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Original Research

Stock Price Drift from the Content of Projected Earnings Information Resulting from Quarterly Operations: Evidence of the Contradiction Between Timeliness and Profitability

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ABSTRACT

Financial statements should have general objectives rather than specific group interests. The possibility of forecasting earnings based on seasonal performance instead of the previous year's earnings and in terms of the contradiction between timeliness and the ability to verify earnings can be a new and thought-provoking issue. The present study examines stock price drift from the content of projected earnings forecast for quarterly operations. The research hypotheses were tested through univariate regression, multivariate regression and correlation coefficient tests using Eviews software. Findings of this study indicate that 1- Profit forecast based on quarterly performance has more verifiability than the previous year (profit stability). 2- The Verifiability of the year profit is more than the profit forecast based on the 9-month performance. 3- Stock price drift is expected on the day after the announcement of earnings and there are changes in earnings compared to the forecast of the previous season. 4- No relationship was observed between the volumes of shares traded the next day and the announcement of the forecasted profit and the changes in the profit compared to the forecast of the previous season.

1 Introduction

The importance of accounting profit is considered from two perspectives. One is to have information content for the capital market to help investors make decisions, which emphasizes the relevance and timeliness of profits. Another possibility is to evaluate the amount of managers' rewards, which this feature emphasizes on the reliability of the reported earnings. In Statement No. 1 (1978) Conceptual Framework for Financial Reporting of the Financial Accounting Standards Board, the purpose of financial reporting of business units is to provide information that is useful for business and economic decision making. This statement, which is consistent with the troubled report, expresses a common feature among all external users: interest in predicting the

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amount, timing, and uncertainty associated with future cash flows. Therefore, financial statements should have general objectives instead of providing specific group interests. Accounting profit is one of the items that external users have always been interested in predicting its amount. Evidence of this is the use of profit stability models (forecasting this year's profit from previous years' profit) and testing the accuracy of this issue. In Statement No. 8 (2010), one of the main features of the decision is considered as the concepts of the theoretical framework of financial reporting of the Financial Accounting Standards Board, reliability and relevance. Relevance is a qualitative characteristic that is defined in the Statement of Concepts 2 as "the ability to make a difference in a decision by helping users to predict the outcome of past, present, and future events or to correct expectations." Relevance is limited by being timely, because if information is not provided in a timely manner, it will lose its relevance and will be considered irrelevant. Reliability is also reliable information that is free of errors and biases and reasonably represents what it claims to say or reasonably expects to express. In Iran, according to paragraph 3 of the first part of the third chapter of Article 7 of the Securities Market Law of the Islamic Republic of Iran, approved in December 2005, companies listed on the stock exchange are required to provide information and interim financial statements for 3 months, 6 months and 9 months. Submit and disclose the unaudited no later than 30 days after the end of the quarterly periods in accordance with the national accounting standards by the Exchange Organization. Designing tests that can further demonstrate the reliability and relevance that are key features of decision-making in the theoretical framework of financial reporting can be very fruitful in accounting research. The lower the profit fluctuations predicted by management, the greater its reliability, and conversely, the more fluctuations in profits predicted by management, the less reliable it is. Similarly, the earlier the profit forecast is made, the more relevant it is as long as it has validity, and conversely, the later the profit forecast is made, the more irrelevant it is as long as it is valid. The information role of management in profit forecasting can be emphasized from the perspective that because he has more information about the company under his leadership, he has the ability to predict profit more accurately than anyone else. Profit forecasting by management based on quarterly operations is highly verifiable. This performance-based profit forecast until the end of the fall season (9 months) is much higher than the performance-based profit forecast until the end of the spring season (3 months). Although the projected profit based on 9-month performance is highly verifiable, but it is not timely, and vice versa, although the projected profit based on 3-month performance is not highly verifiable, but it is timely. It is predicted to result from seasonal operations and the contradiction between timeliness and profitability has been tested. In other words, the purpose of the research is once a profit forecast test based on earnings stability models (forecast current year earnings from previous years) and once again earnings forecast test based on seasonal performance and finally stock price drift test of seasonal earnings changes in terms of conflict between Timeliness and ability to verify profits.

