TESTING THE FACTORS THAT CAUSE HERDING BEHAVIOR ON THE INDONESIAN STOCK MARKET

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Abstract

This study aims to examine and analyze the effect of stock return, market capitalization, and information asymmetry on herding behavior. The data used are secondary data obtained from the annual report of the company that is the object of research. The population in this study is all companies whose shares are listed in the LQ45 stock index for 2020-2022. Sample selection using purposive sampling and data analysis was carried out by multiple linear regression analysis. The results showed that stock returns had an effect in triggering herding behavior, while market capitalization and information asymmetry had no effect on triggering herding behavior. However, stock return, market capitalization, and information asymmetry together affect herding behavior.

Keywords: herding behavior, stock return, market capitalization, asymmetry information

INTRODUCTION

In the last three years, the Indonesian Capital Market has experienced a very significant development which indicates that investment in Indonesia is increasingly being looked at by investors. One of the indicators that can be used to determine the level of development of the Indonesian capital market is to look at data on the increase in the number of stock investors in the capital market. Based on KSEI data for 2022, in 2020-2021, the growth in the number of stock investors reached 103.60%, from 2020 of 1,695,268 investors to 3,451,513 investors in 2021. This phenomenon is very interesting because this extreme increase in the number of stock investors occurred during the COVID-19 pandemic, where the COVID-19 pandemic conditions resulted in the presence of negative sentiment due to circumstances full of uncertainty, causing

pessimism and fear which have implications for the investment risks that investors will bear when investing. The increase in the number of investors is strongly suspected that there are certain factors that influence it. Referring to expected utility theory, despite being in a situation full of risk and uncertainty, investors can still prioritize rational behavior when making investment decisions in the stock market.

One of the behaviors that triggers an increase in trading intensity in the capital market is herding behavior. Herding behavior can be understood as actions that come from reasonable thinking (spurious herding) and also as actions that do not come from reasonable thinking or based on psychological instincts (intentional herding). Spurious herding occurs when individuals process information similar to other individuals, causing them to make similar decisions. While intentional herding or "real herding" is an individual behavior that actually imitates the decisions of other individuals without taking into account the risks that may arise from following those decisions.

Furthermore, Bikhchandani and Sharma (2001) explain that there are three causes of herding behavior rationally in the capital market. First, information-based herding, where when investors are faced with a situation where information is not available, or doubts about the information they have, then the decisions taken tend to follow the decisions of other investors who have better information than following the signals they have, this is called a cascade. Second, reputation-based herding, where the higher the ability of the investment manager, the better his ability to be able to distinguish information signals from noise, so that investment managers can refer to these signals. That way, the reputation of the investment manager is maintained even if it is wrong in making decisions later because other investment managers also receive the same signal. Third, compensation-based herding, where the existence of a compensation scheme is the reason for investment managers to imitate benchmark performance, because in fact the compensation received will decrease if the manager's performance is poor, so they try their best so that their portfolio performance is above benchmark performance.

Several previous studies have been conducted to examine the existence of herding behavior in the stock market. Gunawan et al., (2011) found that in the

Indonesian and global stock markets in Asia Pacific there is herding behavior in market stress conditions, while in conditions of very high stock returns and normal conditions, investor behavior tends to be rational. Komalasari (2016) found that information asymmetry allows herding behavior to occur. The higher the information gap between informed traders and uninformed traders leads to a lower dispersion of returns. However, different results were found by Ramadhan and Mahfud (2016) who stated that stocks listed on the LQ45 index on the Indonesian stock market had no indication of herding behavior. Kremer and Nautz (2012) also state that information asymmetry has no effect on triggering herding behavior The purpose of this study is to investigate whether investors in situations full of uncertainty and full of risk still prioritize rational behavior to make investment decisions in the stock market, where in past research only looks at herding behavior from its irrational side. The main contribution of this study is to measure herding behavior in terms of the availability of information in the stock market—specifically in terms of stock return factors, market capitalization, and information asymmetry.

