Research on the Correlation between Equity Premium, Investors' Disappointment and Disgust Psychology

Pengyi Chen[1*]

[1]Advanced Institute of Finance, Henan University, 450000 Zhengzhou, China

Abstract. As China continues to develop, the A-share market will also encounter certain problems during its development process. This study focuses on the phenomenon of equity premium in the Chinese A-share market, and explores in depth the correlation between high equity premium and the psychological characteristics of Chimarket andors' disappointment and disgust. Based on the theory of "disappointment aversion" in behavioral finance, combined with two typical events of the 2020 pandemic and the 2025 US equivalent tariffs on China, this study also utilized market-related data and calculated indicators such as turnover rate and equity premium rate for comparative analysis. Research has found that investors' "disappointment and disgust" psychology has a significant impact on investment decisions during market fluctuations, and is closely related to the equity premium in the A-share market. This conclusion helps to understand the operational mechanism of China's A-share market and provides a theoretical basis for investor decision-making and market regulation.

1 Introduction

In the field of financial market research, equity premium has always been a focus of attention. Equity premium refers to the difference between the excess return obtained from investing in the stock market and the risk-free return. The Chinese A-share market has experienced rapid development in the past few decades: after the reform and opening up, with the gradual establishment of the socialist market economy system, the deepening of state-owned enterprise reform, and the release of private capital vitality, a large number of enterprises urgently need to obtain financial support through the capital market. Against this backdrop, the A-share market has emerged and rapidly developed, playing an important role in corporate financing and economic growth. However, the A-share market exhibits high volatility and equity premium levels, which has attracted widespread attention from academia and investors. Traditional financial theory is difficult to fully explain the scale and sustainability of equity premiums, which leads to the "mystery of equity premiums". The rise of behavioral finance provides a new perspective for solving this puzzle, in which investors' psychological characteristics are considered one of the important factors affecting equity

* Corresponding author: 2310241014@henu.edu.cn

premiums. Disappointment and disgust, as an important psychological characteristic, may play a key role in the equity premium phenomenon in the Chinese A-share market.

This study aims to explore the correlation between the high equity premium in China's A-share market and the psychological characteristics of Chinese investors' "disappointment and disgust". This paper selects two typical cases of the COVID-19 in 2020 and the implementation of equivalent tariffs by the United States on China in 2025 to analyze, and reveals the mechanism of the impact of "disappointment and aversion" psychology on investors' decision-making in the period of market fluctuations, and how this impact is reflected in the equity premium. This research has significant theoretical and practical implications. At the theoretical level, it helps to enrich the research on the relationship between investor psychology and market phenomena in behavioral finance, and further improve the explanation of the mystery of equity premium. At the practical level, it can help investors better understand their own decision-making behavior and improve the rationality of investment decisions; At the same time, it also provides theoretical support for market regulators to formulate more effective policies, promoting market stability and healthy development.

2 literature review

2.1 Theoretical explanation of the mystery of equity premium

The mystery of equity premium was first proposed by Mehra and Prescott, who found that the historical average equity premium of the US stock market between 1889-1978 was much higher than expected by traditional theoretical models [1]. Subsequent studies have shown that similar phenomena also exist in emerging markets such as Indonesia [2]. This puzzle has sparked widespread discussion in academia, with numerous researchers attempting to explain it from different perspectives, among which the psychological factors of investors have gradually gained attention.

2.2 Investor psychology and equity premium from the perspective of behavioral finance

Behavioral finance believes that investors are not entirely rational, and their psychological factors can significantly affect investment decisions and market outcomes. Among them, the psychology of "disappointment and disgust" has received increasing attention in explaining equity premiums. The prospect theory proposed by Kahneman and Tversky suggests that investors have an asymmetric perception of losses and returns in the decision-making process, where the pain caused by losses outweighs the pleasure brought by equivalent returns [3]. This characteristic is closely related to "disappointment aversion". If the majority of investors in the market have the characteristic of "disappointment aversion", then this collective behavior will drive down stock prices, thereby increasing the level of equity premium. According to Xie, Pantelous, and Florackis, disappointment aversion can lead investors to reduce their investment in the stock market [4]. So when the market faces negative shocks, "disappointed and disgusted" investors will quickly sell their stocks, leading to an excessive decline in stock prices and further expanding equity premiums.

