The Role of Anchoring Effect in the Stock Market Investment Decisions

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Abstract: Price anomalies in the stock market are often difficult to explain using traditional financial theories, and such price anomalies severely affect the specific investment behavior of investors in the stock market and the trend of stock price movements. In order to study the causes of these anomalies and conclude certain countermeasures, this paper combines behavioural economic theories to analyze the causes of stock price movements over a certain period of time in terms of stock price trends caused by psychological deviations of investors in a specific industry. In this paper, this study finds that relevant stock price data by analyzing stock price movements over a certain period of time and integrate them to further understand the impact of investors' psychological biases or heuristics on stock price movements. Finally, this paper provides targeted suggestions for investors and stock market policy makers to address the importance of psychological biases on investment decisions, and suggests investors to consider the influence of different psychological mechanisms in the process of stock investment and make more objective value estimates for stocks. Second, it is recommended that government departments should reduce their intervention in the stock market to reduce the impact of policy changes on the stock market and promote a healthier investment environment for the stock market. In addition, stock market policy makers establish stricter laws for the stock market to regulate the price changes and valuation system of the stock market.

Keywords: stock market, anchoring effect, bias, heuristic

1. Introduction

In finance, it is assumed that investors are rational economic agents, and the efficient market hypothesis is extended. The efficient market hypothesis assumes that the price of a stock is a complete reflection of all the information about that stock. A market that fully reveals all information about the market is called a strong efficient market, while a market that reveals historical trading prices and company-based information is called a semi-strong efficient market [1]. Several scholars have found that the Chinese stock market has met the criteria of a semi-strong efficient market [2]. Although strong efficient markets are often difficult to establish in real life, in studying stock markets, one tends to analyze the factors that change stock price movements through all known information as much as possible based on some well-known economic theories. In this process, scholars have found some stock price anomalies in the stock market that are difficult to be explained by traditional financial knowledge [3].

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The anchoring effect refers to the fact that when people make a prediction about a certain matter based on their known information, they often unconsciously select a particular point in the known information, which is also called an "anchor point", and make an adjustment to their prediction based on this, in the process of adjustment, their prediction result will be infinitely close to the selected "anchor point". In the process of adjustment, the individual's prediction will be infinitely close to the selected "anchor point" [4]. Numerous studies have shown that people are easily influenced by the anchoring effect when making decisions.

Most modern studies propose that some psychological mechanisms similar to the anchoring effect and the endowment effect affect the overall stock price trend by having some influence on investors' analysis and prediction of stock data, leading to wrong predictions of stock values [5]. Therefore, it becomes necessary to take psychological mechanisms such as the anchoring effect into consideration when studying the stock market.

A large number of scholars have Conducted preliminary studies and developed theories to address the above issues. Some scholars argue that investors are anchored by historical 52-week price highs in the stock market, which have an impact on subsequent investment decision behavior. In addition, scholars believe that a good information environment and a low turnover rate will strengthen the anchoring effect of excess returns at the social responsibility level of stocks [6]. In this regard, this paper argues that there are many ways in which the anchoring effect works in the stock market, with historical prices being the more common "anchor value" in stock markets worldwide, while this paper discusses the mechanism and impact of the anchoring effect from the perspective of government policies and information on national situations.

In order to further understand investors' decision-making psychology in the stock market and to study the trend of price changes in the stock market more effectively, this paper will learn more about the anchoring effect and the price changes in the stock market. Combining the underlying influence mechanism of the anchoring effect, this paper will organically combine it with the trend of stock market price changes and provide further explanation and illustration of stock price anomalies and other issues from specific data.

This paper collects the stock price trends of different industry sectors at the beginning of the new crown outbreak in January 2020, and further compares and analyzes their stock price trends, speculates in detail the reasons for such trends and introduces the concept of investor psychological bias, combines such factors with policies and stock price trends, and analyzes and presents the above-mentioned factors. The correlation of these factors is analyzed and presented. Finally, this paper proposes various recommendations for different participants in the stock market regarding the mechanism of the anchoring effect in the stock market.

