WHICEB 2023 Proceedings | Wuhan International Conference on e-Business

Summer 5-28-2023

Impacts of Analyst Reports' Descriptions of Corporate Innovative Behavior on Stock Price Synchronicity

Wei Zhang
School of Information, Central University of Finance and Economics, Beijing, 100081, China, weizhang@cufe.edu.cn

Yu-xia Zhao
School of Information, Central University of Finance and Economics, Beijing, 100081, China

Chen-guang Li
School of Insurance, Central University of Finance and Economics, Beijing, 100081, China

Yan-chun Zhu
Business School,Beijing Normal University,Beijing,100875,China

Xue-feng Li
School of Information, Central University of Finance and Economics, Beijing, 100081, China

Impacts of Analyst Reports' Descriptions of Corporate Innovative Behavior on Stock Price Synchronicity

Wei Zhang[1], Yu-xia Zhao[1], Chen-guang Li[2], Yan-chun Zhu[3], Xue-feng Li[1]

[1]School of Information, Central University of Finance and Economics, Beijing, 100081, China

[2]School of Insurance, Central University of Finance and Economics, Beijing, 100081, China

[3]Business School,Beijing Normal University,Beijing,100875,China

weizhang@cufe.edu.cn(Wei Zhang)

1. INTRODUCTION AND RESEARCH QUESTIONS

Stock price synchronicity hinders the efficiency of resource allocation. Based on the view of information efficiency, Roll[1] points out that the integration of information at the enterprise level is the reason for the heterogeneity of stock price fluctuations. Noise trading theory holds that the fluctuation in the stock price is not entirely caused by information factors, especially in markets in which noise trading dominates. Noise deteriorates the efficiency of information transmission, which causes the stock price to deviate from the true value of the enterprise and presents low stock price synchronicity [2]. The key influencing factor for the formation of stock price synchronicity is information asymmetry[3]. Analysts interpret the company's idiosyncratic information and are important intermediaries in the transfer of information between investors and corporations[4]. Previous studies have interpreted analysts' influence on stock price synchronization on the side of information efficiency or noise trading theory. As one of the important corporate characteristics, corporate innovation behavior is an important basis from which investors evaluate corporate value. In reality, there is a large information asymmetry between the internal and external investors in the enterprise innovation behavior information[5]. Research in recent years has begun to focus on the impact of textual content features of analyst reports on stock price synchronization, but relatively few studies have focused on the textual characteristics of corporate innovation descriptions in analyst reports and their impacts on stock price synchronicity.

Therefore, this study will evaluate the relationship between the corporate innovation behavior descriptions in analyst reports and the stock price synchronicity from the corporate micro-level perspective. Our research questions are as follows: (1) How does the analyst's description of a corporate innovation behavior affect stock price synchronicity? (2) How does the degree of information asymmetry affect the relationship between analysts' descriptions of corporate innovation and stock price synchronicity? (3) Do analysts' descriptions of corporate innovations pass through investors to the capital market, thus affecting stock price synchronicity? (4) Is noise trading a mediating factor between analysts' descriptions of corporate innovation and stock price synchronicity?

2. THEORY AND RESEARCH FRAMEWORK

Based on the views of information efficiency and noise trading theory, the hypotheses and research framework are proposed herein (Figure 1).

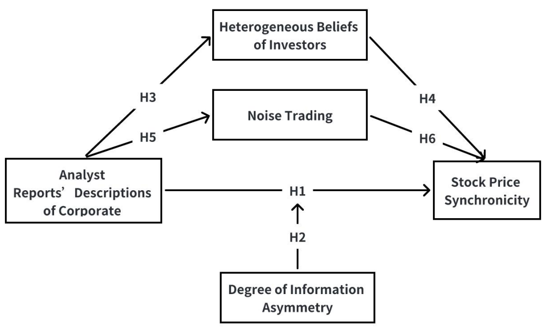

Figure 1. Research framework

In this study, we selected non-financial listed companies from the Shanghai and Shenzhen A-shares from 2019 to 2021 as the research samples. We collected 70,695 analyst reports from Oriental Fortune. We collected the financial data of the companies involved and the stock market data from the CSMAR and Ruisi databases. The study quantified the description of analysts' reports on corporate innovation behavior through text analysis and tested our hypothesis through several multiple linear regression models.

3. RESULTS AND MAJOR FINDINGS

This study observed some valuable findings: (1) the corporate innovation behavior descriptions in analyst reports can restrain the stock price synchronicity; (2) due to the existence of information asymmetry, the signaling mechanism in the stock market is hindered, and the inhibitory effect of the analyst report corporate innovation behavior descriptions on the stock price synchronicity is weakened; (3) investors form heterogeneous beliefs based on the corporate innovation behavior information in analyst reports, which are transmitted to the stock prices through market transactions, which thus reduces the stock price synchronicity; (4) analyst corporate innovation behavior descriptions have a negative correlation with the noise trading level; however, the relationship between the noise trading and stock price synchronicity is not substantial. The conclusion supports the "information efficiency view", and it indicates that securities analysts can effectively mine corporate innovation behavior information. The textual contents of the reports of securities analysts contain incremental information, which can effectively alleviate the stock price synchronicity of enterprises.

4. CONTRIBUTIONS

This study evaluated the relationship between the corporate innovation behavior descriptions in analyst reports and the stock price synchronicity from the corporate micro-level perspective. Through the textual analyses of analyst reports, we constructed an information content index that describes the enterprise innovation behavior. Based on the views of information efficiency and noise trading theory, we took the degree of information asymmetry as the moderating factor and the heterogeneous beliefs of investors and noise trading as the mediating factors, and we analyzed the influence of the corporate innovation behavior descriptions in analyst reports on the stock price synchronicity. We provide favorable evidence for analysts as information intermediaries, discuss the mechanism of the role of securities analysts in stock price synchronicity, and thereby enrich the theoretical stock price synchronicity research.

ACKNOWLEDGEMENT

This research was supported by the National Natural Science Foundation of China under Grant XXXX. This work was supported by National Natural Science Foundation of China (71874215, 71571191) and MOE (Ministry of Education in China) Project of Humanities and Social Sciences (15YJCZH081, 17YJAZH120, 19YJCZH253), Fundamental Research Funds for the Central Universities (SKZZY2015021).

REFERENCES

1. ROLL, R.: R2. The Journal of Finance 43(3), 541–566 (1988).
2. West, K.D.: Dividend Innovations and Stock Price Volatility. Econometrica 56(1), 37–61 (1986).
3. Myers, S.C., Jin, L.: R-Squared Around the World: New Theory and New Tests. Journal of Financial Economics 79(2), 257–292 (2006).
4. Zhang, Z, Yang W.C.: Reputation Model or Information Model: How do China Securities Analysts Affect the Market. Economic Research 51(09), 104–117 (2016). (in chinese)
5. Han, P., Yue, Y.Y.: Economic Consequences of Information Disclosure of Enterprise Innovation. Accounting Research 37(01), 49–55+95 (2016). (in chinese)