



Herding Behavioral Motivation conducted by Coronial Investors: Study on Indonesian Stock Exchange's

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Abstract

The objective of this research is to determine whether periods of market downturn are accompanied by herding behavior among investors. During the Covid-19 pandemic, not only the stock market but also the number of investors in the Indonesian capital market increased significantly. The increase in new investors is also accompanied by an increase in herding behavior, as these new investors have limited experience and literacy in investing in the capital market. The sampling technique used was simple random sampling, with a total of 196 investor samples collected. The analysis method used was Structural Equation Modeling Partial Least Square. The research findings indicate that investor cognitive psychology and market information influence herding behavior among investors. However, stock characteristics do not affect herding behavior. Socio-economic factors moderate the influence of investor cognitive psychology and market information.

Motivasi Perilaku Herding oleh Investor Coronial : Studi pada Investor di Bursa Efek Indonesia

Abstrak

Penelitian ini bertujuan untuk mengetahui apakah periode pasar yang buruk disertai dengan perilaku ikut-ikutan oleh investor. Selama pandemi Covid-19 tidak hanya pasar saham saja yang mengalami kinerja yang buruk tetapi juga meningkatnya jumlah investor pasar modal di Indonesia yang cukup signifikan. Peningkatan investor baru diikuti pula oleh peningkatan perilaku ikut-ikutan karena investor baru ini masih minim pengalaman dan literasi tentang cara berinvestasi di pasar modal. Teknik pengambilan sampel yang dilakukan adalah teknik pengambilan sampel random sederhana sebanyak 196 sampel investor telah terkumpul. Metode analisis yang digunakan adalah Structural Equation Modeling Partial Least Square. Hasil Penelitian menunjukkan bahwa psikologi kognitif investor dan informasi pasar mempengaruhi perilaku ikut-ikutan investor. Sedangkan karakteristik saham tidak mempengaruhi perilaku ikut-ikutan. Untuk faktor sosial ekonomi memoderasi pengaruh psikologi kognitif investor dan informasi pasar.

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INTRODUCTION

In a developing country like Indonesia, the massive development of the capital market, supported by the acceleration of literacy and inclusion efforts by stakeholders, has resulted in a significant increase in the number of investors. According to data from the Indonesia Central Securities Depository (KSEI, 2018-2022), the number of investors has grown by 536.42% over the past five years (2018-2022). With the increasing number of investors in the capital market, particularly during the Covid-19 pandemic, there has been a remarkable growth in the number of investors. These new investors, born during the pandemic period (2020-2022), are predominantly millennials in the age range of 18-30 years and are commonly referred to as “coronial” investors (Kohardinata & Gosal 2022). Eringfeld (2021) introduce the term ‘post-coronial’ here to signify the re-imagined both during and after the pandemic.

Financial literacy and inclusion survey conducted by OJK in 2022 shows that inclusion in the capital market has been an increase from 1.55% in 2019 to 5.19% in 2022. However, capital market literacy has decreased from 4.92% in 2019 to 4, 11% in 2022. The phenomenon of the growing number of investors and lack of literacy in the Indonesian stock market during pandemic Covid-19 has led to an increase in herding practices among domestic investors, contributing to moral hazard issues and negative choices. Moreover, the Covid-19 pandemic has affected the global economy, causing disruptions in stock market performance and triggering panic among investors (Abd-Alla, 2020). During market instability, such as the current Covid situation, investors tend to adopt herd decisions by suppressing personal information (Sachdeva et al., 2021).

The portfolio theory (Markowitz, 1991) and the efficient market theory (Fama, 1970) state that all available infor-

mation fully influences stock prices, and investors act rationally. However, in recent decades, psychologists and financial economists believe that the observed behavior in equity markets cannot be fully explained by neoclassical financial theory (Fransiska et al., 2018; Metawa et al., 2019; Muharam et al., 2021; Rahayu et al., 2021; Sachdeva et al., 2021). Although the efficient market hypothesis asserts that all necessary data should be reflected in asset prices, reliable predictions of future price changes are not possible (Fama, 1970).

Many studies in behavioral finance have identified various behavioral biases and anomalies that affect the decision-making process of investors, such as information sources (Tauni et al., 2017), investor demographic mix (Schmidt et al., 2021), and personal characteristics (Kumari et al., 2019). Among all behavioral biases, herding is one of the most commonly found biases that influence investor decision-making (Fransiska et al., 2018; Metawa et al., 2019; Muharam et al., 2021; Rahayu et al., 2021; Sachdeva et al., 2021).

Current investors generally imitate or follow what other investors do and disregard their own information (Frankfurter & McGoun, 2003). This is known as “herd behavior.” Herding can be defined as the phenomenon where investors mimic the decisions of others rather than following their own beliefs (Kumar, 2021). Nosita & Amrulloh (2023) argues that herding is a trading action performed by investors without considering investment fundamentals. Behavioral factors such as investor sentiment, overreaction and underreaction, overconfidence, and herding behavior have a significant influence on investment decisions (Metawa et al., 2019).

