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# FACTORS INFLUENCING INVESTMENT DECISION MAKING IN FOREIGN EXCHANGE: FINANCIAL LITERACY, RISK PERCEPTION, LOSS AVERSION

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## Abstract

Public interest in *forex* investment is increasing along with easier access to information and technological developments. However, many *forex traders* make investment decisions without adequate knowledge and consideration of risk. This study aims to examine the influence of financial literacy, risk perception, and loss aversion on *forex* investment decisions. The research population consists of *forex traders* in Surabaya with specific criteria. Questionnaires were distributed online using Google Forms as a data collection instrument. The research employs a quantitative approach using primary data and Partial Least Square (PLS) analysis. The results indicate that high levels of financial literacy enhance *traders*' ability to gather and analyze information before investing. Good risk perception encourages *traders* to be more cautious in facing *forex* market fluctuations. Loss aversion influences *traders* to avoid significant losses, leading them to be more selective in choosing investment strategies. These psychological factors become increasingly relevant with technological advancements and the ease of accessing *trading* platforms.

**Keywords:** Financial Literacy, Risk Perception, Loss Aversion, Investment Decision, *Forex Trading*

## INTRODUCTION

Investment is one of the important instruments in achieving long-term financial goals. Among various types of investment instruments available, *foreign exchange* (*forex*) has become one of the most sought-after because it offers high liquidity levels and significant profit potential. According to a survey conducted by the Bank for International Settlements in 2022, the daily transaction value in the *forex* market reached 7.5 trillion US dollars, an increase of 14% compared to three years earlier. However, the high profit potential in *forex* is proportional to the risks faced, considering the very rapid and unpredictable currency price fluctuations. Therefore, investment decisions in *forex* become a very crucial aspect that must be seriously considered by *traders*.

Inappropriate investment decisions can cause significant losses for *forex* participants. Foreign currency *trading* activities are categorized as high-risk investments, where errors in decision-making can result in the loss of all funds. Based on the view of Bahri et al., (2024), investment decisions are the process of selecting investment alternatives that are most suitable to the investor's objectives and risk profile. In this context, decision-making must be done rationally and strategically, considering various factors that influence investor preferences and perceptions of risk and profit. Therefore, the study of psychological and cognitive factors becomes relevant to understanding investor behavior in the *forex* market.

One of the main factors influencing investment decisions is financial literacy, which is an important foundation for individuals to manage their finances effectively. Financial literacy encompasses three key elements: access to accurate information, the ability to analyze and make decisions, and appropriate attitudes in facing financial situations (Fuadi & Trisnaningsih, 2022). Individuals with high levels of financial literacy tend to be better able to understand risk concepts, financial management, and investment strategies. Several previous studies have shown that financial literacy has a significant influence on investment decisions Firdaus et al., (2022); Shintawati & Budidarma, (2023); Yanti & Endri, (2024). However, different results were found by Chofifah et al., (2023), who stated that high levels of financial literacy do not always align with optimal investment decisions. This shows that the influence of financial literacy on investment decisions is not yet conclusive and is still relevant for further research, especially in the context of *forex* which has different dynamics from other investments.

Another factor that influences investment decisions is risk perception. Risk perception refers to an individual's subjective perception of the level of risk contained in an investment instrument. In the highly volatile *forex* market, risk perception has major implications in the decision-making process. Xu, (2023) stated that *traders* who have good risk perception tend to be better able to identify and manage risks effectively. Research by Mayora & Wiwik, (2024) and Nadhila et al., (2024) supports this view by showing the significant influence of risk perception on investment decisions. However, there are still other studies that show insignificant or even negative influences, making it important to re-examine this relationship in the context of *forex traders*.

Another equally important psychological factor is loss aversion, which is the tendency of individuals to avoid losses rather than pursue equivalent gains. In the fast-moving *forex* market, *traders* with high loss aversion tend to take quick action in closing losing positions, even before conducting in-depth analysis. Ingalagi & Mamata, (2024) showed that loss aversion has a significant influence on investment decisions. However, a

study by Gufron & Wibowo, (2024) found that loss aversion does not significantly affect Generation Z investors, indicating different results based on respondent characteristics. Therefore, it is necessary to analyze how loss aversion specifically plays a role in *forex* investment decisions, particularly among *traders* in Surabaya.

