

A Review of the Impact of Herding Effect on Investor Behavior

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Abstract. In recent decades, financial markets have witnessed frequent episodes of extreme volatility, asset bubbles, and sudden crashes that cannot be adequately explained by traditional finance theories rooted in the rational investor assumption. Behavioral finance has emerged as a critical framework for understanding these anomalies, with herding effect serving as one of the most influential explanatory concepts. This paper systematically reviews the impact of herding effect on investor behavior by examining its core mechanisms, manifestations, measurement approaches, and multi-dimensional consequences. Through a comprehensive literature review and synthesis of existing theoretical and empirical studies, this paper analyzes the driving forces behind herding behavior from the perspectives of information economics, principal-agent theory, and behavioral finance, and evaluates the measurement models developed to quantify such behavior in financial markets. The findings reveal that herding behavior significantly undermines market pricing efficiency, amplifies asset price volatility by fueling bubbles and accelerating crashes, erodes individual investor wealth through mistimed entry and exit, and distorts corporate governance by encouraging managerial short-termism. The paper concludes by identifying research gaps and proposing directions for future inquiry.

Keywords: Herding Effect, Investor Behavior, Behavioral Finance, Market Efficiency

1. Introduction

Traditional finance theory is built upon the assumption of the "rational investor," holding that investors are capable of making optimal decisions based on all available information and that market prices fully reflect the intrinsic value of assets. In reality, however, investors are not entirely rational; their decision-making processes are often influenced by cognitive biases, emotional fluctuations, and social interactions. Behavioral finance has emerged in response, systematically revealing the role of psychological factors in financial decision-making, among which the "herding effect" stands as a critical lens for explaining irrational market fluctuations.

Herding effect refers to the tendency of individuals, under conditions of information uncertainty or social pressure, to abandon their own judgments and align their behavior with that of others. In financial markets, this manifests as investors following the crowd in buying or selling, causing asset prices to deviate significantly from fundamentals in the short term, giving rise to bubbles or panic selling. With the proliferation of information technology, particularly social media, the speed of

information dissemination has accelerated and opinion polarization has become increasingly prominent, significantly elevating both the frequency and intensity of herding behavior and posing serious challenges to market stability and investor welfare.

This paper specifically examines the following aspects: the core theoretical frameworks of herding effect, including information cascade theory, reputation and agency problems, and behavioral finance explanations; the reinforcement mechanisms of herding in the social media era; the typical manifestations of herding in investor behavior and the existing measurement models; and the multi-dimensional consequences of herding on market efficiency, asset price volatility, investor wealth distribution, and corporate governance. Through a comprehensive literature review and synthesis of existing theoretical and empirical studies, this paper systematically analyzes the driving forces behind herding behavior, compares the strengths and limitations of different measurement approaches, and evaluates the empirical evidence on herding across various market contexts. This systematic investigation provides practical guidance for investors to identify and mitigate conformity risks, offers a theoretical basis for regulators in designing policy tools to curb excessive market volatility, and ultimately contributes to the healthy and stable development of capital markets.

2. Core mechanisms of herding effect

2.1. Core theoretical framework

Herding behavior is not simply blind imitation; it is driven by multi-layered and composite mechanisms. Mainstream research primarily constructs explanatory frameworks from three dimensions: information economics, principal-agent theory, and behavioral psychology.

2.1.1. Information cascade theory

Information cascade theory provides a classic economic model for explaining herding behavior [1]. The theory holds that when investors face uncertainty, they observe and imitate the behavior of earlier actors, even when such behavior contradicts their own private signals. This occurs because individuals believe that the actions of others may contain valuable information they themselves do not possess. This imitation behavior based on sequential decision-making can interrupt the chain of information transmission; even if the initial decisions of a few individuals are erroneous, it can trigger large-scale "erroneous" herding behavior, causing market prices to deviate from true value for extended periods.

