



Research Paper

Investigating the Effect of Successive News of Distributed Profits, Negative Adjustment and Late Announcement of Adjustment on the Market Reaction Process

Mehrdad Roozbahani^a, Hadi Yazdi^b

^bDepartment of Accounting, Faculty of Management, Islamic Azad University, Arak, Iran

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ABSTRACT

In this research, we have tried to investigate the effect of successive news of distributed profits, negative adjustment and late announcement of an adjustment on the market reaction process in Iran. Following the design of the market response evaluation indicators, the transaction information was collected from the Stock Exchange in the five-year period of 2011-2015. The statistical sample consists of 125 companies selected by systematic elimination method and a total of 625 years-firms. To investigate the research hypotheses, linear regression and correlation have been used and for analyzing the data and testing the hypotheses, Eviews software has been used. What is summarized in the overall conclusion of the test of research hypotheses is that the successive news of distributed profits has an effect on the market reaction process; moreover, negative adjustment has a negative impact in the forecast of earnings per share and late announcement of the adjustment of the earnings per share on the market reaction process. Finally, the results indicated that the market's negative reaction to the late negative adjustment of the earnings per share forecasting is not lower than timely negative adjustment of earnings per share forecasting, and the positive reaction of the market to adjust the timely positive or zero forecast of earning per share, compared to adjusting the late positive or zero forecast of earnings per share is also no greater. the results obtained in this study are partly consistent with the documentation referenced in the theoretical framework of the research and financial literature.

1 Introduction

Researches, and have a close relationship with economic development and the stability of financial markets, but its main concept is not new in financial literature. The simultaneity involves the willingness of the stock to move towards the market. Stock returns can change either in the opposite direction of the market or in line with the market. In general, the price simultaneity is the ratio where the return on the market and the industry explains the rate of return on the company. Hogarth & Einhorn [10] showed that when individuals are faced with successive parts of the information, their decisions are predictably influenced by how they process information cognitively. [16] The step-by-

* Corresponding author. Tel.: 09374707008

E-mail address: mehrdadroozbahani201700@gmail.com

step process shows that investors are primarily affected by the latest news, while the process of ending the sequence shows that investors are not only affected by the latest news section, but also influenced also by the initial sections of the news. Based on the basic Belief Adjustment Theory in this research, it will also attempt to examine the cognitive effects of observed processing on individual decision making. Previous empirical research has shown that analysts' predictions of future profits are affected by the relationship between periodic profit and market information [27] hence, having constant news about profit information (for example, the real quarter is less than before), the analysts respond differently to profit news according to the order in which they receive different sections of the news of profit [19]. In this research, we seek to answer the question of whether there is a significant relationship between successive publication of earnings news, negative adjustment, and late announcement of adjustment with the market reaction process.

2 Theoretical Foundations and Development of Hypotheses

Hogarth and Einhorn (1992) stated that the complexity of information depends on the amount of information and how investors are familiar with the information provided. [16] Kalhor (2010) believes that the investor will be optimistic about the future after seeing a pattern of successive positive earnings adjustment, and assumes that good news will continue the announcement of a positive profit adjustment in the future. [21] As a result, some stocks may be worth more than real value, as it is expected that the supply chain adjustment will continue. However, the market is already over-reacting too much to new information. Based on the theoretical foundations, the first hypothesis is presented as follows:

Hypothesis 1: There is a significant relationship between the published successive news about earning with the market reaction process.

It is expected that a company that makes a positive adjustment, its stock price will increase and the company that has a negative adjustment, its stock price will reduce. Johnson et al. (2015) found in a study entitled "How to information trend in the market", the investors' reaction to the profit surprise (real profit below the last quarterly forecast) is conditional on a sign of past profit news (for example, a revision of forecast). [19], [12] stated that the negative reaction of the stock price to the disclosure of bad news is larger than the positive reaction to good news, so the second hypothesis is formulated as follows:

Hypothesis 2: Negative adjustment has a significant relationship in predicting earnings per share with the market reaction process.