Behavioral Finance Theory provides a comprehensive theoretical framework for understanding investor behavior under uncertainty conditions. This theory is based on the assumption that investors are not always rational, but are influenced by psychological, cognitive, and emotional factors in the decision-making process (Nurbarani & Soepriyanto, 2022). In the highly fluctuating context of *forex*, the behavioral finance approach can provide deeper understanding of how financial literacy, risk perception, and loss aversion influence investor behavior.

Based on the literature review, it was found that research specifically examining the influence of these three variables in the context of *forex* investment decisions is still limited. The majority of previous studies focused more on investment instruments such as stocks, mutual funds, and crypto, which have different risk characteristics and market behaviors compared to *forex*. Additionally, previous studies tended to examine these variables separately. This research offers novelty by combining the three variables in one research model and applying them to *forex traders* in Surabaya as a population that has not been extensively explored in previous studies.

This research aims to analyze the influence of financial literacy, risk perception, and loss aversion on *forex* investment decisions among *traders* in Surabaya. This research is expected to provide empirical and practical contributions in understanding *forex* investor behavior and serve as a reference for making wiser and more rational decisions amid uncertain market conditions.

## REVIEW OF LITERATURE

The theory underlying this research is Behavioral Finance Theory, which emphasizes that financial decisions are not only based on logic, but are also influenced by psychological and emotional aspects of investors. In the context of highly volatile *forex* markets, understanding investor behavior becomes important for analyzing the investment decisions they make (Nurbarani & Soepriyanto, 2022).

One important factor in investment decision-making is financial literacy. Otoritas Jasa Keuangan, (2024) defines financial literacy as knowledge, skills, and beliefs that influence attitudes and behavior in making financial decisions. Individuals with good financial literacy tend to be able to make rational and planned investment decisions. This is reinforced by previous research showing that financial literacy significantly influences investment decisions (Firdaus et al., 2022); (Shintawati & Budidarma, 2023).

The second factor that influences investment decisions is risk perception. Risk perception is investors' subjective assessment of potential losses from an investment. Investors with realistic risk perceptions tend to be more cautious and consider various possibilities before making decisions (Oktasari et al., 2024). Research shows that risk perception has a significant influence on investment decisions, especially in the context of high-risk instruments such as *forex* (Mayora & Wiwik, 2024); (Nadhila et al., 2024).

Another factor is loss aversion, which is the tendency of individuals to avoid losses rather than pursue gains of equivalent value. In practice, investors with high levels of loss aversion will tend to hold losing positions and take profits too quickly for fear of losing (Ingalagi & Mamata, 2024). Research shows that loss aversion can significantly influence investor behavior, both in choosing investment instruments and in responding to market changes (Ermulyawati et al., 2024); (Azzahara et al., 2024).

Investment decisions are the result of interactions between various psychological and rational factors. Investors need to consider aspects of financial literacy, risk perception, and tendencies toward loss aversion in order to make balanced decisions that match their risk profile (Yanti & Endri, 2024). In dynamic and high-risk *forex* markets, understanding these factors becomes very crucial.

This research seeks to examine the influence of financial literacy, risk perception, and loss aversion simultaneously on investment decisions among *forex traders* in Surabaya. This focus was chosen because there is still a lack of academic studies that specifically examine investment decisions in the *forex* context, especially in Indonesia. With this approach, it is hoped that the research can provide scientific and practical contributions to the development of behavioral finance literature in *forex* investment.

## RESEARCH METHOD

This study employs a quantitative approach with *explanatory research*. According to Sugiyono (2020:16), quantitative approach is research that emphasizes numerical data obtained and then processed using statistical analysis. Explanatory research aims to evaluate the influences between research variables with previously formulated hypotheses. The research object focuses on *forex traders* in Surabaya to understand and investigate characteristics, behaviors, or relationships between related variables.

The population of this study consists of 325 *forex traders* in Surabaya in 2025, obtained from the membership database of the Surabaya *Forex* Trader Community, verified by MIFX Surabaya as one of the official *forex* brokers in Indonesia. According to Sugiyono (2020:126), a population is a general area consisting of subjects or objects with certain characteristics chosen by researchers to be studied before drawing conclusions. The selection of *forex traders* in Surabaya was made because the city is one of the significant *trading* and investment activity centers in Indonesia, and has a well-organized trader community.

