

Investor Sentiment and Mispricing of Assets--from Behavioral Finance Perspective

Yuhui Den

Agricultural Bank of China Shenzhen Branch, Shenzhen 518000, China

ABSTRACT. *From the perspective of behavioral finance, this paper explores the impact of investor sentiment on asset mispricing and the moderating role of accounting conservatism in the relationship between investor sentiment and asset mispricing. The research shows that the more optimistic investors are, the more overvalued stock prices are. The improvement of accounting conservatism can alleviate the positive impact of investors' optimism on stock price overvaluation. The conclusion of this study provides a theoretical basis for relevant departments to mitigate the impact of investor sentiment on asset mispricing from the perspective of accounting conservatism, and also provides a way to improve the pricing efficiency of the securities market.*

KEYWORDS: *investor sentiment, Asset pricing, Accounting conservatism*

1. Introduction

From the Internet bubble in the NASDAQ market in 2001 to the subprime mortgage crisis in 2007 to the global financial tsunami in 2008 and the European sovereign debt crisis in 2010, investors showed strong irrational characteristics, and a large number of emotional transactions caused a big market turbulence. Since 2015, asset prices in global capital markets have changed dramatically. The problem of asset prices deviating from intrinsic value, i.e. asset mispricing, has become more and more serious. However, China's capital market is still in the emerging stage of development, and the problem of asset mispricing is more prominent. Long-term and persistent mispricing will lead to the inadequate allocation of capital market resources, hinder the healthy development of capital market and seriously endanger financial security. In order to alleviate the mispricing of assets, it is an important problem that needs to be solved urgently in the field of capital market research in our country to deeply analyze the mechanism of mispricing of assets. Although previous studies have pointed out the existence of investor sentiment bias and confirmed its impact on stock prices from different perspectives, most studies emphasize the subjective factors of investor sentiment, ignoring the objective causes of emotional trading. For the question of "how to improve objective factors to restrain emotional trading to alleviate the impact of investor sentiment on asset mispricing", it is still unable to give a clear answer and feasible suggestions.

Accounting information is an important basis for investors to make investment decisions. Investor sentiment can not be separated from the impact of accounting conservatism as one of the important contents of accounting information quality. Based on behavioral finance and investor sentiment's influence on asset mispricing, this paper studies whether poor accounting conservatism is the objective factor of investor sentiment from the perspective of accounting information. That is whether improving accounting conservatism can effectively inhibit the emergence of emotional trading behavior and alleviate the impact of investor sentiment on asset mispricing.

The theory of behavioral finance can be traced back to the late 1960s. Scholars such as Tversky and Kahneman studied people's investment decision-making behavior in the field of psychology, and generalized the phenomenon of recognition as "cognitive bias". However, due to the prevailing efficient market theory at that time, behavioral finance research has not received extensive attention. Until the late 1980s, with the breakthrough of Thaler and Hiller's research, behavioral finance theory ushered in the golden period of research. Behavioral finance theory advocates paying attention to the behavior analysis of investors in financial decision-making. It combines psychology, behavioral science and other scientific theories. On the basis of retaining the optimization theory, it starts from the actual behavior model of the individual investor and analyses the financial market which is closer to the reality.

The most representative studies include the time pattern of stock returns and investors' psychological accounts (Thaler, 1987); the relationship between abnormal fluctuation of stock price, herding behavior of stock market, speculative price and popular mentality in the crowd (Shiller, 1981, 1990); disposal effect (Odean, 1998); research on abnormal phenomena of IPO (Ritter, 1991); the switching mechanism of overreaction and underreaction (Kahneman, 1998) and so on.

After the 1980s, behavioral finance theory replaced efficient market theory and became a more popular theory in financial academia, but so far there is no unified research system.