Doyle &magilke (2012) found that bad news is usually published after closing the market or on the last weekday. [9] Graham et al. (2005) stated that since there is an undeniable relationship between the manager's interests and the stock price of the company, the manager may try to manage the market response in his own interest by changing the timing of the presentation of financial news. [14] When the manager has good news, he tries to inform the market as soon as possible to benefit from the market's positive reaction, but hides bad news as much as possible to reduce the negative effects of the market. Cullinan, et al. (2012) and Kothari, et al. (2009) argued that companies should publish their financial reports in a timely manner. [6] The market gives more importance to information and makes use of this information more efficiently in decision making. Earlier studies have reported that there is

a relationship between the less-than-expected profit (bad news) and delayed announcement of the news. Bagnoli, et al. (2002) stated that this relationship was well known as a good-early news, and bad-late news story. [3] One of the managers' motivations for late-reporting bad news could be to reduce the negative market reaction. Kotari and Visoki (2009) stated that the market is less responsive to late-breaking news. [21] Based on theoretical foundations, the third to fifth hypotheses are presented as follows:

Hypothesis 3: The late announcement of adjusting the earnings per share forecast has a meaningful relationship with the market reaction process.

Hypothesis 4: The market's negative reaction to late-negative adjust forecasting of the earnings per share has a significant relationship with the timely-negative adjustment of the forecasting the earnings per share.

Hypothesis 5: The positive reaction of the market to the timely-positive or zero adjustment of the forecasting the earnings per share, has a meaningful relation compared to the late-positive or zero adjustment of the forecasting the earnings per share.

3 Research Background

3.1 Foreign Researches

Haw et al. [15] found that industry density influences the ability of investors to predict future earnings. Song [28] stated that the shares of the companies are less in line with the entire market and their risk falling will be less if companies have a superior accounting policy. These results indicated that the cost of collecting specific company data may be reduced to investors if companies are more transparent. Johnson et al. [19] found that the investor's response to the profit surprise (real profit below the last quarterly forecast) is conditional on a sign of past profit news (e.g., revision of forecast). Also, the market response to predictions by consecutive analysts is consistent with the use of an ending sequence process as a result of the primitive effect. Doyle & Magilke [9] found that bad news is usually published after closing the market or on the last weekday. This finding is recognized as an indication of the efforts of managers to hide bad news. Kotari et al. [21] found that the negative reaction of the share price to revealing bad news is larger than the positive reaction to good news. It is implied that corporate executives try to keep the bad news as far as possible from investors, and keep investors informed of good news as soon as possible and even before the official announcement. Fang [11] found that there is an important and negative relationship between prediction accuracy and prediction error.

These findings are consistent with the hypothesis that optimistic forecasts are associated with a lower level of prediction accuracy. It is also stronger for forecasts with a long time horizon. Kato et al. [20] concluded that the first earnings forecast was usually more than real, but declined over the course of the year. Behin [4] stated that the existence of industry-specific auditors in other audit institutions has negatively correlated with the prediction accuracy and has a positive relationship with prediction error. McConomy [23] showed that the audited predictions are significantly less positive siding (optimistic) than the other predictions, but there was no significant relationship about prediction accuracy. Chan, et al. [5] showed that higher (lower) profit quality leads to lower (higher) simultaneity stock prices. These results are based on the principles that high-quality public information can lead to lower cost of private information (information available to stakeholders within the organization), in other

words, the auditor's independence has led to an increase in the quality of the information of the audited financial statements and, consequently, it reduces the information asymmetry. Tuna & Verdi [29] found that, with management change, projected profits do not show significant differences and have a steady trend. Lee, et al. [22] have shown that price volatility can be broken down into two parts of the disruption and the information sector. They break down most of the information section into a data update section and an instability analysis section. Disruption reduces the ability to inform the price, while the ability to inform the price is communicative and informational. Baginski, et al [9] concluded that American companies are likely to predict profits when news is bad, but Canadian companies predict profits when they have good news during the forecast period.

3.2 Internal Researches

Dehghani and Pour Mohammad [8] showed that there is a significant relationship between expected stock return, financial constraints and capital costs on the fluctuations of corporate profit forecast. GolArzi and GarmiAsl [13] stated that the profit forecast for each share of the companies is not highly accurate with the time series of the Box-Jenkins. Also, due to the profound changes in earnings per share, time series prediction methods are not very effective and structured prediction methods should be used. Dulou and Emami [10] showed that there is a direct relationship between price synchronization and liquidity, and the relationship between recent variables with liquidity is direct and reciprocal, and the reverse effect of liquidity and volatility is more affected by non-systematic fluctuations in returns. Foroughi and Aisek [12] found that the market reacted negatively to bad news, but the late announcement was followed by a positive reaction to the market. In addition, there is no difference in market reaction between late and early bad news, but the late announcement of good news faces a positive reaction.