2 Theoretical Foundations and Research Background

2.1. Information Content of Profit Announcement

In accounting, the relationship between earnings and stock returns has been studied in many studies. One of the first accounting studies is Ball & Brown's 1968 paper, which uses simple methods to examine whether there is a correlation between earnings and stock returns. Later, the methods of measuring the

relationship between earnings and stock returns were improved to some extent, and statistical methods were used to explain this relationship.

Investor behaviour in response to net profit information is as follows:

* Investors have previous doubts about the expected returns and risk of companies' stocks. These previous assumptions are based on all available information, which includes the price shortly before the release of the company's current net profit. Which they obtain and differ in their ability to interpret. These previous assumptions may also include expectations about the current and future profitability of the firm because at least part of the future return on bonds depends on the firm's profitability [1].

* As soon as this year's net profit is published, investors will decide to find out more by reviewing and analysing the profit figure. For example, if net profit is high or higher than expected, this is good news. If so, investors will raise their doubts about the profitability and future return of the stock. Other investors who may have had very high expectations for such a net profit flow may interpret the same net profit figure as bad news [1].

* Investors who have changed their outlook on upward futures tend to buy corporate stocks at current market prices, and vice versa for those who have outwardly changed their outlook [1].

* We expect the volume of shares traded to increase when the company reports its net profit. This increase is due to differences in investors' previous assumptions and their interpretation of current financial information. If investors interpret the reported net profit as good news more than those who interpret it as bad news, we expect an increase in stock market prices [1].

2.2. Profit Reaction Coefficient

Empirical research has shown that the unexpected return on stocks after the announcement of profits for some companies is higher than other companies. This raises the question of why the market responds more to the good and bad news of some companies than some others. One of the most important guidelines of empirical financial accounting research in this field is to know and explain the different market reactions to earnings information. This is called the profit response ratio. [26] There are many reasons for the different market reactions to the reported profit, the most important of which are:

1- Risk level of companies: The riskier the future return of the company, the lower the reaction of investors to unexpected profits [11].

2- Corporate capital structure: Increasing profits in companies with high leverage causes power and security for creditors over shareholders. Therefore, the profit response rate for companies with high leverage is lower than companies that have no debt or little debt [11].

3- Profit stability: The more Table the good or bad news in this year's profit is expected in the future, the higher the profit response coefficient [26].

4- Profit quality: Companies that report a continuous increase in both revenue and profit have higher quality profits compared to companies that report a continuous increase in profit only, and as a result have higher profit response rates [17].

5. Opportunity for growth: The good news in this year's profits may indicate a future growth for the company, so it will lead to a higher profit response rate [26].

6- Investors' expectations: The different the investors' expectations for the company's profitability, the higher the profit response coefficient will be [26].

7- Price Awareness: The stock price itself is a source of information about the future value of the company. An indicator of whether stock prices contain valuable information is the size of the company. It can be expected that the stock prices of large companies are more informative than the stock prices of small companies. Because the mass media publishes more news about these companies, as a result,

their market price reflects a lot of information. This causes the already known information about these companies to increase and the ability to increase information in the case of these companies is reduced by financial statements. As a result, it can be predicted that securities prices will react less strongly to corporate financial information than small firms [26].

8- Existence of other information sources: Existence and use of non-accounting information sources leads to reduction of profit information content and lack of market reaction to the announcement of accounting items, including profit. The existence of other sources of information makes the company's information known to the public before the publication of financial reports and the necessary analysis has been done about them, and the implication of this situation is that stock prices do not react to the publication of financial reports, because the changes have already been made in response to information received from unofficial channels [26].