The sampling technique uses Non-Probability Sampling with Purposive Sampling technique, where, according to Sugiyono (2020:131), this technique does not provide equal opportunities for population members to be selected as samples, but sample selection is made with certain considerations according to desired criteria. The established criteria include aged between 21-50 years as this age group is in a cognitively and financially productive period, having a minimum income of Rp10 million, indicating significant financial commitment, conducting at least one *forex* transaction per week to identify active *traders*, participating in investment socialization, and joining *foreign exchange trading* communities. These criteria aim to ensure that respondents have active and relevant involvement in *forex trading* activities, enabling them to provide representative and valid data. The criteria refer to the approach used by Lumbantobing (2024) to maintain validity and data accuracy in research on *forex* trader behavior.

Investment Decision is defined as a means to maintain and expand prosperity that requires proper decisions to avoid wrong investments, and is part of financial decisions involving investment selection actions (Nadhila et al., 2024). The measurement indicators of this variable consist of three aspects: investment decisions support chosen investment goals, preparing to face loss risks, and obtaining results according to investment decision expectations. Measurement uses a 5-point Likert scale from strongly disagree (1) to strongly agree (5) according to Sugiyono (2020:146), who states that the Likert scale is a scale containing five levels of answer preferences.

Financial Literacy is defined as an individual's ability and knowledge in making decisions, planning, and conducting financial accumulation (Nadhila et al., 2024). The measurement indicators of this variable include eight aspects: understanding charged interest rates, understanding financial management methods, knowing how to invest in *forex* markets, understanding company credit ratings, having knowledge about *forex* market activities, understanding the role of brokerage companies in registration with Bappebti, always trusting when transacting in *forex* markets, and having no problems in paying attention to *forex* market information. Measurement uses a 5-point Likert scale to measure respondents' financial literacy levels.

Risk Perception is defined as a process of perception, evaluation, and risk interpretation by an investor toward investment instruments and is related to the investment decision-making process (Mayora & Wiwik, 2024). The measurement indicators of this variable consist of four aspects: finding out and considering risks to be received before investing, choosing investment instruments based on known information and considering risks, investor confidence in high-risk and high-return investments, and considering risks as warnings before investing. Measurement uses a 5-point Likert scale to assess *forex traders*' risk perception.

Loss Aversion is defined as inconsistent behavior caused by excessive concern about losses, which leads to excessive rejection of risks that potentially cause losses (Gufron & Wibowo, 2024). The measurement indicators of this variable include four aspects: focusing on losses rather than gains, being anxious when investment prices fall, refusing to add investments during bad markets, and prioritizing investment security over profits. Measurement uses a 5-point Likert scale to measure the level of loss avoidance among *forex traders* who become research respondents.

This study employs the Structural Equation Modeling (SEM) analysis technique with the Partial Least Squares (PLS) approach. This method was chosen because it can handle complex models, small sample sizes, and data that is not strictly normally distributed (Hair et al., 2021). PLS-SEM is a variance-based approach that focuses on dependent variable prediction through latent construct relationship estimation. The testing stages include: (1) Data Quality Test (Outer Model) consisting of convergent validity (outer loading > 0.70 and AVE > 0.50), discriminant validity (cross loading and Fornell-Lacker Criterion), and composite reliability (> 0.70); (2) Structural Model Analysis (Inner Model) including multicollinearity test (VIF < 5), coefficient of determination ($R^2$), and predictive relevance ($Q^2$); (3) Hypothesis Testing using bootstrapping with criteria of t-statistic ≥ 1.96 and p-value ≤ 0.05 to accept hypotheses at 5% significance level.