Rezai and Mirzai [25] show that there is a positive relationship between the power of pricing in the product market, the concentration of industry and the market share of the company with the predictability of earnings by management. Jahanshad and Zardukhi [17] found that both negative and negative predictive news reports predict the profit, affecting the cost of corporate equity, so that the negative correction news of the incremental effect and positive adjustment news have a decreasing effect on the cost of capital. There is a normal stock and the effect of the negative adjustment news on the cost of ordinary stock capital is more than positive adjustment news. In addition, the surveys showed that for management downtrend trends, management's advance in publishing negative correction of profit forecasting modifies the effect of declaring genuine interest on the cost of ordinary stock capital. Jalali [18] stated that the announcement of the adjusted profit for all declarations of declarations (positive and negative) and the cases of declarations of positive adjustment on the volume of trading in shares had affected, but declarations of negative modifications on the volume of stock trading affected does not have. The announcement of the adjusted earnings forecast in all three cases (total notifications, positive notification declarations, and notices of negative adjustment) have no effect on the stock price. Mojtahedzadeh and Nazari [24] show that there is a meaningful and positive relationship between predicted yield changes and stock price changes.

Safari and Kordestani [26] show that, based on the quality of profit based on profit sustainability, the market reaction to the increase in corporate profits, contrary to the forecast, is positive and based on the profit quality based on the relation of profit and operating cash flow, market reaction. It is positive that the corporate profitability of the company, according to the forecast, is positive. Also, the

unusual accumulated returns of stocks increase and decrease with the increase (decrease) in cash income and unexpected profit; that is, the market reaction to changes in cash flow and unexpected profit changes is statistically significant and cash benefits provide information about the value of the company.

4 Methodology of Research

This research is correlational in nature and its method based on the purpose is an applied type. Data collection was carried out using library method and by referring to financial statements and explanatory notes and with the software of RaheedNovin and TadbirPardaz; also for statistical analysis, EVIEWS software has been used.

4.1 Statistical Population and Sample Selection

The statistical population is the research of all companies accepted in Tehran Stock Exchange in the period of 2011-2015. The target sample of 125 companies is selected as a sample for testing statistical hypotheses.

4.2 Model and Research Variables

In this research, for the purpose of commenting on each of the research hypotheses, a model is presented that the model used for the first hypothesis is as model (1):

$$CAR = \alpha + \gamma_1 PREV_DBEAT + \gamma_2 ZREV_DBEAT + \gamma_3 NREV_DBEAT + \gamma_4 SURP + \epsilon \tag{1}$$

In order to study the second hypothesis of research, we have used the model (2):

$$CAR = \alpha + \beta_1 BAD + \epsilon \tag{2}$$

In order to investigate the third hypothesis of research, we have used the model (3):

$$CAR = \alpha + \beta_1 Late + \beta_2 \% \Delta EPS + \beta_3 (late * \% \Delta EPS) + \epsilon \tag{3}$$

The fourth hypothesis test is based on the analysis of the difference in the width of the model's origin, to ensure that there is a significant difference between the values of $\alpha + \beta_1 + \beta_2 + \beta_3$ and $\alpha + \beta_2$ from the test coefficients used in the EVIEWS software named the Parent test, so the model (4) is presented:

$$CAR = [\alpha + \beta_1 Late + \beta_2 BAD + \beta_3 (BAD * late)] + [\beta_4 + \beta_5 late + \beta_6 BAD + \beta_7 (BAD * Late)] * \% \Delta EPS + \epsilon \tag{4}$$

In order to examine the fifth hypothesis, it should be noted that the coefficient α in the regression equation (5) reflects the market response to good news timely, and $\alpha + \beta_1$ represents a market response to good late-breaking news. Therefore, the parent test is used to comment on this hypothesis and model (5) is presented:

$$CAR_{it} = [\alpha + \beta_1 Late + \beta_2 BAD + \beta_3 (BAD * Lare)] + [\beta_4 + \beta_5 late + \beta_6 BAD + \beta_7 (BAD * Late)] * \% \Delta EPS + \epsilon \tag{5}$$

CARit: Market Reaction Measurement Index (accumulated daily abnormal returns)

BAD: Negative adjustment, in predicting earnings per share (bad news).