Herding behavior typically occurs in emerging markets. Chiang & Zheng (2010) provide evidence of herding behavior among investors worldwide, including China, Taiwan, South Korea, Finland, Italy, Greece, and Portugal. Additionally, Lam

& Qiao (2015) found that, there is no herding behavior in the US and Hong Kong regardless of market conditions, there is some herding behavior in Japan during market downturns, and there are herding investors in South Korea and Taiwan, which are emerging markets.

Muharam et al. (2021) stated that no herding behavior was found among investors in Indonesia, and Fransiska et al. (2018) found no indication of herding behavior among LQ45 investors during the period from 2014 to 2016. However, Rahayu et al. (2021) proved that a majority of Indonesian investors tend to exhibit herding behavior in their investment decision-making.

During Covid-19 pandemic, Nosita & Amrulloh (2023) found that the majority of investors realized that the pandemic would affect performance of stock market, and they were very confident also did not show herding during Covid-19 pandemic. Millennial investor were affected by the deviations in the investment behavior of herding behavior (Rosdiana, 2020). Therefore, this study aims to provide an inclusive overview of herding behavior motivators of millennial investor in Indonesia stock market during Covid-19 pandemic, especially investors who join "Sekolah Pasar Modal (SPM)" that held by PT Bursa Efek Indonesia. The study that combines the context of pandemic and investor behavior that exclusively joined program that conducted by PT Bursa Indonesia is quite rate. Thus, the results from this study can be useful for both academics and policymakers to gain some insight into the behavior of the Indonesia stock market.

The Effect of Investor Cognitive Psychology on Herding Behaviour

Dang & Lin (2016) explains that the phenomenon of herding occurs as the transmission of emotions. Reluctance to regret, moderate self-confidence, and other ways motivate the release of herding behavior by investors (Shiller, 2003). This is pri-

marily related to the influence of psychological changes in the financial field and the subsequent effects on the stock market Zahera & Bansal (2018). Gao & Yang (2018) demonstrate that there is a relationship between investor sentiment, including investor psychology, and market returns and trading behavior.

Investors with lower cognitive abilities and trading experience tend to have a higher tendency to engage in herding (Zhao, 2014). Therefore, individual cognitive abilities play a significant role in investor herding behavior in the stock market. As argued by Metawa et al. (2019) in their research, investor financial behavior is thus contaminated by subjective emotions. While Bihari et al. (2022) argue that it is still important to distinguish between individuals who are less and more influenced by behavioral biases because market behavior can sometimes be extreme and appear irrational.

Investment decision-making is greatly influenced by the sources of information that investors obtain when making investments. Rational investors will seek relevant information to support their analysis, enabling the investment decision-making process to provide optimal utility (Kernan & Mojena, 1973). Based on the above phenomena and the explanations related to the cognitive psychology of investors and herding behavior in investors, it raises the suspicion that the cognitive psychology of coronial investors influences herding behavior in the Indonesian capital market.

H1: Investor Cognitive Psychology (ICP) positive affects Herding Behavior (HB).

The Effect of Market Information on Herding Behavior

Tauni et al. (2016) state that the market information investors obtain has a significant positive correlation with their trading intensity. Tauni et al. (2017) divide market information sources into three

categories: financial advice, verbal communication, and mass media. Market information emerged as the second most influential factor on investor herding behavior. Previous studies also found that market information had a significant effect on herding behavior (Chia et al., 2018). Based on the above phenomena and the explanations related to market information and herding behavior in investors, it raises the suspicion that market information influences herding behavior on coronial investor in the Indonesian capital market.

H2: Market Information (MI) positive affects Herding Behavior (HB).

The Effect of Stock Characteristics on Herding Behavior

Metawa et al. (2019) show that stock characteristics exhibit a clear preference for fundamental analysis. Approximately 81 percent of respondents mentioned fundamental analysis as their source of information for investment decisions, and investors can refer to information from previous investor actions or react to the arrival of fundamental information. According to Lam & Qiao (2015) those involved in herding behavior disregard fundamental analysis when making investment decisions. This behavior often occurs when the market shows unstable or depressed conditions.

Salem (2019) also indicates that investors tend to engage significantly in herding behavior in their trading behavior, mainly due to uncertainty regarding the quality of personal and public information available to them. These investment decisions are measured by investors' responses to buying or selling securities based on fundamental analysis following a similar method to measure trading volume (Zhou et al., 2020). Based on the above phenomena and the explanations related to stock characteristics and herding behavior in investors, it raises the suspicion that stock

characteristics influence herding behavior on coronial investor in the Indonesian capital market.

H3: Stock Characteristics (SC) positive affect Herding Behavior (HB).