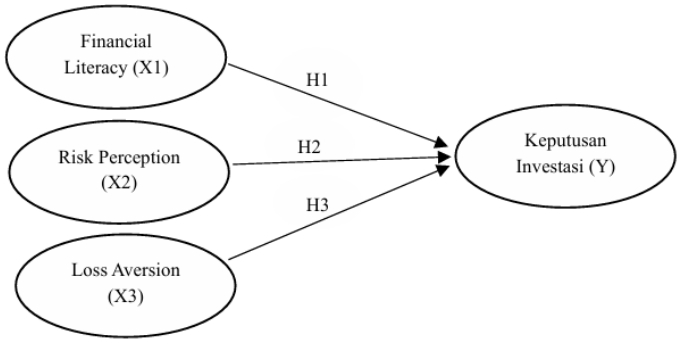
**Research Hypothesis**

The hypotheses proposed in this study are:

- H1: Financial Literacy has a positive and significant effect on Foreign Exchange Investment Decisions.
- H2: Risk Perception has a positive and significant effect on Foreign Exchange Investment Decisions.
- H3: Loss Aversion has a positive and significant effect on Foreign Exchange Investment Decisions.

**Research Model**

This research model describes the relationship between independent variables (financial literacy, risk perception, and loss aversion) to dependent variable (foreign exchange investment decisions). This model can be illustrated as follows:




The image of the model of this study shows that the three independent variables have a direct relationship to foreign exchange investment decisions, which will be tested through multiple linear regression analysis. This study uses a quantitative approach with a survey method, where data is collected through a questionnaire with a Likert scale. The data analysis technique used is a linear regression test to test the influence of each variable on foreign exchange investment decisions. The results of this study are expected to provide deeper insights for investors in making better foreign exchange investment decisions by understanding the role of financial literacy, risk perception, and loss aversion in investment decision-making processes.

## RESULTS AND DISCUSSION

### Measurement Model Assessment

### Convergent Validity

Convergent validity measures the extent to which indicators of a construct correlate highly with each other. It is evaluated through outer loading values, where indicators are considered valid if they have loading values > 0.70. However, indicators with loading values between 0.50-0.70 can still be accepted if AVE and composite reliability meet the criteria. Indicators with loading values < 0.40 should be removed from the model. Additionally, Average Variance Extracted (AVE) is used to test convergent validity, with a minimum AVE value of 0.50. The results demonstrate that all indicators successfully meet the convergent validity criteria, as evidenced by outer loading values exceeding the minimum threshold of 0.70 (Hair et al., 2021).

**Loading Factor Values**

**Table 1.**
**Loading Factor Values Results**

| Instrument | Financial Literacy | Risk Perception | Loss Aversion | Investment Decision | Remarks |
|---|---|---|---|---|---|
| X1.1 | 0.840 | | | | Valid |
| X1.2 | 0.890 | | | | Valid |
| X1.3 | 0.822 | | | | Valid |
| X1.4 | 0.860 | | | | Valid |
| X1.5 | 0.878 | | | | Valid |
| X2.1 | | 0.865 | | | Valid |
| X2.2 | | 0.884 | | | Valid |
| X2.3 | | 0.859 | | | Valid |
| X2.4 | | 0.867 | | | Valid |
| X3.1 | | | 0.837 | | Valid |
| X3.2 | | | 0.841 | | Valid |
| X3.3 | | | 0.843 | | Valid |
| X3.4 | | | 0.854 | | Valid |
| Y1 | | | | 0.884 | Valid |
| Y2 | | | | 0.865 | Valid |
| Y3 | | | | 0.895 | Valid |
| Y4 | | | | 0.897 | Valid |

The evaluation of convergent validity began with testing the loading factor values of each indicator. The analysis results show that all indicators have outer loading factor values above 0.70, indicating that the convergent validity criteria are well met. Financial Literacy indicators (X1.1-X1.5) show loading values ranging from 0.822-0.890, with the highest value on indicator X1.2 (0.890) and the lowest on X1.3 (0.822). Risk Perception (X2.1-X2.4) has loading factor values between 0.859-0.884, with X2.2 showing the highest value (0.884). Loss Aversion (X3.1-X3.4) has a value range of 0.837-0.854, while Investment Decision (Y1-Y4) shows the highest loading factor values with a range of 0.884-0.897.

