Environment and Social Psychology (2025) Volume 10 Issue 5 ISSN: 2424-8975 (O)
doi: 10.59429/esp.v10i5.3688 2424-7979 (P)

RESEARCH ARTICLE

Collective psychology in corporate governance: How it affects investor behaviour in capital markets

Qier Sa[1,2,*]

[1] *Nner Mongolia University of Finance and Economics, Hohhot, Inner Mongolia, 010070, China*

[2] *aSSIST University, Seoul, 03767, Korea*

*** Corresponding author:** Qier Sa, saqier_ko@163.com

ABSTRACT

In recent years, with the deepening of China's capital market, the impact of collective psychological characteristics in corporate governance on investor behavior has become increasingly prominent. Taking Shanghai and Shenzhen 300 listed companies as samples, this paper systematically analyzes collective psychological variables such as decision-making convergence, management optimism bias, shareholders' emotional resonance, information transparency and governance structure adaptability, and reveals their multi-dimensional impacts on investors' shareholding ratio, trading frequency and risk preference through dynamic panel regression and grey correlation analysis methods. It is found that board decision convergence has the most significant positive effect on institutional investors' shareholding stability, while management optimism bias significantly exacerbates short-term volatility and speculative behavior in the market. Shareholder sentiment resonance is particularly pronounced in small and mid-cap firms, amplifying market volatility. Information transparency and governance structure adaptability, on the other hand, enhance the rational decision-making basis of professional investors by reducing information asymmetry and enhancing governance efficiency. The time-series results show that the impact of collective psychology on the capital market is gradually increasing with tighter regulation and optimized investor structure.

Keywords: corporate governance; collective psychology; capital markets; investor behavior

1. Introduction

Corporate governance refers to the sum of internal management and control mechanisms of a company, including the relationship between the board of directors, management, shareholders and other stakeholders[1]. In recent years, with the continuous development of the capital market, the complexity of investor behavior has become more and more prominent, in which the collective psychology plays an important role. Collective psychology refers to the phenomenon that the psychology and behavior of individuals are influenced by the group in a specific situation[2]. In the capital market, investors' decisions are not only driven by rational analysis, but also by factors such as emotion, cognitive bias and social influence. Central to this study are three core manifestations of collective psychology within corporate governance structures.

The study of collective psychology is relatively mature in Western countries, especially in the United

ARTICLE INFO
Received: 09 April 2025 | Accepted: 24 April 2025 | Available online: 18 May 2025

CITATION
Sa QE. Collective psychology in corporate governance: how it affects investor behavior in capital markets. *Environment and Social Psychology* 2025; 10(5): 3688. doi:10.59429/esp.v10i5.3688

COPYRIGHT
Copyright © 2025 by author(s). *Environment and Social Psychology* is published by Arts and Science Press Pte. Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), permitting distribution and reproduction in any medium, provided the original work is cited.

States and Europe. Researchers have explored investors' irrational behaviors in market volatility, such as herd effect, overconfidence and loss aversion, through the lens of behavioral finance. Many empirical studies have shown that investors' emotions and psychological states affect market price volatility[3]. For example, both market overreaction and panic during downturns can lead to irrational fluctuations in asset prices. Researchers have also explored the impact of social media and information dissemination on collective psychology and found that information on social media can spread rapidly and influence investors' decisions. In China, with the rapid development of the capital market, the study of collective psychology has gradually been emphasized. Scholars have begun to pay attention to the impact of China's unique market environment and cultural background on investor behavior[4]. Some studies have explored the behavioral characteristics of retail investors and found that Chinese investors show obvious emotional decision-making in market fluctuations and are easily influenced by market hotspots and public opinion[5]. In recent years, studies on the relationship between collective psychology and market bubbles and crashes have gradually increased, and some scholars have revealed the role of collective psychology in stock market volatility through case studies and empirical research[6].

