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ANALYSIS OF FINANCIAL DECISION-MAKING WITH A BEHAVIORAL ECONOMICS APPROACH: PERSPECTIVES ON CAPITAL MARKET INVESTORS

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ABSTRACT

This study aims to analyze the financial decision-making of investors in capital markets using the approach of behavioral economics. Behavioral economics studies how psychological and emotional factors influence financial decision-making. This study involves analyzing various aspects of investor behavior including loss aversion, information framing, overconfidence, herd behavior, and demographic factors. The results show that investors tend to fear losses more than profits, which affects prudent decision-making. The way information is presented also influences investment decisions, where the formation of a positive or negative frame can affect perceptions of risk and opportunities for profit. Overconfidence also plays a role in investment decision-making, with overconfident investors tend to underestimate risk. Herd behavior is also seen in this study, where investors tend to follow market trends without in-depth analysis, which can increase market volatility. Demographic factors such as age, gender, education, and investment experience also play a role in investment strategy and risk preference. This research provides important insights to investors and market participants about the psychological factors that influence financial decision-making. With a better understanding of investor behavior, it is hoped that investors will be able to make more informed and informed decisions, as well as reduce the impact of psychological biases in the future. financial decision-making in capital markets.

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1. INTRODUCTION

Financial decision-making in the dynamic environment of capital markets is a complex and interesting topic to study. The financial decisions of investors in the capital markets are often based not only on sound considerations and available information, but are also influenced by psychological and emotional factors. The behavioral economics approach broadens our understanding of how human behavior in economic decision-making is influenced by fundamental psychological aspects. This study aims to analyze financial decision making under the approach of behavioral economics from the perspective of investors in the capital market. Capital markets, as a complex investment environment, present unique challenges for investors. Uncertainty, price volatility, completeness of information, and interactions with other market participants all affect investors' approach when making financial decisions. The behavioral economics approach offers a more comprehensive framework for exploring and analyzing the psychological factors involved in this financial decision-making process. Theories such as fear of loss (fear of loss), framing (the way information is presented), and herd behavior (the tendency to follow the crowd) are examples of possible behavioral economics concepts. influence the behavior of investors in the capital market. The results of a study conducted by [1], [2], [3], [4], [5], [6], indicate that these concepts play an important role in shaping the behavior of investors in the capital market environment.

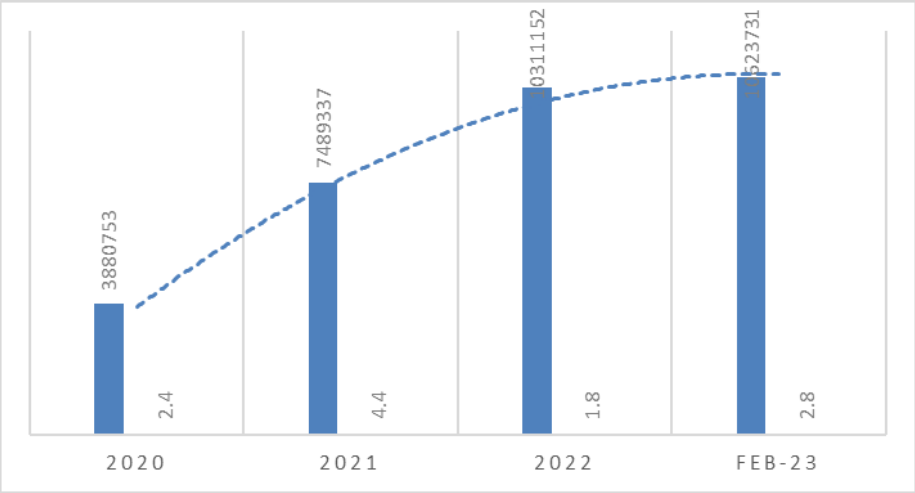

Figure 1. Number of Indonesian Capital Market Investors 2020-2023
Source: Kustodian Sentral Efek Indonesia (KSEI)