This scientific article contains theoretical approaches and hypothetical development which are the basis for explaining and constructing conjectures related to factors that shape herding behavior; research method as a procedure in proving the factors forming herding behavior; result and discussion as elaboration of findings and proof of hypotheses; and conclusion and limitation future research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Signalling Theory

Signalling theory began when Akerlof in 1970 in his work entitled "The Market for Lemons: Quality Uncertainly and the Market Mechanism" broadly explained that information that is important for economic decisions is not always available as consideration to all parties involved in transactions. Akerlof (1970) found a phenomenon where there is an imbalance of information between sellers and buyers regarding the quality of used car products that are traded. This phenomenon shows that when buyers lack information about the characteristics and quality of the products to be purchased, the buyer generalizes the assessment of all products, both high-quality and

low-quality at the same price, so that in the end the buyer gets a "lemon" which means the buyer knows there is damage to the used car when the car has been purchased.

Signalling theory basically explains that companies can reduce market uncertainty and reduce information gaps through providing information that is interpreted as signals by investors. For investors, information is something important to know in deciding on investments. The availability of comprehensive, relevant, and timely data has a very important value for investors because it becomes an assessment material in making decisions. Companies generally voluntarily provide positive information related to their company to the public to impress investors and the signals derived from the information released can influence the actions to be taken by investors whose reactions will be reflected through changes in stock trading volume (Febriyanti, 2020).

Expected Utility Theory

Expected utility theory was first introduced by Neumann and Morgenstern in 1947 and explains the basis for why individuals act rationally. Haryanto (2006) explained that this theory views investors will remain rational and able to make decisions effectively and efficiently based on the belief that they have reliable information to maximize their utility without considering the situation at hand. Expected utility theory argues that despite being exposed to risk, investors are still able to behave rationally. Individuals are considered capable of acting according to reality when it comes to making decisions in risky situations. Therefore, Nusantara et al., (2017) consider expected utility theory is an economic model that emphasizes more on the way individuals actually make decisions in risk situations than the way they should take in such situations.

Efficient Market Hypothesis

A work entitled "Efficient Capital Market: A Review of Theory and Empirical Work" introduced by Fama in 1970 on the concept of the efficient market hypothesis broadly explains that the ideal or not of a market is when prices can provide accurate signals for companies to make decisions regarding production and investment, and investors can freely choose securities that represent ownership of a company on the

basis of The assumption that the price of the securities in full represents all available information.

According to Fama (1970), there are three types of efficient market hypotheses, namely (1) weak form market efficiency hypothesis, where one of the most traditional types of information used in assessing the value of securities is market data, where this market data refers to all information related to past prices; (2) the semi-strong form market efficiency hypothesis, in which the current price of a security quickly reflects all available information. The information in question is not just information about market data, but all data that is known and publicly available; and (3) the hypothesis of strong form market efficiency, where this market is the most restrictive form market in which stock prices fully represent all information, including information of a public and non-public nature, also includes all past information, information spread among the general public and even information known only to a certain number of individuals.

Herding Behavior

Blasco et al., (2012) stated herding behavior as the tendency of an investor who chooses to imitate the trading practices of other investors who are seen as having accurate information rather than information and self-confidence or following market consensus. In simple terms, it can also be said to be a tendency to follow the actions taken by other investors. Bikhchandani and Sharma (2001) stated that herding behavior can be determined based on the cause into two forms, namely herding rationally or called unintentional herding and herding rationally or called intentional herding.

Unintentional herding is a behavior that occurs when individuals are in the same situation by having identical information that is not intentionally designed, so they process the same information and make decisions at the same point. The basis of this unintentional herding is that the information possessed is sufficient and reliable to make a decision. Intentional herding refers to the actions of individuals who intentionally follow choices made by others because they believe that the person being followed has better knowledge in making decisions. Thus, this individual tends to ignore the information that he has himself. This phenomenon arises because information is uneven and less reliable in the decision-making process.

Stock Return

Hartono (2019: 284) defines return as the overall return on an investment made within a certain period of time. Stock returns consist of capital gains (losses) and yields. Capital gain (loss) is the difference between the present investment value and the value of the previous period. Yield is the percentage of periodic cash receipts against the investment price of a certain period of an investment.