2.3 Research on the Chinese A-share market

There is relatively little research on the direct correlation between high equity premiums in the A-share market and investors' psychological characteristics of disappointment and disgust.

Although some studies have explored the impact of investor psychology on the market, they have not delved into the mechanism by which "disappointment aversion" psychology plays a role in the formation of equity premiums. This article selects two typical cases: the 2020 pandemic and the implementation of equivalent tariffs by the United States on China in 2025. In 2020, the global financial market was impacted by the pandemic, and the A-share market was also affected, causing significant fluctuations in investor sentiment [5, 6]. The US tariff policy towards China in 2025 will have a significant impact on the operations of A-share market companies and investor expectations [7, 8]. By analyzing the behavior of investors and market reactions in these two cases, the research aims to explore the relationship between "disappointment and disgust" psychology and equity premium.

3 Research design

3.1 Case selection

This study selects two influential events, the outbreak of the COVID-19 pandemic in 2020 and the implementation of equivalent tariffs by the United States on China in 2025, as case studies for analysis. The outbreak of the COVID-19 pandemic in 2020 had a huge impact on the global economy and financial markets, and the Chinese A-share market has experienced significant fluctuations. The implementation of equivalent tariffs by the United States on China in 2025 has intensified the trade friction between China and the United States, bringing new uncertainties to the A-share market. These two events provide a good opportunity to study the relationship between investors' "disappointment aversion" psychology and equity premium in extreme market environments.

3.2 Data sources

The data for this study mainly comes from Choice Financial Terminal, CSMAR, and statistical data released by relevant government departments and financial institutions. Specifically, it includes the stock price index, turnover rate, equity premium rate of A-share market and macroeconomic data such as the yield of China Bond treasury bond. For the data during the 2020 epidemic period, the research interval is selected from July 2019 to July 2021; For the case of equivalent tariffs imposed by the United States on China in 2025, the period from December 2024 to June 2025 is selected as the research interval. By collecting this data, it can comprehensively reflect the changes in the market before and after the event, providing strong support for in-depth analysis.

3.3 Research method

This study adopts a case analysis method, combining quantitative and qualitative analysis. In terms of quantitative analysis, statistical analysis software is used to process the collected data and calculate related variables such as equity premium rate and turnover rate. In terms of qualitative analysis, by analyzing the behavior of market participants and government policies, this study explores in depth the manifestation and impact mechanism of "disappointment and disgust" psychology in market fluctuations.

4 Case analysis

At the beginning of 2020, the COVID-19 spread rapidly around the world, causing a huge impact on China's economy and the A-share market. At the beginning of the outbreak of the

epidemic, market panic sharply increased, and investors were full of concerns about the future economic situation. From the performance of the A-share market, the stock price index has dropped significantly, and trading volume has significantly increased. Taking the CSI 300 Index in Figure 1 as an example, from January to February 2020, the CSI 300 Index fell from around 4200 points to around 3500 points, a decline of more than 16%. However, at the same time, the trading volume of the stock increased by 109% year-on-year (as shown in Figure 2). During this period, the "disappointment and disgust" mentality of investors was particularly evident. Many investors were worried about the impact of the epidemic on corporate profits and sold their stocks, leading to a panic selling wave in the market.

Fig.1. Trends in the CSI 300 Index from 2019 to 2020.