In 2020, capital markets saw an increase in the number of investors, reaching 92.99% year-over-year. Then, in 2021, this increase will slow down but still increase 37.68%. This growth trend will continue into 2022, albeit at a lower growth rate of 3.03%. A look at the demographics of individual investors reveals significant gender differences. Data through February 2023 shows that male investors dominate at 62.85%, while female investors make up 37.15% of total investors. By age group, investors over 60 years old (≥60) accounted for 2.79% of the total population, equivalent to 896.79 thousand people. The age group from 51 to 60 accounts for 5.25%, with a total of 242.07 thousand people. Meanwhile, the age group from 41 to 50 accounts for 10.95% of the population with a total of 166.59 thousand people. Investors aged 31-40 accounted for 22.63% of the total population, equivalent to 106.76 thousand people. However, the age group accounting for the highest proportion is from 30 years old and under (≤ 30), reaching 58.39% of the population and a total of 52.73 thousand people in February 2023. Education also plays an important role in investor demographics. Next is investment at the university level (≥ S2), accounting for 2.77% of the total number of investors, equivalent to 111.12 thousand people. Higher education (S1) is the most popular level, with the rate of 29.99% or 644.07 thousand people. Investors with Diplome Trois (D3) qualifications accounted for 7.55% of the population with a total of 42.35 thousand people, while investors with an intermediate level of education (≤ SMA) accounted for the highest proportion. , namely 59.69% or 149.40 thousand people. With this data, an interesting picture is drawn of the composition of investors in the capital market, including the growth trend of the number of investors over the years, comparison by gender, distribution by age and level of training. These data provide important insights for understanding the demographics of investors in the capital markets.

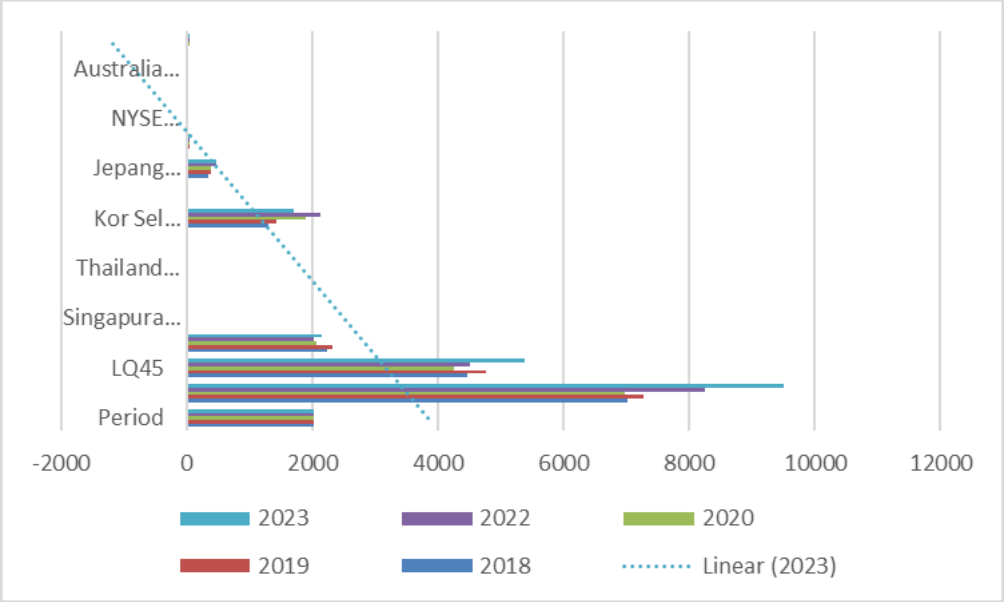

Figure 2. Capital Market Statistics 2023
Source: Otoritas Jasa Keuangan (OJK)

In support of this research, statistical data on the evolution of market capitalization in 2023 can provide valuable information. This data reflects the capital market dynamics across many major exchanges including IDX, LQ45, JII and several international exchanges such as Singapore (STI), Malaysia (KLSE), Thailand (SETI) and others. other exchanges. Figure 2 shows that at the beginning of 2023, the market capitalization on the Indonesian Stock Exchange (IDX) reached Rs 9,354.25 trillion, while the market capitalization of the LQ45 and JII exchanges was Rs 9,354.25 trillion, respectively. 5,344.78 trillion rupees and 1,999.75 trillion rupees. . This data shows volatility in market capitalization over a period of time, which can be an important indicator in analyzing the impact of psychological factors on investors' financial decisions. invest. Comparing market capitalization with international stock exchanges such as Singapore (STI), Malaysia (KLSE) and others can provide insight into the relative position of the Indonesian capital market in regional and global context. Observing changes in market capitalization over a period of time can also provide insight into how external factors, including major news and events, can affect investor behavior and financial decisions.

