provide in the absence of trading.

Lee [16] in his study 'Market efficiency and accounting research' assumed that the price adjustment process to information is instantaneous and/or trivial. This basic assumption has had an enormous influence on the way we select research topics, design empirical tests, and interpret research findings. In his discussion, he argues that price discovery is a complex process, deserving more attention. He highlights significant problems associated with a naïve view of market efficiency, and advocates a more general model involving noise traders. Finally, he discusses the implications of recent evidence against market efficiency for future capital market research in accounting.

Williams [17] studied the relationship between a prior earnings forecast by management and analyst response to a current management forecast. He investigated whether the accuracy of prior earnings forecast by management serves as an indicator to analysts of the believability of a current management forecast. Regression analysis is used to examine the relationship between the usefulness of a prior forecast by management and analyst response to a current forecast, after controlling for other determinants of believability. The results suggest that management establishes a forecasting "reputation" based on prior earnings forecasts.

3 RESEARCH HYPOTHESIS

According to the theoretical literature and study background the following hypotheses are introduced.

- H1: There is a significant relationship between profit forecast accuracy with the stock price response.
H2: There is a significant relationship between getting surprised from the management announced profit and the stock price response.
H3: There is a significant relationship between systematic risk and the stock price response.

4 RESEARCH METHODOLOGY

The current study method is functional from the objective point of view and it is correlation-descriptive from the type point of view. In the current study in order to test the hypothesis, the correlation analysis method was used.

The study population is all of the existing companies in the Tehran's securities market during the period from 2001-2011, but these companies should be qualified according to the following conditions to be chosen as the statistical sample:

- Companies shouldn't change their fiscal year in the study time period.
- The studied companies shouldn't be engaged in the investing and holding affairs.
- Their fiscal year should end in December.
- The number of the total companies participated in the study, based on the above qualifications was 116.

4.1 RESEARCH VARIABLES

4.1.1 DEPENDENT VARIABLES

Stock price response

In the current study abnormal return on the company stock was considered as the stock price response scale, which is calculated according to the relation one:

$$AR_{i,t} = R_{it} - (R_{mt}) \quad (1)$$

$AR_{i,t}$ is the real stock return on the day t. And it is calculated based on the relation 2:

$$R_{i,t} = \frac{(P_{t+1} - P_t) + D + M + N}{P_t} \quad (2)$$

P_{t+1} = price on the day after t-th day.

P_t = price on the t-th day.

D= net profit.

M= precedence benefits.

N= sharing profit benefits.

$R_{m,t}$ is the expected market return which is calculated based on the relation 3:

$$R_{m,t} = \frac{TEDPIX_{t+1} - TEDPIX_t}{TEDPIX_t} \quad (3)$$

Where TEDPIX is the price index and cash return in Tehran's Stock Exchanges.

4.1.2 INDEPENDENT VARIABLES

Getting surprised from the management announced profit: when the management profit forecast has been announced and it is found different from the investors and financial analysts' expectations, a phenomenon known as 'market surprise' occurs.

In the current study this phenomenon (surprise) is calculated by making use of Ng and Tuna and Verdi [1] method in the form of relation 4:

$$Surprise = \frac{Management\ Forecast - Analyst\ Forecast}{Price} \tag{4}$$

Surprise= getting surprised.

Management forecast= Management forecast from the company profit.

Analyst forecast: the undertaken forecast average from the profit by the management during the recent years.

Price: the stock price at the end of the fiscal year.

Disclosure: Disclosure means that the increase in the profit forecast accuracy is interpreted as the higher disclosure quality and vice versa.

$$Accuracy = -1 * |Prior Earnings - Prior Management Forecast|/Price \tag{5}$$

Prior Earnings = every shares real profit (EPS) related to the previous fiscal year.

Prior management forecast= expected by the management related to the previous fiscal year.

Accuracy: profit forecast accuracy.

