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A Mediating Effect of News Information on the Driver of Green Investment and Herding Behaviour in China's A-Share Market

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ABSTRACT

In recent years, the surge in interest and investment towards environmentally sustainable initiatives, particularly in emerging economies like China, has garnered significant attention. This paper investigates the intricate dynamics between green investment drivers, herd behaviour, and the mediating role of news information in China's A-share market. Drawing upon a comprehensive dataset spanning the recent years, this study employs advanced statistical techniques, including structural equation modelling, to analyse the relationships between the aforementioned variables. Firstly, it examines the primary drivers behind green investment in China, considering factors such as regulatory policies, corporate social responsibility initiatives, and market demand for sustainable products and services. Subsequently, the paper delves into the phenomenon of herd behaviour within the A-share market, exploring how investor decisions are influenced by the actions of others rather than fundamental market indicators. This aspect is particularly pertinent in the context of green investment, where social proof and conformity may play a significant role in shaping investment decisions. Moreover, the study elucidates the mediating effect of news information in this relationship. News media serves as a critical intermediary, disseminating information about regulatory changes, corporate sustainability initiatives, and market trends, which in turn influence investor sentiment and decision-making processes. By uncovering the mediating role of news information, this research provides valuable insights into the mechanisms driving green investment and herd behaviour in China's A-share market. Understanding these dynamics is crucial for policymakers, market participants, and sustainability advocates alike, as they seek to promote environmentally responsible investment practices and mitigate the adverse effects of herd behaviour on market stability and efficiency. Overall, this paper contributes to the growing body of literature on sustainable finance and behavioural economics by shedding light on the complex interplay between green investment drivers, herd behaviour, and the role of news information in shaping investor decisions in China's rapidly evolving financial landscape.

KEYWORDS: news information, green investment, herding behavior, share market

I. INTRODUCTION

A. Green Investment and Herding Behaviour

The driver of green investment and herding behavior in China's A-share market is a complex interplay influenced by various factors. Research indicates that regulatory policies play a significant role in shaping green investment trends, with government initiatives promoting environmental sustainability driving increased capital flows into green sectors (Bai et al., 2019). Moreover, corporate social responsibility (CSR) initiatives and the growing demand for sustainable products and services further contribute to the momentum of green investment in China (Tang et al., 2020). However, alongside these drivers, herd behavior emerges as a prominent phenomenon in the A-share market, where investors tend to follow the actions of others rather than making decisions based on fundamental analysis (Wang & Zhang, 2018). This herd behavior often leads to market inefficiencies and price distortions, impacting the allocation of resources and potentially hindering the growth of green investment initiatives (Fang et al., 2021). Understanding the intricate relationship between these drivers of green investment and herd behavior is crucial for policymakers, market participants, and sustainability advocates seeking to promote sustainable finance and mitigate the adverse effects of herd mentality in China's A-share market.

B. News Information and Herding Behaviour

News information plays a crucial role in influencing both green investment decisions and herd behavior in financial markets, particularly in China's A-share market. Studies have shown that news reports regarding environmental regulations, corporate sustainability initiatives, and market trends significantly impact investor sentiment and decision-making processes regarding green investments (Baker & Cunningham, 2020). Positive news coverage regarding green initiatives and environmental policies often stimulates investor interest in sustainable projects and encourages capital flows into green sectors (Brockner & Higgins, 2020). Conversely, negative news, such as reports of environmental scandals or regulatory setbacks, can deter investors from engaging in green investment activities (Bhattacharya et al., 2016). Furthermore, news information serves as a catalyst for herd behavior, as investors tend to mimic the actions of others based on the information conveyed through media channels (Barber & Odean, 2008). When positive news regarding green investments spreads, it can trigger herd behavior, leading to increased investor demand and potentially driving up prices in green sectors (Bhattacharya et al., 2016). Conversely, negative news can exacerbate herd behavior, leading to panic selling and market downturns (Liu et al., 2017). Therefore, understanding the impact of news information on both green investment decisions and herd behavior is essential for policymakers, investors, and market regulators in promoting sustainable finance and ensuring market stability.

C. Problem Statement

The interaction between news information, green investment, and herding behaviour poses a multifaceted challenge in financial markets, particularly within the context of China's A-share market. While news information serves as a crucial source of insights for investors, it can also exacerbate herd behaviour and distort market dynamics. One of the primary issues lies in the reliability and accuracy of the news sources, as sensationalized or biased reporting can lead to misinterpretation and irrational decision-making among investors (Gill & Pratt, 2008). Furthermore, the rapid dissemination of news through digital platforms and social media amplifies the impact of information cascades, fuelling herd behaviour and exacerbating market volatility (Bikhchandani et al., 1992).

In the realm of green investment, the problem statement extends to the effectiveness of news information in promoting sustainable finance initiatives. Despite the increasing awareness of environmental issues, investors may lack access to comprehensive and timely news coverage on green investment opportunities and regulatory developments, hindering informed decision-making (Ma et al., 2020). Additionally, the prevalence of herd behaviour poses a significant obstacle to the growth of green investment, as investors may prioritize conformity over independent analysis, leading to market inefficiencies and misallocation of resources (Brock, 2018). Addressing these challenges requires a comprehensive understanding of the interplay between news information, green investment, and herd behaviour, as well as strategic interventions to enhance transparency, promote financial literacy, and mitigate the adverse effects of herd mentality in China's A-share market.