This study will analyze the psychological and behavioral factors of investors, which can be seen in previous studies, such as in the study of [7], [8], [9], [10], contributing to investment decision making. In addition, data from [11], [12], [13] on the impact of corporate financial performance on investment decision making can also provide an important basis for understanding the impact of external factors on investment decisions. This study will also use statistical data on the evolution of market capitalization in 2023 (Source:

Financial Services Authority (OJK)) as a relevant indicator for capital market value. This data will help link investor behavior, as seen in previous studies, to fluctuations in market value recorded in these statistics. This association is consistent with the relevance of information in investor decision-making in capital markets, as observed in the study by [14], [15]. By summarizing the results of many previous studies and using relevant empirical data, this study aims to contribute significantly to the understanding of investor behavior in capital markets by using behavioral economics.

This research will focus on the analysis of investor behavior in making investment decisions in the capital market, taking into account the influence of psychological factors that may play a role in this process. The main objective of this research is to provide in-depth insight into how psychological factors, including risk tolerance, perceptions of gains and losses, and interactions with market information, can influence investors' investment decisions. By understanding investor behavior through the lens of Behavioral Economics, this research is expected to provide a valuable contribution in developing a more holistic understanding of financial theories. In addition, the results of this study have the potential to provide valuable guidance for investors, financial practitioners, and capital market regulators in dealing with and understanding the impact of psychological effects on financial decision making. The next stage of this study will detail the theoretical framework to be used, the research methodology to be applied, as well as the data analysis steps to be taken to achieve the objectives of this research. Through these efforts, it is hoped that this research will contribute positively in expanding understanding of investor behavior in the capital market using the Behavioral Economics approach.

2. RESEARCH METHOD

This study will use a quantitative and qualitative approach to analyze the financial decision making of investors in the capital market with the Behavioral Economics approach. This research method will involve statistical analysis and interviews with respondents to identify psychological factors that influence investor behavior in making investment decisions. The steps of this research are:

a. Survey and Interview Design: This research will begin by designing a survey and interview guide that includes questions regarding the type of investment chosen, investment amount, investment timing, investment return, demographic characteristics (age, gender, education, previous investment experience, profile risk), as well as psychological and emotional aspects (risk tolerance, perception of advantages and disadvantages, overconfidence, aversion to loss, herding behavior). The survey will be conducted in the form of a questionnaire which will be filled out by the respondents, while interviews will be conducted with several selected respondents to gain deeper insights.
b. Data Collection: The survey will be distributed to several investor respondents in the Indonesian capital market, with random selection of respondents and various demographics. Interviews will be conducted with a selected group of respondents to gain a deeper perspective.
c. Analysis of Demographic Data and Investor Characteristics: Demographic data and investor characteristics will be analyzed descriptively to identify the relationship between demographic factors and investment decisions.
d. Psychological and Emotional Data Analysis: Data regarding the psychological and emotional aspects of investors will be analyzed using statistical methods, such as regression analysis, to identify the influence of psychological factors on investment decisions.

e. Investment Performance Data Analysis and Market Benchmarks: Investment performance data will be analyzed to see the relationship between investment decisions and the results achieved, as well as to compare investor portfolio performance with market performance in general.
f. Analysis of Market News and Information Data: Data regarding market news and information will be analyzed to see how external information influences investor behavior and investment decisions.
g. Analysis of Financial Transaction Data: Investor financial transaction history data will be analyzed to see changes in investment strategy over time.
h. Survey and Interview Data Analysis: Data from surveys and interviews will be analyzed qualitatively to gain deeper insights into investors' thoughts, motivations, and behavior in making financial decisions.

Based on the analysis of survey results and capital market data, this study will develop a revised hypothesis describing the relationship between psychological factors and investment decision-making behavior in capital markets. The research hypothesis will be adjusted according to the experimental results found in the data analysis. Through these steps, this study will provide insight into the psychological factors that influence investors' financial decision making in the capital markets, as well as how external factors, such as such as fluctuations in market values, can influence investor behavior. This method will allow researchers to test the proposed hypotheses and develop a more comprehensive understanding of investor behavior in the Indonesian capital market context.