Systematic risk: beta is a scale of systematic risk which is calculated by relation 6.

$$\beta = \frac{\delta_{im}}{\delta_m^2} = \frac{E[(R_i - \mu_i)(R_m - \mu_m)]}{E(R_i - \mu_i)^2} \tag{6}$$

In Which R_i , R_m are the company return and market return, respectively, and μ_i , μ_m are the companies returns average and market returns average.

4.1.3 CONTROL VARIABLE

Company size: This is obtained from the total assets logarithm.

To test the study hypothesis, we use regression models (1), (2), and (3), in order:

$$Abret = \beta_0 + \beta_1 Accuracy + \varepsilon \tag{Model 1}$$

$$Abret = \beta_0 + \beta_1 Bad\ News + \beta_2 Good\ News + \beta_3 Bad\ News \times Surprise + \beta_4 Good\ News \times Surprise + \beta_5 Control\ Variable_j + \beta_6 Surprise_{it} + \varepsilon \tag{Model 2}$$

$$Abret = \beta_0 + \beta_1 Risk\ Controls + \beta_2 Surprise + \beta_3 Surprise \times Quality_m + \varepsilon \tag{Model 3}$$

Abret= abnormal return

Bad News= it is the news of profit reduction proportional to the last year and it is equal to one if the surprise is positive/one, it is zero, otherwise.

Good news: it is an increase in the profit proportional to the last year. It is equal to one if the surprise is negative and it is zero, otherwise.

Control variable: company size.

Risk controls: systematic risk.

Accuracy: profit forecast accuracy.

Surprise: getting surprised.

4.2 DATA COLLECTION METHOD

The information required for the current study to test the study hypothesis is collected through a reference to the audited financial statements (existing in the Tehran securities organizations library) of the companies accepted in Tehran securities market and Rahavard Novin software (Iranian software) as well.

The utilized tools to collect the data include observation, statistical tests, information banks, SPSS software, and Excel software. The data related to the theoretical and subjective principles are collected mostly from the libraries and by making use of the books, Persian and English articles.

4.3 EMPIRICAL RESULTS

4.3.1 HYPOTHESIS ANALYSIS AND TEST METHOD

In the current study, the multivariate linear regression model has been used to analyze the data and test the hypotheses and F-value was used to test the significance of the overall model, and T-value was used in every model to assess the significance of the independent variables coefficient. To accept or to reject the hypotheses, decisions has been made in the confidence level of 95%. Also Colmogrof - Smearnov test and Durbin-Watson D - value were used to survey and determine the homogeneity of the experimental data with the statistical distributions and to test the error independence from each other, respectively.

4.3.2 VARIABLES NORMALITY ASSUMPTION

Since, variable normality results in the model residuals normality, it is necessary to control its normality before testing the goodness of the fitness. To test the dependent variable normality we use the Colmogrof - Smearnov test.

Table 1. Colmogrof-Smearnov test (K-S)

Abbreviations	Abret
Number of data	1044
Average	-0.1347
Standard deviation	0.75232
Most deviated modulus	0.101
The most positive deviations	0.101
The most negative deviations	-0.057
Z-value	3.254
Significance level	0

According to table 1, because dependent variable significance level is less than 0.05, H_0 hypothesis is rejected and H_1 hypothesis is accepted. That means the data follow a normal distribution. To normalize the variables, the mathematical conversion (\log^2) is used.

Table 2 surveys the converted variables normality hypothesis.

Table 2. Colmogrof-Smearnov test (converted amount)

Abbreviations	LNABRT
Number of data	1044
Average	-2.4154
Standard deviation	2.5049
The Most deviated modulus	0.081
The most positive deviations	0.052
The most negative deviations	-0.081
Z-value	2.623
Significance level	0.111

According to table 2, because variables significance level is more than 0.05, H_0 hypothesis is accepted and H_1 hypothesis is rejected. In other words, data have normal distribution. Therefore, variables normality assumption is accepted.