3 Research Background

In their research, Ijaz et al. Examined changes in dividends as a signal to predict the company's future profits. The results of their research showed that there is a significant relationship between changes in current dividends and changes in future profits for companies with higher abnormal returns [20]. In their research, Agapova and Divides examined the market response to the failure of the upward and downward pattern of profits. They used abnormal returns to measure the market response. The results of their research showed that the market reacts strongly to these failures [9]. Lee in a study with information asymmetry; Misleading pricing and securities issuance has investigated the effect of misleading pricing due to information asymmetry on the issuance of securities. The results show that when managers manage based on their personal information to conclude that the company's securities are traded below the intrinsic price, they prevent the issuance of shares [22]. Hutton et al. concluded in their study that the absolute value of discretionary accruals is the ambiguous aspect of companies' reported earnings, and that profits with more accruals have uncertainty about the relationship between current and future earnings. Do more. In addition, they stated that the information content of profits that are less transparent is also less than transparent profits [19]. Rogers et al. found evidence that firms that make earnings forecasts throughout the year have lower profit information content than other firms [25].
Louise and Sun in a study examined the effect of profit quality on its information content. The results of their research showed that companies that have significant negative (positive) changes in operating cash flow, manage their accruals in an increasing (decreasing) manner. In addition, their results showed that the information content of companies' profits when significant changes If a positive (negative) consideration has occurred in their favor, it has not made a significant difference. They also found that corporate earnings information content was significantly related to discretionary accruals but not to discretionary accruals [23]. Basu et al. in their research examined and compared the information content of companies' quarterly earnings announcement against the information content of other information sources in the market such as dividend announcement news and management forecasts. They found that the information content resulting from the announcement of seasonal profits of companies has 11% of the information content and has the most information content compared to other information sources [12]. Jiang et al. in a study examined the information content of quarterly earnings hours after their announcement. The results of their research showed that in the early hours the volume of exchanges does not change significantly, but when the market closes and before it reopens, the volume of requested exchanges increases significantly. But price changes are applied quickly when profit is declared, which indicates the information efficiency of the market [21]. In a study, Davis et al. examined the information

content of published information along with the announcement of companies' quarterly profits. In their research, they divided the accompanying information into two categories: optimistic and pessimistic. The results of their research showed that the published accompanying information has the ability to predict the company's performance in the next chapter. They also stated that company management tries to transfer some company-specific information to the market along with quarterly earnings information [15]. Al-dhemari and Ismail. Examined the relationship between ownership structure and profit information content. In this regard, 330 companies for the period 2009-2008 were surveyed. Evidence shows that the ability to predict profits is high when companies are small. The results also showed that with the increase of institutional shareholder ownership, the information content of profits increases. Contrary to expectations, however, the findings show that board independence negatively and significantly affects the ability to predict profits [10]. In their research, Gibson et al. Examined and categorized corporate earnings and analyst behaviour. In this study, they found that analysts who focus on a large number of companies and predict their profits, when the company announces its profit, they focus less on it and more on companies that they focus on not disclosing their profits. Also, companies with high unexpected profits fluctuate more in their projected profits, which increases their risk and these analysts focus less on these companies [18]. In a study, Emsakpur et al.Examined the role of quarterly earnings announcements on the relationship between traders' trading speed and abnormal cumulative stock returns for 161 companies between 2013 and 2017. Their results showed that the excessive speed of traders around quarterly earnings announcements has a significant relationship with abnormal cumulative stock returns and leads to an increase in abnormal cumulative stock returns, which increase in the period of one month before and one month after Profit announcement for the fourth quarter of the year (fourth announcement) is weaker than the first, second and third quarters [3]. In a study, Salehifard et al. examined the impact of CEO power on the information content of quarterly profit announcements for 108 companies between 2010 and 2017. Their results showed that powerful managers have more independence and have a more supervisory role on the board, which reduces the loss of stakeholders' rights and agency costs, and thus reducing agency costs reduces information asymmetry and reduces financial information opacity and as a result, they increase the information content of quarterly earnings announcements [6]. Etemadi and Yarmohammadi. In a study examined the factors affecting timely interim reporting in companies listed on the Tehran Stock Exchange. They studied 40 companies and concluded that company size, company profitability, company performance complexity, company life, shareholder composition and the existence of a costing system had no effect on the timeliness of interim information and only the amount of stock transactions in the interim period. Has a statistically direct relationship with intermediate reporting speed [2]. Mohsen Khoshtinat and Soghra Barari Nokashti. In a research study on the size of the company on the content of profit announcement information for 101 companies in the period between 2003 and 2005. Their results showed that there is a significant relationship between annual profit announcement and unexpected returns around the date of profit announcement in small and medium enterprises, but no significant relationship was observed in large companies [5]. Arab Maazaar Yazdi and Jamalian Pour. In a study examined the information content of the interim financial reports of 3, 6 and 9 months of 318 companies listed on the Tehran Stock Exchange during the years 2002 to 2008. The results of their research indicate that all three studied forms have desirable information content and can be used to use the information contained in them to appropriate models to predict stock returns, profitability and future cash flows. But the figures in the 9-month statements in most cases had a higher information content than other interim financial statements [7]. Aghaei et al. in a study examined the effect of seasonal profit announcements of companies on meeting

