Analysis of China’s Stock Market and the Psychology of Individual Investors based on Behavioral Finance

Yuning Chen

College of Economics & Management, South China Agricultural University, Guangzhou 510642, China.
1577749963@qq.com

Abstract. With the continuous development of the economy and finance, China’s stock market also moves on, but its system is still imperfect due to historical reasons. In addition, the characteristics of Chinese culture and society make the domestic financial market very different from that of foreign countries, especially in the psychology of investors. Based on behavioral finance, this paper studies the psychology of investors and then gives some suggestions on the investment to Chinese individual investors in order to help them make rational investments.

Keywords: the psychology of individual investors; behavioral finance.

1. Introduction

Individual investors, with limited professional knowledge, tend to collect and analyze the financial market based on psychology. As a result, they are likely to make irrational investment decisions. Therefore, it is not enough to adopt the traditional financial theory to explain the root of such behaviors and give corresponding strategic suggestions. However, behavioral finance, an emerging discipline in the financial market, is of more practical significance, because it makes the best use of traditional psychology and basic social disciplines in practice. China’s stock market, still in its emerging phase, needs to be improved in many aspects. At present, the most important issue to be solved is the excessive speculation in the market, which is mainly caused by the irrational behavior of most institutional investors and many small and medium-sized investors (1). This paper mainly applies the method of literature review to summarize the theoretical basis and models of behavioral finance. By analyzing the psychology of individual investors, this paper sorts out the main trend of investment behaviors. After that, the focus shifts towards the psychology of excessive self-confidence and herd instinct, and their effects on the stock market. By studying from the perspective of psychology, this paper aims to optimize the stock market environment and promote the healthy development of China’s stock market.

2. A Review of Behavioral Finance Theory

2.1 Researches on Behavioral Finance

2.1.1 The Definition of Behavioral Finance

Compared with traditional finance, behavioral finance, incorporating the core contents of traditional psychology and economics, comprehensively analyzes the actual decision-making behavior of individual investors. It is a combination of psychology and investment decision-making. The security price is not only determined by the value of security itself, but also largely influenced by the behavior of investors. In another word, psychological activities and behaviors of investors have great impacts on the price of the security market and price changes. Apart from that, the core content of behavioral finance covers the limitations of arbitrage and psychological theory.

2.1.2 The Classical Theory of Behavioral Finance

Behavioral finance explains, studies and predicts the development of financial markets from the perspective of individual behavior and the psychological factors that generate such behavior. Through analyzing deviant and abnormal behaviors performed by financial market entities, the business philosophy and decision-making behavior of different market entities in different market...
environments can be found out. With this theory, descriptive models that can correctly reflect the decision-making behavior of market entities and the actual operation situation can be built up. This theory serves as a supplement to the defects of traditional finance and points out some questions. However, although the theoretical model applied by this theory has been developed for a long time, it still needs to be further improved.

a. Mental Accounting

Mental accounting was first named by Richard Thaler, a professor of Behavioral Science at the University of Chicago. As he puts it, in addition to the actual account, there is a mental accounting in the human mind. People will divide the expenses and benefits into different accounts on the psychological level (2). In real life, most people are affected by mental accounting, so they always have different attitudes toward the equivalent amount of money and make different decisions.

b. Expectancy Theory

Expectancy theory is the core of behavioral finance. Based on the Efficient Market Hypothesis, researchers proposed the Expected Utility Theory, believing that rational investors pay more attention to pursuing the expected utility maximization. They also put forward that there is no deviation between investors’ investment philosophy and subjective probability when estimating price on the basis of the available information. However, the research results in the following years show that people do not always make investment decisions with a rational attitude. What’s more, cognitive biases also have an impact on the financial investment behavior of investors.

c. A Behavioral Approach to Asset Pricing Theory

In the light of Security Potential/Aspiration (SP/A) and Expectancy Theory, Shefrin and Statman (1994) put forward a Behavioral Approach to Asset Pricing Theory, concerning about the capital asset pricing model. According to this new theory, there are two kinds of traders in the market--informed traders and noise traders. The informed traders are the investors within the capital asset pricing model, who take the same attitude towards risks and have no cognitive errors on the investment behavior, while noise traders are the ones outside the model with different attitudes towards risks and are more likely to make cognitive mistakes in investment (3).