4.3.3 THE FIRST HYPOTHESIS TEST RESULTS

H1: there is a significant relationship between the profit forecast accuracy and stock price response.

Table 3 is indicative correlation coefficient, determination coefficient, and Durbin-Watson test between profit forecast accuracy and profit forecast response.

Table 3. Correlation coefficient

Durbin-Watson value	Estimation standard error	offsetting determination coefficient	determination coefficient	Correlation coefficient	model
2.011	1.50931	0.291	0.312	.340 ^a	1

Based on the table 3, Pierson correlation coefficient between the two variables, profit forecast accuracy and stock price response, is equal to 0.340. This figure shows a significant relationship between the two variables, profit forecast accuracy and stock price response, and also the calculated offsetting determination coefficient is 0.291, which is a good number and it offers an appropriate goodness of fitness for stock price response variable by using the profit forecast accuracy and according to table 3 the amount of Durbin-Watson value is 2.011 and this figure shows that the errors are independent from each other and there is no autocorrelation between errors and the regression can be used.

Table 4 shows regression variance analysis for the profit forecast accuracy and the stock price response.

Table 4. Regression variance analysis

Significance level	F-value	Squares mean	Degree of freedom	Total squares	Model	
.000 ^a	5.637	18.587	1	10.587	regression	
		3.297	1037	6529.607	residual	1
			1038	6540.195	total	

Table 4 is indicative of the variance analysis between stock price response as the dependent variable and profit forecast accuracy as the independent variable. Considering the significance level which is less than 5%, the linearity assumption of the relationship between the two variables is confirmed.

Table 5. Regression equation coefficients for independent and control variables

Co linearity Statistics		Significance level	T-value	Standardize coefficient	Not Standardize coefficient		abbreviations	model
Variance inflation factor	tolerance			Beta	The column coefficient standard error B	B		
		0	-30.911		0.078	-2.409	Constant	1
1	1	0	-10.597	-0.44	0.43	-4.557	Accuracy	

In table 5 and in the column B the constant amount and the independent variable coefficient in the regression equation have been introduced and this equation is in the form of relation 7:

$$ABRET_{it} = -2.409 - 4.557 * Accuracy \tag{7}$$

4.3.4 THE SECOND HYPOTHESIS TEST RESULTS

H2: There is a significant relationship between the management announced profit and the stock price response.

Table 6 shows correlation coefficient, determination coefficient and the Durbin-Watson test between getting surprised from the management announced profit and stock price response:

Table 6. Correlation coefficient

Durbin-Watson value	Estimation standard error	offsetting determination coefficient	determination coefficient	Correlation coefficient	model
2.006	1.49184	0.305	0.318	.435 ^a	1

Based on the table 6, Pierson correlation coefficient between the two surprise variables from the management announced profit and stock price response is equal to 0.435. This figure shows a significance relationship between the two surprise variables from the management announced profit and stock price response in the error level of 5%.

Also, the calculated offsetting determination coefficient is 0.305 which is a good figure and it offers an appropriate goodness of fitness for the variable changes by use of getting surprised from the management announced profit and according to table 6 the amount of the Durbin-Watson value is 2.006, and this figure shows that the errors are independent from each other and there is no autocorrelation between errors and the regression can be taken advantage of.

Table 7 shows regression variance analysis for surprised from the management announced profit and stock price response.

Table 7. Regression variance analysis

Significance level	F-value	Squares mean	Degree of freedom	Total squares	Model	
.001 ^a	4.825	29.957	4	119.83	Regression	
		6.209	1034	6420.365	Residual	1
			1038	6540.195	Total	

Table 7 shows the variance analysis between stock price response, as the dependent variable and getting surprised from the management announced profit, as the independent variable and according to the significance level which is below 5%, the linearity assumption between the two variables is confirmed.

