

**MARKET SENTIMENT AND ITS ROLE  
IN ASSET PRICING AND INVESTMENT DECISION-MAKING IN CHINA'S STOCK MARKET**

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*The article presents the results of a study of the impact of market sentiment on the functioning of the Chinese stock market. The essence of market sentiment is considered, their inseparable connection with behavioral finance is substantiated, and a comprehensive analysis of the factors of their formation is performed. Practical recommendations for choosing the time to enter the market and risk management in the context of climate change are offered. This will help to increase the predictability of investor behavior and market stability*

**Keywords:** *Investor Sentiment; Principal Component Analysis; Climate Risk; Stock Market Timing*

Market sentiment, at its core, refers to the collective psychological tendency of investors toward the future direction of financial markets, manifested in their trading behaviors and asset pricing decisions. Unlike objective fundamentals (e.g., corporate profits, macroeconomic data), it embodies subjective perceptions, expectations, and emotional biases (optimism, pessimism, panic) that drive deviations between asset prices and intrinsic values. M. Baker and J. Wurgler defined it as a "systematic bias in investor beliefs about future cash flows and risks," emphasizing its role as a non-fundamental driver of volatility – their pioneering Principal Component Analysis (PCA)-based index (integrating turnover rate, IPO volume, and closed-end fund premium/discount rate) demonstrated that high sentiment fuels valuation bubbles, while low sentiment triggers irrational selling [1]. This definition is particularly salient in China's A-share market, where retail investors account for a large share of total trading volume: their frequent trading and high sensitivity to external information accelerate sentiment transmission to stock prices, making sentiment not just a psychological construct but a tangible driver of short-term market swings. To quantify the structural characteristics of retail-dominated investors in China's A-share market, we extracted data from official registration statistics, which clearly reflect the overwhelming proportion of individual investors (Table 1).

Table 1. – A-Share Investor Quantity, Proportion & Market Cap Holding (As of Jun 2025)

Investor Type	Quantity (as of Jun 2025)	Proportion of Total Investors, %
Total	240 million	100
Individual	239 million	99.76
Institutional	576000	0.24

*Source:* based on data [2].

This role of market sentiment is deeply rooted in behavioral finance, which rejects traditional finance’s “fully rational investor” assumption. Three core behavioral finance concepts clarify this connection and explain sentiment’s strong impact on China’s stock market:

First, Simon’s bounded rationality theory underscores that investors cannot exhaustively analyze all options due to cognitive constraints (e.g., limited attention, difficulty processing complex data) and information asymmetry – an issue particularly pronounced in China’s A-share market, where retail investors lack access to professional research compared to institutions. Instead, they rely on simplified heuristic decisions (e.g., chasing short-term gains, overreacting to climate news), with market sentiment emerging directly from these behaviors. For instance, unwarranted turnover surges may be misinterpreted as “market consensus,” driving overvaluation.

Second, market sentiment capitalizes on inefficiencies unaddressed by the Efficient Market Hypothesis (EMH). While the EMH posits asset prices reflect all historical data, behavioral finance demonstrates sentiment-induced mispricing creates persistent inefficiencies. M. Baker and J. Wurgler validated this, with China’s A-share market offering clear evidence: high-volatility growth stocks are undervalued in low-sentiment periods and overvalued in high-sentiment periods [1]. This mispricing persists for months due to retail investors’ heuristic decisions delaying market equilibrium, contradicting the EMH.

Third, herding behavior and prospect theory explain sentiment propagation in China’s retail-dominated market. Herding leads investors to mimic majority actions (e.g., blind selling amid extreme weather-induced negative sentiment), while prospect theory highlights negative sentiment’s stronger impact – investors’ loss aversion drives more drastic trades (e.g., sharp sell-offs in high-energy stocks amid policy rumors versus muted buying in renewables during positive news). Collectively, these theories frame sentiment as a tangible outcome of psychological biases, linking individual behavior to market dynamics.