2.1.2. Reputation and agency problems

In the domain of institutional investors, herding behavior is often closely related to reputation risks and agency problems [2]. Professional investors such as fund managers tend to "cluster together" out of career security considerations. If an unconventional investment decision fails, their personal reputation and career prospects suffer severe damage; however, if they follow the mainstream and the decision fails, the individual bears relatively less responsibility since most peers have suffered similar losses [3]. This "shared error" mentality causes institutional investors to tend to hold similar portfolios and avoid risks associated with deviating from industry consensus, thus generating herding behavior at the institutional level [4].

2.1.3. Behavioral finance explanations

From the perspective of behavioral finance, herding behavior stems from several inherent psychological biases that shape investor decision-making under uncertainty [5, 6]. First, humans possess an innate tendency to seek social approval and conformity; in ambiguous situations, aligning with the group provides a sense of psychological security and reduces the anxiety associated with making independent choices. Second, investors often exhibit overconfidence in their own information yet simultaneously suffer from representativeness bias—when they observe a large number of others taking consistent action, they over-attribute correctness to the crowd's behavior, believing that "the crowd is always right," and thus choose to follow rather than trust their own analysis. Third, ambiguity aversion plays a significant role: in the face of highly uncertain financial environments, investors have extremely low tolerance for ambiguity, and imitating others appears to offer a clear and straightforward decision-making path, thereby alleviating cognitive dissonance and emotional stress.

2.2. Reinforcement mechanisms in the social media era

With the advent of the 21st century, particularly the rise of social media, new platforms for the generation and amplification of herding effects have emerged. These reinforcement mechanisms operate through multiple interconnected channels. Emotional and extreme viewpoints spread and resonate much more easily on social media platforms than neutral or balanced analyses, rapidly forming market consensus among retail investors [7]. Online "influencers" and financial self-media have become new types of opinion leaders whose views can quickly influence the decisions of a large number of followers, often bypassing traditional financial intermediaries and professional analysts. Furthermore, algorithmic recommendation systems continuously expose investors to information that aligns with their existing views, reinforcing established biases and accelerating both the homogenization and polarization of opinions within investor groups, which in turn makes collective decision-making more susceptible to sudden shifts in sentiment.

3. Manifestations and measurement of herding effect in investor behavior

3.1. Typical manifestations of investor herding behavior

Herding behavior among investors manifests in several observable patterns in financial markets. The most direct manifestation is trading convergence, where within specific time periods a large number of investors concentrate their buying or selling the same stock or type of asset, causing abnormal trading volume and severe imbalance between buy and sell orders. This is often accompanied by extreme asset price volatility, as stock prices or indices experience continuous sharp rises or falls in the absence of major fundamental news, forming distinct trend momentum that attracts even more followers. Additionally, sector rotation and concept speculation are common symptoms—investors chase market hotspots, generating short-term frenzies for "thematic stocks" and "concept stocks," with related sector valuations rapidly deviate industry averages. Historically, numerous significant asset bubbles (such as the Internet bubble of the late 1990s) and market crash events exhibit typical trajectories of herding, progressing from frenzied buying in the early stages to panic selling when sentiment reverses, leaving a clear signature of collective irrationality.

3.2. Measurement methods

Academia has developed various quantitative models to detect and measure herding effects in financial markets. The Lakonishok-Shleifer-Vishny (LSV) model, proposed in 1992, serves as the foundational tool for detecting herding among institutional investors [2]. This model measures whether fund managers exhibit a tendency to buy or sell specific stocks during particular periods at levels significantly above random expectations. Specifically, the LSV model computes the average herding measure across all stocks in a given period by comparing the actual proportion of buyers to the expected proportion under the null hypothesis of independent trading. A significantly positive measure indicates that institutional investors tend to move in the same direction simultaneously, providing a direct empirical test of herding in professional portfolios. Studies applying the LSV framework have found that institutional herding by French equity funds amounts to 6.5%, which is larger than estimates reported for many developed markets [4].