**Average Variance Extracted (AVE)**

**Table 2.**
**AVE Results**

| Variable | AVE | Remarks |
|---|---|---|
| Financial Literacy | 0.737 | Valid |
| Risk Perception | 0.754 | Valid |
| Loss Aversion | 0.712 | Valid |
| Investment Decision | 0.783 | Valid |

The AVE testing shows that all variables have values above 0.50, confirming adequate convergent validity. Financial Literacy has an AVE value of 0.737, Risk Perception of 0.754, Loss Aversion of 0.712, and Investment Decision of 0.783. These results indicate that each construct is able to explain more than 50% of the variance of its indicators.

**Discriminant Validity**

Discriminant validity measures the extent to which a construct is truly different from other constructs. It can be tested through cross-loading (indicator loading values should be higher on their own construct than on other constructs) and Fornell-Larcker Criterion (square root of AVE for each construct should be higher than correlations between other constructs in the model) (Hair et al., 2021).

**Cross Loading**

**Table 3.**
**Cross Loading Test Results**

| Variable | Financial Literacy | Risk Perception | Loss Aversion | Investment Decision | Remarks |
|---|---|---|---|---|---|
| Financial literacy | **0.858** | | | | Valid |
| Risk perception | 0.491 | **0.869** | 0.358 | 0.644 | Valid |
| Loss aversion | 0.359 | | **0.844** | 0.467 | Valid |
| Investment decision | 0.571 | | | **0.885** | Valid |

The cross-loading analysis reveals that each indicator exhibits a higher correlation with its own construct compared to other constructs. This indicates that each latent variable has good discriminant validity, where no indicators correlate highly with constructs other than the construct they are supposed to measure.

**Fornell-Larcker**

**Table 4.**
**Fornell-Larcker Test Results**

| Variable | Financial Literacy | Risk Perception | Loss Aversion | Investment Aecision | Remarks |
|---|---|---|---|---|---|
| Financial literacy | **0.858** | | | | Valid |

| | | | | | |
|---|---|---|---|---|---|
| Risk perception | 0.491 | **0.869** | 0.358 | 0.644 | Valid |
| Loss aversion | 0.359 | | **0.844** | 0.467 | Valid |
| Investment decision | 0.571 | | | **0.885** | Valid |

The Fornell-Larcker test shows that the square root of AVE values on the main diagonal for each variable (Financial Literacy = 0.858, Risk Perception = 0.869, Loss Aversion = 0.844, and Investment Decision = 0.885) is higher than the correlation values between constructs. These results confirm that each construct has adequate discriminant validity and can be clearly distinguished from other constructs.

**Composite Reliability**

**Table 5.**
**Composite Reliability Measurement Results**

| Variable | Composite reliability | Remarks |
|---|---|---|
| Financial literacy | 0.933 | Realiabel |
| Risk perception | 0.925 | Realiabel |
| Loss aversion | 0.908 | Realiabel |
| Investment decision | 0.935 | Realiabel |

The reliability evaluation shows that all variables have composite reliability values exceeding 0.70. Financial Literacy has a value of 0.933, Risk Perception of 0.925, Loss Aversion of 0.908, and Investment Decision of 0.935. These results indicate that all variables in the study have good and consistent reliability levels.

**Structural Model Assessment**

**Multicollinearity Test (VIF)**

**Table 6.**
**Multicollinearity Test Results**

| Variabel | VIF |
|---|---|
| Financial literacy | 1.387 |
| Risk perception | 1.209 |
| Loss aversion | 1.387 |

The multicollinearity test using the Variance Inflation Factor (VIF) shows that there are no multicollinearity problems in the model. All predictor constructs have low VIF values: Financial Literacy of 1.387, Risk Perception of 1.209, and Loss Aversion of 1.387. Since all VIF values are well below the threshold of 5, the model is free from multicollinearity problems.

**Coefficient of Determination ($R^2$)**

**Table 7.**
**R-square ($R^2$) Measurement Results**

| Variabel | R-squre |
|---|---|
| Investment Decision | 0.537 |

The $R^2$ value for the Investment Decision construct is 0.537, indicating that 53.7% of the variability in investment decisions can be explained by the variables Financial Literacy, Risk Perception, and Loss Aversion. This value indicates that the model has moderate predictive ability according to the established classification criteria.

