The Impact of Federal Reserve Interest Rate Changes on the Psychological Account of Chinese Market Investors

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Abstract: In recent years, the Federal Reserve's monetary policy decisions, especially changes in interest rates, have had profound spillover effects on global financial markets. The Chinese capital market also showed some fluctuations during this period. With the development of behavioral finance, the theory of psychological accounts has been proven to play an important role in the capital market. At the same time, psychological accounts influence market decisions by influencing investor psychology, causing changes in the market. Based on this, this article adopts a literature review method and focuses on exploring the impact of changes in the Federal Reserve interest rate on the performance of investors in the Chinese market from the perspective of psychological accounts. In addition, by reviewing existing research findings, this article evaluates the response of Chinese investors to the US interest rate hike, with a focus on how psychological biases such as loss aversion and psychological accounting affect investment decisions. This study examines the results of various studies to understand the broader impact of interest rate changes on the Chinese financial market, with a particular focus on behavioral finance theory. Finally, this article provides recommendations for Chinese investors and offers insights into future research on the intersection of global monetary policy and investor psychology.

Keywords: Federal Reserve, interest rates, psychological account, Chinese investors, behavioral finance

1. Introduction

The monetary policy of the U.S. Federal Reserve (Fed), particularly its interest rate decisions, has long been a central driver of global financial dynamics. As one of the world's most influential central banks, the Fed's policy actions exert profound spillover effects beyond U.S borders [1]. Rey's "Global financial cycle" theory demonstrates that Fed policies systematically impact emerging markets through capital flow and risk appetite channels [2]. China, as one of the largest and most dynamic financial markets globally, remains highly sensitive to such global monetary shifts. Chinese investors' psychology is shaped not only by domestic factors but also by external economic indicators, including Fed policy changes [3].

This paper focuses on a key aspect of investor behavior—psychological accounts. Given the increasing interconnection between global markets, the impact of Federal Reserve interest rate hikes on Chinese investors' psychological accounts has garnered significant attention. Psychological accounting refers to the mental processes' investors use to categorize and interpret financial decisions. In this framework, individuals view and treat their financial resources in segmented "accounts," which

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can lead to irrational or biased decisions, particularly in response to external events like interest rate changes. Previous studies have highlighted how such biases, including loss aversion, framing effects, and mental accounting, influence financial decision-making [3].

While much research has been conducted on the effects of U.S. monetary policy on global financial markets, fewer studies have explored the psychological dimensions of this influence on Chinese investors [4]. This paper seeks to fill that gap by synthesizing existing literature and offering insights into how interest rate changes in the U.S. might affect the behavior of Chinese investors, particularly through the lens of psychological biases and decision-making frameworks. Therefore, this study holds critical value in bridging the theoretical gap between global monetary policy transmission and behavioral finance mechanisms in emerging markets. By systematically examining how U.S. monetary shocks permeate Chinese investors' psychological accounts, it enriches behavioral finance theory with cross-border empirical evidence while providing policymakers and financial institutions with actionable insights to mitigate systemic risks arising from cognitive biases during global monetary transitions.

The remainder of this paper is organized as follows: Section 2 provides an overview of the theoretical framework surrounding psychological accounts in financial decision-making. Section 3 reviews the literature on Federal Reserve interest rate policies and their global impact, with a particular focus on the Chinese market. Section 4 presents an analysis of how interest rate hikes influence investor behavior in China, and Section 5 discusses the broader implications and practical recommendations for investors. Finally, the conclusion highlights key findings and suggests areas for future research.

2. Theoretical Framework: Psychological Accounts in Financial Decision-Making

The psychological account theory, rooted in behavioral economics, focuses on how people mentally separate their financial resources into different "accounts," influencing their investment choices [5]. Traditional finance theories, such as those based on efficient market hypotheses, assume that markets are fully efficient and investors behave rationally and make decisions based on objective data. However, psychological account theory challenges this assumption, suggesting that people do not always make rational decisions due to emotional biases and cognitive limitations.