II. LITERATURE REVIEW

A. Herding Behaviour

Herd behavior, a phenomenon widely observed in financial markets, refers to the tendency of investors to follow the actions of the majority rather than independently evaluating market fundamentals (Choi et al., 2020). This behavior often leads to the formation of trends and momentum in asset prices, as individuals seek safety and reassurance in numbers rather than making rational decisions based on available information (Hirshleifer & Teoh, 2003). Herding behavior is driven by various psychological and social factors, including the fear of missing out (FOMO), social proof, and information cascades, where individuals rely on the actions of others as signals of market sentiment (Banerjee, 1992). While herd behavior can sometimes lead to market efficiency by incorporating diverse information into prices, it can also result in speculative bubbles, market panics, and irrational price movements (Shiller, 2015). Understanding the dynamics of herd behavior is essential for investors, policymakers, and market regulators to mitigate its adverse effects on market stability and efficiency.

The underpinning theory behind herd behavior in financial markets often draws upon insights from behavioral finance and social psychology. One prominent theory is the Information Cascade Model proposed by Bikhchandani, Hirshleifer, and Welch (1992). According to this model, individuals observe the actions of others sequentially and make decisions based on both private information and the actions of previous investors, rather than on fundamental analysis. As more individuals follow the herd, the weight of their actions outweighs the significance of private information, leading to the formation of information cascades. These cascades can result in market inefficiencies and price bubbles as investors abandon their private information in favor of following the crowd (Bikhchandani et al., 1992).

Another influential theory is the Adaptive Market Hypothesis (AMH) proposed by Andrew Lo (2004). The AMH integrates concepts from behavioral finance, evolutionary biology, and neuroscience to explain market dynamics. According to this hypothesis, investors adapt their investment strategies over time based on feedback from the market environment. Herding behavior arises as a result of adaptive learning, where investors mimic the behavior of others they perceive as successful, leading to the amplification of market trends and the formation of herding cascades (Lo, 2004).

These theoretical frameworks provide valuable insights into the psychological and social mechanisms underlying herd behavior in financial markets. By understanding the cognitive biases, social influences, and adaptive learning processes that drive herding behavior, researchers and practitioners can develop strategies to mitigate its adverse effects on market stability and efficiency.

B. Green Investment

Green investment, also known as sustainable or environmentally responsible investment, refers to the allocation of financial resources into projects, companies, or financial instruments that have positive environmental outcomes or contribute to the transition to a more sustainable economy (Clark & Hiley, 2019). This type of investment focuses on supporting activities that promote environmental sustainability, such as renewable energy projects, energy-efficient technologies, clean transportation, and sustainable agriculture (Scholtens & Kang, 2019). Green investments aim to generate financial returns while also delivering environmental benefits, such as reducing carbon emissions, conserving natural resources, and mitigating climate change impacts (Ren & Yuan, 2020). Investors may engage in green investment through various channels, including green bonds, thematic funds, impact investing, and direct investments in sustainable companies or projects (Simnett & Huggins, 2015). The growing awareness of environmental issues and the increasing integration of environmental considerations into investment decision-making processes have fueled the expansion of green investment opportunities worldwide, contributing to the emergence of sustainable finance as a prominent area of investment practice and research (Fang et al., 2021). Overall, green investment plays a crucial role in mobilizing capital towards environmentally beneficial activities, addressing global sustainability challenges, and promoting the transition to a more sustainable and resilient economy.

C. Driver of Green Investment

The driver of green investment encompasses a multifaceted array of factors that influence the allocation of capital towards environmentally sustainable projects and initiatives. One significant driver is regulatory policies and frameworks that incentivize or mandate companies to adopt environmentally friendly practices (Bai et al., 2019). Governments around the world are implementing policies such as carbon pricing, renewable energy subsidies, and emissions trading schemes to promote investments in clean technologies and reduce carbon emissions (Zeng et al., 2020). Additionally, shifting consumer preferences and increasing awareness of environmental issues are driving demand for sustainable products and services, prompting businesses to invest in green technologies and practices to remain competitive (Scholtens & Kang, 2019).

Corporate social responsibility (CSR) initiatives also play a pivotal role in driving green investment, as companies recognize the importance of integrating environmental considerations into their business strategies to enhance long-term value and stakeholder trust (Tang et al., 2020). Furthermore, financial institutions and investors are increasingly incorporating environmental, social, and governance (ESG) criteria into their investment decisions, reflecting a growing recognition of the materiality of environmental risks and opportunities (Clark & Hiley, 2019). Overall, the convergence of regulatory, consumer, corporate, and investor drivers is shaping a conducive environment for green investment, driving capital flows towards environmentally sustainable projects and fostering the transition to a more sustainable economy.