the information needs of stakeholders for 106 companies between 2006 and 2010. The results of their research showed that quarterly profit announcements on average 9 to 17% of total information Annually affects the stock price of companies and this shows that the role of quarterly earnings announcements for investors and other stakeholders is not to provide timely information, but its role is to increase the reliability of more timely information sources Is [1]. Mehrazeen et al. in a study examined the relationship between earnings information content and levels of financial transparency of companies listed on the Tehran Stock Exchange for the years 2007 and 2008. The results of their research showed that the transparency of financial information weakens the profit-return relationship. In fact, the results of the multiple linear regression model of the research show that in companies with low (high) level of financial transparency, profits have more (less) information content for investors [8]. Bozorg Asl and Adibi. In a study examined the relationship between the information content of quarterly profit announcements and negative news during the season for 80 companies between 2008 and 2012. The results of their research showed that the presence of negative news during a chapter has a positive and significant effect on the information content of the profit of that chapter [4].

3 Hypotheses

I: Profit forecast based on 3-month performance has more verifiability than profit of the previous year.

II: The strength of the year profit is more reliable than the profit forecast based on 9-month performance.

III: Stock price drive is expected on the day after the announcement of earnings and there are changes in earnings compared to the forecast of the previous season.

IV: There is a relationship between the volume of shares traded on the day after the forecast of earnings and earnings changes compared to the previous quarterly forecast.

4 Research Method

The present study is applied in terms of purpose; because the purpose of this research is to develop applied knowledge in a specific field and depending on the nature of the type, it is causal-comparative post-event research. The reason for naming this research as post-event is that the data collected is related to events that have occurred in the past. The purpose of post-event research is to investigate the cause-and-effect relationships by studying the existing results and previous context in the hope of finding the cause of action.

4.1 Statistical Society

The statistical population of the study included the top 50 companies at the end of 2016, according to the Tehran Stock Exchange, which after the elimination of banks and credit institutions, insurance and pension companies, investment companies and other financial intermediation, finally 40 companies. And for 3 years ago (120 company-year data) were analyzed using Eviews software. Tehran Stock Exchange had 242 working days in 2016. The selected companies in the research in terms of the number of trading days had a minimum of 30 trading days and a maximum of 238 trading days.

4.2 Research Model and its Variables

To calculate the profit stability model, the model of Penman and Zhang [24] is used as follows:

$$E_t = \alpha_0 + \beta_1 E_{t-1} + \varepsilon \quad (1)$$

Where E_t is the profit per share of this year and E_{t-1} is the profit per share of the previous year.
In the profit stability model of Penman and Zhang [24], β_1 is the coefficient of profit stability and more ever it is closer to the number 1, the more sTable the profit and therefore the higher the quality. And if it is closer to zero or negative, the quality of profit will be lower.
To forecast this year's profit, the following model has been used to forecast profit based on 3-month, 6-month and 9-month performances.