2. Analysis of Stock Prices in the Medical Sector and Other Sectors of the Chinese Stock Market

Stock markets are often subject to unpredictable price movements that are often difficult to explain by traditional economic principles. With the in-depth study of stock investment market by some scholars, the discipline of behavioral economics is gradually understood and learned by the public, and many scholars who are well established in the investment market believe that the series of behaviors made by investors in the stock market and the impact of these investment behaviors on the stock market need to be further explained from the perspective of behavioral economics through some special psychological deviations proposed in psychology of explanation [6]. After some research on behavioral economics, this paper argues that some typical psychological biases can largely influence investors' decision-making behavior, which in turn can change their investment behavior and eventually lead to the volatility of the overall stock price. This paper focuses on the effect of anchoring effect on investors' behavior and argues that anchoring effect will significantly

affect investors' decision making and further influence stock prices. In order to prove the above conjecture, this paper will take the stock price trend of the medical industry as an example, select the stock trend data for a certain period of time, and analyze it with the role of investor sentiment in it.

2.1. Background Description

With the continuous progress of science and technology, the level of medical care has also made greater achievements in the world, and the capital market has keenly discovered the great investment opportunities in this industry, and the medical concept has gradually become a popular investment industry in recent years [7]. Coupled with the fact that the medical industry is more resistant to declines and is a defensive stock that does not experience big changes up or down, more and more investors are starting to pay attention to this industry. In addition, with the development of the economy, people's quality of life has improved greatly, and more and more people are paying more attention to health, and with it, the demand for some drugs and equipment has further increased, making the stock prices of the medical industry go all the way up. Although the medical industry is a relatively stable investment, there are still some unpredictable price anomalies, and this paper suggests that the reasons for this may be related to investor sentiment.

2.2. Data Analysis of Stock Prices

To make the impact of the anchoring effect in stock price movements more visible, this paper finds specific data on the stock price movements of the medical sector in the Chinese stock market and some other sectors that are more popular in daily investment life during the worst period of the new crown epidemic in China in January 2020.



Figure 1: Retail sector stock price trend in January 2020. (Source: www.10jqka.com.cn)

Figure 1 shows the trend graph of the price movement of the retail sector in January 2020. It is easy to see that from mid-January the retail sector showed the strong impact of the new crown epidemic on it, and the stock market continued to decline for a long period of time, before gradually recovering and rebounding after the stock prices of the retail sector fell to a certain level in the late January period.



Figure 2: Textile manufacturing stock price trend in January 2020. (Source: www.10jqka.com.cn)

Figure 2 shows the trend in stock prices for the textile manufacturing industry in January 2020. Similar to the impact on the retail sector in Figure 1, the textile manufacturing industry also began to weaken from mid-January onwards, with a more pronounced dive in stock prices. It was not until February that stock prices recovered.

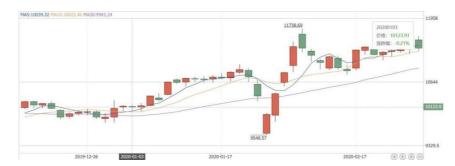


Figure 3: Stock price trend in Medical Services in January 2020. (Source: www.10jqka.com.cn)

Figure 3 shows the trend of stock price movement in the medical services sector in January 2020, from which it can be seen that compared to the above two sectors, the medical services sector did not suffer a major shock at that time, and even though its stock price did not increase significantly during this period, the overall trend of change was more robust and showed an overall upward trend.