(Source: Choice https://choice.eastmoney.com/)

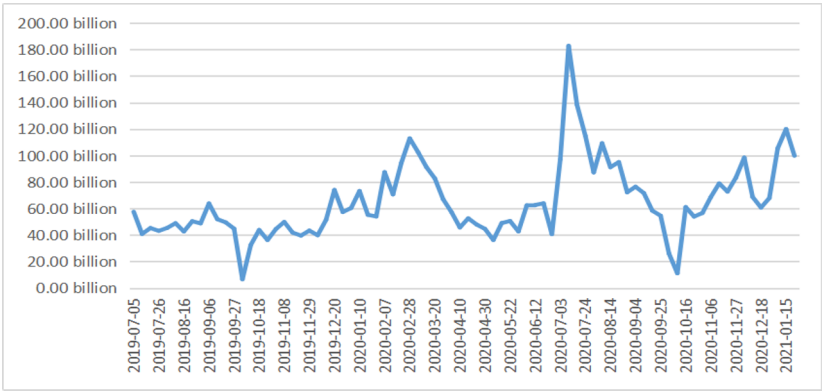

Fig. 2. Trading Volume of the CSI 300 Index in 2019-2020.

In order to further analyze the relationship between the psychology of "disappointment and disgust" and equity premium, this article calculated the equity premium rate during the epidemic period and compared it with the level before the epidemic. The equity premium rate is calculated by subtracting the risk-free rate of return from the return on investment in the stock market. The CSI 300 Index is selected as the return on investment in the stock market, and the 10-year treasury bond bond yield is selected as the proxy variable. As shown in Figure 3, the equity premium rate significantly increased during the epidemic, rising from an average of around 5% before the epidemic to over 7%. This indicates that under market panic, investors' "disappointment and disgust" mentality leads them to demand higher returns from stock investments, thereby pushing up the level of equity premium.

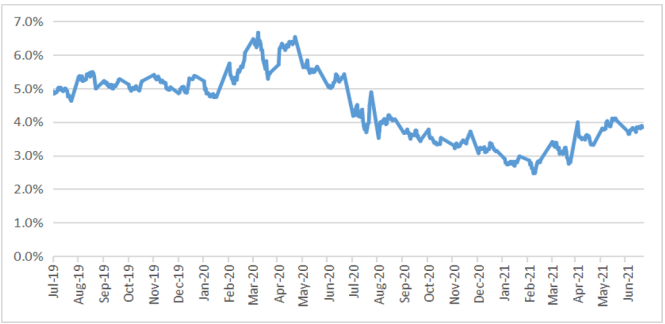

Fig. 3. Trend of Equity Premium Rate Changes in the CSI 300 Index.

Under the impact of the COVID-19 in 2020, the high equity premium in the A-share market is significantly related to the psychological characteristics of "disappointment and aversion" of investors. This article takes the stocks of Dongfang Fortune, Yiling Pharmaceutical, and Fosun Pharma as typical cases, and their turnover rate fluctuations are highly correlated with policy stimulus, market sentiment, and psychological expectations, confirming the explanatory power of Barberis et al.'s theory of "disappointment aversion" for asset pricing [9].

4.1 2020: Market response to the impact of the pandemic and policy stimulus

4.1.1 Oriental Wealth: loose liquidity and active trading

On February 3, 2020, 3138 A-shares hit the limit down due to the pandemic, and market panic reached its peak. Subsequently, the central bank released 1.7 trillion yuan of liquidity through tools such as reserve requirement ratio cuts and reverse repurchase agreements, coupled with the China Securities Regulatory Commission's promotion of medium and long-term capital inflows into the market, resulting in a significant improvement in market liquidity. As the leader of Internet securities companies, Oriental Fortune's turnover rate reached 11.74% on February 26, 2020, with a record turnover. This phenomenon is consistent with the "liquidity premium" theory proposed by Gomes et al , which suggests that investors' risk appetite increases under loose policies, driving active trading of highly liquid assets [10].

4.1.2 Yiling Pharmaceutical: epidemic demand and policy support

Lianhua Qingwen Capsule of Yiling Pharmaceutical was listed in the Diagnosis and Treatment Plan of novel coronavirus Pneumonia and became the core anti epidemic drug. From February to April 2020, the company's stock price has risen by 120% cumulatively, with a turnover rate consistently higher than the industry average. This performance not only benefits from the tilt of epidemic prevention and control policies towards the pharmaceutical industry, but also reflects investors' overly optimistic expectations of the "anti epidemic concept".