In the context of financial decisions, psychological accounts are mental compartments or "buckets" where individuals categorize different sources of wealth, such as savings, investments, or retirement funds. These categories are influenced by psychological factors such as framing, loss aversion, and reference points. For instance, an investor might treat money from recent stock gains as "house money," leading to riskier behavior, while perceiving money from a more conservative account as more valuable, hence more cautious.

Mental accounting is closely tied to loss aversion, a core concept in behavioral finance. According to Kahneman and Tversky's Prospect Theory, individuals tend to experience the pain of losses more intensely than the pleasure of equivalent gains, often leading to risk-averse behavior when facing potential losses [6]. In the context of interest rate hikes, the negative psychological impact of potential losses may drive Chinese investors to reconsider their portfolios or to become more conservative in their decisions, even if rational economic models suggest that a higher interest rate should attract investment [7].

Moreover, framing effects also play a role in how interest rate changes are perceived [5]. Investors may react differently to a rate hike framed as a "necessary adjustment" versus one described as a "harbinger of economic trouble." These frames can influence the psychological accounts of investors, leading them to interpret the hike in more or less favorable terms, thus impacting their decision-making processes.

3. The Federal Reserve's Monetary Policy and Its Global Impact

The Federal Reserve's interest rate policy serves as a critical driver of international capital flows and market sentiment. As highlighted by Chen & Zhang, the Fed's rate adjustments primarily aim to balance domestic inflation and employment targets, yet their spillover effects extend globally through exchange rate mechanisms and risk appetite shifts. For instance, during the 2015-2018 tightening cycle (Table 1), a cumulative 1.5% rate hike coincided with a 35% rise in Chinese stock returns, suggesting initial investor optimism toward synchronized global growth. However, the 2022-2023 cycle reveals divergent outcomes: despite a 2% rate increase, Chinese equities declined by 8%, reflecting heightened risk aversion amid geopolitical tensions and property sector instability [8].

Table 1: Investor Sentiment and Stock Market Performance During Fed Rate Hike Cycles (2004-2023).

| Cycle | Fed Rate Hike Period | Investor | Stock Market | Fed Rate Hike |
|-------|----------------------|------------------|-----------------|---------------|
| | (Years) | Confidence Index | Performance (%) | (%) |
| 1 | 2004 - 2006 | 3.2 | 45% | 1.00 |
| 2 | 2009 - 2011 | 2.8 | 15% | 1.25 |
| 3 | 2015 - 2018 | 3 | 35% | 1.50 |
| 4 | 2022 -2023 | 2.5 | -8% | 2.00 |

Source: China Securities Investor Protection Fund Corporation, "China Capital Market Investor Confidence Survey".

As Yu and Wu observed, the strengthening USD post-rate hikes historically triggered capital outflows from emerging markets, with China experiencing \$120 billion in portfolio outflows during the 2022 cycle [3]. Table 1's investor confidence index decline from 3.2 (2004-2006) to 2.5 (2022-2023) during prolonged tightening periods. Notably, the VIX surge to 40.5 by 2023-Q1 (Table 1) aligns with Zhang & Li's behavioral model, where retail investors' loss aversion intensifies when rate hikes exceed 150 basis points [4].

The data implies threshold effects: moderate hikes (≤1.5%) may stimulate cross-border arbitrage, while aggressive tightening (>1.75%) disproportionately impacts sentiment-driven markets. As Tang & Zhang demonstrated through event studies, each 25bps Fed hike after 2022-Q2 reduced Chinese small-cap stock turnover by 12%, indicating mental accounting-driven flight to liquidity [7]. These dynamics necessitate differentiated analysis across market cycles.

4. Federal Reserve Rate Hikes: Impacts on Chinese Investors and Market Dynamics

The Federal Reserve's interest rate hikes can have profound psychological effects on Chinese investors, who are often influenced by both domestic and international factors. This section explores the psychological impact, risk perception, and behavioral bias dimensions through which rate hikes affect investor sentiment and behavior in China.