$$E_t = \alpha_0 + \beta_1 P\_E_{Q1-Q3} + \varepsilon \quad (2)$$

Where E_t the earnings per share of this year, P_E_{Q1-Q3} the projected earnings per share at the end of 3 months, 6 months and 9 months.
Regarding the relationship between stock price and the volume of traded (exchanged) stocks, the following models of earnings per share forecast have been used:

$$Price_{t+1} = \alpha_0 + \beta_1 \Delta P\_E_{Q2-Q1} + \varepsilon$$

$$Price_{t+1} = \alpha_0 + \beta_1 \Delta P\_E_{Q3-Q1} + \varepsilon \quad (3)$$

$$Volume_{t+1} = \alpha_0 + \beta_1 \Delta P\_E_{Q2-Q1} + \varepsilon$$

$$Volume_{t+1} = \alpha_0 + \beta_1 \Delta P\_E_{Q3-Q1} + \varepsilon$$

In which $Price_{t+1}$ is the stock price of the next day, ΔP_E_{Q2-Q1} is the forecasted profit changes based on the 6-month performance compared to the 3-month period, ΔP_E_{Q3-Q1} is the projected profit change based on the 9-month performance compared to the 3-month period and the volume of shares traded (exchanged) the next day.

5 Findings

The Table below shows the regression model of Penman and Zhang profit stability in the last 2 years (2016 to 2015 and 2015 to 2014) regarding the research sample.

Table 1: Descriptive statistics of research variables Variable

variable	Number of observations	Average	Maximum	Minimum	Standard Deviation
EPS2014	40	867.25	5991	38	1092.602
EPS2015	40	895	6343	-581	1188.285
EPS2016	40	1155.3	6311	-212	1227.440

Table 2: Penman and Zhang Model [24]

year	Regression mode	Modified R^2	Statistic- independent variable	Probability t-statistic	Durbin Watson Statistic	F-Statistic Regression model	F-Statistic Probability
2015	$EPS_{15} = 52.23 + 0.97EPS_{14} + \varepsilon$	0.793	12.27	0.0000	1.773	150.4761	0.0000
2016	$EPS_{16} = 336.98 + 0.91EPS_{15} + \varepsilon$	0.778	11.73	0.0000	2.049	137.528	0.0000

Table 3: The Power to Explain the Profit of the Year from the Profit Forecast Based on the Performance of 3 Months, 6 Months and 9 Months

Profit forecast based on performance	Regression model	Modified R^2	Statistic- independent variable	Probability t-statistic	Durbin Watson statistic	F-Statistic Regression model	F- statistic probability
3 month	$EPS = 645.01 + 0.29P\_EPS_{Q1} + \varepsilon$	0.873	3.34	0.0013	2.142	21.423	0.0000
6 month	$EPS = 358.34 + 0.58P\_EPS_{Q2} + \varepsilon$	0.936	2.130	0.0000	2.130	*28.935*	0.0000
9 month	$EPS = 52.23 + 0.97P\_EPS_{Q3} + \varepsilon$	0.967	2.153	0.0000	2.153	57.700	0.0000

As shown in the Table, the power to explain the profit of each year from the profit of the previous year is in the range of 78% to 79% for the research sample.

As shown in Table 4:

1- The power to explain the profit of each year from the forecast of 3-month profit and the change of 6-month profit compared to 3 months (Model 1) is 93% regarding the research sample.

2- The power to explain the profit of each year from the forecast of 6-month profit and changes in 9-month profit compared to 6 months (Model 2) is 95% of the research sample .

3- The power to explain the profit of each year from the forecast of 3-month profit and 6-month profit changes compared to 3 months and 9-month profit changes compared to 6 months (Model 3) is 94% regarding the research sample. While in Model 3, the variable (6-month profit changes compared to 3-month) is not significant at the 5% level.

The results of Tables 2 and 3 show that earnings forecasting power based on earnings sustainability model (Penman and Zhang [24]) is less than earnings forecasting power based on quarterly performance.

Therefore, according to the information hypothesis, managers have valuable information that has the

ability to predict their profit more.