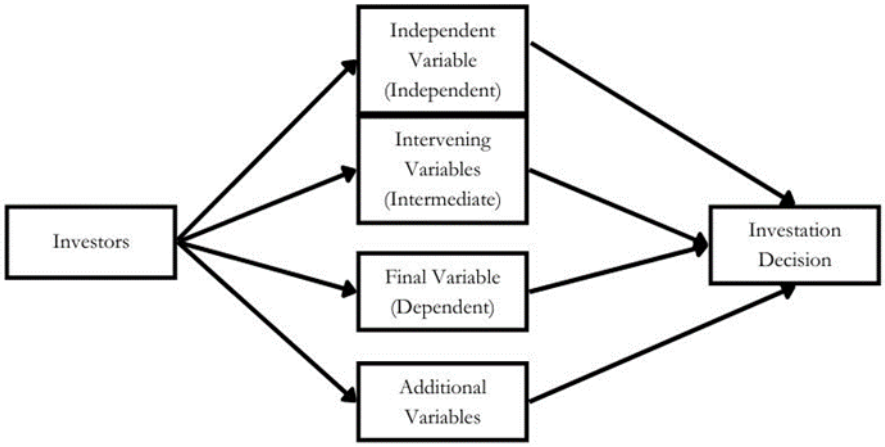

Figure 3. Framework Theoretical Research

In this study, the theoretical framework is used to analyze the factors affecting the investment decision making in the capital market, applying the approach of behavioral economics. The independent variable included psychological and emotional factors, including loss aversion, framing, overconfidence, and herd behavior. In addition, demographic factors, and investor characteristics such as age, gender, education and investment experience are also included as independent variables. In addition, the influence of market information and economic news, such as the influence of economic news and the influence of market information, is also considered. Variables with mediating (referral) functions include perceived risk and return on investment, as well as attitudes towards investment and risk tolerance. Making investment decisions in the capital markets is the ultimate (dependent) variable that needs to be understood through these factors. In addition, investment performance is measured by stock value, price volatility, and return on investment. Data from surveys and interviews are used to reveal investors' views, attitudes and thoughts, thereby supporting the relationship between psychological factors and investment decision-making. In addition, benchmark market data, such as equity market performance or stock indexes, helps compare an investor's portfolio performance with overall market performance. Based on this theoretical framework, the following hypotheses are proposed

H1: There is a positive relationship between psychological and emotional factors (loss aversion, framing, overconfidence, herd behavior) and the perceived risk and return of investments.
H2: Demographics and investment experience (age, gender, education, investment experience) affect an investor's attitude towards investments and risk tolerance.
H3: The influence of market information and economic news contributes to changing investment attitudes and investors' perception of risk.
H4: Perceived risk and return on investment as well as investment attitudes and risk tolerance influence investment decision making in the capital markets.
H5: Investment decision making in the capital markets affects the performance of investments (stock value, price volatility, rate of return on investment).

H6: Survey results and interviews show that investors' views, attitudes, and thoughts support the relationship between psychological factors and investment decision making.
H7: An investor's portfolio performance can be compared with capital market benchmarks to gauge the effectiveness of investment decisions.

This theoretical framework is the basis for the analysis and interpretation of data in the study of investment decision-making in capital markets according to the behavioral economics approach. The main data collection method is to distribute questionnaires to people in Indonesia using the Google Form platform. The study sample consisted of 100 randomly selected respondents. Respondents were asked to complete a questionnaire that included personal information in the form of demographic data, as well as respond to 20 questions designed to explore psychological factors influencing investment decision making. Each question includes several related indicators to measure these psychological factors. Respondents' responses will be subjected to descriptive analysis to reveal the meaning of the recorded numbers. The data analysis in this study involved several steps. First, a descriptive analysis was used to provide insight into the distribution and characteristics of the demographic data and psychometric factors obtained from the questionnaire. Frequency analysis was used to assess how often respondents gave certain answers to each variable in the questionnaire. In addition, a cross-sectional analysis was performed to determine the relationship between demographic factors (such as age, gender, education level and investment experience) and psychological factors influencing investment decisions. Test this relationship using chi-squared statistic test with p-value as the main criterion. The null hypothesis (H0) is rejected if p <; 0.05, showing a significant relationship between demographic and psychological factors. Chi-square analysis aims to evaluate the interaction of demographic factors with psychological factors in investment decision making. The method also helps identify demographic factors that have a significant impact on investors' perceptions of risk and return on investment, as well as investors' attitudes and risk tolerance. The results of the data analysis provide insight into the interplay of psychological and demographic factors in capital market investment decision making and their influence on investor behavior.

3. RESULTS AND ANALYSIS

There are several factors that are the main focus of this research in analyzing investment decision making in the capital market using the Behavioral Economics approach. Each factor has a different role and implications for investor behavior.

