

Market Response Research on the Pre-Increased Profit of Listed Companies

Wenbin Yuan

School of Nanjing University of Science and Technology Nanjing 210000, China

936984008@qq.com

Keywords: Net profit growth, stock price change, regression analysis.

Abstract: Financial indicators are indicators that can measure the operating performance of listed companies, and they have a significant impact on the stocks of listed companies. In this paper, the stock price of the listed company that announced the performance forecast in 2018 is the research sample within one month after the release of the performance forecast. The research on the impact of the profit notice of the listed company's annual report on the stock price change is analyzed to analyze the expected forecast disclosure. Whether the profit pre-increased information affects the stock price and whether it is delayed. From the regression analysis and correlation test results of this paper, there is a strong correlation between the direction of the profit increase of listed companies and the direction of the change of their stock prices.

1. Introduction

The changes in the stock price of listed companies are affected by many factors, among which there are three main aspects: First, factors from outside the market, including fiscal policy, macroeconomic orientation, monetary policy, etc. Second, factors from the market, including The mentality of both parties to the transaction, stock market price fluctuations and market management behaviors; third, internal factors from the company, including financial accounting information, major events of the company. Financial information plays an important role in the determination of stock prices, and is also an important consideration for fundamental analysis. As a well-founded financial forecasting indicator, its role is to convey to the market the company's expected profit information, which can weaken the information asymmetry caused by the existence of inside information in the securities market to a certain extent, thus Further strengthen market efficiency. From the perspective of empirical analysis, this paper focuses on the profit pre-increment information in the announcement of the listed company in the A18 stock market announcement of the mid-year performance forecast. Does the profit pre-increment information in the annual report affect the stock market price changes and how it affects the impact? Out of the analysis.

2. Variable selection and model building

2.1. Variable selection

Taking into account the psychological expectation of market investors' decision-making, this paper takes the net profit growth information in the performance forecast of listed companies as the explanatory variable, and takes the stock price as the explanatory variable within one month after the disclosure of the annual report, and performs multiple regressions respectively. Analysis and correlation tests are used to test whether the net profit growth information in the annual report has an impact on the market performance of the listed company's stock price.

2.2. Data screening

Based on the research questions in this paper, the author selects stocks with large market value from all listed companies that publish the mid-term performance forecast for 2018, and screens out other major events that occurred during the inspection period, causing abnormal stock price fluctuations (such as daily limit, down limit, and additional issuance). Etc.) and during the

inspection period, stocks that caused a sharp drop in stocks due to stock ex-rights occurred. Therefore, the stocks of 96 listed companies were selected as samples, of which 60 were pre-increased profits and 36 were pre-reduced profits. All data were from CSMAR and RESSET databases.)

2.3. Model building

In the process of data sorting, the author finds that the correlation between the profit increase (decrease) of the sample and the fluctuation range of the stock price is not obvious. However, the direction of change, that is, the sign of the data has a significant positive correlation. Therefore, two models are constructed to examine the correlation between the listed company's profit pre-increment announcement and its stock market reaction from two perspectives. The model is built as follows:

(1) Quantity relationship model

Y_i represents the stock price change rate, X_{1i} represents the upper limit of the profit pre-increased range, X_{2i} represents the lower limit of the profit pre-increased range, β is the coefficient of X, and C is a constant. The binary linear model is constructed as follows:

$$Y_i = C + \beta_1 X_{1i} + \beta_2 X_{2i} + \sigma \quad (1)$$

Since the model only considers an explanatory variable for net profit growth, the effect of Y_i on other neglected pairs of explanatory variables is explained by σ , and it is assumed to conform to the classical assumption of econometric.

(2) Directional relationship model

Y represents the direction of stock price change, D represents the profit pre-growth, and constructs a one-time linear model as follows:

$$Y_i = D_i + \sigma \quad (2)$$

The corresponding relationship is: stock price rises, $Y_i=1$; stock price falls, $Y_i=-1$; stock price does not change, $Y_i=0$. In the same way, the representative profit in the formula is expected to change direction. The corresponding relationship is as follows: profit pre-increased, $D_i=1$; profit pre-reduction, $D_i=-1$; profit is expected to remain unchanged, $D_i=0$. σ Represents a random error term.