Market Capitalization

Market capitalization is a concept in business that reflects the total value of a company's stock. Investor interest in companies with high stock prices will increase the company's market capitalization (Fitriani, 2021). The value of market capitalization can be measured by multiplying the number of listed shares by the closing price of the shares in that period. The increasing market capitalization value of a company becomes a magnet for investors to invest in the company. The value of a large market capitalization is directly proportional to the size of the company which indicates that the greater the capitalization, the larger the size of the company. Investors can judge a company as having low risk and great growth potential in the future based on its capitalization level. The market capitalization of a company can be a benchmark for investors to decide their investment choices. Investors also believe that the company's high growth potential will be able to provide maximum results, especially in terms of stock returns.

Asymmetry Information

Information asymmetry is a condition of information inequality between one party and another party in economic activities (Financial Services Authority, 2016). The difference in ownership of information is due to the difficulty of investors to obtain information. It is unlikely for the company to provide complete data about the company's condition because the data is a company secret and will be published at the right time.

Information asymmetry is divided into two basic forms, namely hidden knowledge and hidden action. Hidden knowledge is a condition in which one party has

more control over information related to the quality of the products and services being traded than the other party, so the presence of this condition will cause adverse selection. Hidden action is defined as actions carried out by one party in a hidden way that affect the quality of the product being traded with the intention that the other party does not know his actions, and thus cause moral hazard problems.

Hypotheses Development

The overall return of an investment in a period of time that has been made is referred to as return. Stock returns consist of capital gains (losses) and yields. In general, investors invest as a way to maximize self-prosperity by expecting returns that will be received in the future. Based on signalling theory, the existence of information becomes something that is very important for investors to know in deciding on investment. The availability of complete, relevant, accurate, and up-to-date information is needed by investors to make investment decisions. An information has at least two contents, namely good news and bad news. When there is an increase in returns, such as dividends, it is seen as a positive signal that causes stock price movements to react positively, but when dividends decrease, it will be seen as bad news that causes stock price movements that respond negatively, so that the announcement of increases and decreases in dividends also has an impact on the increase and decrease in stock prices. When the stock price is in a positive condition as a result of the large demand for shares, it will have an impact on the return obtained (Rachmawati and Suhermin, 2019).

Research conducted by Fransiska et al., (2018) found there is a dynamic relationship between market returns to herding behavior, where high market returns can cause herding behavior. Likewise, research conducted by Venezia et al., (2011) revealed that return can affect herding behavior. Therefore, the hypotheses built by the researcher is as follows.

H_1 : Stock returns can lead to herding behavior in the stock market.

Market capitalization is a concept in business that reflects the total value of a company's stock. Investor interest in companies with high stock prices will increase the company's market capitalization. Usually, stocks with a low market cap have less information than large stocks. Therefore, small stocks are usually under-researched by researchers in the capital market because they consider the high cost of research.

Researchers in the capital market tend to conduct research for large stocks because they are seen as providing greater returns (Ramli et al., 2016).

Referring to signalling theory, company management is encouraged to direct investors in gaining insight into the company's future prospects by presenting information about the company's development. Facts about the market capitalization of a company become very important for investors in forming investment decisions. Large market capitalization companies are usually in great demand by investors, one of the reasons is because they distribute dividends periodically, so investors flock to invest in the company. In the research of Fransiska et al., (2018), the results obtained are that market capitalization factors can trigger investors to act herding for reasons of investment safety. Investors believe that investing in large-cap stocks is safe because if at any time there is a collapse, the company will not collapse instantly. Therefore, the hypotheses built by the researcher is as follows.

H_2 : Market capitalization can lead to herding behavior in the stock market.

Blasco et al., (2012) define herding behavior as the tendency of an investor who chooses to imitate the trading practices of other investors who are seen as having accurate information rather than self-information and beliefs or following market consensus. Differences in information owned by each investor, both in terms of number and in terms of quality can trigger herding behavior. The existence of information inequality between one party and another party in economic activities, where one party has more control over information than the other party is referred to as information asymmetry. Information asymmetry can cause the formation of herding behavior due to doubts about the credibility of the information owned.