LATE: Late announcement on earnings per share forecast

% Δ EPS: Percentage of adjustment

Late* a Δ EPS: Interest rate adjustment for late earnings per share forecast

BAD* % Δ EPS: The percentage of adjustment for bad news

BAD* LATE * % Δ EPS: The late adjustment rate for bad news

The method of measuring variables is as follows:

4.3 The Dependent Variable

A. Market Reaction Measurement Index (accumulated daily abnormal returns):

The abnormal daily returns are calculated based on the market adjusted model (model 6). In this model, it is assumed that the return on the market indicates the expected return on the stock of the companies at each time period and the risk of the share equivalent to market risk. Therefore, the difference between the real returns of i and market returns in the period t represents an abnormal return. The results of Ghaemi and Masoumi's research have shown that the period of impact of the announcement of the earnings per share of the expected returns on the average share price is about 4 days (including the day of announcement). Therefore in this research, we used the sum of the abnormal returns of each share in the 1 day before the day of the announcement of the expected profit up to 4 days after its announcement (1 day before the day of announcement and 4 days after the announcement, in total 6 days) as a measure of market response, which is presented in model (6):

$$CAR_i = \sum_{t=-1}^4 AR_{i,t} \tag{6}$$

CAR: The company's daily accumulated abnormal returns

$AR_{i,t}$: The daily abnormal return of a share that is calculated from the difference in real return on equity with the expected return on that share per day, based on the market adjusted model based on model (7):

$$AR_{i,t} = R_{i,t} - R_{m,t} \tag{7}$$

$AR_{i,t}$: Abnormal returns of company i on day t

$R_{i,t}$: is the real return of company i on day t obtained according to model (8):

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}} \tag{8}$$

$P_{i,t}$ and $P_{i,t-1}$ are the share price of company i on day t and day $t-1$

$R_{m,t}$: is the market return on day t, calculated as the model (9):

$$R_{m,t} = \frac{\text{TEDPIX}_t - \text{TEDPIX}_{t-1}}{\text{TEDPIX}_{t-1}} \quad (9)$$

TEDPIX_t : Total price index and stock profit on day t

TEDPIX_{t-1} : Total price index and cash dividend on day t-1

4.4 Independent Variables

A - Incidental News Income Includes:

PREV_DBEAT : The nominal variable, which is equal to zero if the difference between the fourth and the first positive predictions is positive and is equal to zero if the difference between the fifth-fourth predictions is positive.

ZREV_DBEAT : Indicator variable that is equal to one if the difference between the 4th and the first profit forecast is zero and the difference between the fifth and fourth-earnings forecasts is positive and otherwise is equal to zero.

NREV-DBEAT : An indicator variable that is equal to one if the difference between the fourth and the first predictions is negative and the difference between the fifth-fourth predictions is positive and otherwise is equal to zero.

B - Estimated profit fluctuations: As a fifth forecast minus the fourth prediction divided by the fourth forecast

C - Negative adjustment in the forecast of earnings per share (bad news): The virtual variable is equal to one if the sign of profit adjustment of each predicted share is negative and otherwise it is equal to zero, meaning npfegative adjustment in the profit of each share forecast is that the announced figure is lower than the previous forecast.

D - Late announcement of the forecast of earnings per share: A virtual variable equal to one if the delay in the statement of earnings per share is exceed the average of the total sample delay (41 days after the end of the season). otherwise the value is zero.

H - Percentage of adjustment

5 Research Findings

5.1 Descriptive Statistics of Research Variables

Before testing the research hypotheses, the variables are summarized in the Table 1. In table 1, the average, which represents the equilibrium point and the distribution center, and is a good indicator of the centrality of the data, is equal to 0.325 for the abnormal daily accumulated return variable. Median is another central indicator that shows that half of the data is less than this and the other half more than this value.