**Predictive Relevance ($Q^2$)**

**Table 8.**
**Q-square ($Q^2$) Measurement Results**

| Variabel | Q-squre |
|---|---|
| Investment Decision | 0.404 |

The Q-square value obtained is 0.404, which exceeds the threshold of 0.25. This result shows that the structural model has good ability in estimating parameters and predicting relationships between variables, and has strong predictive relevance to explain investment decision behavior.

**Hypothesis Testing**

**Table 9.**
**Hypothesis Testing Results**

| Path Coefficient | Original sample (O) | T statistics (\|O/STDEV\|) | P values | Remarks |
|---|---|---|---|---|
| Financial Literacy (X1) -> Investment Decision (Y) | 0.285 | 5.274 | 0.000 | Signifikan |
| Risk Perception (X2) -> Investment Decision (Y) | 0.428 | 8.139 | 0.000 | Signifikan |
| Loss Aversion (X3) -> Investment Decision (Y) | 0.211 | 3.079 | 0.002 | Signifikan |

Hypothesis testing was conducted using the criteria of t-statistic ≥ 1.96 and p-value ≤ 0.05 at a 5% significance level. The test results show that all three hypotheses proposed in this study are accepted. The influence of Financial Literacy on Investment Decision shows a path coefficient of 0.285 with t-statistic 5.274 and p-value 0.000, indicating a positive and significant influence. Risk Perception on Investment Decision has the largest path coefficient of 0.428 with t-statistic 8.139 and p-value 0.000, showing the strongest and most significant influence compared to other variables. Loss Aversion on Investment Decision shows a path coefficient of 0.211 with t-statistic 3.079 and p-value 0.002, which although having the smallest influence, still has a positive and significant effect.

**The Influence of Financial Literacy on *Foreign Exchange* Investment Decisions**

Based on the hypothesis testing results, Financial Literacy (X1) is proven to have a positive and significant influence on Investment Decision (Y) with a t-statistics value of 5.274 and p-value 0.000 < 0.05. This finding shows that the higher the level of financial literacy possessed by *forex traders* in Surabaya, the wiser the investment decisions they make in the *foreign exchange* market. A good understanding of basic financial concepts such as risk, return, leverage, margin, and market fluctuations enables *traders* to make more planned decisions and avoid fatal errors in *foreign exchange* transactions.

In the context of Behavioral Finance Theory, investment decisions made by individuals are not entirely rational, but are influenced by psychological factors, experience, and knowledge possessed. High financial literacy can help *traders* reduce the impact of behavioral biases that commonly occur in *forex trading* activities, such as overconfidence, herd behavior, and loss aversion. A trader who has good financial knowledge tends to be more cautious about risks, more selective in analyzing market information, and able to manage emotions in fluctuating market situations. This finding is consistent with research conducted by Firdaus et al., (2022); Shintawati & Budidarma, (2023) dan Yanti & Endri, (2024), which shows that financial literacy significantly influences investment decisions. This research confirms that financial literacy strengthens positive financial behavior and reduces the tendency to make decisions based solely on intuition or emotional impulses.

**The Influence of Risk Perception on *Foreign Exchange* Investment Decisions**

Based on the hypothesis testing results, Risk Perception (X2) is proven to have a positive and significant influence on Investment Decision (Y) with a t-statistic value of 8.139 and p-value 0.000 < 0.05. This finding shows that the Risk Perception possessed by *forex traders* influences their investment decision-making. *Traders* who have good risk perception tend to be more careful in making decisions and more considerate of various possible outcomes from a transaction. Conversely, an incorrect or low perception of risk can encourage *traders* to act too aggressively without rational consideration.

In the context of the highly fluctuating *foreign exchange* market, risk perception becomes an important aspect in the decision-making process. *Traders* who understand that every transaction has potential losses will be more careful in managing capital, setting loss limits (stop loss), and choosing instruments that match their risk profile. This finding can be explained through Behavioral Finance Theory, which emphasizes that investors' perception of risk is not always consistent with objective reality in the market. This perception is often influenced by personal experience, emotional conditions, and cognitive biases such as availability bias and loss aversion. *Traders* with realistic risk perception will be better able to control emotions when extreme market movements occur, so they continue to make decisions based on analysis, not fear or greed.