Referring to signalling theory, the company's management needs to direct investors regarding management's views on the company's prospects in the future. Information disparities between different parties can lead to uncertainty. When in an uncertain situation, investors tend to believe that individuals who have access to information will make more optimal decisions, so they will follow investors who have access to that information. (Sugiantara, 2022). In research conducted by Komalasari (2016), it was found that information asymmetry strengthens the possibility of herding

behavior. The higher the information asymmetry between the informed trader and the uninformed trader drives the dispersion of returns lower. Therefore, the hypotheses built by the researcher is as follows.

H_3 : Information asymmetry can lead herding behavior in the stock market.

RESEARCH METHOD

This research uses quantitative data in the form of information about the shares of companies listed on the Indonesia Stock Exchange. The data in this study was obtained through the Indonesia Stock Exchange (IDX), the Indonesian Central Securities Depository (KSEI), Yahoo Finance, and other sources. The population used in this study is all companies whose shares are incorporated in the LQ45 index on the Indonesia Stock Exchange throughout 2020 to 2022.

Population and sample

To determine the sample so as not to cause bias, the sample determination uses purposive sampling method. To obtain a representative sample, the criteria used are as follows.

1. The company's shares are included in the LQ45 category consistently and continuously during the period 2020 to 2022.
2. The company takes corporate action in the form of dividend distribution at least once during the period 2020 to 2022.
3. Company closing price data and other data related to variable measurement needs can be found on the Indonesia Stock Exchange, in the company's annual report, or in other sources.

Table 1 Variable Operational Definition

Variable	Code	Proxy	Source
Independent Variable Stock Return (X_1)	SR	$\text{Stock Return} = \dfrac{Pt - Pt\text{-}1 + Dt}{Pt\text{-}1}$	(Hartono, 2019)
Market Capitalization (X_2)	MC	Market capitalization = outstanding shares × closing price	(Fransiska et al., 2018)
Asymmetric Information (X_3)	AI	$SPREAD_{i,t} = \dfrac{ask_{i,t} - bid_{i,t}}{\left(\dfrac{ask_{i,t} + bid_{i,t}}{2}\right)} \times 100$	(Azari and Fachrizal, 2017)

Dependent Variable Herding Behavior (Y_1)	CSAD	$CSAD = \frac{1}{N}\sum_{i=1}^{N}|R_{i,t}-R_{m,t}|$	(Chang, Cheng, and Khorana, 2000)

Research Models

The first regression model is used to determine the occurrence of herding behavior in companies listed on the LQ45 index by conducting a non-linear regression to observe the relationship between disperse value and market return ($R_{m,t}$) as follows.

$$CSAD_t = \alpha + \gamma_1|R_{m,t}| + \gamma_2 R^2_{m,t} + \varepsilon_t$$

The second regression model is used to test the three hypotheses with herding behavior (CSAD) as the dependent variable and stock return (SR), market capitalization (MC), and asymmetry information (AI) as independent variables as follows.

$$CSAD_{i,t} = \alpha + \beta_1 SR + \beta_2 MC + \beta_3 AI + \varepsilon$$

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 2 Descriptive Statistics

	N	Mean	Median	Maximum	Minimum	Std. Dev.
LOG Y	84	-0.701804	-0.727553	0.371016	-1.676214	0.399643
LOG X1	84	-0.769349	-0.692298	0.361511	-2.204773	0.506653
LOG X2	84	4.816736	4.751681	6.022824	3.796047	0.501533
LOG X3	84	1.712415	1.707592	2.161087	1.035935	0.214098

Descriptive statistics of the variables used in this study are presented in table 1. The herding behavior (LOG Y) variable is expressed as a percentage whose log value is between -1.676214 and 0.371016. The minimum value is owned by PT. Bank Rakyat Indonesia (Persero) Tbk. It can be concluded that investors tend to follow market sentiment, thus, individual stock returns will cluster around market returns, causing the deviation value between stock returns and market returns to be low. The maximum value is owned by PT. Media Nusantara Citra, Tbk. This is because investors tend to

rely on their personal information, causing the deviation value between stock returns and market returns to be high, or away from market returns.