Table 8. Regression equation coefficients to the independent and control variable

Co linearity Statistics		Significance level	t-value	Standardize coefficient	Non-Standardize coefficient		abbreviations	model
Variance inflation factor	Tolerance			Beta	The column coefficient standard error B	B		
		0.027	-2.198		0.66	-1.451	Constant	1
1.484	0.674	0.022	2.301	0.086	0.193	0.444	Good news	
1.436	0.696	0.021	2.306	0.085	2.126	4.903	Bad news surprise	
1.024	0.976	0.063	-1.864	-0.058	0.13	-0.241	Control variable	
1.49	0.671	0.018	2.361	0.089	0.646	1.525	surprise	

In table 8 and in column B, constant amount and independent variable coefficient has been introduced in the regression equation, respectively and this equation is in the form of relation 8:

$$ABRet_{it} = -1.451 + .444 * GoodNews + 4.903 * BadNewsSurprise + 1.525 * Surprise \quad (8)$$

4.3.5 THE THIRD HYPOTHESIS TEST RESULTS

H3: there is a significant relationship between systematic risk and stock price response.

Table 9 shows correlation coefficient, determination coefficient and Durbin-Watson test between systematic risk and stock price response.

Table 9. Correlation coefficient

Durbin-Watson value	Estimated standard error	Offset determination coefficient	Determination coefficient	Correlation coefficient	model
1.986	1.50447	0.316	0.349	.497 ^a	1

According to table 9, the Pierson correlation coefficient of the two variables, systematic risk and stock price response, is equal to 0.497. This figure shows a significant relationship between the two variables, systematic risk and stock price response. Also, the calculated offsetting determination coefficient is 0.316, which is a good figure and it offers an appropriate goodness of fitness from the changes of variables for the stock price response by taking advantage of the systematic risk. Based on the table 7, Durbin-Watson value is 1.986 and this figure shows that the errors are independent from each other and there is no autocorrelation between errors and the regression can be used.

Table 10 shows regression variance analysis for the systematic risk and the stock price response.

Table 10. Regression variance analysis

Significance level	F-value	Squares mean	Degree of freedom	Total squares	model	
.001 ^a	4.749	20.291	3	60.873	Regression	1
		4.272	1027	6441.746	Residual	
			1030	6502.62	Total	

Table 10 shows the variance analysis between stock price response variable as the dependent variable and systemic risk as the independent variable and because the significance level is less than 5%, the linearity assumption of the relationship between the two variables has been confirmed.

Table 11. Regression equation coefficient for the control and independent variables

Co linearity statistics		Significance level	t-value	Standardized coefficient	Non- Standardized coefficient		Abbreviations	Model
Variance inflation factor	Tolerance			Beta	Column coefficient standard error B	B		
		0	-30.24		0.082	-2.491	Constant	1
1.002	0.998	0	-4.86	-0.32	0.093	-0.452	Risk control	
1.24	0.309	0	-3.578	-0.325	0.958	-3.428	Surprise	
1.24	0.309	0	-3.979	-0.374	1.128	-4.489	Surprise quality	

In table 11 and in column B, the constant value and the independent variable coefficient are introduced, in order, in the regression equation and this equation takes the following form:

$$ABRet_{it} = -2.491 - .452 * RiskControl - 3.428 * Surprise - 4.489 * SurpriseQouility \quad (9)$$

5 CONCLUSIONS AND DISCUSSIONS

In the first hypothesis test, according to the analysis performed based on the regression and correlation methods we came to this conclusion that there is a positive correlation coefficient between the independent variable(profit forecast accuracy) and dependent variable (stock price response) in the companies accepted in Iran’s securities market and there is a

significant relationship between the accuracy of profit forecast and the stock price response in the companies accepted in Tehran's securities market.

According to the results obtained, there is an inverse relationship between the profit forecast accuracy and the stock price response in the companies accepted in the Tehran's securities market. That means that with an increase in the profit forecast accuracy, there would be a decrease in the response of the stock price and vice versa.