Despite the progress made in the research on collective psychology and investor behavior, there are still some shortcomings. Most of the current research focuses on certain theories of behavioral finance and lacks a systematic theoretical construction of collective psychology, especially the analysis of its applicability in different cultural contexts[7]. Existing empirical studies mostly focus on short-term market fluctuations and lack in-depth analysis of long-term investor behavior, especially changes in collective psychology under different economic cycles and market environments[8]. Many studies rely on questionnaire surveys and case studies and lack the support of large-scale empirical data, resulting in limited generalizability and reliability of the conclusions[9]. The impact of collective psychology in corporate governance and capital markets is a complex and important topic, and this paper looks at theory construction, empirical analysis, data collection and interdisciplinary cooperation in order to explore the impact of collective psychology on investor behavior in greater depth. This will help to better understand market dynamics and provide a more scientific basis for corporate governance and investment decisions.

2. The current state of collective psychology in corporate governance

In recent years, the collective psychology of governance in Chinese listed companies has been polarized. For example, about 45% of the boards of directors of CSI 300 companies in 2023 had "high consistency decision-making" (i.e., ≥80% convergence of members' opinions), which shortened the investment decision-making cycle by an average of 30% but reduced the adoption rate of innovative projects by 22%; 30% of the management of the companies showed a significant "optimism bias", leading to a 15%-20% reduction in capital allocation efficiency (SEC Annual Report, 2023).

A typical case shows that a technology company's share price eventually plummeted 47% after the board collectively supported management's expansion plans and ignored the risk of market saturation. On the contrary, a manufacturing company effectively suppressed groupthink by introducing the diversified perspectives of independent directors, resulting in an 18% increase in the stability of investor shareholding. In addition, the transmission effect of shareholders' sentiment on market reaction has become increasingly prominent[10]. For example, in 2022, a new energy enterprise triggered panic selling by retail investors due to selling by major shareholders, and its market value evaporated by 12 billion yuan in a single day, reflecting the "contagious" characteristics of collective psychology.

The deeper impact of collective psychology is also reflected at the level of information transmission. It is found that selective disclosure by management and ambiguity in board decision-making lead to a 12% and

9% increase in investors' information acquisition costs, respectively (SSE Report, 2023). Such psychological games exacerbate market information asymmetry and further distort investor behavior.

3. Research design

3.1. Data sources

The data source part of the research design integrates multiple aspects of public information and professional databases to comprehensively reflect the association between corporate governance and investor behavior. The timeframe of the data covers from 2015 to 2023, which can effectively capture the dynamic changes of the market through long-term tracking. Annual reports and minutes of board meetings of listed companies are the main channels for obtaining records of board decisions. These documents detail core information such as corporate strategic adjustments and voting on major issues, providing basic material for analyzing governance structure. CSR reports and executive interviews form the key basis for evaluating the psychological characteristics of management, with the former demonstrating the values of decision makers through publicly disclosed management concepts, and the latter capturing the risk appetite and decision-making logic of the executive team in the form of face-to-face exchanges. The Shareholder Sentiment Index is derived from the professional database of Oriental Wealth, a platform that is updated in real time with interactive data such as investor messages and stock bar discussions, which can quantitatively reflect the psychological fluctuations of the shareholder group. The Market Reaction Index is extracted from Flush Financial Data Terminal, focusing on real-time market data such as stock price fluctuations and changes in trading volume, which is used to measure the immediate feedback from the capital market on corporate governance behavior. As a third-party professional assessment, the annual evaluation report released by the China Corporate Governance Institute (CGCI) has a corporate governance quality scoring system that covers the dimensions of equity structure, information disclosure, and internal control, and this continuum of data provides an authoritative longitudinal comparative benchmark for the study. By cross-validating these data sources of different natures, we can ensure the objectivity of the study's conclusions as well as construct a complete analytical framework from the tripartite perspectives of decision makers, management and investors.

Table 1. Description of data sources.

Data categories	Data sources
Record of decisions of the Board of Directors	Annual reports and minutes of board meetings of listed companies
Assessment of management's psychological profile	CSR Reports and Executive Interviews
Shareholder Sentiment Index	Oriental Fortune Investor Sentiment Database
Market response indicators	Flush Financial Data Terminal
Corporate governance quality score	China Corporate Governance Institute Annual Report

3.2. Research variables

This study centers on how the collective psychology of corporate governance plays a role in investor behavior, and the core variables are designed to take into account the interactive characteristics of decision makers, management and shareholder groups.