The Effect of Socioeconomic Factors and Herding Behavior

The tendency of investors to engage in herding behavior is also influenced by certain socioeconomic factors (Nair et al., 2017). Age significantly affects herding behavior, as experienced investors have more information, experience, and expertise in the stock market, allowing them to make better and more rational decisions than younger investors (Lin, 2012). Another idea suggests that investors become more confident with increasing age groups due to the improvement of their knowledge and abilities. As a result, they tend not to listen to or follow the actions of the crowd (Ngoc, 2013).

Higher levels of education also influence the tendency to engage in herding behavior. Stock investors with higher educational qualifications are expected to be more knowledgeable and informed about the stock market. Therefore, stock investors are inclined to be overconfident about their abilities and knowledge, and they tend not to follow the crowd (Mobarek et al., 2014). Investors with higher income levels are more likely to invest more in the stock market. Consequently, they are more inclined to avoid risks, and to avoid risks, they follow the actions of others and engage in herding behavior (Ngoc, 2013). Sachdeva et al. (2021) suggest that individual socioeconomic factors drive herding behavior, ranking the lowest compared to other factors. This finding is in line with the statement by Komalasari et al. (2021), who, in their study, conducted an extensive review of the literature on herding and found that socioeconomic factors have the least influence on herding.

- H4: Socioeconomic Factors (SEF) moderate the influence of Investor Cognitive Psychology (ICP) on Herding Behavior (HB).
- H5: Socioeconomic Factors (SEF) moderate the influence of Market Information (MI) on Herding Behavior (HB).
- H6: Socioeconomic Factors (SEF) moderate the influence of Stock Characteristics (SC) on Herding Behavior (HB).

These hypotheses propose that socioeconomic factors play a moderating role in the relationships between investor cognitive psychology, market information, stock characteristics, and herding behavior.

METHOD

This study is a quantitative research that aims to investigate the relationship between herding behavior and the factors influencing it, namely Investor Cognitive

Psychology (ICP), Market Information (MI), and Stock Characteristics (SC). Social Economic Factor (SEF) is used as a moderating variable. The research design employed in this study is a causal research design, which allows the researcher to identify cause-and-effect relationships between the variables.

The data used in this study is primary data collected through a questionnaire survey method. The population of this study consists of individual investors from the coronial generation, who opened an account and started their investments during the Covid-19 pandemic period (2020-2022) and have attended the capital market school organized by KP (Branch Office) BEI Jawa Tengah 1. The sample for this study were collected using the method of random sampling that includes coronial investors who have attended the capital market school organized by KP BEI Jawa Tengah 1 and are members of the WhatsApp group and Telegram alum-

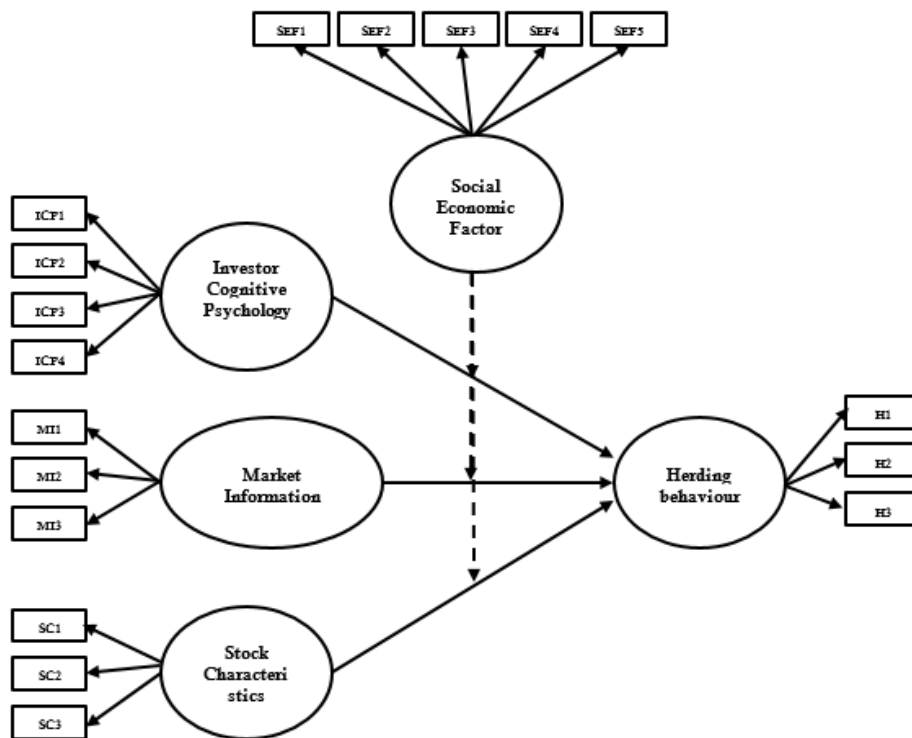


Figure 1. Structural Equation Model

ni of SPM IDX Semarang. Based on the data from the representative office of BEI Jawa Tengah 1 during the period of 2020-2021, there were 7,550 investors who have attended the capital market school and 2,048 investors who are members of the alumni group of SPM IDX Semarang.