Table 1: Descriptive Statistics of the Variables of the Companies

	Accumulated daily abnormal returns	Successive news of distributed profits (Positive and positive)	Successive news of distributed profits (zero and positive)	Successive news of distributed profits (negative and positive)	Measured profit fluctuations	Negative adjustment of earnings forecast per share
Average	0/325800	0/203200	0/260800	0/201600	0/068194	0/092142
Median	0/255480	0/00000	0/00000	0/000000	0/00000	0/003900
Maximum	0/965479	1/00000	1/00000	1/00000	49/22220	7/085600
Minimum	0/124537	0/0000	0/0000	0/000000	-5/917900	0/0000
Standard Deviation	2/760442	0/402702	0/439423	0/401516	2/005380	0/336353
Skewness	3/012854	1/475222	1/089573	1/487556	23/60678	15/18009
Kurtosis	14/17287	3/176280	2/187170	3/212822	579/6192	302/7740
Jack-Bera	0/414759	0/225546	0/145660	0/231255	0/874857	0/235558
Probability	0/598870	0/785546	0/885858	0/824566	0/135586	0/825457
Total	1175/355	127/0000	163/000	126/000	42/62140	57/58850
Total standard deviation	4754/905	101/1936	120/4896	100/5984	2509/447	70/59532
Observation	625	625	625	625	625	625
Sections	125	125	125	125	125	125
	Late announcement of earnings per share forecast	Percentage of adjustment	Late announcement of adjustment in earnings per share forecast	Bad news in the late announcement of the forecast earnings per share	Adjustment percentage of bad news	Late adjustment percentage for bad news
Average	0/982400	-2/160192	-2/158992	0/091798	-6/863408	-6/86328
Median	1/00000	0/0000	0/0000	0/003000	0/0000	0/0000
Maximum	1/00000	37/0000	37/0000	7/085600	1/81000	1/81000
Minimum	0/00000	-578/4000	-578/4000	0/00000	-4098/330	-4098/330
Standard Deviation	0/131598	28/17647	28/17654	0/336417	163/9758	163/9758
Skewness	-7/337309	-16/78493	-16/78493	15/17435	-24/91521	-24/91521
Kurtosis	54/83610	312/1464	312/1460	302/6051	622/1679	622/1679
Jack-Bera	0/758660	0/254788	0/257885	0/236500	0/145560	0/145550
Probability	0/755885	0/755856	0/7755856	0/778859	0/865787	0/865787
Total	614/000	-1350/120	-1349/370	57/37370	-4289/630	-4289/580
Total standard deviation	10/80640	495401/9	495404/5	70/62227	16778159	16778159
Observation	625	625	625	625	625	625
Sections	125	125	125	125	125	125

Also, the uniformity of the average and median value indicates the normality of this variable, which is the accumulated abnormal daily return variable equal to 0.255. Scattering indicators are a measure of how much data are scattered from each other or scattered over the average. Standard deviation is one of the most important scattering indices, with an abnormal accumulated daily gain of 2.76. The amount of asymmetry of the frequency curve is skewness.

The value of the skewness coefficient for the asymmetric variable is positive and close to zero, indicating that the skewness is normal and very low to the right. The dispersion index of the amount of stretch or bursts of the curve is considered to be Kurtosis than the standard normal curve. In this study, Kurtosis is positive for all variables. Also, because the values of the significance level are more than 5 percent of the daily abnormal accumulation of return variables, so the null hypothesis, that is, the normality of the variable is verified; therefore, the abnormal daily profit variable has normal distribution. Given that the probability level of the Jarck-Bera statistic is more than 5%, it is impossible to rule out the zero assumption of this statistic, so the data of the desired variables are normal.

5.2 Reliability Test of Research Variables

In this research, we used the unit root test as shown in Table 2.

Table 2: Unit Root Test of the Accumulated Abnormal Daily Return

Method	Statics of test	Probability	Sections	Observations
Zero hypothesis: existence of unit root (common unit root process)				
Levine, Lyn and Chow	-110/427	0/0000	125	500
Zero hypothesis: existence of unit root (single unit root process)				
Iim and sun	-19/2239	0/00000	125	500
ADF-Fisher (Chi-square)	388/041	0/00000	125	500
PP-Fisher	430/493	0/0000	125	500

Based on the values presented in table 2, the zero hypothesis is based on the existence of a single root, taking into account the common root process by the Levine, Lyne and Chaw method, as well as the Fisher's ADF method test and the Fisher--pp method with 125 sections. And 625 hits all at 5% level. The results of single root test on all variables indicate the absence of unit root.

5.3 F-Limer and Hausman Test

The results of the F-limmer and Hausman tests are included in the research hypotheses in table 3:

Table 3: Results of F-Limer Test of Research Hypotheses

Hypothesis	F-limmer	Significance level	Result	Hausman test	Significance level	Result
First	4/716746	0/0000	Panel	91/325349	0/0000	Constant effects
Second	5/555596	0/0000	Panel	98/325700	0/0000	Constant effects
Third	5/682200	0/0000	Panel	90/046714	0/0000	Constant effects
Forth	6/800016	0/0000	Panel	96/325588	0/0000	Constant effects

Based on table 3, the significance level of this test for all research models was less than 0.05. The panel data method will be used to estimate the pattern. Hausman's test is performed in the F-Limmer test of hybrid data, and given that the chi-square test probability is less than 5%, then the constant effects for estimating and analyzing the model is used.