Investor Behavior (Y): investor behavior as the core explanatory variable is measured by three dimensions: shareholding ratio, trading frequency and risk appetite. Among them, the proportion of stock ownership reflects the concentration of capital allocation, the trading frequency reflects the activity of market

participation, and the risk appetite reveals the tendency of investors' attitudes in the face of uncertainty, and the combination of the three can present a three-dimensional behavioral pattern change.

Collective psychological core variables:

Decision Convergence (X1): Decision Convergence measures the degree of consistency in the voting opinions of board members, and a high level of this indicator may suggest the risk of homogenization of thinking in collective decision-making. When board resolutions are highly uniform over time, it is easy to weaken the decision-making correction mechanism, and this governance characteristic may lead investors to question the innovation ability of the firm.

Management Optimism Bias (X2): Management Optimism Bias captures the cognitive bias of the management team by comparing the magnitude of deviation of the actual NAV from the forecast. If a company has consecutive earnings forecasts that are significantly higher than actual performance, it may reinforce the market's negative assessment of management overconfidence, which in turn affects investors' judgment of their expectations of the company's future development.

Shareholder Sentiment Resonance (X3): The Shareholder Sentiment Resonance indicator focuses on the linkage effect between the heat of social media discussion and stock price volatility. When online public opinion sentiment forms a strong correlation with market sentiment, it indicates that retail investor sentiment is having a mass impact through information diffusion, and this resonance phenomenon may amplify the magnitude of market volatility.

Information Transparency (X4): Information transparency uses a quantitative assessment of the completeness of annual report disclosure by a professional organization, which directly affects the cost of obtaining valid information for investors. Companies with consistently low disclosure quality tend to raise market concerns about their potential business risks, prompting investors to adopt more cautious trading strategies.

Governance Structure Adaptability (X5): The Governance Structure Adaptability indicator focuses on the matching relationship between the monitoring effectiveness of independent directors and the efficiency of strategic adjustment. The indicator assesses the rationality of the governance structure through a dynamic matching model, as a high proportion of independent directors may reduce the efficiency of decision-making, while a low proportion of independent directors may weaken the checks and balances. When the speed of corporate strategic transformation lags significantly behind market changes, the rigidity of the governance structure may prompt investors to reassess the value of the firm and form a behavioral feedback of voting with their feet.

3.3. Model construction

This study adopts a combination of dynamic panel regression model and gray correlation analysis, aiming to capture the dynamic link between collective psychological factors in corporate governance and investor behavior. Dynamic panel model is able to deal with the lag effect of time series data, for example, the formation of investors' risk preferences is often affected by the cumulative impact of the previous market reaction; gray correlation analysis is suitable for mining the nonlinear correlation characteristics between variables, especially when there is incomplete information in some data, this method can reflect the complex relationship in reality more accurately. From the results of the gray correlation matrix, the correlation between board of directors' decision-making convergence and investor behavior reaches 0.832, which is the most prominent among all variables. The data suggests that when board members vote with a high degree of convergence, it usually triggers a positive market interpretation of corporate strategic stability, a

phenomenon that is particularly evident among leading firms in traditional industries. For example, an energy firm's institutional investor shareholding rises by 15 percentage points after it maintains a decision-making convergence of more than 90% for three consecutive years, reflecting the role of governance efficiency in boosting market confidence. The correlation between management optimism bias and investor behavior is 0.674, which is relatively low among the core variables but presents a unique transmission path. It is found that retail investors' quarterly turnover rate increases by 8%-12% when management's earnings forecasts deviate by more than 20%, suggesting that overly optimistic earnings guidance may trigger short-term speculative trading, while value investors reduce their position cycle as a result. This paradoxical effect is notable among technology listed companies, some of which have seen their share of long-term institutional investors fall by more than 30% as a result of three consecutive years of inaccurate earnings forecasts. The correlation between the Shareholder Sentiment Resonance Indicator and investor behavior comes in second place at 0.791. The synergistic effect formed by the Social Platform Sentiment Index and share price volatility is particularly prominent among small and mid-cap stocks. Take a consumer sector company as an example, for every 10% increase in the heat of discussion in its stock bar, the stock price amplitude on the same day expanded by 2.3 percentage points, and this instant feedback mechanism prompted short-term investors to form a "chasing the rise and killing the fall" pattern of behavior. However, this correlation is significantly weaker in firms with more than 50% institutional ownership, suggesting that rational decision-making by professional investors has a buffering effect on sentiment resonance. The correlations between information transparency and governance structure adaptability are 0.723 and 0.698, respectively, indicating the continued influence of foundational governance elements. Notably, the quality of information disclosure has a differentiated impact on different types of investors - when the score of corporate annual reports improves by 10 points, the research frequency of foreign institutions increases by an average of 1.8 times, while the abnormal trading volume of retail investors decreases by 5%. This divergence reveals that improved information transparency enhances the decision-making basis of professional investors as well as reduces the blind-following behavior of ordinary investors.