Descriptive statistical analysis is used to provide an overall description of the herding behavior model, which is the dependent variable. Investor Cognitive Psychology (ICP), Market Information (MI), and Stock Characteristics (SC) are the independent variables. Social Economic Factor (SEF) is the moderating variable that influences the dependent and independent variables. The analysis tool used in this study is Structural Equation Modeling Partial Least Square (SEM-PLS). SEM-PLS is deemed suitable for studying behavioral finance, as it combines the disciplines of business economics and psychology. Therefore, this method is highly appropriate for studying behavior.

In this study, the researcher used a moderation variable to strengthen the influence of independent variables on the dependent variable. Therefore, it required a multivariate analysis tool to analyze the research model in Figure 1.

RESULT AND DISCUSSION

Investors who opened an account and started investing during the Covid-19 pandemic period (2020-2022) and attended the capital market school organized by KP BEI Jawa Tengah 1 and joined the alumni SPM IDX Semarang Telegram group, totaling 846 individuals. The sampling method used was simple random sampling, taking into account the known population size, homogeneity, and the right of every individual in the population to become a sample. Questionnaires were distributed to all members of the alumni SPM IDX Semarang Telegram group, and within 4

weeks, 196 responses were collected for analysis using SEM-PLS.

The study was conducted by distributing questionnaires via Google Forms through the alumni SPM IDX Semarang Telegram group. Respondents were asked to provide objective answers about their herding behavior based on the listed questions or statements in the questionnaire. Out of the 196 collected responses, they were subsequently used for data analysis. Based on the data collected above, the measurement testing process is conducted. The sample distribution is listed in table 1. The dataset provides insights into the demographic composition, educational backgrounds, investment experience, and income levels of 212 individuals. Gender-wise, there's a slight skew towards men, constituting 0.56, while women represent 0.44. Regarding age, a significant portion, 0.55, are younger than 25, indicating a predominantly youthful sample. Educationally, the majority have pursued higher education, with nearly half holding undergraduate degrees and almost an equal proportion possessing master's degrees. A smaller but notable segment, 0.07, have attained doctorates, suggesting a diverse educational spectrum. In terms of investment experience, there's a fairly even distribution across different experience levels, indicating a varied level of familiarity with investment instruments. Lastly, income distribution reveals that the majority earn less than 5 million monthly, showcasing a prevalence of modest income levels within the sample, with fewer individuals earning higher amounts.

Table 2 provides additional insights regarding participants' investment decision-making tendencies and confidence levels. For instance, 196 individuals were surveyed regarding three specific indicators. For the first indicator, which gauges conformity to majority decisions, the mean score was 2.69 with a standard

Table 1. Sample Demographic Distribution

Data	N	Percentage
Gender		
Men	119	56
Women	93	44
Total	212	100
Age		
< 25	116	55
25 – 40	66	31
40 – 55	27	13
> 55	3	1
Total	212	100
Education background		
Highschool or below	4	2
Undergraduate	96	45
Master	97	46
Doctor	15	7
Total	212	100
Investment experience		
Less than a year	61	29
1-2 year	88	42
More than two years	63	30
Total	212	100
Monthly income		
< 5 million	155	73
5-10 million	14	7
>10 million	43	20
Total	212	100

Source: Data Processed (2023)

Table 2. Results of the descriptive analysis of the herding behaviour.

No	Indicator	N	Min	Max	Mean	Std Dev
H1	I make investment decisions based on the majority of decisions made by other investors.	196	2	63	2.69	.99
H2	I confidently make decisions that are different from the majority of investors in the market.	196	6	80	3.33	.89
H3	Fast market movements do not affect my decision-making.	196	10	80	3.26	1.07
Total		588	18	223	9.27	2.96

Source: Primary Data (2023)

deviation of approximately 0.999. This suggests that, on average, participants lean towards aligning their investment decisions with the majority. Conversely, for the second indicator, measuring confidence in deviating from the majority, the mean score was notably higher at 3.33, with a smaller standard deviation of around 0.892. This indicates a higher level of confidence among participants in making decisions contrary to the majority. The third indicator, assessing susceptibility to fast market movements, yielded a mean score of 3.26, with a standard deviation of approximately 1.071, suggesting a moderate resilience to rapid market fluctuations among respondents. Overall, the total dataset

comprising these indicators reflects a diverse range of attitudes and behaviors towards investment decision-making among the surveyed individuals.