**The Influence of Loss Aversion on *Foreign Exchange* Investment Decisions**

Based on the hypothesis testing results, Loss Aversion (X3) is proven to have a positive and significant influence on Investment Decision (Y) with a t-statistics value of 3.079 and p-value 0.002 < 0.05. This finding shows that the loss aversion tendency possessed by *forex traders* affects their investment decisions. *Traders* who have high levels of loss aversion tend to focus more on potential losses than potential gains that might be obtained. As a result, they become more careful in making decisions, even tending to avoid risks despite opportunities to get bigger returns.

In practice, *traders* who have loss aversion bias often show behaviors such as holding losing positions too long, hoping prices will reverse direction, or taking profits too quickly for fear of losing profits already gained. Such behavioral patterns reflect fear of losses that is greater than the desire to gain profits, which ultimately can hinder optimization of investment results. This finding can be explained through Behavioral Finance Theory, which states that financial decisions are often irrational and influenced by psychological aspects such as fear

of loss. In this context, loss aversion illustrates how emotions and perceptions of loss can overcome logical considerations and rational analysis.

## CONCLUSION

Based on the study of *forex traders* in Surabaya, it can be concluded that the three psychological and cognitive factors, namely financial literacy, risk perception, and loss aversion, have proven to positively influence the quality of *forex* investment decisions. *Traders* with good financial literacy are able to make more careful decisions, those who have informed risk perceptions tend to be wiser in investing, and *traders* with adequate levels of loss aversion make more conservative and measured decisions. Risk perception shows the most dominant influence on *forex* investment decisions, indicating that *traders*' ability to accurately identify and assess risks is the key to success in *forex trading* activities.

Theoretically, this research contributes to the development of behavioral finance theory by integrating three psychological constructs in the context of *forex trading* in emerging markets. The finding that risk perception has a dominant influence enriches understanding of the hierarchy of psychological factors in high-risk investment decision making. This study also extends the application of Behavioral Finance Theory in the context of *foreign exchange trading* in Indonesia, particularly in metropolitan cities such as Surabaya.

The practical implications of this research indicate that *forex trading* platforms and financial education institutions need to prioritize the development of training programs that focus on improving *traders*' risk assessment capabilities. Additionally, there is a need to develop more comprehensive and easily understood risk analysis tools to support the *trading* decision-making process. Financial regulators can also utilize these findings to design more effective investor protection policies by considering the psychological aspects of retail *traders*.

For future research, it is recommended to explore other psychological factors such as overconfidence bias, anchoring bias, and herding behavior that may influence *forex* investment decisions. Longitudinal research is also needed to understand the dynamics of trader behavior changes along with experience and fluctuating market conditions. Furthermore, comparative studies between *traders* in various major cities in Indonesia can provide more comprehensive insights into the influence of demographic and socio-economic factors on *forex trading* behavior. The development of machine learning-based predictive models that integrate psychological and technical factors also presents a promising research opportunity to improve the accuracy of *trading* performance predictions.

## REFERENCES

Azzahara, C. T. M., Tubastuvi, N., Purwidianti, W., & Bagis, F. (2024). Analisis Pengaruh Risk Perception, Risk Tolerance, Overconfidence, Dan Loss Aversion Terhadap Keputusan Investasi Generasi Milienial. *Ecobisma (Jurnal Ekonomi, Bisnis Dan Manajemen)*, *11*(1), 62–76. https://doi.org/10.36987/ecobi.v11i1.5334

Bahri, S., Maskudi, M., Aeni, D. S. N., & Risqiya, L. H. (2024). Keputusan Investasi Investor Pemula: Peran Literasi Keuangan, Persepsi Resiko Dan Overconfidance Dalam Mempengaruhi Keputusan Investasi Investor Pemula Di Lantai Bursa. *Journal of*

*Accounting and Finance*, *3*(1), 1–15. https://doi.org/10.31942/jafin.v3i1.10851

Chofifah, A. L., Muhdiyanto, & Ibrahim, M. W. (2023). 59214 2 Program Studi Manajemen, Fakultas Ekonomi dan Bisnis. *Magersari, Kec. Magelang Sel*, *21*(21), 59214.