2.2 Research on Individual Investment Psychology

2.2.1 Classification of Individual Investors

In the financial product market, individual investment behaviors are diverse. This paper only studies two typical kinds of investors—hyperactive investors and gambler-like investors from the perspective of behavioral finance.

a. Hyperactive Investors

In daily life, people, relying too much on their own predictions, not only underestimate the risks, but also overestimate their ability to control the situation in the face of unexpected situations. However, the data show that the price fluctuation predicted by investors is usually lower than the real price fluctuation in the market. It can also be said that investors underestimate the fluctuation of financial product prices, resulting in a high market turnover rate.

b. Gambler-like Investors

China’s stock market is also known as the "news market" because investors often rely too much on so-called 'grapevine' or 'inside information.' Most individual investors do not make judgments based on their knowledge of listed companies and financial product markets. Instead, they tend to rely on the "inside information" to make investment decisions. As a result, investors rely too much on their information and believe that they can get a lot of benefits from the financial product they invested. However, what they do will only continuously stimulate the speculative psychology of individual investors in the financial product market and aggravate the volatility of the financial product market (4).
2.2.2 The Psychology of Individual Investors and its Impact

Many scholars have studied and classified the psychology of individual investors. With the literature review, this paper sorts out three typical psychology, including overconfidence, regret effect and herd effect, which spread obvious influences on the stock market.

a. Over-confidence

Through observation, practice research and comparative analysis of the research results, psychologists found that people generally tend to trust their judgment and overestimate their opportunities to successfully deal with the cases. Consequently, they tend to attribute the success to their own capacities, while ignoring the role of luck and opportunity. According to scholars and experts, such a kind of cognitive deviation is referred to as the "over-confidence". The most typical performance of overconfidence is to blindly raise the trading volume in the case of excessive trading, which leads to high trading costs and great losses of investors' assets.

b. Herb Effect

Herb effect, also known as herd behavior, refers to the irrational behavior of individuals in a group in the financial market and trading activities. Herb effect is a common phenomenon in people’s social activities. In the financial market, it means that investors choose to imitate the actions of others, instead of following their own beliefs and information. Against the uncertainty of information in this rapidly changing financial market, some investors, for convenience, choose to imitate the public, collect information from other investors and make similar decisions to other investors.

c. Regret Effect

Regret is the pain, which will be generated when people think that they have given up a better one for a worse one. The same applies to financial investment. Although the profits yield by the rise of the financial product can bring a temporary sense of achievement and satisfaction, as the price continues to rise, such senses will gradually disappear and be replaced by regret.

2.2.3 The Impact of Individual Psychology of Investing on the Stock Market

In China, many scholars have studied the impact of individual investors' psychology on the stock market, especially those irrational investors. Li Xiaozhou (2006) mainly studied the influence of irrational psychology, the change of investors’ emotion and trend, as well as social dynamic change on the stock market. According to the study, irrational psychology will lead to asset price bubbles in the security market (6). In a bull market, some cognitive biases of investors will be constantly strengthened, resulting in asset prices far away from the basic value. What’s worse, with such deepening biases, the asset price bubble will be pushed to the peak. While in a bear market, investors’ excessive conservatism and pessimism will also lead to an overreaction of the price, making the asset price extremely lower than its value. Under such circumstances, investors' pessimistic judgment will be further consolidated, with a result of the depression of the market. In general, irrational consumers will buy more stocks when the prices rise, while selling their stocks when the prices fall, making arbitrageur expect more transactions in the future. Accordingly, such an expectancy will cause the stock price far from its basic value, and make the market price more volatile. It can be seen that investors' irrational behavior and asset price will affect each other. Investors’ irrational behavior will cause the change in the asset price, and the price change, in turn, will extend the impact of investors by strengthening their cognition and belief. In other words, the interaction between asset price and investors' cognition is a circular feedback process, which produces the asset price bubble in China’s stock market. Moreover, the change of emotion, trend, and social dynamics will also affect the psychology of investors, thus influencing the price of the capital market. Wang Yali (2005) studies the positive feedback effect of individual investors on China’s stock market and believes that it is the cause of the irrational changes in China’s stock market (7). In China’s stock market, individual investors who are more likely to blindly follow others due to the lack of professional knowledge and market experience are continuously increasing. As a result, with the larger number of individual investors, such the positive feedback effect has spread across the capital market, and then become the dominant nature of the whole market. In sum, this irrational individual investment behavior is magnified by its absolute superiority in quantity, making the entire stock market irrational. Liu lei
(2013) studies the influence of noise traders on the stock market from two perspectives (8). According to the study, noise traders can improve the liquidity and vitality of the stock market, bringing more opportunities for transactions to rational investors. On the other hand, noise traders can also make the market manipulation more serious. Besides, noise traders can make the action of informed traders, just the users of inside trading information, be covered. As a result, rational investors cannot distinguish real insider traders from noise traders, that is to say, rational investors cannot acquire valuable information from the market transaction. With the market motivation covered, insider traders can obtain excess profit. Under this circumstance, insider traders can make transactions many times and thereby increase market participation. To a certain extent, the efficiency of the market has been improved. The information acquired by rational investors mainly includes the information released by noise investors and the information distributed by the market manipulator to confuse the market. However, the two kinds of information cannot be distinguished. Rational investors will conduct market operations based on these two kinds of information. For market manipulators, they can benefit when false market information deliberately spread is used as a basis for investors to make market decisions. At the same time, noise traders can lead to sharp fluctuations in stock prices. In the real market, the mechanism of noise trading is various. For example, performance-oriented arbitrage and positive feedback trading will increase the volatility of market prices.