Complementing the LSV approach, the Cross-Sectional Absolute Deviation (CSAD) model, developed by Chang, Cheng, and Khorana, offers a broader perspective by examining aggregate market behavior rather than institutional trading direction alone [8]. This model utilizes the cross-sectional dispersion of individual stock returns relative to market returns to infer the presence of herding. During periods of market stress, if herding behavior is significant, individual stocks tend to move in unison, causing the cross-sectional return dispersion to decrease rather than increase as market volatility rises. Earlier work by Christie and Huang introduced the Cross-Sectional Standard Deviation (CSSD) approach, which posited that under extreme market movements, irrational herding should reduce dispersion [9]. However, the CSAD model improves upon this by examining the non-linear relationship between market returns and dispersion, making it more robust for detecting herding across different market conditions and national contexts, including both developed and emerging markets.

4. Consequences of herding effect on investor behavior

The herding effect is not a neutral phenomenon; it produces a series of complex and far-reaching consequences for individual investors, the overall market, and even the real economy.

4.1. Impact on market efficiency

According to the efficient market hypothesis, prices should rapidly and fully reflect all available information. Herding behavior causes trading to be based on imitation rather than information, thereby undermining the information content of market prices and creating pricing errors [1]. A large number of investors chasing trends delays the adjustment of prices to fundamentals, and may even push prices in the wrong direction for extended periods, severely impairing the market's pricing efficiency and resource allocation function. When market participants prioritize the actions of others over fundamental analysis, price discovery becomes distorted, and capital is misallocated across sectors and firms.

4.2. Impact on asset prices

Herding behavior exerts a profound and multifaceted impact on asset price dynamics across different time horizons. In the optimistic phase of the market cycle, herding buying pushes asset prices far above their intrinsic values, actively fueling the formation and expansion of speculative

bubbles. This process is typically self-reinforcing: as prices rise, more investors are drawn in by the visible wealth effect, further driving prices upward and creating a positive feedback loop that progressively detaches valuations from underlying corporate fundamentals. Historical evidence from the Internet bubble of the late 1990s and the housing bubble preceding the 2008 global financial crisis demonstrates that herding was a central driver of these severe price distortions. Empirical research indicates that during bubble formation, both institutional and retail herding cause trading volumes to expand dramatically while firm fundamentals remain largely unchanged, eventually leaving prices grossly misaligned with intrinsic value [7].

Conversely, when negative signals emerge or sentiment reverses abruptly, panic-driven herding selling can cause market liquidity to evaporate almost instantaneously, triggering cliff-like price declines and severe market stampedes. The imitation and herding behavior creates positive feedback in asset valuation, resulting in super-exponential growth of price time series during the ascent, which is then inevitably followed by a sudden collapse when the feedback loop breaks. Studies have shown that herding significantly exacerbates short-term market overreaction, thereby increasing overall financial instability [10]. During panic episodes, the absence of buyers on the other side of the market causes sell orders to accumulate, leading to cascading price declines; liquidity shortages trigger margin calls and forced liquidations, further amplifying market dysfunction and potentially escalating into systemic risk.

Lastly, herding behavior creates short-term price momentum (commonly described as "chasing gains and selling off losses"), but over longer investment horizons, when prices have deviated severely from fundamental values, sharp and inevitable mean reversion—that is, price reversal—occurs. Empirical evidence suggests that institutional herding positively predicts short-term returns but negatively predicts long-term returns, implying that while early participants can profit from riding the wave, late followers are often left holding overvalued assets when the trend reverses, suffering substantial losses [11]. In the long run, prices inevitably revert toward fundamental values, and stocks that were previously inflated by herding tend to experience declines significantly larger than the market average during the correction phase, inflicting persistent wealth damage on unsuspecting followers.

4.3. Impact on investor wealth

For individual investors, participating in herding behavior is typically a source of significant wealth destruction rather than enhancement. Retail investors tend to buy during the late stages of market euphoria, when prices are already at elevated levels, and sell during the later stages of panic declines, when prices have already fallen substantially, thereby consistently buying high and selling low. Herding behavior itself is a form of decision-making bias that often combines with other behavioral biases such as the disposition effect and excessive trading frequency to collectively erode investors' long-term compounding returns [5]. Among investors, although institutional investors may also be drawn into herding episodes, their superior information access, advanced research capabilities, and sophisticated risk control systems usually mean they suffer relatively smaller losses; in some cases, they can even strategically profit from retail investors' reactive herding behavior, which further exacerbates wealth inequality between informed and uninformed market participants.