4.1.3 Fosun Pharma: vaccine expectations and capital game

Fosun Pharmaceuticals has become the focus of the market due to its cooperation with BioNTech in developing COVID-19 vaccine. In July 2020, the company's stock price rose by over 50% in a single month, and the turnover rate repeatedly exceeded 10%. However, the uncertainty in vaccine development has led to fluctuating market sentiment, with

investors oscillating between "optimistic expectations" and "risk concerns". This psychological fluctuation is consistent with the "asymmetric expected utility" theory proposed by Barberis et al. which states that investors are more sensitive to negative news than positive news, leading to trading behavior characterized by "chasing after gains and killing losses" [9].

4.2 2022: Policy adjustments and market sentiment rebalancing

4.2.1 Repeated outbreaks of the epidemic and policy tightening

At the beginning of 2022, the Omicron variant triggered a new round of outbreaks, and many places implemented lockdown measures. As shown in Figure 4, Yiling Pharmaceutical's turnover rate reached 100.05% in February due to the expected increase in sales of Lianhua Qingwen. However, after the controversy over product efficacy in March, the stock price continued to hit the limit down, and the turnover rate soared to 131.53%. As of the end of April, its turnover rate further soared to 208.36%. This drastic fluctuation reflects investors' "disappointment and disgust" mentality under policy uncertainty: when expectations fall through, investors tend to quickly cut losses, leading to abnormally high turnover rates.

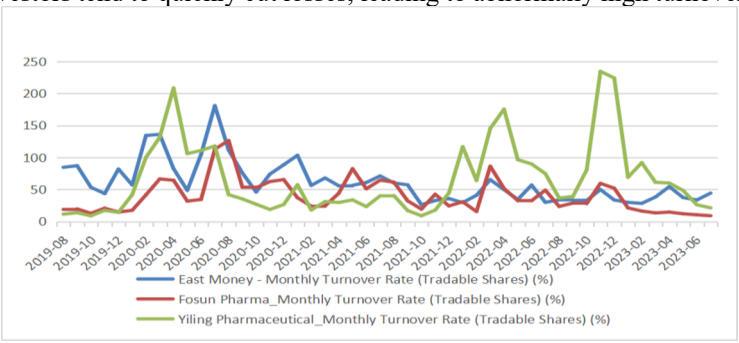

Fig. 4. Trends in Turnover Rates of Some Stocks in the A-share Market from 2019 to 2023.

4.2.2 the release of the "New Ten Measures" and the differentiation of pharmaceutical stocks

In December 2022, the "New Ten Measures" will optimize prevention and control measures, clarifying that "the public shall not be restricted from purchasing over-the-counter drugs such as antipyretic and cough suppressants online and offline". The policy adjustment has also triggered a reassessment of the market's demand for pharmaceuticals, as shown in Figure 4: Yiling Pharmaceutical experienced a capital withdrawal due to excessive speculation in the past. In December 2022, the turnover rate reached a historical high of 234.40%, and the stock price hit the limit down; Fosun Pharma's year-end turnover rate rebounded to 59.94% due to accelerated mRNA vaccine approval, and its stock price stabilized and rebounded. This differentiation reflects the "reference point dependence" in disappointment aversion theory - investors adjust their expectations based on policy changes, maintain confidence in assets that meet expectations (such as vaccine progress), and decisively sell off assets that deviate from expectations .

4.3 Verification of the theory of disappointment and disgust

4.3.1 Loss avoidance and overreaction

The panic selling in the early stages of the 2020 pandemic (such as the daily limit down of Oriental Wealth) and the controversial decline of Yiling Pharmaceutical in 2022 both indicate that investors are more sensitive to negative news than positive news, which is in line with the "loss aversion" feature proposed by Barberis et al. [9].

4.3.2 Expected management and policy dependence

Government policies, such as loose liquidity and accelerated pharmaceutical approvals, affect trading behavior by changing investors' expectations. For example, the stimulus policy in 2020 eased the sentiment of "disappointment and disgust", while the expected adjustment triggered by the "New Ten Measures" in 2022 intensified market volatility, confirming Gomes et al.'s view that "policy signals guide asset pricing" [10].