The variable stock return (LOG X1) is expressed in percentage form whose log value is -2.204773 to 0.361511. PT. Adaro Energy, Tbk became the company with the lowest stock return. In 2020, the return of PT. Adaro Energy Tbk bottomed out, due to a decline in the company's headline revenue that year. As a result, net profit decreased and this resulted in a decrease in the company's dividends. In addition to these factors, the decline in stock prices also played a role in reducing stock returns in 2020. The maximum value is owned by PT. Media Nusantara Citra, Tbk. Return of shares of PT. Media Nusantara Citra is the highest, where this happened in 2020. The significant increase in stock price in that year was the main factor influencing the increase in stock returns. Therefore, it can be concluded that stock prices have an important role in determining the return of company shares.

The market capitalization variable (LOG X2) is expressed in units of trillion rupiah whose log value is at 3.796047 to 6.022824. The minimum value is owned by PT. Erajaya Swasembada Tbk. This is because in 2022 there was an increase in material costs, so the company also increased the selling price of its products, resulting in a decrease in sales volume and net profit and ultimately has implications for a decrease in the company's stock price. The maximum value is owned by PT. Bank Central Asia, Tbk. This is because in the previous period the company carried out a corporate action, namely a stock split that split shares into 1: 5, so that this corporate action was responded well by investors and improved the company's image, and thus could encourage investors to own company shares, considering the company's performance and prospects in the future were quite promising.

The information asymmetry variable (LOG X3) is proxied through the bid-ask spread and expressed in percentage form whose log value is from 1.035935 to 2.161087. The minimum value is owned by PT. Semen Indonesia (Persero) Tbk and the maximum value is owned by PT. Erajaya Swasembada, Tbk. This minimum and maximum value wants to explain that informed investors will sell when uninformed investors set an offer price that is too high. Conversely, informed investors will buy when uninformed investors put the ask price too low. The difference between the highest price offered by the uninformed investor and the lowest price requested by the

uninformed investor is referred to as the spread. So, the more informed an investor is, it will shrink the spread value indicating that the information asymmetry is also small.

Classical Assumption Test

The classical assumption test is intended to ensure that the research data meets the BLUE (Best Linear Unbiased Estimated) requirements before hypothesis testing is carried out. Based on the normality test through Jarque-Bera, the probability value is 0.0933 which means greater than 0.05, so it can be concluded that the research data is normally distributed. Based on the requirements of the multicollinearity test, if the VIF value is below 10 or less than 10, multicollinearity does not occur. Based on the results of the multicollinearity test, all variables have a VIF value below 10 which means that multicollinearity does not occur. Based on the conditions of the White test, if the probability value of obs R*-squared is greater than 0.05, heteroscedasticity does not occur. Based on the results of heteroscedasticity testing, the probability value of obs R*-squared is 0.1080 or greater than 0.05, so it can be concluded that heteroscedasticity does not occur.

Testing Result and Discussion

Table 3 Herding Behavior Detection

Dependent Variable: LOGY
Method: Least Squares
Date: 10/06/23   Time: 07:48
Sample: 1 84
Included observations: 84

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.212396	3.009815	1.067307	0.2890
ABS_RMT	-122.4769	93.53855	-1.309373	0.1941
RMT2	862.9449	654.8726	1.317729	0.1913

Before proving the hypothesis, it is first detected whether herding behavior occurs or not within the established observation period, namely from 2020 to 2022. From the results of quadratic regression that has been carried out, the overall market

condition for the period 2020 to 2020 shows no indication of herding behavior in the LQ45 stock index as evidenced by the value of the non-linear coefficient between CSAD and the squared market return (R^2m,t) of 862.9449, where the interpretation of this value is positive and significant, so it can be concluded that herding behavior is not indicated in the LQ45 index in the period 2020 to 2022. The results of this study are in line with the results of research conducted by Ramadhan and Mahfud (2016) which found that stocks listed on the LQ45 index on the Indonesian stock market had no indication of herding behavior. Different results were found by Sugiantara (2022) where herding behavior was detected in the Indonesian stock market. This happens because the study analyzes rising market conditions and shorter research periods.

The absence of herding behavior in this study indicates that investors in the Indonesian stock market have behaved rationally in making investment decisions. Investors are deemed to have used information available in the market as a basis for analyzing investments and have relied on their personal information rather than copying other investors' investment decisions or following market consensus. As is well known, the uncertainty of the COVID-19 pandemic certainly increases investment risk, also with the issuance of government policies, such as social restrictions, it has a double effect on the economy, one of which is a decrease in economic supply and demand which leads to a decrease in economic performance. However, the absence of herding behavior detected in the study period shows that even under risk pressure, investors still behave rationally.