Ermulyawati, E., Dedi Hariyanto, & Heni Safitri. (2024). Influence of Loss Aversion, Herding Bias and Regret Aversion Towards Investment Decision to Shareholder in Pontianak. *Journal of Economics, Social, and Humanities*, *1*(2). https://doi.org/10.30595/jesh.v1i1.149

Firdaus, M. Y., Ayati, A., & Aprilia, P. (2022). THE EFFECT OF FINANCIAL LITERATURE, INCOME AND HERDING BIAS ON INVESTMENT DECISIONS (Study on Students of the Faculty of Economics and Business, Mercu Buana University, Jakarta). *Indikator: Jurnal Ilmiah Manajemen Dan Bisnis*, *6*(1), 1. https://doi.org/10.22441/indikator.v6i1.13913

Fuadi, M. N., & Trisnaningsih, S. (2022). Pengaruh Literasi Keuangan Dan Lingkungan Sosial Terhadap Perencanaan Keuangan Pribadi. *Jurnal Proaksi*, *9*(2), 97–111. https://doi.org/10.32534/jpk.v9i2.2332

Gufron, A. M., & Wibowo, P. A. (2024). *FAKTOR-FAKTOR PSIKOLOGIS YANG MEMPENGARUHI KEPUTUSAN INVESTASI GENERASI Z: STUDI TENTANG ANCHORING, LOSS AVERSION, OVERCONFIDENCE, REGRET AVERSION, DAN REPRESENTATIVENESS*. *5*(3), 342–361.

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Evaluation of Formative Measurement Models*. https://doi.org/10.1007/978-3-030-80519-7_5

Ingalagi, S. V, & Mamata. (2024). Implications Of Loss Aversion And Investment Decisions. *Journal of Scientific Research and Technology*, *3*, 34–40. https://doi.org/10.61808/jsrt90

Lumbantobing, D. (2024). *Keefektifan manajemen risiko dan strategi investasi terhadap profitabilitas pada*. *06*(04), 1117–1124.

Mayora, G. M., & Wiwik, L. (2024). The Effect of Risk Perception, Recency Bias, Herding Behavior and Regret Aversion Bias on Investment Decision Making Among The Younger Generation in Surabaya. *Ekspektra : Jurnal Bisnis Dan Manajemen*, *8*(1), 80–94. https://doi.org/10.25139/ekt.v8i1.7482

Nadhila, A., Roy Sembel, R. S., & Malau, M. (2024). The Influence of Overconfidence and Risk Perception on Investment Decisions: The Moderating Effect of Financial Literacy on Individual Millennial Generation Investors. *Eduvest - Journal of Universal Studies*, *4*(6), 5280–5299. https://doi.org/10.59188/eduvest.v4i6.1219

Nurbarani, B. S., & Soepriyanto, G. (2022). Determinants of Investment Decision in Cryptocurrency: Evidence from Indonesian Investors. *Universal Journal of Accounting and Finance*, *10*(1), 254–266. https://doi.org/10.13189/ujaf.2022.100126

Oktasari, D. P., Nurjaya, N. N., & Karyatun, S. (2024). *Financial Literacy, Risk Perception, and Herding Effects on Investment Decisions*. *X*(August), 22–29.

https://doi.org/10.51244/IJRSI

Otoritas Jasa Keuangan. (2024). *OJK: Kerugian akibat investasi bodong capai Rp139,6 triliun sejak 2017*. https://www.antaranews.com/berita/4028658/ojk-kerugian-akibat-investasi-bodong-capairp1396-triliun-sejak-2017

Shintawati, M. P. D., & Budidarma, I. G. A. M. (2023). The Effect Of Income And Financial Literacy On Investment Decisions With Financial Behavior As An Intervening Variable. *International Journal of Science and Society*, *5*(5), 1–24. https://doi.org/10.54783/ijsoc.v5i5.864

Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

Xu, J. (2023). Behavioral Finance Provides Insights into Risk Perception and Risk Management. *Academic Journal of Management and Social Sciences*, *4*(1), 12–15. https://doi.org/10.54097/ajmss.v4i1.11472

Yanti, F., & Endri, E. (2024). Financial Behavior, Overconfidence, Risk Perception and Investment Decisions: The Mediating Role of Financial Literacy. *International Journal of Economics and Financial Issues*, *14*(5), 289–298. https://doi.org/10.32479/ijefi.16811