3. Model estimation and inspection

(1) The magnitude of the stock price change within one month of the explanatory variable

Use SPSS to make regression analysis on the pre-increase information of the listed company's annual report disclosure and the stock price change rate within one month after the disclosure of the annual report, and construct the model. After eliminating the abnormal items, the results are as shown in Table 1 and Table 2. Show:

Table.1. Summary of Model

Model	Correlation coefficient R	R square	Adjust R square	Standard estimated error
1	0.084	0.007	-0.017	13.32116

Table.2. Model coefficient estimation

	Model	Non-standardized coefficient		Standardized coefficient	t	Sig
		B	Standard error	Beta		
1	constant	5.714	1.564		3.654	0.000
	Profit pre-up limit	-0.023	0.031	-1.758	-0.762	0.448
	Lower profit margin	0.023	0.030	1.757	0.761	0.449

Therefore, it can be seen from the software analysis that there is a negative correlation and a positive correlation between the price change rate of the stock and the upper and lower limits of the profit disclosed by the listed company in the performance forecast. According to the results of the statistical analysis software, it can be concluded The linear model of multiple estimates is as follows:

$$Y_i = 5.714 - 0.023X_{1i} + 0.023X_{2i} \quad (3)$$

It can be seen from the data in the regression analysis (Table 2) that the Sig. of the two independent variables is significantly larger than 0.001, so there is no significant correlation. Therefore, it can be concluded that there is no relevant quantitative relationship between the expected change in profit in the listed company's performance forecast and the stock price volatility within the next month.

(2) Directional relationship model

According to the previously preset orientation relationship model, the profit pre-increment information and stock price change information of the listed company are converted into variables indicating only the direction of change. The new data obtained will be tested and the results are as follows.

A test of the correlation between the direction of stock price movement and the direction of profit change within one month:

Table.3. Correlation test between the direction of stock price change and the direction of profit change within one month

		Profit pre-upper limit symbol	Profit pre-upper limit symbol	Stock price change symbol within one month
Profit pre-upper limit symbol	Pearson Correlation	1	1.000**	0.244*
	Sigma. (Bilateral)		0.000	0.025
Profit pre-upper limit symbol	Pearson Correlation	1.000**	1	0.244*
	Sigma. (Bilateral)	0.000		0.025
Stock price change symbol within one month	Pearson Correlation	0.244*	0.244*	1
	Sigma. (Bilateral)	0.025	0.025	

** .Significantly correlated at the 0.01 level (Bilateral).

* .Significantly correlated at the 0.05 level (Bilateral).

From the above table, it can be seen that there is a significant correlation between the direction in which the listed company's profit is expected to change and the direction in which its stock changes within one month.

4. Conclusion analysis

From the above, we can see that the profit pre-increment information in the performance announcement published by the listed company has a positive impact on the fluctuation of its stock price. This effect is reflected in the positive correlation between the profit pre-increment information and the stock price change.

However, this correlation cannot be effectively quantified. That is, the profit increase rate of a listed company cannot make a good prediction and estimation of the stock price fluctuation. The performance forecast information of a listed company can only be used for the next period of its stock price. The direction of change in the period is effectively predicted, that is, the listed company's profit is pre-increased, then its stock price has a high probability of rising; if the listed company's profit is pre-decreased, its stock price is likely to decline. In addition, investors are not able to pass the expected changes in the profit forecast in the listed company's earnings announcements and the specific possible changes in the forecasted stock prices.

The author believes that there are several reasons for the above phenomena:

(1) China's securities market continues to develop

With the continuous development of China's securities market, the investor behavior of the stock market has become increasingly mature and rational. In this case, investors can respond to a variety of market information, such as investing in a stock when there is a policy or company-level good news, which in turn causes stock prices to rise. The performance forecast of a listed company is also an effective message that can cause investors to react. When a listed company expects profit growth, investors will rush to invest in the company's stock; when the listed company expects profit to fall, investors will sell it. The stock thus caused the company's stock price to fall. All in all, the effective impact of the profit forecast information in the listed company's performance forecast on the stock price reflects the effectiveness of the information and the development and maturity of the market to a certain extent.