The results of this study are in line with expected utility theory which says that investors will still be rational and can make decisions effectively and efficiently because they have reliable information to maximize their utility even under conditions full of risk. If the results of this study are associated with the concept of efficient markets, if herding behavior is indicated not to occur, then it can be concluded that the Indonesian stock market has been efficient, because investors only use information that is already available in the market, where the available information has been fully reflected in stock prices, so investors are not possible to be able to obtain abnormal returns.

Table 4 Multiple Linear Regression Analysis Results

Dependent Variable: LOGY
Method: Least Squares
Date: 10/06/23   Time: 07:43
Sample: 1 84
Included observations: 84

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.133367	0.369268	-0.361167	0.7189
LOGX1	0.622537	0.048463	12.84564	0.0000
LOGX2	-0.082154	0.049887	-1.646809	0.1035
LOGX3	0.178827	0.120493	1.484129	0.1417

The substantiation of the hypothesis that has been built previously can be seen in table 3. Based on the results of a partial significance test on the effect of return on herding behavior, obtained the probability value of variable stock return of 0.000, where $0.000 < 0.05$, so it can be concluded that stock return affects herding behavior. The results of this study are in line with the results of research conducted by Wylie (2005) which states that when mutual funds in the United Kingdom have good performance shown by the return on investment made, it will be able to trigger herding behavior.

In general, investors invest as a way to maximize self-prosperity by expecting returns that will be received in the future. Based on signalling theory, the existence of information becomes something that is very important for investors to know in deciding on investment. The availability of complete, relevant, accurate, and up-to-date information is needed by investors to make investment decisions. When there is an increase in returns on investment, such as dividends, it is seen as a positive signal that views that the company has a good performance. The existence of information related to stock returns that will be obtained encourages other investors to invest in the company.

Based on the results of the study, it can be concluded that when the company provides information related to the return on an investment that has been made by investors, it will encourage other investors to invest in the company in the hope that in the future it will get a return on investment. This condition can be categorized as unintentional herding. Tuominen (2016) in his research said that unintentional herding

can occur if all investors jointly process the same public information so that their decisions lead to the same decisions by not considering their personal signals, which the content of these private signals is not necessarily owned by other individuals. When everyone ultimately ignores their personal signals and chooses to act on public information, then this individual is in a state of cascade information, that is, taking the same decisions taken by the previous individual. Therefore, in this study, information about stock returns can influence the occurrence of herding behavior rationally which solely occurs because of the similarity of investment decisions sourced from the same information processing.

Based on the results of the partial significance test on the effect of large market capitalization on herding behavior, the probability value of the large market capitalization variable of 0.1035 was obtained, where $0.1035 > 0.05$, so it can be concluded that large market capitalization has no effect on herding behavior. The results of this study are in line with the results of research conducted by Venezia (2010) and Thahjono (2019) which stated that herding behavior actually occurs in companies with a small market capitalization. In contrast to the results of research by Fransiska et.al (2018) which found that large market capitalization has an effect on triggering herding behavior.

In general, companies with large market capitalizations have more quality information and are easy to obtain, so investors who plan to invest can already estimate their future prospects. Meanwhile, companies with small market capitalizations have less information and that information cannot be ascertained. Based on the results of the study, it can be concluded that the greater the market capitalization of a company which means the more information available related to the company, it may not necessarily encourage investors to invest in the company, even though information related to the company can be obtained equally. The conditions found in this study want to say that market capitalization has no effect on the emergence of unintentional herding. Referring to the opinion of Tuominen (2016), if unintentional herding does not occur, it can be concluded that individuals in making investment decisions do not only rely on public information, but may also have relied on their personal information that is not owned by other individuals. In addition, according to Bikhchandani (2000), unintentional herding

can occur when public information has uncertainty in the accuracy of the information, even when investors have behaved rationally.