Convergent Validity Testing Results

The convergent validity of reflective indicators is tested by examining the loading factor values for each indicator of the construct in the combined loadings and cross-loadings output. To test the Averaged Variance Extracted (AVE), it can be observed in the Output Latent Variable Coefficient. Based on Table 3, it can be concluded that overall, the outer model values or correlations between constructs and variables meet the convergent validity

Table 3. Value of Combined Loadings and Cross Loadings

Variables	Loadings Value	P-value	Information
Herding			
H1	-.572	<.001	Valid
H2	.767	<.001	Valid
H3	.657	<.001	Valid
Investor Cognitive Psychology			
ICP1	.372	<.001	Valid
ICP2	.778	<.001	Valid
ICP3	.814	<.001	Valid
ICP4	.408	<.001	Valid
Market Information			
MI1	.722	<.001	Valid
MI2	.765	<.001	Valid
MI3	.833	<.001	Valid
Stock Characteristics			
SC1	.797	<.001	Valid
SC2	.832	<.001	Valid
SC3	.763	<.001	Valid
Social-Economy Factor			
SEF1	-.387	<.001	Valid
SEF2	.704	<.001	Valid
SEF3	.802	<.001	Valid
SEF4	.721	<.001	Valid
SEF5	.389	<.001	Valid

Source: Primary Data (2023)

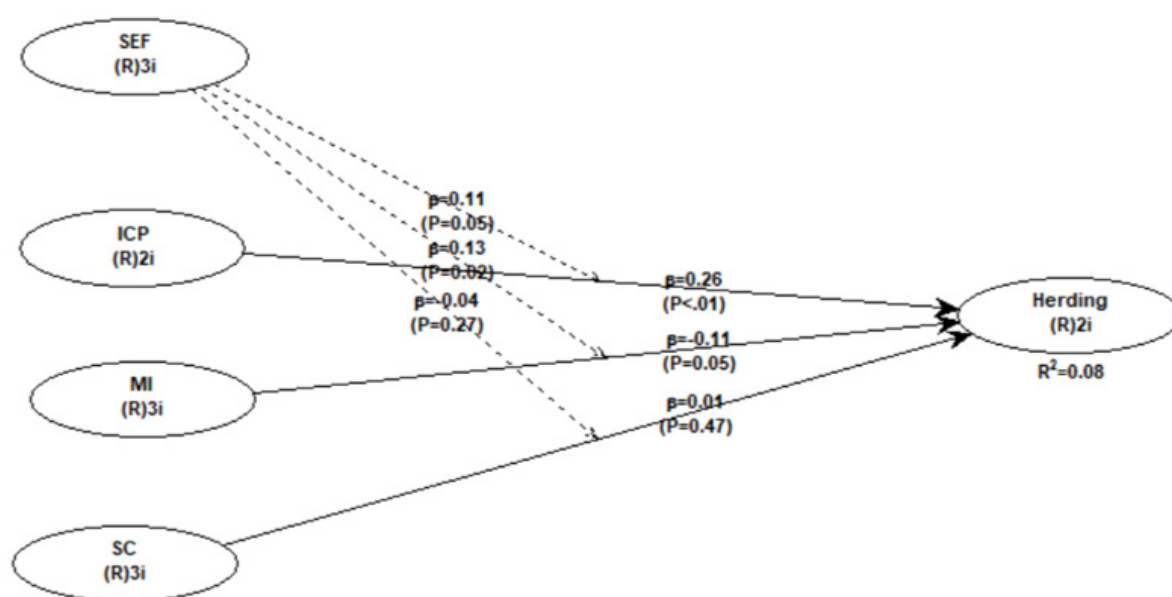


Figure 2. Structural Equation Model Results

criteria, as the indicators have loading factor values above 0.6 and p-values less than 0.001, except for the indicators H1, ICP1, SEF1, and SEF5. Therefore, the indicators H1, ICP1, SEF1, and SEF5 should be removed from the research questionnaire.

Hypothesis Testing

Hypothesis testing was conducted to examine the relationships within the developed model, aiming to provide explanations and evidence for the research hypotheses or assumptions. The correlation between constructs was assessed through path coefficient values and their significance levels. The testing results are presented in Figure 2.

The path coefficient values and P-values for hypotheses 1 to 4 of this study can be observed in the output of WarpPLS 8.0, specifically in the Path Coefficient and P-values in Table 4.

Investor Cognitive Psychology Influences Herding Behavior

The research findings support the first hypothesis, which states that investor

cognitive psychology has a positive influence on herding behavior. These findings align with the argument that investors are more likely to engage in herding behavior when their cognitive psychology is high. A study by Gao & Yang (2018) demonstrated a relationship between investor psychology and trading behavior (herd behavior). The research showed that investor sentiment and high trading behavior have a positive influence on behavioral return and sentiment return. This is also supported by Zhao (2014), who found that investors with lower cognitive abilities and trading experience are more prone to herding behavior. Therefore, an individual's cognitive abilities play a significant role in investor herding behavior in the stock market.

Bihari et al. (2022) argue that it is important to differentiate between individuals who are less and more influenced by behavioral biases because market behavior can sometimes be extreme and seemingly irrational. Metawa et al. (2019) suggest that financial behavior of investors is influenced by their emotions and psychological characteristics.