3.1. Aversion to Loss (Fear of Loss)

The loss aversion factor describes the tendency of investors to feel the negative impact of a loss with greater magnitude than that of an equivalent gain [16], [17]. Investors with high loss aversion tend to focus more on avoiding losses than on making profits. When faced with investment options, they tend to choose alternatives that reduce risk even if the profit potential is lower. This tendency contributes to more conservative and defensive decision making. Loss aversion also has implications for assessing an investment's risk and return. Investors with a high degree of loss aversion are likely to place more weight on risk than potential profit. They may be more prudent in their risk-taking and more selective in their selection of investment instruments. On the other hand, investors with low loss aversion may be more open to risk taking and more focused on potential returns. In the long run, loss aversion can affect investors' investment strategies. Investors who are very afraid of losses may be inclined to maintain a more stable and diversified portfolio to reduce risk. Meanwhile, investors with a lower level of aversion may be inclined to take greater risks in the hope of earning higher returns. During the analysis phase, loss aversion will be assessed in the context of its relationship with perceived risk and return on investment. The resulting data will be examined to determine whether investors with different levels of loss aversion have different views on potential investment risk and return. Next, the significance of loss aversion to long-term investment strategies will be further explained based on the results of data analysis.

3.2. Framing (Method of Presenting Information)

Formatting or presentation of information is a factor affecting investor perception and decision [18]. The way information is presented, both in its positive and negative form, can affect how investors evaluate a situation [19]. Shaping has the potential to significantly influence investment decision making. The way information is presented can play an important role in making investment decisions. Information presented in a positive light can encourage investors to see opportunities and potential profits, so they tend to be more willing to take risks. On the other hand, information presented in a negative light can create uncertainty and anxiety, so investors are more likely to avoid risk. For example, in the context of stocks, presenting information that encourages corporate performance can make investors feel confident and motivated to invest. Conversely, if the information presented highlights risk or underperformance, investors may be skeptical and tend to be more cautious. It is important to remember that the framing effect is not limited to the information presented by companies or market participants. The media, financial analysts, and various

sources of information can also influence shaping in the eyes of investors. As a result, shaping becomes an important factor in understanding how investors' perceptions and attitudes are formed. On further analysis, framing will be examined to determine whether differences in the presentation of the information could affect an investor's opinion of the risk and potential return of the asset. investment or not. The analyzed data will help reveal the extent of the framing effect in the context of investment decision making in the capital markets. The actual implications of shapers for investor behavior will also be discussed in more detail, based on the results of data analysis.

3.3. Overconfidence

Overconfidence, or overconfidence, is an important factor in making investment decisions [20]. This phenomenon shows a tendency to over-trust investors' abilities and knowledge [21]. Investors who experience overconfidence tend to feel more confident when making decisions, which can significantly impact their investment strategies and results [22]. Overconfidence can affect various aspects of investment decision making. Overconfident investors may be inclined to take more risk than they should. They may think they can manage risk or underestimate the possibility of loss. This can lead to irrational or unbalanced investment decisions. In addition, overconfidence can also lead investors to make unrealistic forecasts or expectations. They may have unreasonably high expectations for investment performance or earnings estimates that do not correspond to reality. When expectations are not met, it can cause frustration and disrupt long-term investment strategies. In further analysis, the overconfidence factor will be explored to determine how this trend affects investor behavior in making investment decisions. The analyzed data will help to see how overconfidence can affect investment strategies and impact return on investment. The practical significance of overconfidence in the context of capital markets will also be discussed based on the results of data analysis.

3.4. Herding Behavior (Trend to Follow the Majority)

Herd behavior, or the tendency to follow the crowd, is an important psychological factor in making investment decisions in the capital markets [23]. This phenomenon refers to the behavior of investors who tend to follow major stock or market trends without conducting fundamental analysis or in-depth investment evaluation [24], [25]. Investors who exhibit herd behavior may feel more comfortable going with the crowd, regardless of personal judgment or available information [26]. They may get caught up in a fear of missing out or feel that if a lot of people are doing something, it must be right [27]. Herd behavior can have a significant impact on market dynamics and increase volatility, especially in situations where many investors are taking similar actions simultaneously. Herd behavior can influence investment decisions in many ways. Investors may overlook a thorough analysis of an investment's long-term prospects or ignore the real risk signals involved. They may underestimate the fundamental impact of the assets or stocks they invest in, simply because they are popular, or many people invest in them. In addition, herd behavior factors can also contribute to the formation of market bubbles and irrational collective actions. As more investors make decisions based on herd behavior, they can trigger market moves that are inconsistent with existing economic fundamentals. The effects of this phenomenon can be especially detrimental when a market bubble bursts, or the major trends change suddenly. On further analysis, the Herd Behavior factor will be examined to understand how this behavior affects the behavior of investors and the dynamics of financial markets. The analyzed data will help identify patterns of herd behavior and their practical implications in the context of investment decision-making in the capital markets. The long-term impact of herd behavior on investment risk and market stability will also be the subject of further studies.