Based on the results of the partial significance test on the effect of information asymmetry on herding behavior, the probability value of the information asymmetry variable was obtained at 0.1417, where 0.1417 > 0.05, so it can be concluded that information asymmetry has no effect on herding behavior. The results of this study are in line with the results of research conducted by Kremer and Nautz (2012) which states that information asymmetry has no effect on triggering herding behavior. In contrast to the results of Komalasari's research (2016) which found that information asymmetry has an effect in triggering herding behavior.

Referring to signalling theory, the company's management needs to direct investors regarding management's views on the company's prospects in the future. Information imbalance between one party and another can trigger uncertainty. Sugiantara (2022) states that in uncertain situations, investors tend to believe that those who obtain information will make better decisions, so they follow the actions of investors who have such information. In this study, companies listed in the LQ45 stock index were chosen as the object of research because the LQ45 index is liquid, meaning that its shares are actively traded. Stocks that are actively traded indicate the absence of information inequality because each investor has sufficient information to decide his investment.

Based on the results of the study, it can be concluded that information asymmetry has no effect in triggering herding behavior. If herding behavior cannot be created due to information inequality, it can be said that the information asymmetry that occurs in inequality is not too large or even no information asymmetry occurs at all. This is evidenced by the value of the bid-ask spread. The smaller the spread between the ask price and the bid price, it means that investors are considered to have fairly balanced information and use the information available in the market as a basis for analyzing investments rather than copying other investors' investment decisions or following market consensus. The condition of the non-effect of information asymmetry on unintentional herding in this study also informs that even if investors have the same

information, it may not necessarily be able to encourage investors to invest in the company. According to Bikhchandani (2000), unintentional herding can only occur if public information has uncertainty in the accuracy of the information, even when investors have behaved rationally. In other words, unintentional herding does not occur if the information processed is accurate and in decision making has been supported by personal information that is not necessarily owned by other individuals. In addition, it is very possible that there are other factors that can encourage the absence of herding behavior in addition to factors of availability and equity of information that are not described in this study, such as personal economic factors of investors themselves.

Table 5 Multiple Linear Regression Analysis Results

R-squared	0.730677	Mean dependent var	-0.701804
Adjusted R-squared	0.720577	S.D. dependent var	0.399643
S.E. of regression	0.211253	Akaike info criterion	-0.225070
Sum squared resid	3.570236	Schwarz criterion	-0.109317
Log likelihood	13.45294	Hannan-Quinn criter.	-0.178538
F-statistic	72.34704	Durbin-Watson stat	2.294418
Prob(F-statistic)	0.000000		

In addition to looking from the partial side, this study also measured how the three variables together affect herding behavior in table 4 and found the results that the F-statistical value was 72.34704 with a probability level of 0.0000. The actual probability level is smaller than 0.05, so it can be concluded that all independent variables, namely stock return (SR), market capitalization (MC), and information asymmetry (AI) together affect the herding behavior variable.

CONCLUSION

This study aims to examine and analyze the effect of stock returns, market capitalization, and information asymmetry on the existence of herding behavior in the shares of companies listed on the LQ45 index of the Indonesia Stock Exchange from 2020 to 2022. The total sample in this study amounted to 84 companies determined through a purposive sampling approach. Testing the existence of herding behavior is done by measuring the disperse value between stock returns and market returns using the Cross Sectional Absolute Deviation model developed by Chang, Cheng, and

Khorana (2000). Through the results of data analysis and interpretation, it is concluded that unintentional herding behavior does not occur throughout 2020 to 2022 on the LQ45 index. Stock returns published by companies have an effect in encouraging individuals to behave herding, while the company's market capitalization and information asymmetry have no effect in encouraging individuals to act herding.

In the development of further research, two different market conditions can be used, namely bullish market conditions and bear market conditions to see the difference in the probability of herding behavior in the Indonesian stock market. In addition, further research can also widen the population at the overall level of the Indonesia Stock Exchange because it represents the overall condition of the capital market, so that it can provide much more accurate results.

The limitation of this research is only conducted on overall market conditions without differentiating it into either bullish market conditions or bearish market conditions. In addition, this study was only conducted to determine whether the LQ45 stock index indicated herding behavior or not and did not consider the type of investor who performed herding behavior, whether the type of foreign investor or the type of domestic investor.

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