Market sentiment is shaped by two interacting drivers – traditional financial factors and emerging climate risk factors – with solid empirical support from China’s stock market. Traditional financial factors, long-used as sentiment proxies, reflect market activity and risk appetite: The CSI 300 Index’s turnover rate, for example, signals trading enthusiasm – amid optimistic sentiment, it peaks and coincides with

risers in growth indices as retail investors increase positions in growth stocks. Trading volume amplifies this signal during bullish periods, serving as a clear sign of optimism. The closed-end fund premium/discount rate, another key proxy, reflects investors' risk aversion: amid concerns about economic conditions, closed-end funds often see wider discount rates as investors sell fund shares to avoid losses, prompting retail capital to shift to defensive sectors. IPO activity also mirrors sentiment: during high-sentiment periods, more IPOs launch with higher average first-day returns as retail investors chase short-term gains; during low-sentiment periods, fewer IPOs are completed with lower first-day returns as investors avoid the risk of "breaking issue" (IPO prices falling below offering levels). Crucially, these factors correlate: rising turnover often aligns with narrower closed-end fund discounts (as optimism reduces risk aversion) and more IPOs (as companies list during bullish markets), forming a self-reinforcing cycle that lifts sentiment.

Climate risk, a non-traditional yet increasingly critical driver, influences market sentiment in China's stock market through three quantifiable channels [3]: We systematically categorized the impact paths of climate risk and compared the limitations of traditional sentiment indices in capturing these risks (Table 2).

Table 2. – Impact Mechanism of Climate Risk on Market Sentiment and Stock Prices

Type of Climate Risk	Core Impact Logic	Specific Transmission Mechanism	Limitation of Traditional Sentiment Indices (e.g., CICI)
Physical Climate Risk (Extreme Weather)	Disrupt operations → weaken confidence → emotional panic → stock price fluctuations	1. Transport/agriculture enterprises' operational delays → Retail selling → Stock price drop; 2. Drought-induced hydropower shortage → Corporate performance pressure → Index decline	Fail to capture climate panic → measurement bias
Climate Policy Shocks	Reshape profit expectations → guide capital flow → affect sentiment & stock prices	1. Tightened carbon constraints → Higher financing costs for high-energy-consuming enterprises → Institutional selling; 2. Clean energy support → Increased R&D investment → Volatility reduction	Fail to cover sectoral sentiment differentiation → inaccurate timing signals
Climate Policy Uncertainty	Information asymmetry aggravation → Risk aversion → Volatility amplification	Policy instability → Enterprises hide negative info → Investors cautious → Crash risk rise	Ignore risk aversion amplification effect → unable to explain abnormal fluctuations

Source: based on data [4, 5].

These factors strongly influence investment decisions in China’s A-share market – largely because retail investors’ dominance amplifies sentiment effects via their sensitivity to short-term signals and reliance on heuristics. Traditional financial factors guide retail asset allocation predictably: optimistic sentiment (high turnover/rising volumes) drives chasing high-growth, high-volatility sectors; pessimism (wider closed-end fund discounts) prompts shifts to defensive sectors.

Climate risk, however, has emerged as a "game-changer" – retail investors’ dominance and short-term risk sensitivity add new complexity to decisions. Physical climate risk disrupts operations and triggers synchronized selling: typhoons disrupt coastal logistics or rainstorms damage agriculture, prompting retail selling and price drops in related sectors [6].

Climate policy shocks reshape institutional portfolios and capital flows: following stricter carbon standards, institutions reduced high-energy sector holdings and increased clean energy allocations, with retail investors following suit. Amid surges in climate policy uncertainty, retail investors cut high-risk exposure and boost low-risk holdings. Using the 2024 typhoon period as a case, we visualized the link between physical climate risk, retail trading, and stock price volatility in A-share port sectors (Figure 1).