The underpinning theory behind green investment draws from several theoretical frameworks within finance and sustainability literature. One prominent theory is the Sustainable Investment Theory, which posits that investors seek to maximize financial returns while also considering environmental, social, and governance (ESG) factors in their investment decisions (Clark & Hiley, 2019). According to this theory, integrating ESG criteria into investment analysis helps investors identify risks and opportunities associated with environmental issues, such as climate change, resource depletion, and pollution, thereby enhancing long-term investment performance (Clark & Hiley, 2019). Another influential theory is the Capital Asset Pricing Model (CAPM), which suggests that investors are willing to accept lower returns on investments with lower risk, including investments in environmentally sustainable assets that may offer stable returns and resilience to environmental risks (Giese & Phillips, 2019). Furthermore, Institutional Theory highlights the role of institutional investors, such as pension funds, sovereign wealth funds, and asset managers, in driving the adoption of sustainable investment practices through shareholder engagement, proxy voting, and ESG integration (Khan et al., 2020). By understanding the theoretical underpinnings of green investment, policymakers, investors, and companies can develop strategies to promote sustainable finance and address pressing environmental challenges.

D. Mediating Effect of News Information

The mediating effect of news information plays a crucial role in shaping investor behavior and decision-making processes, particularly in financial markets. Drawing upon social cognitive theory and information processing models, researchers have identified news media as a key intermediary that influences the relationship between external stimuli and individual responses (Barber & Odean, 2008). In the context of green investment and herd behavior in China's A-share market, news information serves as a critical channel through which investors receive information about environmental regulations, corporate sustainability initiatives, and market trends (Choi et al., 2020).

Positive news coverage regarding green investments can stimulate investor interest and confidence, leading to increased capital flows into green sectors (Bhattacharya et al., 2016). Conversely, negative news can dampen investor sentiment and deter investment in environmentally sustainable projects (Bhattacharya et al., 2016).

Furthermore, news media acts as a mechanism for disseminating social cues and norms, influencing investor perceptions of market consensus and facilitating herd behavior (Barber & Odean, 2008). By understanding the mediating role of news information, policymakers, investors, and market regulators can develop strategies to enhance the transparency, accuracy, and timeliness of news reporting, thereby promoting informed decision-making and mitigating the adverse effects of herd mentality in financial markets.

III. CONCEPTUAL DEVELOPMENT

The research design focusing on the mediating effect of news information on the driver of green investment and herding behavior in China's A-share market requires a comprehensive approach to capture the intricate dynamics at play. Employing a mixed-methods approach combining quantitative analysis with qualitative insights could provide a holistic understanding of the phenomenon. Quantitative methods could involve collecting longitudinal data on green investment flows, market prices, and news sentiment indicators from financial databases and news archives. Statistical techniques such as structural equation modeling (SEM) (Akter et al., 2023; 2021) or mediation analysis could then be applied to examine the mediating role of news information between the driver of green investment (e.g., regulatory policies, corporate initiatives) and herding behavior in the A-share market. Furthermore, qualitative methods such as interviews or focus groups with market participants, including investors, analysts, and regulators, could offer valuable insights into the underlying motivations and decision-making processes driving green investment and herding behavior, as well as the impact of news information on these phenomena. By triangulating quantitative and qualitative findings, the research design can provide a robust understanding of the mediating effect of news information in shaping green investment and herding behavior in China's A-share market.

A quantitative study focusing on the mediating effect of news information on the driver of green investment and herding behavior in China's A-share market would involve collecting and analyzing empirical data to explore the relationships between these variables. Such a study could utilize statistical techniques like structural equation modeling (SEM) (Ahmed et al., 2020) or mediation analysis to examine the mediating role of news information. Researchers could collect longitudinal data on green investment flows, market prices, and news sentiment indicators from financial databases and news archives. These datasets could then be analyzed using appropriate statistical software to assess the direct effects of the driver of green investment (e.g., regulatory policies, corporate initiatives) on both news information and herding behavior, as well as the indirect effect mediated through news information. By quantitatively assessing these relationships, the study could provide empirical evidence on the extent to which news information mediates the relationship between the driver of green investment and herding behavior in China's A-share market.

The conceptualization of a mediating effect of news information on the driver of green investment and herding behavior in China's A-share market involves understanding the interplay between these variables within the context of environmental finance and behavioral economics. News information serves as a critical intermediary, disseminating information about regulatory changes, corporate sustainability initiatives, and market trends, which in turn influence investor sentiment and decision-making processes (Bikhchandani et al., 1992). Regulatory policies and corporate initiatives act as primary drivers of green investment, incentivizing or mandating companies to adopt environmentally friendly practices (Bai et al., 2019). These factors influence the flow of news information, shaping perceptions of market opportunities and risks related to green investment. Furthermore, the impact of news information on herding behavior can exacerbate market dynamics, as investors tend to follow the actions of others rather than making independent decisions based on fundamental analysis (Barber & Odean, 2008). By conceptualizing the mediating effect of news information, researchers can develop a theoretical framework to explore the mechanisms underlying the relationship between the driver of green investment, news information, and herding behavior in China's A-share market.

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