In the second hypothesis test and according to the analysis which has been performed by regression and correlation method, we came to this conclusion that there is a positive correlation between independent variable (getting surprised from the management announced profit) and dependent variable (stock price response) in the companies accepted in Iran's capital market and there is a significant relationship between getting surprised from the management announced profit with the stock price response in the companies accepted in Tehran's securities market, which means that with an increase in the surprise from the management announced profit, the stock price response goes up and vice versa.

In the second hypothesis test, according to the analysis which is performed by the regression and correlation method, we came to this conclusion that there is a positive correlation between independent variable (systematic risk) and the dependent variable (stock price response) in the companies accepted in Iran's capital market and there is a significant relationship between the systematic risk and stock price response in the companies accepted in Tehran's securities market.

According to the results obtained, there is a direct relationship between systematic risk and stock price response in the companies accepted in Tehran's securities market which means that with an increase in the systematic risk, the stock price response increases and vice versa.

REFERENCES

- [1] J. Ng, I. Tuna, R. Verdi, (2012), "Management Forecasts, Disclosure Quality, and Market Efficiency," The Wharton School University of Pennsylvania 1303 Steinberg Hall-Dietrich Hall.
- [2] R. J. Bloomfield, R. Libby, and M. W. Nelson, (2003), "Do Investors Over relies on Old Elements of the Earnings Time Series?" *Contemporary Accounting Research* 20 (1), (spring), pp. 1-31.
- [3] R. J. best, (2002), "Prior information and the market reaction to dividend changes", *Review of Quantitative Finance and Accounting*, pp. 361-376.
- [4] D.W. Collins and S.P. Kothari, (1989), "An Analysis of Inter temporal and Cross-sectional Determinants of Earnings Response Coefficients", *Journal of Accounting and Economics* 18, 49.
- [5] W. Xie, (2008), "A New Measure of Analyst Earnings Forecast Dispersion", Working Paper, University of New Hampshire.
- [6] W. Xie, (2009), "Analyst Earning Forecast Accuracy": A Second Look, University of New Hampshire.
- [7] R. Brid, (2001), "The prediction Earnings Movements Using Accounting Data": An Update and Extension of Ou And Penman, *Journal of Asset Management*, 2, (February).
- [8] W.H. Beaver, R. Clarke, and W. Wright, (1979), "The Association between Unsystematic Security Returns and the Magnitude of the Earnings Forecast Error," *Journal of Accounting Research* (Autumn 1979), pp. 316-340
- [9] B. B. Ajinkya and M. J. Gift, (1984), "Corporate managers' earnings forecasts and symmetrical adjustments of market expectations," *Journal of Accounting Research* 22 (2), pp. 425-444.
- [10] G. Waymire, (1984), "Additional evidence on the information content of management earnings forecast" *Journal of Accounting Research* 22 (2), pp. 703-718.
- [11] R. Jennings, (1987), "Unsystematic security price movements, management earnings forecasts, and revisions in consensus analyst earnings forecasts," *Journal of Accounting Research* 25 (1), pp. 90-110.
- [12] J. L. Rogers and P. C. Stocken, (2005), "Credibility of management forecasts," *The Accounting Review* 80 (4), pp. 1233-1260.
- [13] A. Brav, and J. B. Heaton, (2002), "Competing theories of financial anomalies," *The Review of Financial Studies* 15 (2), pp. 575- 606.
- [14] E. Bartov, S. Radhakrishnan, and I. Krinsky, (2000), "Investor sophistication and patterns in stock returns after earnings announcements," *The Accounting Review* 75, pp. 43-63.
- [15] J. Rogers, (2006), "Disclosure quality and management trading incentives," University of Chicago working paper.
- [16] C. Lee, (2001), "Market efficiency and accounting research: a discussion of 'capital market research in accounting' by S.P. Kothari," *Journal of Accounting and Economics* 31 (1-3), pp. 233-253.
- [17] P. A. Williams, (1996), "The relation between a prior earnings forecast by management and analyst response to a current management forecast," *The Accounting Review* 71 (1), pp. 103-113.