At present, the research on behavioral finance theory is mainly carried out at two levels: market inefficiency and investor behavior. The research of investor behavior can be divided into two aspects: the individual behavior of investors and the group behavior of investors. In the study of investor group behavior, there are many specific research directions, such as heterogeneous beliefs, investor sentiment, herding effect and so on. Investor sentiment is an important branch of investor group behavior research. The research on investor sentiment is mainly from the perspective of investment and psychology. Shleifer (1997) was the first to use psychological concepts to define investor sentiment. He believed that investor sentiment reflected a dynamic process, that is, the wrong use of Bayesian law by investors. Barberis et al. (1998) interpreted this dynamic process as an overreaction to good or bad news on the basis of cognitive psychology and expectation theory. Chang (2009) believes that the difference in investor sentiment is not only limited by professional knowledge, but also related to the emotional factors of traders at every dynamic moment. Wang Meijin and Sun Jianjun (2004) share similar views. Mehra and Sah (2002) argue that

investor sentiment is an indicator of risk preference. Baker and Stein (2004) further specify risk preference as a misvaluation of pricing. Other scholars define investor sentiment from investment attitude. Brown and Cliff (2005) linked emotions to stock market mispricing, and found a significant positive correlation between emotional variables and market returns. Baker and Wurgler (2006, 2007) argue that investor sentiment is a combination of expectations and variances given by traders for future cash flows, but at the same time this judgment does not reflect current facts.

Generally speaking, investor sentiment refers to an emotional reaction of investors in the face of changes in market conditions and a comprehensive response of traders to expectations and variances of future cash flows (Baker and Wurgler, 2006, 2007). But investor sentiment is more often an irrational emotional judgment, which often leads to over-reaction to positive or negative news (Barberis et al., 1998). There are fewer theoretical studies on investor sentiment than empirical studies. The most important theoretical models are BSV model (Barberis et al., 1998), DHS model (Daniel et al., 1998). BSV model establishes models from the perspective of company and investor respectively. It concludes that the company's earnings can be summarized into two states: one is contrary to the previous period, the other is a trend of continuous increase. In each issue, investors observe returns according to Bayesian law, and use external information to update their beliefs about their status. DHS model divides investors into informed investors and uninformed investors. Investors without information are not susceptible to judgment bias, but the price of investment assets in financial markets is determined by investors with information, while investors with information usually have two kinds of bias: overconfidence and self-attribution bias.

The theoretical models of investor sentiment have different ideas. Generally speaking, the main factors affecting investor sentiment are first found out, and then different mathematical models are used to incorporate the indicators of investor sentiment, forming the model under the theoretical framework. However, up to now, there is no authoritative systematic framework to study the impact and role of investor sentiment. Moreover, although these models reveal the impact and role of some investor sentiment, the conclusion of the study is somewhat one-sided because only the research perspective is limited to investor sentiment. If we can combine investor sentiment with other factors, the results will be more comprehensive and reasonable. Based on the existing research and from the perspective of investor sentiment, this paper will construct the path of "accounting Conservatism - investor sentiment-Asset mispricing", which is an in-depth exploration of the formation mechanism of asset mispricing.

2. Investor Sentiment and Mispricing of Assets

Behavioral finance holds that whether investor sentiment will lead to mispricing of assets depends on the following two conditions: first, investor sentiment has an important impact on investor behavior decision-making; second, limited arbitrage. Influenced by investor sentiment, the stock price will temporarily deviate from the intrinsic value. If arbitrage behavior is not limited, the stock price will