Through the investigation and analysis of market participants, this study found that investors' decision-making behavior during the epidemic period was significantly influenced by the psychology of "disappointment and disgust". Many investors choose to sell their stocks when stock prices fall due to concerns about further losses, even if the fundamentals of some stocks have not substantially changed. This behavior leads to market overreaction, causing stock prices to further deviate from their intrinsic value, thereby increasing equity premiums. And due to the market downturn caused by the epidemic, some investors were worried that they would not be able to achieve the expected returns. Out of disappointment and disgust, they sold it in advance, causing an imbalance between market supply and demand, exacerbating market volatility and rising equity premiums.

4.4 The implementation of equivalent tariffs by the United States on China

After the announcement of the tariff implementation, there were significant fluctuations in the stock prices of related industries in the A-share market. Taking the manufacturing industry, which is greatly affected by tariffs, as an example, the stock prices of some companies have fallen sharply in the short term. As shown in Figure 5 ,the stock price of Luxshare Precision fell sharply one month after the implementation of tariffs, and investors were pessimistic about the prospects of the industry.

Fig. 5. Trends in the Stock Price of Luxshare Precision from February to May 2025

(Source: Choice https://choice.eastmoney.com/)

Lixun Precision is a leading enterprise in the field of consumer electronics in China, mainly engaged in the research and manufacturing of core components such as connectors, connecting wires, and intelligent modules. Its products are widely used in fields such as 3C, automotive electronics, and communication equipment. Its core customers include Apple Inc., with revenue from Apple accounting for over 70% in 2024, and export revenue accounting for 87.6%. This highly dependent business structure on a single customer makes Luxshare Precision extremely sensitive to changes in international trade policies.

In April 2025, the United States announced the imposition of a 34% "equivalent tariff" on China. Although Luxshare Precision passed on the tariff cost to importers through the FOB model and the management clarified multiple times that the "impact was limited," market sentiment still triggered a strong reaction. From April 7th to 9th, Luxshare Precision fell by the limit down for three consecutive trading days, evaporating nearly 70 billion yuan in market value and dropping from a high of 47 yuan to 29 yuan, with a range decline of 38.3%. If calculated from the high point of 47 yuan on February 25th to the low point of 27.11 yuan on April 9th, the cumulative decline exceeds 42%, far exceeding the performance of the overall market during the same period.

This phenomenon can also be explained by the theory of disappointment and disgust (Gul). This theory suggests that when actual returns are significantly lower than expected, investors will amplify their risk aversion behavior due to a sense of disappointment [11]. As a heavily held institutional stock, the stock price of Lite On Precision has long relied on optimistic market expectations for the stability of Apple's supply chain. After the tariff policy was introduced, although the company's fundamentals were not substantially impacted, investors' concerns about "Apple order transfer" formed a psychological anchor, resulting in a huge gap between expected returns and reality. Specifically, the behavior of individual investors exhibits the following characteristics:

(1) Expected anchoring and cognitive bias:

Investors equate the deep binding business model between Luxshare Precision and Apple with a "direct impact of tariffs", ignoring the industry practice that tariffs are borne by importers under FOB terms. As Lai pointed out, investors often make decisions based on initial anchoring information, which may lead to investment bias [12]. It is precisely this deviation that reinforces the psychological expectation of "performance decline" and forms emotion driven selling behavior.

(2) Disposal effect:

When the stock price falls below a key support level (such as 30 yuan), retail investors trigger their "stop loss instinct" and sell heavily to avoid further losses. This is in line with Shefrin&Statman's disposition effect theory, which suggests that investors tend to sell profitable assets too early and delay selling loss making assets, but may operate in reverse under extreme emotions [13].