(2) China's securities market is still not mature enough

Although the profit forecast information in the listed company's performance forecast can affect the investor's behavior to a certain extent, thus affecting the trend of the stock price, this correspondence is not quantifiable. The reason is that China's securities market is still not mature enough. Although investors can respond to the information published by the listed company in the performance forecast. However, because each investor's psychological expectations are different, the investment mentality is different, and the market is expected to be different, investors cannot accurately and reasonably respond to various information, and the actual realization is not between the profit pre-increment and the stock price. There is a valid correspondence.

At the same time, because the market development is not mature, investors can not respond to the information displayed by the market in a timely manner and be reflected in the stock price. This reaction cycle takes a long time. Judging from the previous test results, as time goes by, the correlation between the expected change direction of the profit in the listed company's performance forecast and the direction of the stock price change is increasing, which indicates the effective response period of investors in China's securities market. Longer.

Combining the above model construction, regression analysis and result analysis, we can draw the conclusion that the listed company's profit pre-increment information has a positive impact on the market performance of its stock, but this effect is limited to the symbol. There is no effective reference value for the specific stock market price changes.

At the same time, we can conclude that the current stock market is a weak effective market through the investor's market behavior, and the strong correlation between the stock price volatility, the direction of stock price changes and the direction of the listed company's profit. Although the financial information and good news of listed companies have a positive impact on investors' investment decisions, this influence cannot be quantified, and investors' response to such information is not rational enough. When investing in investment decisions, investors still refer to the historical trend of stock prices to a large extent, rather than the intrinsic value of stocks. In other words, although the stock price of the stock market can respond to various public information, its

specific price does not reflect all public information effectively and effectively. In fact, the stock price of the listed company changes very much. To a large extent, it still depends on its historical trend.

References

- [1] Ball R, Brown P. An empirical evaluation of accounting income numbers [J]. Journal of accounting research, 1968, 6 (2): 159-178.
- [2] Collins D W, Maydew E L, Weiss I S. Changes in the value-relevance of earnings and book values over the past forty years [J]. Journal of accounting and economics, 1997, 24 (1): 39-67.
- [3] Clubb C, Naffi M. The Usefulness of Book - to - Market and ROE Expectations for Explaining UK Stock Returns [J]. Journal of Business Finance & Accounting, 2007, 34 (1 - 2): 1-32.
- [4] Gu Jing. Empirical Study on the Impact of Public Announcement on the Stock Price of Listed Companies [J]. National Business Situation: Economic Theory Research, 2008 (9): 74-75.
- [5] Huang Guangxiao, Lin Hui. Path Dependence Analysis of Equity Separation[J]. Fujian Forum: Humanities and Social Sciences, 2006 (2): 90-93.
- [6] Li Shouxi. Comparison of Sino-US Differences in Accounting Statement Information and Stock Price Correlation [J]. Shanghai Finance, 2004 (7): 33-35.
- [7] Ohlson J A. The theory of value and earnings, and an introduction to the Ball - Brown analysis*[J]. Contemporary Accounting Research, 1991, 8 (1): 1-19.
- [8] Wu Shinong, Huang Zhigong. Empirical Research on Profit Information Report of Listed Companies, Stock Price Change and Stock Market Efficiency [J]. Accounting Research, 1997, 4: 12-17.
- [9] Xin Nian, Preference and Behavioral Finance: Belief, preference and behavioral finance [M]. Peking University Press, 2007.
- [10] Yang Yan. Empirical Study on the Impact of Accounting Information on Stock Price [J]. Modern Economic Information, 2009, 16: 154.
- [11] Zhang Bing, Li Xiaoming. Research on the Progressive Effectiveness of China's Stock Market [J]. Economic Research, 2003, 1: 54-61.
- [12] Zhang Wei. The Revision of Accounting Indicators from the Influence of Accounting Information on Stock Price [J]. Theoretical Journal, 2007 (1): 77-79.
- [13] Zhao Yulong, Wang Zhitai. An Empirical Study of the “Function Locked” Phenomenon in China's Securities Market [J]. Economic Research, 1999, 9: 56-63.