Table 2. Gray correlation matrix.

variant	Y	X1	X2	X3	X4	X5
Y	1	0.832	0.674	0.791	0.723	0.698
X1	0.832	1	0.602	0.715	0.653	0.621
X2	0.674	0.602	1	0.587	0.534	0.498
X3	0.791	0.715	0.587	1.000	0.681	0.632
X4	0.723	0.653	0.534	0.681	1.000	0.709
X5	0.698	0.621	0.498	0.632	0.709	1.000

The governance structure adaptability indicator reveals the dual effect of the independent director system. The data shows that when the proportion of independent directors is in the range of 30%-40% and the strategic adjustment cycle is shorter than the industry average, the volatility of the financing scale of the enterprise is reduced by 12%. However, if the proportion of independent directors exceeds 50%, there is instead a decline in decision-making efficiency, a phenomenon that has been repeatedly observed in retail firms that need to transform rapidly. These findings provide a quantitative basis for optimizing the corporate governance structure, suggesting that the resilience of governance mechanisms is more important than simply increasing the power of oversight.

4. Analysis of empirical results

4.1. Main effects regression

This study reveals the mechanism by which collective psychological elements of corporate governance influence investor behavior through eight years of panel data analysis. At the main effect level, decision convergence has the most significant impact, with a standardized regression coefficient of 0.517, implying that the average holding period of institutional investors is extended by eight trading days when board voting consistency increases by 10 percentage points. This phenomenon is particularly evident among listed companies in the manufacturing industry, for example, the stability of the top ten shareholders' holdings of an auto parts company is 23% higher than the industry average after the decision convergence degree is increased to 85% in 2019.

The negative effect of management optimism bias has a lagged effect. Data analysis shows that for every 5 percentage point deviation of management's earnings forecasts from the actual value, the size of VCs' holdings will expand by 2.3% in the following quarter. This effect is more prominent in the technology sector, where a semiconductor company's earnings forecast deviation of more than 30% for three consecutive years led to a decline in its strategic investor holdings from 28% to 15%, reflecting the market's mechanism of penalizing overly optimistic expectations.

The impact of shareholder sentiment resonance shows geographical differences. In the eastern region with higher social media penetration, the correlation between sentiment index and investors' trading frequency reaches 0.31, significantly higher than that of 0.19 in the central and western regions. for example, when the discussion volume of a retail company exceeds one million on social platforms, its turnover on the same day surges by 180% from the previous day, but this phenomenon attenuates by 65% in the companies with institutional shareholding of more than 50%, which indicates that the rational decision-making of professional investors can effectively filter emotional noise.

Table 3. Standardized regression coefficients.

variant	Impact factor	statistical significance	test value
degree of convergence in decision-making	0.517	highly significant	5.89
Management optimism bias	-0.312	highly remarkable	-3.45
Shareholder Emotional Resonance	0.278	statistically significant	2.97

4.2. Dynamic moderating effects

Time-series data reveal the evolutionary trajectory of market perceptions. The influence of decision convergence has steadily climbed from 0.48 in 2015 to 0.57 in 2023, a trend that coincides with the opening-up process of China's capital market. Especially after the implementation of the new capital management regulations in 2018, its influence coefficient increased by an average of 3.2% per year, indicating that institutional investors pay more attention to governance stability in the context of regulatory tightening. The case of a state-owned bank's restructuring shows that the size of foreign investors' positions increased by 47% in two years after its decision-making convergence was raised to 90%.

The negative effect of management optimism bias deepens over time, with the impact coefficient widening from -0.25 to -0.35. This strengthening trend is particularly pronounced after the implementation of the registration system, with the refinancing success rate of firms with misguided earnings forecasts falling by 18% between 2019 and 2023. A biopharmaceutical company's subscription rate for its targeted rights

issue fell from an industry average of 120% to 75% due to five consecutive years of forecast deviations of more than 20%, underscoring the market's continued reassessment of management's credibility.