According to the above stock price trend chart, it is clear that in this month when the epidemic seriously affected the economy, most of the industries that were once favored by investors did not withstand the blows generated by the epidemic and produced a more pronounced weakness in a relatively short period of time, with the overall stock price showing a downward trend, however, the medical sector this The medical sector, however, has not been able to avoid the impact of the new epidemic to a certain extent, but the overall trend is still relatively stable and shows a certain upward trend. During the new epidemic, people were affected by the disease and shifted their attention to health protection, which was more necessary at the time, and could not devote themselves to other aspects of development, such as economic development, and the strong panic made many industries affected by the epidemic [8]. The economies of some countries were in turmoil, and the stock markets of many countries showed a significant weakening trend. The reasons why the medical industry was able to maintain stability and even continue to rise to some extent during this period deserve further consideration and analysis. Based on the study of behavioral economics, this paper makes a preliminary guess about the price trend of the medical industry during this period.

With the further development of the epidemic and the increase of the number of infected people, medical construction became the most concerned and needed basic security at that time, and the

country also needed to strengthen medical construction in order to minimize the damage and loss caused by the new crown epidemic. After the initial alleviation of the urgent medical needs at the time, it was easy to see that the demand for the development of vaccines and effective drugs to combat the epidemic had increased further. Some of the more astute investors caught this phenomenon during this period and, based on this phenomenon, initially determined that stock prices in the healthcare sector might continue to show a more positive trend in the coming period, so they used this information as an anchor point for their investments, predicting that the healthcarerelated industries would further develop as a result of the epidemic, and invested more in certain stocks in this sector, making the number of investors investing in the healthcare sector The number of investors investing in the healthcare sector has increased more significantly in the short term, which has led to an increase in stock prices. In this regard, some scholars believe that the reason for the significant drop in stock prices in most industries during this period was that the panic at the time made investors choose to sell their holdings out of aversion to risk, causing a downward spiral in the stock market as a whole, while pharmaceutical stocks remained stable because investors overreacted to the policies and actions of the state at the time, which made them overly believe that the state These policies led them to overly believe that the state's support for healthcare construction would increase during this period, causing them to shift their investments to the healthcare sector in order to gain additional income in the process [9].

This paper argues that, at the beginning of the epidemic, China was hit by an unprecedented catastrophe, and the intense fear of the disease and the rapid spread of relevant information on the Internet made people eager to sell their stocks in order to reduce the financial risk they might take in this way, i.e., risk aversion does have some influence on investors, but investors' holdings of stocks in the pharmaceutical sector are not only due to the state's actions. However, investors do not only hold stocks in the pharmaceutical sector because of an overreaction to state actions or government policies. The anchoring effect is also evident in this process: in the Chinese investment market, policy changes usually have a significant impact on stock market price movements, and investors habitually change their investment decisions in response to policy changes in their past investment careers. The information that policies affect stock price movements becomes a kind of stereotype for investors, which is the "anchor" that influences people's decisions in the anchoring effect. In the period of the new crown outbreak, investors were clearly influenced by this "anchor" and thus changed their investment decisions, resulting in stock price fluctuations.

Some scholars have suggested, through continuous observation of pharmaceutical sector stocks in January 2020, that after a continuous period of upward volatility, pharmaceutical sector stocks also experienced an initial stabilization and did not continue their previous upward trend [10]. This paper argues that this occurrence may be inextricably linked to the anchoring effect. 2020 January Chinese stock market is more negatively priced overall due to the impact of the New Crown epidemic, and investors are likely to predict that pharmaceutical stocks are likely to be implicated in the investment process based on their perception of the overall downward trend in the stock market. Therefore, although investors predicted better price growth in the medical sector at the time of the initial outbreak, they may still choose to change their investment strategy and sell their holdings due to the continued downturn in the broader market. In this paper, this paper argues that a major factor for investors to change their investment strategy in this process i.e. being anchored by the general stock market price, linking the medical sector stock price to the general market price and thus making the decision to sell their stocks.

2.3. Recommendations

In response to the above phenomenon, this paper makes different recommendations for investors and investment market policy makers and regulators. First, based on the impact of market

information on investors, this paper suggests that investors should try to understand and grasp more comprehensive market information in the process of making investments and not to follow certain policies or information blindly. In addition, investors should avoid following the trend effect, and should formulate certain investment strategies in advance before making decisions, and be able to establish scientific investment ideas in the long-term investment process to reduce losses caused by blindness or impulsiveness.