Table 4. Path Coefficients and P-values

Hypothesis	Statements	Path Coefficient	P-value	Results
H1	Investor cognitive psychology (ICP) positive influences herding behavior (HB).	.26	.00	Accepted
H2	Market information (MI) positive influences herding behavior (HB).	.11	.05	Accepted
H3	Stock characteristics (SC) positive influence herding behavior (HB).	.01	.47	Rejected
H4	Social-economic factors (SEF) moderate the influence of investor cognitive psychology (ICP) on herding behavior (HB).	.11	.05	Accepted
H5	Social-economic factors (SEF) moderate the influence of market information (MI) on herding behavior (HB).	.13	.02	Accepted
H6	Social-economic factors (SEF) moderate the influence of stock characteristics (SC) on herding behavior (HB).	.04	.27	Rejected

Source: Data Processed (2023)

Market Information Influences Herding Behavior

The research findings support the second hypothesis that market information has a positive influence on herding behavior. This indicates that the more market information investors obtain, the higher their tendency to engage in herding behavior. This finding aligns with the argument that investors use various information search strategies to aid in their investment decision-making process, aiming to achieve optimal utility (Kernan & Mojena, 1973). Jain et al. (2021) states that investing in risky assets and gathering additional information leads to frequent portfolio adjustments and, consequently, high trading frequency.

The results of this study are also supported by previous research on rational and behavioral investment determination models, which indicate that acquiring

more information leads to increased trading frequency, which can be considered as herding behavior (Guiso & Jappelli, 2006; Jain et al., 2021). Studies by Tauni et al. (2016) and Tauni et al (2017) state that the primary source of information used by investors for their financial decisions significantly impacts their trading behavior and frequency.

Stock Characteristics Influence Herding Behavior

The research findings do not support the third hypothesis that stock characteristics influence herding behavior. The result suggests that the more knowledgeable investors are about stock characteristics, the less likely they are to engage in herding behavior. This finding is consistent with previous studies such as Lam & Qiao (2015), which suggest that those involved in herding behavior disregard fundamental ana-

lysis when making investment decisions. Salem (2019) indicate that investors tend to engage in herding behavior due to uncertainty regarding the quality of available personal and public information.

Zhou et al. (2020) measure trading volume based on investors relying on fundamental analysis, where the better their fundamental analysis, the lower the trading volume. This finding contradicts the results of studies conducted by Chia et al. (2018), and Sachdeva et al. (2021), which suggest that stock characteristics are one of the top factors driving investors to engage in herding behavior.

Socioeconomic Factors Moderate the Relationship Between Investor Cognitive Psychology and Herding Behavior

The research findings support the fourth hypothesis that socioeconomic factors moderate the relationship between investor cognitive psychology and herding behavior. Accepting this hypothesis suggests that the socioeconomic factors of investors can strengthen the relationship between investor cognitive psychology and herding behavior.

This finding is also supported by explanations from previous research that socioeconomic factors such as age, experience, income, or sociological identity factors significantly influence individual preferences. These factors also have a close relationship with the tendency to engage in herding behavior (Sachdeva et al., 2021). The herding tendency is also influenced by specific socioeconomic factors (Nair et al., 2017). Cognitive psychology plays a significant role in influencing herding behavior as humans are fundamentally driven by emotions, which can change due to socioeconomic factors (Fransiska et al., 2018). Investor psychology can influence individual preferences, and these factors are closely related to the herding tendency. When an investor strongly cor-

relates with group norms, it creates social pressure, leading to a lack of confidence in their own judgments and fostering herding behavior (Sachdeva et al., 2021). However, if investors have high experience and education, it reduces herding behavior.

Socioeconomic Factors Moderate the Relationship Between Market Information and Herding Behavior

The research findings support the fifth hypothesis that socioeconomic factors moderate the relationship between market information and herding behavior. Accepting this hypothesis suggests that the socioeconomic factors of investors can strengthen the relationship between market information and herding behavior.

These findings align with the findings of Abd-Alla (2020), where the COVID-19 pandemic disrupted market performance, making market information crucial, especially for inexperienced investors who tend to panic and engage in herding behavior. Additionally, during market instability, such as during the COVID-19 pandemic, investors tend to engage in herding behavior by suppressing personal information and following group decisions or herding (Sachdeva et al., 2021). Age significantly affects herding behavior, as experienced investors possess more market information, experience, and expertise, enabling them to make better and more rational decisions compared to young investors, making them less prone to herding behavior (Lin, 2012).

Socioeconomic Factors Moderate the Relationship Between Stock Characteristics and Herding Behavior

The research findings do not support the sixth hypothesis that socioeconomic factors moderate the relationship between stock characteristics and herding behavior. The non-acceptance of this hypothesis suggests that the socioeconomic factors of

investors do not strengthen the relationship between stock characteristics and herding behavior. This indicates that investor socioeconomic factors do not significantly influence their herding behavior when they understand stock characteristics, including industry performance, sector analysis, and financial reports of the chosen stocks in their portfolio.

This finding is consistent with Komalasari et al. (2021), where socioeconomic factors emerge as the least significant driver of both stock characteristics and herding behavior. This finding aligns with Komalasari et al. (2021) extensive review of herding literature, which found that socioeconomic factors have minimal influence on stock characteristics and herding behavior. Conversely, this result contradicts some previous studies that suggest socioeconomic factors as significant drivers of herding behavior (Nair et al., 2017).