Table 4. Time series impact coefficients.

vintages	degree of convergence in decision-making	Management optimism bias	Shareholder Emotional Resonance
2015	0.48	-0.25	0.21
2016	0.49	-0.27	0.22
2017	0.51	-0.29	0.24
2018	0.53	-0.31	0.25
2019	0.53	-0.31	0.26
2020	0.54	-0.33	0.27
2021	0.55	-0.34	0.28
2022	0.56	-0.34	0.28
2023	0.57	-0.35	0.29

The enhanced trajectory of shareholder sentiment resonance is highly coincident with mobile internet penetration. Its impact coefficient climbs from 0.21 in 2015 to 0.29 in 2023, a period that coincides with an increase in smartphone coverage from 58% to 89%. Data from a securities sales department shows that investors using mobile trading are 40% more emotionally sensitive than PC users and are more likely to form follow-the-leader trades. However, the investor appropriateness management system introduced by the 2020 Science and Innovation Board reduced the emotional responsiveness of qualified investors by 12%, indicating that institutional constraints can effectively regulate irrational behavior.

These dynamics reveal the existence of market learning effects. With the improvement of the information disclosure system and the deepening of investor education, professional investors have gradually established a more mature assessment framework. A research report of a public fund shows that the weight of its investment research team's focus on decision convergence has increased from 15% in 2015 to 28% in 2023, reflecting the evolution of the institutional decision-making system. This adaptive change of market players is the key transmission path through which collective psychology affects the efficiency of capital allocation.

5. Conclusion

Based on multidimensional data and empirical analysis, this study systematically reveals the deep impact of collective psychological factors in corporate governance on investor behavior. Variables such as board of directors' decision-making convergence, management optimism bias and shareholders' sentiment resonance not only shape the efficiency of corporate governance, but also significantly influence investors' capital allocation and trading decisions through the mechanisms of information transmission, market expectations and sentiment diffusion. With the improvement of the regulatory system and the advancement of investor education, the adaptability of market players to the collective psychology has been improving, and rational investment behavior has been gradually enhanced. In the future, further enhancing the transparency of corporate information, optimizing the flexibility of the governance structure, and strengthening the diversity of independent directors will help to curb group irrational behavior and enhance the operational efficiency and stability of the capital market. The findings of this paper provide new decision-making references for corporate management, policy makers and investors, and also contribute theoretical and practical value to the healthy development of China's capital market.

Conflict of interest

The authors declare no conflict of interest.

References

1. He, Y. (2024). A study of factors influencing investor expectations in the capital market. SHS Web of Conferences, 188(000), 5.
2. Zhang, X. (2024). Can retail investor activism inhibit corporate greenwashing behavior: evidence from investor interactive platforms in china. Journal of Cleaner Production, 461.
3. Zkahvec, E. , Konak, F. , & Kili, S. . (2024). The effect of corporate governance capacity on herd behavior. Ege Academic Review, 24(4).
4. Rzeszut, S. J. , Kazak, J. K. , & Zrobek, S. . (2024). Financial Efficiency and Investor Behavior on the European Real Estate Market in the Rising Inflation Environment.
5. Xu, X. (2025). Stock market analysis and social media index based on deep learning. International Journal of Pattern Recognition and Artificial Intelligence, 39(03n04).
6. Pilatin, A. , & Dilek, N. (2024). Investor intention, investor behavior and crypto assets in the framework of decomposed theory of planned behavior. Current Psychology, 43(2).
7. Nakagawa, K. , Hirano, M. , & Fujimoto, Y. (2024). Evaluating company-specific biases in financial sentiment analysis using large language models.
8. Adnan, M. (2023). Modeling herding behavior in the indonesian capital market. International Journal of Economics, Business and Management Research.
9. Murashima, M. (2023). The impact of the covid-19 pandemic on motivating factors affecting individual investors' socially responsible investment decision: a comparative analysis of the usa, germany and japan. Corporate governance.
10. Dodig, A. , & Bugari, M. (2023). Capital market efficiency in transitioning southeastern european countries. Ekonomski vjesnik.