Table 4: Power of Year Profit Explanation from Profit Forecast Based on 3-Month and 6-Month Performance; And Changes 3 Months Later and 6 Months Later

$1: E_t = \alpha_0 + \beta_1 P\_E_{Q1} + \beta_2 \Delta P\_E_{Q2-Q1} + \varepsilon$				*Profit forecast based on quarterly performance and 6-month profit changes compared to 3 months*			
$2: E_t = \alpha_0 + \beta_1 P\_E_{Q2} + \beta_2 \Delta P\_E_{Q3-Q2} + \varepsilon$				*Profit forecast based on 6-month performance and 9-month profit changes compared to 6-month*			
$3: E_t = \alpha_0 + \beta_1 P\_E_{Q1} + \beta_2 \Delta P\_E_{Q2-Q1} + \beta_3 \Delta P\_E_{Q3-Q2} + \varepsilon$				*Profit forecast based on quarterly performance and 6-month profit changes compared to 3-month and 9-month profit changes compared to 6-month*			
Model	**Regression model**	**Modified R^2**	**Statistic independent variable**	**Probability t-statistic**	**Durbin Watson statistic**	**F-statistic Regression model**	**F-Statistic probability**
1	$E_t = 598.21 + 0.39P\_E_{Q1} + 839.54\Delta P\_E_{Q2-Q1} + \varepsilon$	0.932	4.7879 4.251	0.0000 0.0001	2.483	24.920	0.0000
2	$E_t = 354.11 + 0.63P\_E_{Q2} + 399.41\Delta P\_E_{Q3-Q2} + \varepsilon$	0.949	7.394 4.423	0.0000 0.0000	2.212	33.428	0.0000
3	$E_t = 562.06 + 0.43P\_E_{Q1} + 471.33\Delta P\_E_{Q2-Q1} + 314.19\Delta P\_E_{Q3-Q2} + \varepsilon$	0.937	5.284 1.858 2.226	0.0000 0.0673 0.0291	2.037	27.745	0.0000

The results of Spearman correlation coefficient of real year earnings with 3-month, 6-month and 9-month earnings are as follows:

Covariance Analysis: Spearman rank-order Date: 07/09/18 Time: 13:38 Included observations: 40				
Correlation Probability	R_EPS	Q1_EPS	Q2_EPS	Q3_EPS
R_EPS	1.000000 -----			
Q1_EPS	0.787617 0.0000	1.000000 -----		
Q2_EPS	0.851407 0.0000	0.975985 0.0000	1.000000 -----	
Q3_EPS	0.870532 0.0000	0.888920 0.0000	0.934703 0.0000	1.000000 -----

Fig. 1: The Results of Spearman Correlation Coefficient of Real Year Earnings with 3-Month, 6-Month and 9-Month Earnings

As shown in Table5, stock price drift is forecast on the day after the announcement of earnings and

earnings changes compared to the previous season and the model is significant at the level of 5%, although the maximum adjusted model is 16%. The results of this test are consistent with the efficient market hypothesis. Therefore, hypothesis number three of the research (stock price drift on the day after the announcement of earnings and earnings changes compared to the previous quarter forecast) is confirmed.

Table 5: The Effect of Information Content on Changes in 6-Month and 9-Month Earnings Relative to 3-Month Earnings on Stock Prices the Next Day

Regression model	**Modified R^2**	**Statistic Independent variable**	**Probability t-statistic**	**Durbin Watson Statistic**	**F-statistic Regression model**	**F-Statistic probability**
$Price_{t+1} = 0.99 + 0.08\Delta P\_E_{Q2-Q1} + \varepsilon$	0.1	3.57	0.0005	1.786	12.764	0.0005

Spearman correlation coefficient test results between two variables

Covariance Analysis: Spearman rank-order
Sample: 1393 1395
Included observations: 116
Balanced Sample (listwise missing value deletion)

Correlation Probability	Δ_EPS	PRICE
Δ_EPS	1.000000 -----	
PRICE	0.181930 0.0506	1.000000 -----

Regression model	**Modified R^2**	**Statistic- independent variable**	**Probability t-statistic**	**Durbin Watson Statistic**	**F-statistic Regression model**	**F-statistic probability**
$Price_{t+1} = 0.99 + 0.08\Delta P\_E_{Q3-Q1} + \varepsilon$	0.016	4.72	0.0000	2.266	22.228	0.0000

Spearman correlation coefficient test results between two variables

Covariance Analysis: Spearman rank-order
Sample: 1393 1395
Included observations: 116
Balanced Sample (listwise missing value deletion)