CONCLUSION AND RECOMMENDATION

This research was conducted to test, analyze, and obtain evidence of the influence of investor cognitive psychology, market information, and stock characteristics as the main variables on herding behavior exhibited by millennial investors, with socioeconomic factors as the moderating variable. Based on the theoretical framework, six hypotheses were formulated. Subsequently, the effects of these variables were examined. A questionnaire was administered to alumni investors of the School of Capital Market, representing the Indonesian Stock Exchange Central Java 1, who were members of the Telegram group for SPM IDX Semarang alumni. A total of 196 responses were collected via Google Forms.

The measurement model (outer model) testing met the requirements of validity (convergent and discriminant) and reliability. Based on the testing and discus-

sions presented, the following conclusions can be drawn, investor cognitive psychology (ICP) has an influence on herding behavior (HB), market information (MI) has an influence on herding behavior (HB), stock characteristics (SC) do not have an influence on herding behavior (HB), socioeconomic factors (SEF) moderate the influence of investor cognitive psychology (ICP) on herding behavior (HB), socioeconomic factors (SEF) moderate the influence of market information (MI) on herding behavior (HB) and last, socioeconomic factors (SEF) do not moderate the influence of stock characteristics (SC) on herding behavior (HB).

There are limitations in this study that can be potential areas for further research. These limitations include herding behavior was only measured based on the questionnaire (primary data), which may not fully capture the extent of herding behavior in the Indonesian capital market. Second, the population used in the study consisted only of investors who had attended the capital market school in the Central Java 1 region and were members of the SPM IDX Semarang alumni group on Telegram. This sample may not fully represent the herding behavior of investors in the Indonesian capital market as a whole.

And last, the investors involved in the study were those who started investing during the COVID-19 pandemic, often referred to as coronial investors. Therefore, there was no comparison of herding behavior between investors before the pandemic, during the pandemic, and after the pandemic.

In light of these limitations, the author suggests recommendations for future research such as, include trading volume as secondary data to measure the indication of herding behavior in the capital market by examining the intensity of stock trading. Future research should also expand the study population to provide a broader

representation of investor behavior. And last, subsequent studies could compare herding behavior among investors before the pandemic, during the pandemic, and after the pandemic. These suggestions aim to address the limitations of the current study and provide directions for further research in this field.

REFERENCES

- Abd-Alla, M. H. (2020). Sentimental Herding: The Role of COVID-19 Crisis in the Egyptian Stock Market. *Copernican Journal of Finance & Accounting*, 9(3), 9-23.
- Bihari, A., Dash, M., Kar, S. K., Muduli, K., Kumar, A., & Luthra, S. (2022). Exploring Behavioural Bias Affecting Investment Decision-making: A Network Cluster Based Conceptual Analysis for Future Research. *International Journal of Industrial Engineering and Operations Management*, 4(1/2), 19-43
- Chia, L. H., Chong, L. Y., Fu, Z. C., Khoo, J. S. L., & Soh, Z. H. (2018). *Herding behavior in stock market: a case in Malaysia* (Doctoral dissertation, UTAR).
- Chiang, T. C., & Zheng, D. (2010). An Empirical Analysis of Herd Behavior in Global Stock Markets. *Journal of Banking & Finance*, 34(8), 1911-1921.
- Dang, H. V., & Lin, M. (2016). Herd Mentality in the Stock Market: On the Role of Idiosyncratic Participants with Heterogeneous Information. *International Review of Financial Analysis*, 48, 247-260.
- Eringfeld, S. (2021). Higher Education and its Post-colonial Future: Utopian Hopes and Dystopian Fears at Cambridge University during Covid-19. *Studies in Higher Education*, 46(1), 146-157.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25(2), 383-417.
- Fransiska, M., Sumani, S., & Pangestu, S. (2018). Herding Behavior in Indonesian Investors. *International Research Journal of Business Studies*, 11(2), 129-143.
- Gao, B., & Yang, C. (2018). Investor Trading Behavior and Sentiment in Futures Markets. *Emerging Markets Finance and Trade*, 54(3), 707-720.
- Jain, J., Walia, N., Kaur, M., & Singh, S. (2021). Behavioural Biases Affecting Investors' Decision-making Process: A Scale Development Approach. *Management Research Review*, 45(8), 1079-1098.
- Kernan, J. B., & Mojena, R. (1973). Information Utilization and Personality. *Journal of Communication*, 23(3), 315-327.
- Kohardinata, C., & Gosal, G. G. (2022). Perilaku Herding Investor Coronial yang Bertransaksi pada Akun Saham Syariah. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3681-3688.
- Komalasari, P. T., Asri, M., Purwanto, B. M., & Setiyono, B. (2022). Herding Behaviour in the Capital Market: What do we know and what is next?. *Management Review Quarterly*, 72(3), 745-787.
- Kumar, A. (2021). Empirical Investigation of Herding in Cryptocurrency Market under different Market Regimes. *Review of Behavioral Finance*, 13(3), 297-308.
- Kumari, S., Chandra, B., & Pattanayak, J. K. (2019). Personality Traits and Motivation of Individual Investors towards Herding Behaviour in Indian Stock Market. *Kybernetes*, 49(2), 384-405.
- Lam, K. S., & Qiao, Z. (2015). Herding and Fundamental Factors: The Hong Kong Experience. *Pacific-Basin Finance Journal*, 32, 160-188.
- Lin, H. W. (2012). How Herding Bias could be Derived from Individual Investor Types and Risk Tolerance?. *International Journal of Economics and Management Engineering*, 6(6), 1395-1400.
- Markowitz, H. M. (1991). Foundations of Portfolio Theory. *The Journal of Finance*, 46(2), 469-477.
- Metawa, N., Hassan, M. K., Metawa, S., & Safa, M. F. (2019). Impact of Behavioral Factors on Investors' Financial Decisions: Case of the Egyptian stock market. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1), 30-55.