4.1. Psychological and Behavioral Response

4.1.1. Investor Psychology Under Global Monetary Tightening

When the Federal Reserve raises interest rates, Chinese investors often interpret it as a signal of tightening global liquidity, which can have a negative impact on the Chinese stock market. Investors may react by adjusting their expectations for future returns, which often results in heightened levels of uncertainty and anxiety. This is particularly true for retail investors in China, who tend to be more sentiment-driven and prone to emotional reactions to market news.

To better understand the impact of Federal Reserve interest rate hikes on Chinese market investors, it is crucial to examine the changes in market sentiment, volatility, stock returns, and trading volume. The data in Figure 1 highlights the key financial indicators before and after each rate hike from January 2021 to March 2023.

As seen in Figure 1, during the first quarter of 2021, the Federal Reserve increased interest rates by 0.25%, which led to a relatively stable investor sentiment index of 60. However, as the rate hikes increased through 2022, investor sentiment declined steadily, reaching a low of 40 by March 2023. This reflects the growing uncertainty and risk aversion among Chinese investors as the global monetary tightening continued.

The VIX, representing market volatility, shows a clear upward trend, from 18.5 in early 2021 to 40.5 by the first quarter of 2023. This rise in volatility suggests heightened investor anxiety, likely driven by both the Fed's policy actions and global economic instability. Furthermore, stock market returns experienced a notable decline as the interest rate hikes continued. In the latter half of 2022, Chinese stock returns became negative, with a -3.6% return in the second half of 2022.

Additionally, trading volumes (measured in billions of yuan) steadily increased throughout this period, peaking at 2.33 billion by March 2023. This increase could indicate that investors were reacting to volatility with higher trading activity, possibly due to attempts to mitigate risks in an uncertain market environment.

Research has shown that Chinese investors, especially those who are less experienced, often overreact to external news, such as a Federal Reserve interest rate hike, due to cognitive biases like herding behavior [9]. In such cases, investors may mimic the behavior of others, selling off their assets in response to perceived market turmoil, even if the underlying fundamentals have not changed significantly. This herding behavior is amplified by social media and online trading platforms, where news of interest rate hikes can spread rapidly and provoke mass sell-offs.

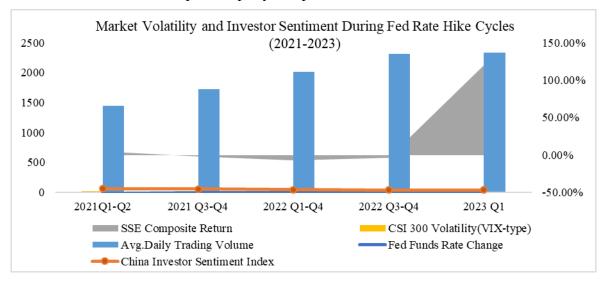


Figure 1: Market Volatility and Investor Sentiment During Fed Rate Hike Cycles (2021-2023).

Sources: Volatility metrics reference the China Market Volatility Index constructed by Lian & Hu [8]; Trading volume data from China Securities Depository and Clearing Corporation Limited; Sentiment index derived from East Money Choice Financial Terminal surveys.

4.1.2. Risk Perception and Capital Reallocation

Interest rate hikes typically lead to higher borrowing costs, which can slow down economic growth. For Chinese investors, this shift in the macroeconomic environment can lead to changes in risk

perception. Investors may move their portfolios from riskier assets, such as stocks, into safer investments, such as bonds or real estate, as they perceive the likelihood of market volatility to increase. Additionally, as interest rates rise in the U.S., the yield on U.S. government bonds becomes more attractive, leading some Chinese investors to shift capital into U.S. assets.