Correlation Probability	Δ_EPS	PRICE
Δ_EPS	1.000000 -----	
PRICE	0.214903 0.0205	1.000000 -----

Table 6: The Effect of Information Content on Changes in 6-Month and 9-Month Earnings Relative to 3-Month Earnings on the Volume of Shares Traded the Next Day

Regression model	**Modified R^2**	**Statistic-independent variable**	**Probability t-statistic**	**Durbin Watson Statistic**	**F-statistic Regression model**	**F statistic probabilty**
$Volume_{t+1} = 0.11 + 0.13\Delta P\_E_{Q2-Q1} + \varepsilon$	0.03	1.78	0.0786	1.865	3.078	0.0828

Spearman correlation coefficient test results between two variables

Covariance Analysis: Spearman rank-order
Sample: 1393 1395
Included observations: 116
Balanced Sample (listwise missing value deletion)

Correlation Probability	Δ_EPS	PRICE
Δ_EPS	1.000000 -----	
PRICE	0.181930 0.0506	1.000000 -----

Regression model	**Modified R^2**	**Statistic-independent variable**	**Probability t-statistic**	**Durbin Watson Statistic**	**F-statistic Regression model**	**F Statistic Probability**
$Volume_{t+1} = 0.11 - 0.05\Delta P\_E_{Q3-Q1} + \varepsilon$	0.0	-1.13	0.2593	2.052	1.288	0.2593

Spearman correlation coefficient test results between two variables

Covariance Analysis: Spearman rank-order
Sample: 1393 1395
Included observations: 116
Balanced Sample (listwise missing value deletion)

Correlation Probability	Δ_EPS	PRICE
Δ_EPS	1.000000 -----	
PRICE	0.214903 0.0205	1.000000 -----

As shown in the Table, the forecasted earnings announcement and earnings changes compared to the previous season forecast with the volume of shares traded the next day and at the level of 5% are not significant.

Therefore, hypothesis number four of the research (there is a relationship between the volume of shares traded on the day after the announcement of the forecasted profit and changes in earnings compared to the forecast of the previous chapter) is rejected.

In order to calculate the volume of shares traded the next day, the following formula has been used：

The volume of shares traded the next day = volume of shares traded the next day / maximum share traded that year.

Table 7: The Results Summary Table

Models	Description and results
1- Profit forecast based on Penman and Zhang profit stability model	The power to explain the profit of each year from the profit of the previous year is in the range of 78% to 79% for the research sample.
2-1- Profit forecast based on 3-month, 6-month and 9-month performances	The power to explain the profit of the year from the forecast of 3-month profits is in the range of 87% to 97%
2-2- Profit forecast based on 3-month and 6-month operations and changes 3 months later and 6 months later	The power to explain the profit of the year from the forecast of 3-month and 6-month profits and changes 3 months later and 6 months later is in the range of 93% to 95%
Outcome of Models 1 and 2: Profit forecasting power based on earnings stability model (Penman and Zhang [24]) is less than earnings forecasting power based on 3-month performance. Therefore, according to the information hypothesis, managers have valuable information that has the ability to predict their profit more. As a result, the research hypothesis number one (profit forecast based on 3-month performance is more verifiable than the previous year's profit) is confirmed.	
Result of models 2-1 and 2-2: The lowest power to explain the profit of the year is the profit forecast based on 3-month performance, but the profit forecast based on 3-month performance has more power to be timely. In contrast, the highest power to explain the profit of the year is the forecast of profit based on 9-month performance, although the forecast of profit based on 9-month performance has less power to be timely. Therefore, the second hypothesis of the research (the power of confirming the profit of the year is more than the forecast of profit based on the performance of 9 months) is confirmed.	
Stock price drift on the day after the announcement of earnings forecast and earnings changes compared to the forecast of the previous season and the model is significant at the level of 5%, although the maximum adjusted R^2 of the model is 16%. The results of this test are consistent with the efficient market hypothesis. Therefore, hypothesis number three of the research (stock price drift on the day after the announcement of earnings and earnings changes compared to the previous quarter forecast) is confirmed.	
The forecasted profit announcement and profit changes compared to the previous season forecast with the volume of shares traded the next day and at the level of 5% are not significant. Therefore, hypothesis number four of the research (there is a relationship between the volume of shares traded on the day after the announcement of the forecasted profit and changes in earnings compared to the forecast of the previous season) is rejected.	