- Mobarek, A., Mollah, S., & Keasey, K. (2014). A Cross-Country Analysis of Herd Behavior in Europe. *Journal of International Financial Markets, Institutions and Money*, 32, 107-127.
- Muharam, H., Dharmawan, A., Najmudin, N., & Robiyanto, R. (2021). Herding Behavior: Evidence from Southeast Asian Stock Markets. In *Recent developments in Asian Economics International Symposia in economic theory and econometrics* (pp. 207-220). Emerald Publishing Limited.
- Nair, M. A., & Yermal, L. (2017). Factors Influencing Herding Behavior among Indian Stock Investors. In *2017 International Conference on Data Management, Analytics and Innovation (ICDMAI)* (pp. 326-329). IEEE.
- Ngoc, L. T. B. (2014). Behavior Pattern of Individual Investors in Stock Market. *International Journal of Business and Management*, 9(1), 1-16.
- Nosita, F., & Amrulloh, R. (2023). Investor Behaviour during COVID-19 Pandemic: Do they Herding?. In *Macroeconomic Risk and Growth in the Southeast Asian Countries: Insight from SEA* (pp. 115-135). Emerald Publishing Limited.
- Rahayu, S., Rohman, A., & Harto, P. (2021). Herding Behavior Model in Investment Decision on Emerging Markets: Experimental in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(1), 053-059.
- Sachdeva, M., Lehal, R., Gupta, S., & Garg, A. (2021). What Make Investors Herd While Investing in the Indian Stock Market? A Hybrid Approach. *Review of Behavioral Finance*, 15(1), 19-37.
- Salem, R. (2019). Examining the Investment Behavior of Arab Women in the Stock Market. *Journal of Behavioral and Experimental Finance*, 22, 151-160.
- Schmidt, U., Friedl, A., Eichenseer, M., & de Miranda, K. L. (2021). Social Comparison and Gender Differences in Financial Risk Taking. *Journal of Economic Behavior & Organization*, 192, 58-72.
- Shiller, R. J. (2003). From Efficient Markets Theory to Behavioral Finance. *Journal of Economic Perspectives*, 17(1), 83-104.
- Tauni, M. Z., Fang, H. X., & Iqbal, A. (2016). Information Sources and Trading Behavior: Does Investor Personality Matter?. *Qualitative Research in Financial Markets*, 8(2), 94-117.
- Tauni, M. Z., Fang, H. X., & Iqbal, A. (2017). The Role of Financial Advice and Word-of-Mouth Communication on the Association between Investor Personality and Stock Trading Behavior: Evidence from Chinese Stock Market. *Personality and Individual Differences*, 108, 55-65.
- Tauni, M. Z., Rao, Z. U. R., Fang, H. X., & Gao, M. (2017). Does Investor Personality Moderate the Relationship between Information Sources and Trading Behavior? Evidence from Chinese Stock Market. *Managerial Finance*, 43(5), 545-566.
- Yang, W. R., & Chuang, M. C. (2023). Do Investors Herd in a Volatile Market? Evidence of Dynamic Herding in Taiwan, China, and US Stock Markets. *Finance Research Letters*, 52, 103364.
- Yuan, Y., Wang, H., & Jin, X. (2022). Pandemic-driven Financial Contagion and Investor Behavior: Evidence from the COVID-19. *International Review of Financial Analysis*, 83, 102315.
- Zahera, S. A., & Bansal, R. (2018). Do Investors Exhibit Behavioral Biases in Investment Decision Making? A Systematic Review. *Qualitative Research in Financial Markets*, 10(2), 210-251.
- Zhao, J. (2014). Cognitive Limitation, Herding Behavior, and Investment Performance. *HKU Theses Online (HKU-TO)*.
- Zhou, X., Gao, Y., Wang, P., & Zhu, B. (2022). Examining the overconfidence and overreaction in China's carbon markets. *Economic Analysis and Policy*, 75, 472-489.