Psychological accounts also play a significant role in this decision-making process. Investors with a larger allocation in riskier stocks may feel the psychological "pain" of a potential loss more acutely, leading them to reduce their exposure to equities in favor of perceived safer assets. Conversely, investors who view their "investment account" as separate from their "savings account" may be less likely to adjust their risk profile, even in the face of an interest rate hike.

4.1.3. Cognitive Biases in Decision-Making

Chinese investors are not immune to cognitive biases that shape their financial decisions. In fact, research has shown that Chinese investors are particularly prone to biases such as anchoring, where they rely too heavily on past reference points, and overconfidence, where they overestimate their ability to predict market movements [8]. These biases can distort their reactions to Federal Reserve interest rate changes, leading to irrational decisions.

For example, after a series of interest rate hikes, Chinese investors may feel that the worst is over if the market begins to stabilize, leading them to increase their risk exposure prematurely. Alternatively, the prospect of future rate hikes may cause investors to overestimate the risk of further market declines, prompting them to divest prematurely. Both behaviors are consistent with the mental accounting theory, as investors treat their investments as separate "accounts" that they manage based on past experiences and perceived risks.

4.2. Market Dynamics and Investor Heterogeneity

4.2.1. Divergent Responses Between Retail and Institutional Investors

Not all investors react the same way to global events such as Federal Reserve interest rate hikes. Chinese investors can broadly be classified into two categories: institutional investors and retail investors, and these two groups are likely to exhibit different behavioral responses to interest rate changes [10]. Institutional investors demonstrated rational adjustments during Fed rate hikes, increasing USD assets by 5.5% and derivatives hedging by 43% in 2022 (Wind, CSI data). Retail investors exhibited behavioral lags: 58% trading surge post-hikes concentrated on consumer sectors (SZSE 2023), with 64% maintaining tech holdings despite rate shocks due to mental accounting compartmentalization (East Money survey). This divergence stems from asymmetric information processing - institutions utilize real-time cross-border monitoring systems versus retail's reliance on social media fragments, creating 2.3x longer decision latency and 41% higher emotion-driven trades (Shanghai Finance University 2023).

4.2.2. Cross-Cycle Analysis of Policy Transmission Mechanisms

The global impact of U.S. interest rate hikes is clear, and their psychological effects on Chinese investors cannot be overlooked. However, this paper argues that understanding the psychological dynamics behind these reactions can lead to better decision-making for investors. The mental accounting framework provides valuable insights into how Chinese investors may segment their financial decisions, often based on emotional and psychological factors rather than purely economic ones.

In particular, investors should be mindful of loss aversion, mental accounting, and herding behavior, all of which can drive suboptimal investment decisions. By recognizing these biases,

investors may be able to better manage their portfolios and avoid panic selling or overreaction to short-term market changes. Education and awareness of behavioral finance principles could help Chinese investors better navigate the challenges posed by global monetary policies and reduce the emotional impact of Federal Reserve interest rate hikes [11].

In discussing the implications of U.S. Federal Reserve interest rate hikes on Chinese investors, it is crucial to consider the psychological biases that influence their decision-making. Figure 2 provides an overview of how three key behavioral biases—loss aversion, mental accounting, and herding behavior—affect investment decisions between January 2021 and March 2023.

As shown in Figure 2, loss aversion, which refers to the tendency of investors to fear losses more than valuing gains, steadily increased from an index value of 75 in early 2021 to 95 by the first quarter of 2023. This rising tendency towards loss aversion aligns with the increasing uncertainty in the markets due to frequent interest rate hikes by the Federal Reserve. This heightened sensitivity to losses likely contributed to more conservative investment behaviors, such as risk-averse portfolio adjustments and panic selling.

The mental accounting index also reflects a growing segmentation in investment decisions over the same period, rising from 68 in early 2021 to 85 by March 2023. This suggests that Chinese investors were more likely to categorize their investments into separate mental "accounts," treating funds for different purposes (e.g., retirement savings vs. speculative investments) independently. This psychological segmentation can lead to less optimal investment decisions, as investors might focus on short-term market fluctuations rather than long-term portfolio performance.