By reviewing the studies on the impact of irrational investors’ psychology and behavior on China’s stock market, this paper argues that individual investors in China’s stock market are different from each other in the age, education background, professional knowledge of financial market, capacity, the way to get and analyze information, the ability to react and take risks as well as the motivation to enter the stock market. Therefore, it is more likely for individual investors to make an irrational investment, which not only has influences on individual investment income but also the stock market. Therefore, individual investors should be more professional, and make rational investments.

3. Suggestions on the Psychology and Behavior of Individual Investors

Individual investors should be fully aware of the risk of investment in the financial market, establish a right investment view, and actively develop the awareness of risk prevention, so as to take a healthy attitude towards investment, participate in investment prudently and rationally, and avoid risky or impulsive investment. In addition to awareness of rights, individual investors should also ensure that their rights will not be violated by others.

Individual investors should pay more attention to the principal--the important foundation of financial project decision-making and the root of the theoretical model--to strengthen the investment strategy. For any financial investment, individual investors should adhere to the principle of no loss of principal, keep diversified investment in mind, and carefully analyze the type of investments. Apart from that, it is suggested that individual investors avoid buying too many financial products one time and blindly follow informal information, and could divide up their money and keep rational (9).

Moreover, individual investors need to continuously acquire relevant financial investment knowledge to improve themselves. By doing so, they can objectively analyze relevant financial information and changes, as well as make relatively rational judgments and decisions so that investment losses caused by the lack of professional knowledge can be reduced. Furthermore, to improve the technical analysis of the stock market, individual investors should not only make a comprehensive analysis of the stock trend and trend line, but also make a comprehensive analysis of the support line, resistance line and moving average. Through such a comprehensive and systematic analysis, a relatively right investment decision can be made.

4. Conclusion

In general, the situation of the financial market is changing rapidly. To supervise and guarantee the healthy and stable development of the financial market, it is necessary to carry out an effective analysis of the financial development trend in China, and constantly improve and upgrade the existing
risk prevention measures. More importantly, the government should actively play its role in regulation and management. When studying the psychology and behavior of individual investors, a rational scientific analysis is needed to explore the deep cause of the failure in investments. Following the analysis result, a reasonable scientific strategy can be produced so that the role of finance can be fully played in reducing transaction risks and guiding individual investors to prudently make scientific decisions. Consequentially, investors can get benefits from the financial market, while the harmony and stable development of the society can also be fostered.

It can provide a new and comprehensive perspective for financial investment to analyze individual investors in the financial market from the perspective of behavioral finance. Now, the conformity phenomenon is still a serious problem in the domestic financial market, which will cause a serious deviation between the prediction of the financial market and the actual market, and lead to big fluctuations in the price of financial products. Since the nature of the transaction in the financial market is a collective behavior that spreads a wide influence on the whole market, the collective investment behavior can be better analyzed by analyzing the psychology of individual investors. Based on these efforts, a reasonable scientific and cautious investment strategy can be produced to avoid risk, obtain more benefits, and build healthy and perfect financial market conditions.

References

[1]. Li Sujun. On Personal Investment Psychology and Behavior Based on Behavioral Finance [D]. Chinese Academy of Social Sciences (2012).

[2]. Li Yangzhi. On the Interaction Effect between China’s Stock Market and Lottery Market from the Perspective of Behavioral Finance [D]. Shanghai Normal University (2019).

[3]. Zhao Honghong, Huang Chunyan. Analysis of Herd Behavior in China's Financial Product Market from the Perspective of Behavioral Finance [J]. Business, 2013(10Z):226-226.

[4]. Research on Investment Behavior in China’s Financial Product Market Based on Behavioral Finance [D]. University of Science and Technology of China, 2016.

[5]. Deng Jing. The Impact of Investors’ Sentiment on Earnings Yield of Financial Products [D]. Central South University, 2006.

[6]. Li Xiaozhou. Study in the Irrational Behaviors of China Securities Market [D]. Jilin University, 2006.

[7]. Wang Yali. A study on the Influential Factors of China’s Stock Price from the Perspective of double heterogeneity of Investors [D]. Hebei University of Technology, 2005.

[8]. Liu Lei. Research on the Influence of Noise Trading on the Volatility of China’s stock market [D]. Northwest University, 2013.

[9]. Zhou Zhanqiang, Li Defeng. An Analysis of Individual Investors’ Behaviors from the Perspective of Behavioral Finance [J]. Journal of Central University of Finance and Economics, 2006(2):44-48.