return to the intrinsic value. However, when arbitrage is limited, the deviation will continue, that is, short-selling restriction will significantly hinder the elimination of investors' sentiment-dominated asset mispricing. Studies have confirmed that the foreign securities market environment meets these two conditions, and found that investor sentiment can affect the company's stock price. Compared with the mature Western securities market, China's securities market is still in the stage of development. Investors' behavior is obviously affected by emotions, while the problem of limited arbitrage is prominent, so the above two conditions are satisfied. From the perspective of the impact of investor sentiment on investment behavior, the participants in China's securities market are mainly individual investors. Compared with professional institutional investors, the professional investment knowledge of individual investors is limited. Investment decisions usually focus on subjective judgment and "chase the ups and downs" with sentiment. At the same time, institutional investors are not entirely rational. Although they have professional knowledge and forecasting and analysis ability, they often ignore the basic information of the company and pay too much attention to market psychological expectations in decision-making, and have obvious speculative tendency. Both types of investors have subjective psychological bias in emotional trading, and their behavior decisions will be affected by subjective emotions. From the perspective of limited arbitrage, China's securities market has been constrained by short selling for a long time. Limited arbitrage is serious. Even after the introduction of margin trading and stock index futures, the short selling restriction has been relaxed. However, due to the extremely unbalanced development between financing and margin trading, the scale of financing transactions is much larger than that of margin trading, the role of margin trading mechanism is weak, the channel of expression of bearish views in the market is still not smooth and can not fully reflect the negative information in the market, and small and medium-sized investors will be unable to operate because of the threshold restrictions of stock index futures trading. Therefore, the special investor structure dominated by individual investors in China's securities market and the special institutional background of long-term short-selling restrictions lead to the influence of investor sentiment on asset mispricing in China's securities market.

Specifically, in a positive emotional state, investors have a strong willingness to buy, a weak sense of risk, and often pay attention to investment efficiency. They mainly use frequent and radical trading methods, such as additional trading volume, pursuing high-priced stocks and so on. Such active participation in market transactions will continue to push asset prices higher. Because of the restriction of arbitrage, only optimistic investors participate in trading in the securities market, while pessimistic investors can not participate in the securities market because of the restriction of short selling. Optimistic investors have become the dominant force in the securities market. Stock prices reflect the attitude of optimistic investors, so that the intrinsic value of stock prices relative to listed companies is greatly overestimated. When individual emotions evolve into systematic group bias, which makes the emotions no longer present individual characteristics but show obvious sociality, under the interaction mechanism of social groups, investors' emotions interact with each other, and trading behavior tends to converge, resulting in

overvaluation of individual stock prices evolving into group overvaluation, driving prices upward. At the same time, there is feedback mechanism between investor sentiment and stock price. The rise of stock price meets investors' expectations, strengthens investors' confidence, strengthens investors' optimism, and further increases stock price. This will attract more investors to buy, and promote the feedback mechanism to continue to circulate, thus exacerbating the degree of overvaluation of stock prices. Therefore, it can be concluded that the more optimistic investors are, the more overvalued stock prices will be.

3. Accounting Conservatism, Investor Emotion and Mispricing of Assets

Investor sentiment, as a representative deviation of bounded rationality, seriously affects the correct valuation of stocks by investors. This psychological deviation is caused not only by subjective factors, but also by objective factors. Accounting information is an important basis for investors to make investment decisions. Accounting information reflects the company's earnings and losses, or the "good" and "bad" of the company's disclosure of information content is an important objective factor for investors' emotional trading. Companies with poor accounting conservatism are more active in recognizing earnings than losses, and more timely in releasing good news than bad news, which may prompt investors to be optimistic, thus affecting asset mispricing.

From the perspective of information asymmetry, management has information within the company concerned, which is not available to outside investors. Due to the close relationship between management salary and position and stock price, for the motivation of improving salary and position, management may actively confirm earnings in advance or release good news of company earnings to external investors frequently, stimulating investors to arouse optimism, attracting investors to buy stocks and driving up stock prices. As an effective corporate governance mechanism, accounting conservatism can restrain managers from ignoring or underestimating losses, overestimating net assets and profits to increase earnings without authorization, and restrain managers from concealing bad news and releasing good news frequently. The listed companies with higher accounting conservatism have their losses recognized and recorded in accounting earnings in time, the bad news of unfavorable earnings is disclosed in time, more real and objective accounting earnings information is grasped by external investors, and the information asymmetry between external investors and management is reduced significantly. Therefore, accounting conservatism can alleviate the problem that optimistic trading continues to push up stock prices by alleviating information asymmetry and restraining investors' optimism.