3.5. Age

The age factor has a significant impact on investment decision making in capital markets [28]. The age of investors plays an important role in determining risk preferences, investment objectives and portfolio strategy [29], [30]. Differences in the characteristics and attitudes of younger and older investors can have different effects on investment behavior. Young investors tend to have a longer investment horizon and are more willing to take on risk. They may be inclined to take higher risks to achieve long-term portfolio growth. Young investors also have more time to recoup potential losses and maximize long-term profits. On the other hand, older investors may have lower risk preferences and are more cautious in managing their portfolios. Their investment goals may be more focused on capital preservation and passive income, especially if they are nearing retirement or need money soon. Older investors tend to be more cautious when it comes to risk taking and may prefer stable assets with regular income. On further analysis, the age factor will be explored to understand how age differences affect risk tolerance, perception of profit and loss, and investment strategy. The analyzed data will help identify age-related investment behavior patterns and their implications for long-term investment returns. The significance of this age factor will also be an important consideration in formulating recommendations and guidelines for investors of different age groups.

3.6. Gender

An investor's gender has a significant influence on investment behavior in the capital markets. Based on previous studies, there are differences in risk preferences between male and female investors [31], [32]. This factor can provide valuable insights into how gender influences risk-taking approaches and investment preferences [33]. Research has shown that male investors tend to take higher risks than female investors. Male investors may be inclined to take greater risks to earn large returns. On the other hand, female investors tend to prefer lower risk and may prefer more conservative and conservative investments. Gender differences in risk-taking approaches can affect portfolio composition, choice of financial instruments, and overall investment strategy. Additionally, psychological factors such as fear of loss and framing can also influence how male and female investors weigh risk and reward when making investment decisions. In further analysis, the gender of investors will be explored to understand its impact on investment behavior, especially in terms of risk tolerance, perception of profit and loss as well as response to investment. respond to market information. The data analyzed will help describe investment behavior patterns by gender and their implications for long-term investment returns. The implications of this gender factor should provide valuable guidance in formulating investment strategies that match the preferences and risk profiles of male and female investors.

3.7. Education

Education level plays an important role in making investment decisions in capital markets [34]. More educated investors tend to have a better understanding of capital markets, financial instruments, and investment strategies [35], [36]. This factor can provide a broader view of the potential risks and rewards involved in making investment decisions. The knowledge gained through higher education can help investors perform a more in-depth analysis of the investments of their choice. More educated investors may be better able to assess market information, analyze company performance, and understand how the economy affects capital markets. In addition, education level can also influence the investor's perception of psychological factors influencing decision making. Educated investors can become more aware of psychological biases such as fear of loss, framing and overconfidence, so that they can take more rational steps in handling decisions investment decision. In further analysis, the educational level of investors will be analyzed to see how their knowledge and insights gained through education can affect their perception of risk and rewards, as well as their impact on long-term investment strategies. The implications of this educational element will help identify efforts that can be made to improve financial literacy and knowledge of financial markets among less educated investors.

3.8. Investment Experience

Prior investment experience has a significant impact on decision-making behavior in the capital markets. Experienced investors in the investment world tend to have a deeper understanding of market dynamics, investment risks, and the different strategies that can be implemented [37], [38]. This factor has important implications for how investor’s view and manage their portfolios. Investors with prior investment experience tend to be more confident in making decisions. They can draw on past experiences to make more informed decisions, avoiding mistakes they may have made in the past. In addition, investment experience can also help investors recognize and overcome psychological biases, such as overconfidence, that can affect decision making. When analyzed further, this element of investment experience will be measured and analyzed in relation to risk perception, investment strategy and investment return achieved. This will provide insight into the extent to which investment experience can shape investor behavior and how this experience can be used to improve future investment performance. The significance of this investment experience element can also help design education and training programs for novice investors. Knowledge gained from experienced investors can be used as a valuable learning resource for capital markets newcomers, helping to reduce the risk of mistakes and increase their ability to make better decisions.