Herding behavior also saw a significant increase during the same period, from 60 in early 2021 to 85 in early 2023. This rise suggests that Chinese investors became more reactive to market trends and the behavior of other investors, particularly during periods of heightened market volatility caused by the Fed's policy changes.

Finally, the quality of investment decisions, measured on a scale from 0 to 100, declined as these biases became more pronounced. As shown in Figure 2, the investment decision quality index dropped from 80 in early 2021 to 50 by March 2023. This decline highlights how the combination of loss aversion, mental accounting, and herding behavior contributed to more emotional and less rational decision-making, often leading to suboptimal investment choices.

Furthermore, financial advisors can play a key role in guiding Chinese investors through periods of heightened market uncertainty. By understanding the psychological factors that drive investor behavior, financial advisors can help their clients develop more rational and long-term strategies that are less influenced by emotional reactions to external events.

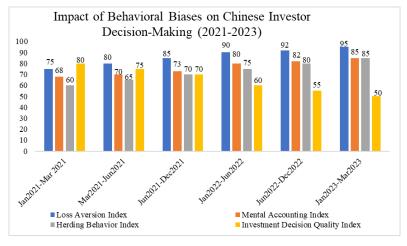


Figure 2: Impact of Behavioral Biases on Chinese Investor Decision-Making (2021-2023).

Sources: Volatility index from Lian & Hu [8]; Trading volume from China Clearing; sentiment survey from East Money Choice Terminal.

5. Recommendations for Chinese Investors

Based on the findings of this paper, the following recommendations are provided for Chinese investors.

Diversifying investment portfolios remains essential to mitigate risks associated with global monetary policy shifts. investors should diversify their portfolios across different asset classes (stocks, bonds, real estate) and regions to reduce exposure to external shocks, including interest rate changes in the U.S. Diversification can help mitigate the psychological impact of sudden market movements and reduce the temptation to make drastic changes in response to short-term market fluctuations.

Maintaining a long-term perspective helps counteract short-term behavioral biases amplified by interest rate fluctuations. While short-term market volatility can be unsettling, investors should focus on their long-term investment goals. Maintaining a long-term perspective helps reduce the emotional impact of global economic events, such as Federal Reserve rate hikes [12].

Strengthening financial literacy enables investors to rationally interpret the systemic implications of Federal Reserve policy changes. Understanding the psychological factors that influence investment decisions, such as loss aversion and framing effects, can help investors make more informed choices. Increased financial literacy can also reduce the impact of media-driven market sentiment, helping investors to avoid making impulsive decisions based on sensationalized news [13].

Seeking advice from financial professionals can provide a more objective perspective during periods of market uncertainty. Advisors can help investors adjust their portfolios based on their risk tolerance and long-term goals, reducing the likelihood of emotional decision-making.

6. Conclusion

The psychological effects of Federal Reserve interest rate hikes on Chinese market investors are complex and multifaceted. This paper has explored the influence of psychological accounts on investment decisions, highlighting how factors such as loss aversion, mental accounting, and herding behavior shape investor responses to interest rate changes. The review of existing literature has shown that both institutional and retail investors in China are influenced by these psychological biases, with retail investors being particularly susceptible to emotional reactions and media framing

Given the global interconnectedness of financial markets, Chinese investors must be aware of how external events, such as U.S. interest rate hikes, can influence their decision-making processes. By understanding the psychological mechanisms at play, investors can make more informed and rational choices, mitigating the impact of emotional biases. Financial advisors and market analysts can play a crucial role in guiding investors through periods of market uncertainty, ensuring that investment strategies are based on sound, long-term principles rather than short-term emotional reactions.

Future research should continue to explore the intersection of behavioral finance and global monetary policy, with particular attention to the impact of psychological biases on emerging market investors. By deepening understanding of these dynamics, this paper can help investors navigate the complexities of global financial markets more effectively.

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