(3) Herd effect and panic selling:

The continuous limit down triggered strong consolidation of financing stocks and passive reduction of quantitative strategies, forming a vicious cycle of "decline sell accelerate decline". The fear triggered by this vicious cycle leads retail investors to follow suit and sell. This is similar to the research of Dhall and Singh on the impact of COVID-19 on the Indian stock market. They used the CSAD model to analyze the market data, and found that during the epidemic period, the herding effect in the Indian stock market at the industry level was significantly enhanced [14]. This means that in the market panic, investors tend to ignore their own private information and instead choose to follow group behavior to make investment decisions, sell stocks along with the trend.

It is worth noting that the mid year report of Luxshare Precision in 2025 shows a year-on-year increase of 20% -25% in net profit, confirming that the actual impact of tariffs is limited. But the self strengthening of market sentiment has caused stock prices to deviate

from fundamentals, highlighting the overreaction of A-share investors to the "disappointment scenario". This case shows that Chinese retail investors are more likely to interpret policy shocks as systemic risks in an information asymmetry environment, and then amplify market volatility through collective selling.

Similarly, this article calculated and analyzed the equity premium rate during this period. As shown in Figure 6, after the implementation of tariffs, the equity premium rate showed an upward trend again, rising from the previous 5.8% to 7%. This indicates that the market uncertainty caused by the US reciprocal tariffs on China has further strengthened investors' "disappointment and disgust" mentality, making them demand higher risk compensation for stock investments, thereby driving up equity premiums.

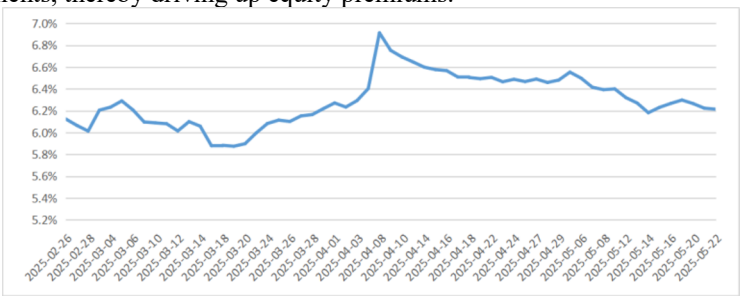

Fig. 6. Trend of Equity Premium Rate Changes in the CSI 300 Index in 2025.

In the analysis process, this article also found that investors' "disappointment and disgust" psychology varies in different industries. For industries directly affected by tariffs, such as manufacturing and export-oriented enterprises, investors have a stronger sense of disappointment and disgust, with a greater decline in stock prices and a more significant increase in equity premiums. For some industries that are less affected by tariffs, investors' reactions are relatively small, and changes in equity premiums are also relatively mild. This indicates that the impact of "disappointment and disgust" psychology on equity premium is closely related to the degree of impact on the industry.

5 Conclusion

5.1 Main findings

Through data analysis of specific cases from two periods, this study found a significant correlation between the high equity premium in China's A-share market and investors' psychological characteristics of "disappointment and disgust". When the market faces significant negative impacts, such as the early outbreak of the COVID-19 pandemic in 2020, investors amplified negative expectations due to disappointment and disgust, triggering panic selling and driving up equity premiums; In the stage of intensified trade frictions in 2025, this mentality has also led to an increase in the equity premium level of some industries. Government intervention such as liquidity support policies can alleviate irrational selling and narrow the premium increase, but policy uncertainty may temporarily exacerbate disappointment. This correlation is reflected in different industries and market environments, but the degree of impact varies depending on industry characteristics and the nature of market shocks.

5.2 Research limitations and future prospects

Although this study has achieved certain results, there are also some limitations. Firstly, there

are few proxy variables, making it difficult to fully and accurately measure this complex psychological characteristic. Future research can explore more precise measurement methods, such as using experimental economics or big data analysis, to more accurately capture investors' psychological changes. Secondly, the sample size is relatively limited, which may not fully cover all market situations. Future research can expand the sample size and analyze more events to further validate and improve research conclusions. In addition, this study mainly focuses on the impact of investors' "disappointment and disgust" psychology on equity premiums. Future research can further explore the influence of other factors on the market,so as to view the financial market comprehensively.

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