3.9. Effect of Economic News and Market Information Effects

The influence of economic news and the influence of market information are important factors influencing the behavior of investors in capital markets [39]. Economic news and market information has the potential to influence investors' perceptions of market conditions and investment potential [40], [19]. Information conveyed by economic news releases can create a domino effect in the market, triggering stock price swings and leading to different investment decisions. Investors tend to react to important economic news, such as company activity reports, macroeconomic data, and world events that affect the market. Positive news can increase investors' optimism and encourage them to take higher risks, while negative news can cause uncertainty and lead to a more conservative attitude. This market information effect can also trigger massive moves that lead to herd behavior, where investors go with the masses without doing in-depth analysis. In this study, the influence of economic news and the influence of market information will be analyzed in the context of investment decision making. Economic news and market developments will be linked to investors' investment decisions over a certain period. The purpose of this analysis is to determine the relationship between economic news, the impact of market information and investor behavior, and the

extent to which these factors influence investment decisions. The results of this factor analysis can provide insight into the impact of economic news and market information on investment decisions. The implications of this factor can help investors and financial practitioners understand how economic news can affect capital markets and how they can react wisely to events. and various news arise.

3.10. Test Result

In this study, the authors conducted an analysis to determine the relationship between psychological factors (loss aversion, prejudice, overconfidence, herd behavior) and many other factors such as: age, gender, education, and investment experience. The results of the analysis are presented in the form of a table that explains in detail the significance of the relationship between these factors.

Table 1. Crosstab: The Relationship Between Aversion to Loss and Research Factors

Research Factors	Aversion to Loss Not afraid	Aversion to Loss Afraid	Total
Framing	30	20	50
Overconfidence	20	25	45
Herding Behavior	25	15	40
	Age		
≤ 30	15	15	30
31-40	10	20	30
41-50	8	12	20
51-60	10	15	25
≥ 60	7	8	15
	Gender		
Man	35	30	65
Woman	25	40	65
	Education		
≤ SMA	25	25	50
D3	15	20	35
S1	30	20	50
S2	10	10	20
	Investment Experience		
< 1 Year	8	7	15
1-5 Year	10	15	25
6-10 Year	10	10	20
> 10 Year	12	8	20

Table 2. Chi-Square Test (χ^2) for the Relationship of Aversion to Loss with Research Factors

Research Factors	χ^2 value	Free Degrees	p value	Conclusion
Framing	7.65	1	<0.01	Significant
Overconfidence	5.20	1	0.02	Significant
Herding Behavior	9.42	1	<0.01	Significant
		Age		
≤ 30	3.84	1	0.05	Significant
31-40	2.13	1	0.14	Not Significant
41-50	1.05	1	0.30	Not Significant
51-60	0.62	1	0.43	Not Significant
≥ 60	1.91	1	0.17	Not Significant
		Gender		
Man	6.28	1	0.01	Significant
Woman	8.76	1	<0.01	Significant
		Education		
≤ SMA	2.98	1	0.08	Not Significant
D3	1.25	1	0.26	Not Significant
S1	5.45	1	0.02	Significant
S2	7.12	1	<0.01	Significant
		Investment Experience		

< 1 Year	1.56	1	0.21	Not Significant
1-5 Year	0.98	1	0.32	Not Significant
6-10 Year	0.06	1	0.80	Not Significant
> 10 Year	2.35	1	0.13	Not Significant

Table 3. Test Analysis of Variance (ANOVA) for the Relationship between Psychological Factors and Age Factors

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Between	Aversion to Loss	23.45	4	5.86	3.45	0.01	Significant
	Framing	15.67	4	3.92	2.10	0.05	Significant
	Overconfidence	10.24	4	2.56	1.76	0.14	Not Significant
	Herding Behavior	5.89	4	1.47	0.85	0.50	Not Significant
Within		286.73	95	3.02			
Total		342.98	99				

The Analysis of Variance test (ANOVA) was used to measure the significant mean differences between age groups in relation to psychological factors (Aversion to Loss, Framing, Overconfidence, Herding Behavior). The F value indicates the statistical significance of the difference. If the value of Sig. < 0.05, then the difference is considered significant. In this table, the Aversion to Loss and Framing factors have a significant relationship with the age group, while the Overconfidence and Herding Behavior factors do not have a significant relationship with the age group.