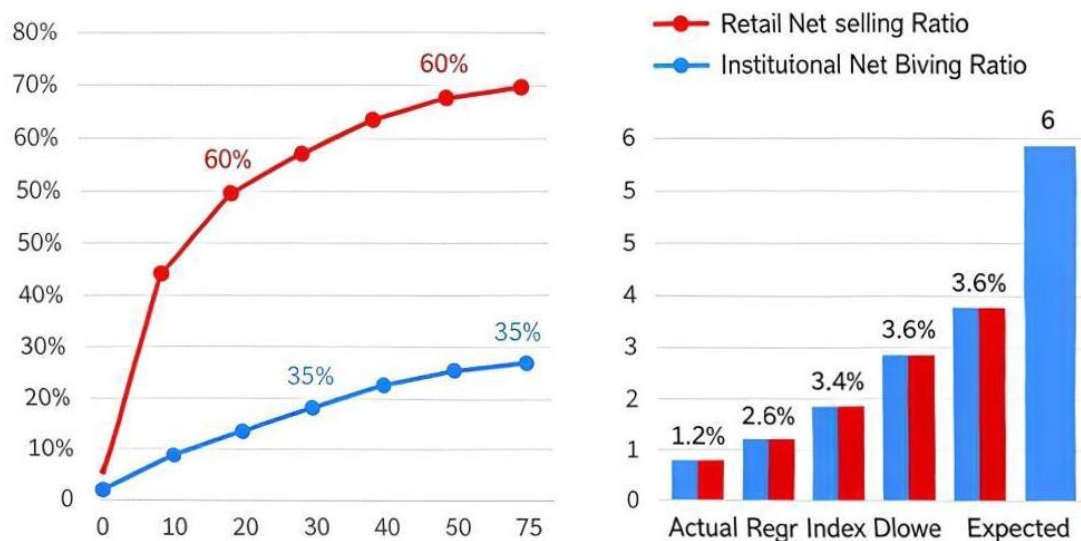


Figure 1. – Retail Trading Volume and Stock Price Volatility of A-Share Port Sectors During the 2024 Typhoon Period [compiled by the authors based on A-share port sector transaction data (2024) and [7]]

Compounding these effects is retail investors’ tendency to overreact to climate-related news – a behavior rooted in bounded rationality and herding. For example, a local news report about potential climate risks to specific sectors can lead

retail investors to sell related stocks within hours, causing price drops. This overreaction fuels herd behavior, where synchronized trading widens price swings: during droughts, hydropower stocks see significant price declines driven almost entirely by retail herding – far exceeding the declines justified by actual earnings impacts.

Given the overlapping impacts of traditional financial factors and climate risk on retail investors' decision-making and market sentiment, targeted measures are needed to improve investor behavior predictability and market resilience – requiring leverage of the newly constructed Climate Risk-Market Sentiment Index (CR-MSI). First, popularize CR-MSI to help investors (especially retail) quantify climate risk-sentiment links: amid high negative sentiment signals (e.g., extreme weather, policy tightening), they can proactively adjust portfolios (e.g., cutting agriculture/high-energy exposure) instead of reacting impulsively. Second, institutional investors should develop CR-MSI-based climate products (e.g., low-carbon ETFs) to redirect capital to sustainable sectors (e.g., clean energy), reducing speculation in climate-vulnerable industries and volatility (consistent with Guo & Wang, 2025). Third, regulators should strengthen climate information disclosure rules, mandating listed companies to report physical/transition risks and operational impacts to address information asymmetry and curb rumor-driven trading. Fourth, stabilize climate policy implementation to reduce uncertainty: per Xia (2024), policy stability curbs management's incentive to hide negative information, lowering crash risk and calming sentiment. Finally, enhance investor education on behavioral finance and climate risk, training retail investors to use CR-MSI to distinguish sentiment-driven fluctuations from fundamental changes and curb irrational herding. Together, these steps address the root drivers of sentiment volatility and climate risk, boosting predictability and market resilience.

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## **РЫНОЧНЫЕ НАСТРОЕНИЯ И ИХ РОЛЬ В ЦЕНООБРАЗОВАНИИ АКТИВОВ И ПРИНЯТИИ ИНВЕСТИЦИОННЫХ РЕШЕНИЙ НА ФОНДОВОМ РЫНКЕ КИТАЯ**

*В статье представлены результаты исследования влияния рыночных настроений на функционирование фондового рынка Китая. Рассмотрена сущность рыночных настроений, обоснована их неразрывная связь с поведенческими финансами, выполнен комплексный анализ факторов их формирования. Предложены практические рекомендации для выбора времени входа на рынок и управления рисками в условиях изменения климата. Это будет способствовать повышению предсказуемости поведения инвесторов и стабильности рынка.*