From the perspective of signaling theory, accounting conservatism requires the management of listed companies to confirm their expenses and liabilities in time and not overestimate their income and assets, so the disclosed accounting information presents lower corporate profits and assets, and conveys the information of expected loss to the outside world. Based on this robust accounting information, investors are more cautious in evaluating the intrinsic value of listed companies and more

objective in stock price expectations, which can effectively reduce the optimism of investors, and ultimately reduce the positive deviation of stock market price from the intrinsic value. In other words, because accounting conservatism requires that the confirmation of bad news be more timely than that of good news, the disclosure of bad news sends a negative signal to the company's development, which makes optimistic investors adjust downward their optimistic expectations of stock prices. When bad news is transmitted frequently, investors' optimism is significantly reduced due to the signal stimulation, and the possibility of continuing to push up the stock price through a large number of stock purchases is reduced. The more the bad news is disclosed, the less likely the stock price is overvalued due to investors' optimism. Therefore, the asymmetric characteristics of accounting conservatism itself on the confirmation of loss and return, bad news and good news can restrain investors' optimism through the role of signal transmission, thus alleviating the problem of overvaluation of stock prices caused by emotional trading.

To sum up, whether from the perspective of information asymmetry or signal transmission between external investors and management of listed companies, it can be concluded that improving accounting conservatism can effectively suppress investors' optimism, and then alleviate the impact of optimism on stock price overvaluation. The more robust the accounting information is, the more obvious the restraint effect on investors' optimism is, and the greater the negative moderating effect on the positive relationship between investors' optimism and stock price overvaluation. Therefore, it can be concluded that the improvement of accounting conservatism can alleviate the positive impact of investors' optimism on stock price overvaluation.

4. Conclusions and Suggestions

From the perspective of behavioral finance, this paper investigates the influence of investor sentiment on asset mispricing. Based on accounting information, this paper focuses on the moderating effect of accounting conservatism on the relationship between investor sentiment and asset mispricing, starting from the objective factors of investor sentiment trading. It also answers the question whether the improvement of accounting conservatism can effectively alleviate the impact of investor sentiment on asset mispricing. The results of this study show that the more optimistic investors are, the more overvalued stock prices will be. The improvement of accounting conservatism can alleviate the positive impact of investors' optimism on stock price overvaluation.

Based on the above conclusions, the following suggestions are put forward: Firstly, we should strengthen investor rational investment education. Investor sentiment will seriously affect the correct valuation of stocks, so it is very important to strengthen investors' rational investment education to improve the pricing efficiency of the securities market. Specifically, securities regulators should actively guide and promote investors' rational investment education from the perspective of policy formulation; securities companies and other securities service institutions should play their main role in guiding investors' emotions, strengthen publicity and

education, and avoid the occurrence of group investors' emotional trading. The above regulators and service providers should take their respective responsibilities to help investors establish correct investment ideas, improve investors' rationality, and alleviate the mispricing of assets caused by investors' emotional trading.

Secondly, the standard of accounting conservatism should be formulated. Accounting conservatism can alleviate the overvaluation of stock prices caused by over optimistic expectations. At the same time, because too high accounting conservatism will damage the usefulness of earnings information, in the process of perfecting accounting standards in China, we should not only pay attention to the positive role of the conservatism of accounting information quality, but also consider the problem that too high accounting conservatism affects the usefulness of accounting information, and formulate the standard of "appropriate use". For example, the principle of "importance" should be integrated into "conservatism". In the general transaction process, accounting should focus on the relevance of accounting information. For the special transactions which are easy to arouse investors' sentiment, such as major good or risky transactions, the principle of accounting stability should be given priority. Through the "appropriate use" of accounting conservatism, we can effectively play the role of accounting conservatism in alleviating the overvaluation of stock prices caused by optimism, and improve the pricing efficiency of the securities market.

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