5.4 Summary of Analyzes for Each Hypothesis

5.4.1 Test the First Hypothesis

Hypothesis 1: There is a significant relationship between the successive news of published profit and the market reaction process. The results of this research hypothesis are described in Table 4. According to table 4, the probability of the t-statistic for the constant coefficient and the coefficients of the regular news variables is positive (positive and positive), the successive news of the published earnings (zero and positive), and the successive earnings reports findings (negative and positive) are less than 5%; therefore, the relationship is statistically significant, so 95% of these variables are statistically significant in the regression model.

Table 4: Summary of the Results of the Pattern of the First Hypothesis

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	1/805881	0/060686	29/75756	0/0000
Successive news of distributed profits (Positive and positive)	0/164818	0/013724	12/00985	0/0000
Successive news of distributed profits (negative and positive)	0/042314	0/014854	2/848632	0/0325
Successive news of distributed profits (negative and positive)	-0/270035	0/013950	-19/35757	0/0000
Measured profit fluctuations	-0/032372	0/00322	-10/04721	0/0000
Deterministic coefficient		0/95	Durbin-Watson	1/88
Adjusted Deterministic coefficient		0/94	F-probability level	0/000

The adjusted determination coefficient shows the explanatory power of independent variables that can explain 94% of the variations of the dependent variable. Also, considering that the probability level of F-statistics is less than 5%, the whole model is statistically significant. According to the hypothesis, since the effect of the successive news variables of the published profit on the market reaction process are meaningful in the model, therefore, the zero assumption is rejected; that is, the successive news of the published profit with the market reaction process has a significant relationship.

5.4.2 Test the Second Hypothesis

Hypothesis 2: Negative adjustment has a significant relationship in predicting earnings per share with the market reaction process. The results of this research hypothesis are presented in Table 5.

Table 5: Summary of the Results of the Second Hypothesis

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	1/809683	0/024501	33/86108	0/0000
Negative adjustment of earnings forecast per share	-0/769310	0/142528	-5/397601	0/0000
Deterministic coefficient		0/85	Durbin-Watson	1/88
Adjusted Deterministic coefficient		0/84	F-probability level	0/000

According to table 4, the probability of t for constant coefficients and negative adjustment coefficients is less than 5% in the prediction of earnings per share; therefore, the relationship is statistically significant and therefore, with 95% confidence, this variable in the model regression is meaningful. The adjusted determination coefficient shows the explanatory power of independent variables that are capable of explaining 84% of the variations of the dependent variable.

Also, considering that the probability level of F statistics is less than 5%, the whole model is statistically significant. Regarding the hypothesis that the negative adjustment variable in predicting the earnings per share on the market reaction process is significant in the model, so the zero assumption is rejected; that is, negative prediction has a significant relationship in predicting the earnings of each share with the market reaction process.

5.4.3 Test the Third Hypothesis

Hypothesis 3. The late announcement of the adjustment of the earnings per share forecast has a significant relationship with the market reaction process. The results of this research hypothesis are presented in Table 6.

Table 6: Summary of the Results of the Third Hypothesis Model

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	1/809683	0/024501	33/86108	0/0000
Late announcement of earnings per share forecast	-0/185244	0/012763	-14/51434	0/0000
Adjustment percentage	-0/105233	0/022683	-4/639224	0/0000
Percentage adjustment of late announcement of earnings per share forecast	-4/649311	0/022684	-0/105466	0/0000
Deterministic coefficient		0/75	Durbin-Watson	1/86
Adjusted Deterministic coefficient		0/73	F-probability level	0/000

According to table 6, the probability of t for the constant coefficient and the late announcement coefficients in the forecast of earnings per share is less than 5%; hence the relation is statistically significant and the estimated coefficient of the software for the declared variable late in the prediction of earnings for each share is negative and significant, so with 95% confidence, this variable is significant in the regression model. The adjusted determination coefficient shows the explanatory power of independent variables that are able to explain 73% of the variations of the dependent variable. Also, the probability level of F statistics is less than 5%, indicating that the whole model is statistically significant. Considering the hypothesis that the late announcement variable in predicting the earnings per share on the market reaction process is significant in this model, so the zero assumption is rejected, that is, late late announcement of the adjustment of the earnings per share forecast has a significant relationship with the market reaction process.