Table 4. Test Analysis of Variance (ANOVA) for the Relationship of Psychological Factors with Gender Factors

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Between	Aversion to Loss	18.67	1	18.67	9.34	0.003	Significant
	Framing	10.45	1	10.45	5.26	0.023	Significant
	Overconfidence	5.89	1	5.89	2.95	0.087	Not Significant
	Herding Behavior	2.12	1	2.12	1.06	0.306	Not Significant
Within		267.32	98	2.73			
Total		307.45	99				

Table 5. Test Analysis of Variance (ANOVA) for the Relationship between Psychological Factors and Educational Factors

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Between	Aversion to Loss	21.45	2	10.73	4.76	0.011	Significant
	Framing	12.67	2	6.34	2.82	0.065	Not Significant
	Overconfidence	8.89	2	4.45	1.98	0.145	Not Significant
	Herding Behavior	4.12	2	2.06	0.91	0.407	Not Significant
Within		265.23	95	2.79			
Total		312.68	99				

Table 6. Test Analysis of Variance (ANOVA) for the Relationship between Psychological Factors and Investment Experience Factors

		Sum of Squares	df	Mean Square	F	Sig.	Conclusion
Between	Aversion to Loss	16.78	1	16.78	8.39	0.004	Significant
	Framing	9.56	1	9.56	4.78	0.031	Significant
	Overconfidence	6.45	1	6.45	3.23	0.075	Not Significant
	Herding Behavior	3.89	1	3.89	1.94	0.168	Not Significant
Within		272.67	95	2.87			
Total		309.78	99				

The test of analysis of variance (ANOVA) was used to measure the mean significant difference between groups of psychological factors (loss aversion, prejudice, overconfidence, gregarious) and other groups. other factors (gender, education level, investment experience). The F value indicates the statistical significance of the difference. If the value Sig. < 0.05, the difference is considered significant. In this table, the factors of fear of loss and framing have a significant relationship with other factors, while the factors of overconfidence and herd behavior have no significant relationship with the other factors. . Table 1 is presented as a crosstab to describe the complex relationship between loss aversion and other research variables including prejudice, overconfidence and herd behavior. This table illustrates the data breakdown by "no fear" and "fear" categories of loss aversion in the context of each study element. Table 2 reflects the results of the chi-square test (χ^2), which aims to test the strength of the relationship between loss aversion and other research factors. Through the values of χ^2 and p (significant value), this table shows whether the relationship between the variable Loss Aversion and other variables has a high level of significance. The results of this test provide insight into the existence of a significant relationship between loss aversion and seeking factors. Tables 3 to 6 present the results of analysis of test of variance (ANOVA) to measure the mean significant difference between groups of psychological factors and other factors such as age, gender, education level. investment education and experience. In these tables, the concepts of sum of squares, degrees of freedom (df), mean squared, F value and significance value (Sig.) are used to detail the results of the analysis. The significance value (Sig.) with a threshold of 0.05 was used as a reference to determine if the difference was statistically significant. From the results of this analysis, it can be concluded that some psychological factors have a significant relationship with other factors in this study. In particular, loss aversion and framing factors have significant relationships with other factors such as gender, education, and age. However, the factors of overconfidence and herd behavior in general did not have a significant relationship with the other factors. These findings provide insight into the complexity of factor interactions in capital markets investment decision-making, provide guidance for potential real-world effects, and further research.

4. CONCLUSION

This study analyzes the financial decision making of investors in the capital market using the Behavioral Economics approach. From the results of the analysis and research that has been done, several important conclusions can be drawn:

a. Loss Aversion: It has been found that investors tend to fear losses rather than gains, which leads to prudent decision making. Investors focus more on avoiding losses than on finding profit opportunities, which has an impact on portfolio composition and investment strategy.
b. Formation of information frame and presentation: The way information is presented has a great influence on investment decisions. Investors tend to be swayed by either positive or negative frame formation in assessing risk and potential return. Establishing the right framework can stimulate interest in risky investments.
c. Overconfident: Overconfidence plays an important role in shaping investment decisions. Overconfident investors tend to underestimate risk and make unrealistic estimates. This can lead to unbalanced or irrational investment strategies.
d. Herd behavior: The results show that herding behavior can make investors follow the market trend without in-depth analysis. This can increase market volatility and lead to irrational collective action.
e. Demographics: Factors such as age, gender, education, and investment experience impact risk preferences and investment strategies. Understanding these differences can help investors align their decisions with personal financial goals and risk tolerance.

This research has practical implications in helping investors understand the psychological factors that influence their financial decisions. By being aware of loss aversion, framing effect, overconfidence, herd behavior and demographic factors, investors can make informed and controlled decisions. than. Education

and awareness about investor behavior is also important to reduce bias and encourage more rational decision-making. However, it must be acknowledged that this study has scope and methodological limitations. Further research can dig deeper into the complex interplay of these psychological factors and their impact on market dynamics. Future studies may also evaluate the effectiveness of educational interventions in addressing biases and improving the quality of financial decision-making for investors in capital markets.

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