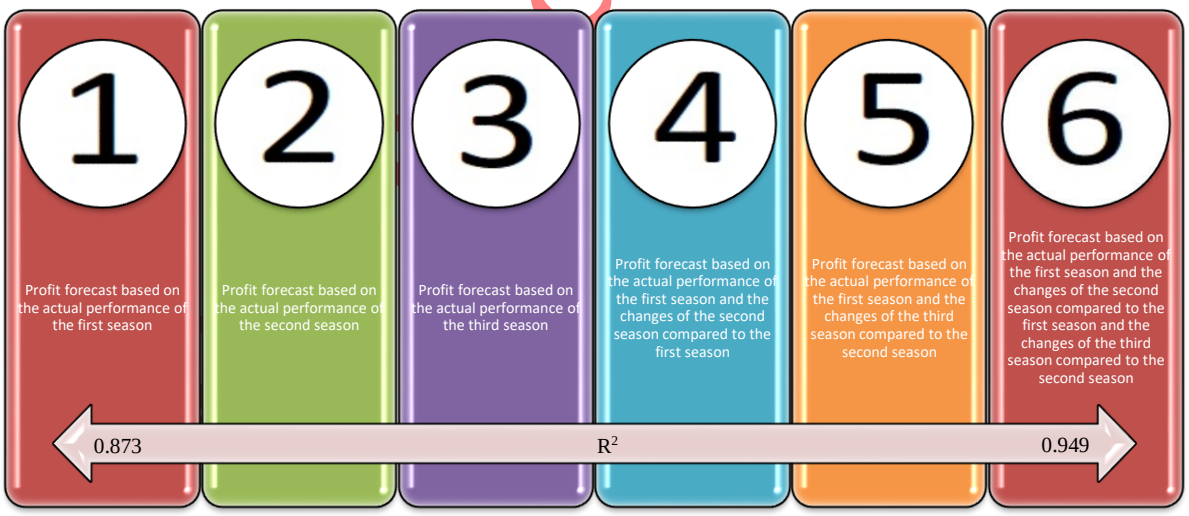

Fig. 2: Flowchart - Perform the Suggested Method

6 Discussion and Conclusion

Accounting profit forecasting as a common feature among all users is one of the cases that external users have always been interested in forecasting its amount. In Statement No. 8 (2010), one of the main features of the decision was considered as one of the concepts of the Financial Accounting Standards Board's theoretical framework for financial reporting. The lower the profit fluctuations predicted by

management, the greater its reliability and vice versa. Similarly, the earlier the profit forecast is made, the more relevant it is, provided it is verifiable, and vice versa. In the present study, the effect of predictive earnings information content resulting from seasonal performance on stock price drift was investigated. Findings of this study indicate that 1- Profit forecast based on quarterly performance has more verifiability than the previous year (profit stability). Therefore, managers' information hypothesis that they have valuable information in the ability to predict profits is confirmed. In other words, instead of forecasting this year's profit from the previous year's profit (profit stability), it is better to use seasonal operations. 2- The profitability of the year profit is more than the profit forecast based on the 9-month performance. Therefore, there is evidence of a contradiction between the timeliness and verifiability of profits. In other words, the forecast and verification of this year's profit based on 9-month performance is more than the forecast and verification of this year's profit of 3-month performance. 3- Stock price drive is expected on the day after the announcement of earnings and there are changes in earnings compared to the forecast of the previous season, which is consistent with the efficient market hypothesis. In other words, when the quarterly profit is announced and there are changes in the profit, the stock price drop occurs the next day. 4- No relationship was observed between the volumes of shares traded the next day and the announcement of the forecasted profit and the changes in the profit compared to the forecast of the previous season.

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