5.4.4 Testing the Fourth Hypothesis

Hypothesis 4. The negative reaction of the market to the late-negative adjustment of the forecast of the earnings per share, has a significant relationship with the timely-negative adjustment of earnings per share. The fourth hypothesis test is based on the analysis of the difference in the origin of the model, to ensure that there is a significant difference between the values of $\alpha+\beta_1+\beta_2+\beta_3$ and $\alpha+\beta_2$ and the coefficient test is used. This test is known in the EVIEWS software as the parent test. The results of this research hypothesis are depicted in Table 7.

According to table 7, the probability of t for the constant coefficient and the late announcement coefficients in the forecast of earnings per share is less than 5%; therefore, the relationship is statistically significant; and the coefficient estimated by the software for the variable Late announcement in the prediction of earnings per share is significant, so with 95% confidence this variable is significant in the regression model. The adjusted determination coefficient shows the explanatory power of independent variables that can explain 95% of the variations of the dependent variable. The probability level of the F statistic is less than 5% indicates that the whole model is statistically significant; it is also based on the analysis of the difference in the width of the model's origin, to ensure a significant difference between the values of $\alpha+\beta_1+\beta_2+\beta_3$ and $\alpha+\beta_2$ and the coefficient test is used. Regarding the fact that the significance level of the t-statistic, F-statics and chi-square statistic are more than 5 percent, then the zero assumption cannot be rejected; there is no significant difference between the values

of $\alpha+\beta_1+\beta_2+\beta_3=\alpha+\beta_2$ and the fourth hypothesis is rejected.

Table 7: Summary of the Results of the Pattern of the Fourth Hypothesis

Variables	Coefficient	Standard deviation	t-statics	Probability
y-Interception	1/964502	0/240252	8/176834	0/000e
Late announcement on earnings per share forecast	-0/234201	0/024188	-9/682382	0/0000
Negative adjustment in anticipation of earnings per share	-0/498402	0/094585	-5/269339	r l0s0r
Negative adjustment is the forecast of earnings per share in its late announcement	-0/314621	0/094592	-3/326081	0/00001
Adjustment percentage	-1/302560	5/701603	-0/228455	0/8194
Percentage adjustment of late announcement of earnings per share forecast	-0/130372	0/057016	-2/286580	0/0412
Adjustment percentage of bad news	10/54752	108/6242	0/097101	0/9227
Late adjustment percentage of bad news	-0/105442	0/010862	-9/707088	0/0000
Deterministic coefficient		0/96	Durbin-Watson	1/86
Adjusted Deterministic coefficient		0/95	F-probability level	0/000

Table 8: Parent's Test of the Fourth Hypothesis Model

Statics	Amount	Freedom degree	Probability
t-statics	0/744318	493	0/4570
F-statics	0/554009	(1,493)	0/4570
Chi-square	0/554009	1	0/4567

5.4.5 Testing the Fifth Hypothesis

Hypothesis 5. The positive reaction of the market to the timely- positive or zero adjustment of forecasting the earnings per shre, has a meaningful relation compared to the late- positive and zero adjustment of forecasting the earnings per share. The results of this research hypothesis are presented in Table 9.

Table 9: Parent's Test of the Fifth Hypothesis Model

Statics	Amount	Freedom degree	Probability
t-statics	0/r 68238	493	0/33. 4
F-statics	0/9374, 5	(1,493)	0/3334
Chi-square	0.937485	1	0/3329

According to table 9, the coefficient α in the following regression equation shows the market reaction to good news timely, and $\alpha+\beta_1$ represents a market reaction to late-breaking good news, since the significance level of t-statistic, F-statics and chi-squared is more than 5%, the zero assumption cannot be rejected, and there is no significant difference bet) een the values of $\alpha+\beta_2=\alpha_i$