4.4. Impact on corporate governance

Investor herding behavior also transmits through capital markets to listed companies, significantly affecting their corporate governance structures and strategic decision-making processes. When a particular industry or company becomes the subject of intensive concept speculation and gains market favor, its cost of equity and debt financing decreases substantially, potentially leading to overinvestment in projects with questionable long-term viability. Conversely, high-quality companies that are neglected by the market due to a lack of speculative appeal may face binding financing constraints and chronic underinvestment, even when they possess strong fundamentals. This distortion in capital allocation can persist for extended periods, as herding-driven valuations often fail to reflect genuine business performance, causing capital to flow toward less productive uses and generating long-term efficiency losses in the real economy. Overvalued industries tend to attract excessive financing, fostering overcapacity, while undervalued but fundamentally sound firms miss critical growth opportunities.

Moreover, this misallocation is amplified as corporate management, under pressure to cater to short-term market hotspots, tends to abandon long-term strategic planning in favor of short-sighted actions. Research has found that herding behavior significantly inhibits firm-level research and development investment and innovation output by amplifying short-term performance pressure, with a particularly pronounced negative effect on utility model patents and incremental innovations [12]. Management may engage in inefficient mergers and acquisitions or even financial manipulation to meet short-term earnings expectations, ultimately eroding the firm's core competitiveness and long-term sustainability. Furthermore, when investor attention is overwhelmingly absorbed by market noise and speculative hotspots, shareholders may neglect in-depth analysis and effective monitoring of listed companies' fundamentals, governance structures, and internal controls. This distraction weakens the disciplining mechanism of informed shareholder oversight precisely when it is most needed, creating opportunities for controlling shareholders to extract private benefits at the expense of minority investors and exacerbating agency problems within the firm.

5. Conclusion

This paper systematically reviews the core mechanisms, manifestations, measurement approaches, and multi-dimensional impacts of herding effect on investor behavior. The research demonstrates that herding behavior is rooted in information asymmetry, principal-agent conflicts, and inherent human psychological biases, and has been unprecedentedly amplified in the social media era. It is prevalent across various types of financial markets globally and constitutes a key force driving market inefficiency, severe price volatility, and irrational investor decision-making. Existing measurement models such as the LSV model and the CSAD model provide effective quantitative tools for identifying and calibrating herding behavior across different market settings and participant groups.

For investors, recognizing the existence and hazards of herding effect is the first step toward more rational decision-making. Investors should establish investment frameworks grounded in fundamental value and their own risk preferences, maintain prudent skepticism toward market consensus, and avoid being swayed by short-term emotional noise propagated through social media and other channels. For regulators, curbing harmful herding behavior and maintaining overall market stability remain important policy responsibilities that require carefully designed interventions.

In terms of research limitations, this paper primarily relies on literature review and theoretical synthesis rather than independent quantitative empirical testing, and it does not employ econometric modeling or experimental methods to examine herding behavior in specific national contexts such as the Chinese A-share market or other emerging economies. Additionally, this review does not systematically distinguish the heterogeneous characteristics of different investor types—such as retail investors, mutual funds, private equity, and foreign institutional investors—in their herding propensities and market impacts, nor does it explore cross-cultural differences in herding intensity across various national and regional markets. Future research could fruitfully concentrate on several promising directions: first, the role of artificial intelligence-driven algorithmic trading and quantitative strategies in either amplifying or mitigating herding behavior in modern high-frequency financial environments; second, empirical evaluations of regulatory interventions—including circuit breakers, short-sale restrictions, and enhanced disclosure requirements—aimed at curbing harmful herding; third, the distinctive patterns of herding behavior in emerging asset classes such as cryptocurrencies and Environmental, Social, and Governance (ESG) investments, where information environments differ markedly from traditional equity markets; and fourth, the development of more sophisticated behavioral models that integrate insights from neurofinance and emotional intelligence indicators to better predict and explain the dynamic evolution of herding under varying market conditions.

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