Second, for the policy makers of the investment market, this paper believes that the government should reduce the intervention of policies on the stock market to avoid the risk of market turmoil after the introduction of new policies, so that the stock market tends to be a more efficient investment market and create a healthier investment environment.

Third, the market regulator should strengthen the supervision of listed companies to ensure that the information disclosed in the market is true and reliable and reduce the misleading situation to investors. In addition, the market regulator should increase the purging function of the investment market to reduce the emergence of unhealthy competition and the release of false information to mislead investors.

3. Conclusion

Based on further observation and analysis of the trends of stock price changes in different sectors in January 2020, as well as the analysis of different scholars for the trends of stock price changes in the medical sector during this period, this paper summarizes the following conclusions: the stock market often reacts to the impact of some factors, which is manifested in the change of stock prices, which is a generally accepted market law in traditional finance. Some specific periods, stock prices do not change exactly according to the way of change proposed by traditional finance, and the trend of some stocks presents price anomalies that are completely difficult to explain by finance. In this paper, by observing the stock prices of the medical sector and other sectors in the Chinese stock market during the period of the new crown epidemic in 2020, this study analyze in detail the impact of psychological biases, such as the anchoring effect, on investors and the stock market during the investment process by combining certain explanations of investor behavior in behavioral economics, and find that during the occurrence of certain specific events, investors are likely to change their prices based on past experience or currently available In other words, investors are to a large extent influenced by known information and announced policies. In other words, investors are largely anchored by known information and adjust their self-decision strategies in order to reduce the risk they may take or to gain excess returns.

As to how investors are further influenced by the psychological bias similar to the anchoring effect in the process of investing, since the process of investors being influenced by the psychological bias and making further decisions is continuous, to obtain more accurate examples of data, it is necessary to continuously track the investment behavior of investors over time and the price trends of the corresponding securities, and to To obtain more accurate data examples, researchers need to continuously track investors' investment behavior over time and the price trends of the corresponding securities, and integrate and analyze the above data to understand the impact of anchoring effect on investors' behavior and the role and mechanism of anchoring effect in the stock market. This is a large and complex task, which has not been explored in depth in this paper and will take some time to deepen in the future. In future research, certain functions can be constructed to use the above data as variables and dependent variables, so as to further explain the influence and role of anchoring effect in stock market in a more precise way.

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References

- [1] Tang Kun.: A review of the efficient market hypothesis[J]. Financial Economics, No.494(20):88-89 (2018).
- [2] Yu Yu.: Exploring the efficiency of China's stock market by the efficient market hypothesis. Modern Business, No.444(35):78-79 (2016).
- [3] Yang Borui.: Research on the anchoring effect of price anomalies in China's stock market. Northwest Normal University, (2020).
- [4] Wei Wuhong.: Research on the effect of anchoring ratio on expected stock returns. Guangxi University, (2022).
- [5] Amos Tversky; Daniel Kahneman.: Judgment under Uncertainty: Heuristics and Biases. Science, 1974(4157)
- [6] Huang Xiaoping.: Research on the anchoring effect of Chinese stock market. Zhongyuan Institute of Technology, (2022).
- [7] Yang, Elaine.: The economic impact of the global new crown pneumonia epidemic and the impact on the healthcare industry. China Finance, No.817(20):78-79(2020).
- [8] Jiawen Lu.: An empirical study on the impact of new crown pneumonia concern on stock market based on search index. Donghua University, (2022).
- [9] Yang Shuyuan,Liu Fang.: A brief discussion on common psychological behavior deviations of securities investors and their adjustment. Economist, No.369(11):76-77 (2019).
- [10] Duan Yuyuan.: The impact of the new crown pneumonia epidemic on China's stock market--an empirical analysis based on the pharmaceutical industry. China Business Journal, No.817(18):28-30 (2020).