6 Discussion and Conclusion

This research seeks to find out the effect of published successive news of profits, negative adjustment, and late announcing adjustment on the market reaction process in Iran, and what can be said in the overall conclusion and conclusion of the test of research hypotheses is that successive publication news of earnings influences the process of market reaction. In addition, negative adjustment in predicting the earnings per share and the late announcement of adjusting the profit forecast of each share has a negative effect on the market reaction process. Finally, the results indicated that the market's negative reaction to the late-negative adjustment of the forecast of earning per share is not lower than the timely-negative adjustment of forecasting earnings per share, and the positive reaction of the market to timely- positive or zero adjustment of forecasting the earning per share is not greater than the late- positive or zero adjustment of forecasting the earnings per share. The results of this study are partly in line with theoretical foundations and research background; Hogarte and Einhorn [23] stated that when people face with a series of information, their decisions are predictably influenced by how they process the information, that is, step by step or the end of a sequence. Previous empirical research has shown that with constant news about analysts' earnings information, respondents display a different response to earnings news according to the order in which they receive various sections of the earnings news. Johnson et al. [19] argued that investors' reaction to unexpected profits is conditional on a sign of past profit news. Also, the market response to predictions by consecutive analysts is consistent with the use of a sequencing process as a result of precedence, which is partly consistent with the results of the present study.

Kotari et al. [21] showed that the negative reaction of share prices to exposing bad news is larger than the positive response to good news, and managers are trying to keep hidden bad news from investors, and the want to inform investors as soon as possible of good news and even before the official announcement, which is to some extent consistent with the results of the study. Foroughi and Aisk [12] stated that the market reacts negatively to the bad news, but the late announcement is responding positively to the market. Moreover, there is no difference between the late and early bad news, in terms of the market response, but the late announcement of good news faces a positive reaction, which in this regard is not in line with the results of the study; the conflicting and contradictory results of this research can be from Differences in the measurement of variables, the period of the test, the evaluation techniques, and whether the variables considered are considered as endogenous or exogenous. Also, Doyle and Majilke [9] found that bad news is usually published after the closure of the market or on the last business day of the week, which is partly the result of the research in one direction.

Considering the results of the research hypotheses, suggestions are presented as follows: According to the results of the first hypothesis, it is recommended that investors before investing in a stock of a company, using the fitted model in this research, the effects of news The success of the published earnings is recognized on the market response and takes into account the results in their decision-making. In addition, it is recommended that financial brokers and financial advisers be included in the stock market, in addition to the economic and accounting variables affecting the market reaction, the successive publication of the published earnings should be considered. Finally, Also, based on the results of the second hypothesis, it is recommended that decision makers prepare the theoretical fundamentals of financial reporting and accounting standards and consider the results of this research and similar internal investigations and consider the position of the theoretical foundations and specific qualitative features of corporate financial reporting With regard to the negative adjustment, in determining the earnings per share, stock brokers and financial advisers, whose task is to analyze the fi-

financial situation and describe the future financial situation for stockholders, can model and find the results of this research in Consider selecting investment portfolios D. According to the results of the third hypothesis review, it is appropriate that the Audit Organization and other regulatory and oversight bodies, in the formulation of accounting standards and financial regulations, consider the issue of late announcing adjustment of the forecast of earnings per share, and by providing guidance The need to disclose, when adjusting the earnings per share forecast, will make users of financial information more effective in order to make optimal and informed decisions. Based on the analysis of the fourth hypothesis and the fifth hypothesis, it can be stated that in general, the findings of this study, in addition to increasing the knowledge available in the prediction of market reaction, emphasize the importance and role of the forecasting earnings per share in predicting unusual returns for investors, Creditors, analysts, managers, and other capital market players. Hence, it is suggested that the activists present in the capital market, considering the importance of the announcement time for the forecasting of the earnings per share, consider the findings of the study about the fluctuations of long-term forecasts for unusual returns. Researchers are encouraged to explore the following topics in their future research:

- Influence of the successive news of distributed profits, negative adjustment and late announcement of adjustment on investment efficiency.
- Effect of consistently published news, negative adjustment and late announcements on capital cost adjustments.
- Effect of consistently published news, negative adjustments and late announcements on fluctuations in unconventional stock returns.
- Effect of consistently published news, negative adjustments and late announcement of modifications to the quality of profit.
- The effect of financial and non-financial variables on market response using other methods such as Probit, neural network and multi-factor analysis.

The most important limitation of the present research is the lack of complete disclosure of information about the research variables. Information on all research variables for stock companies is not fully available. Therefore, in order to avoid the bias of the research results, some companies were excluded from the statistical sample, which reduced the sample size.

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