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## Impact of Emotions on Investment Decisions of Individual Investors in Vietnam Stock Market

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ARTICLE INFO	ABSTRACT		
Published Online:	To improve investment performance and achieve long-term returns, investors need to control their		
26 October 2022	emotions. The article studies the impact of emotions on individual investors' decision to buy and		
	securities, including two main expressions: loss aversion and regret aversion. The article uses		
	descriptive statistical methods and analyzes data through the results of a survey of 150 individual		
	investors on the Ho Chi Minh City Stock Exchange. The results show that investors' decisions are		
	influenced by loss aversion and regret aversion. Investors often feel stress when losing, they keep		
	losing stocks for a long time because they hope the price can rise again, but when they make a profit,		
	they sell their shares very quickly to take profits because they are afraid of regret if they lose their		
	profits, which reduces investment efficiency, even leads to losses. To improve investment results,		
Corresponding Author:	investors need to control their emotions well through careful planning and disciplined execution of		
Phan Ngoc Yen Xuan	the plan.		
KEYWORDS: emotion, loss aversion, investment decision, individual investor, regret aversion, stock market.			

## **1. INTRODUCTION**

Nowadays, the stock market is growing and playing an increasingly important role in the growth and stability of the economies of countries. Moreover, the stock market helps investors to make potential investment plans and seek profits, no matter how much invested capital, so it is suitable for many investors, specially individual investors.

Recently, despite the complicated development of the pandemic, Vietnam's stock market has had amazing growth, in December 28, 2021, the VN-Index reached 1,494.39 points, went up 35.4% compared to the end of 2020; market capitalization reached 7,729 trillion VND, up 46% compared to the end of 2020; the number of securities investment accounts dizzying increased, the number of individual accounts in Vietnam increased to 4.08 million accounts, an increase of 47.3% compared to the end of 2020; in which, the number of domestic investors accounted for 99% of the total number of investment accounts in the whole market. However, up to 90% of investors entering the market lose 90% of their assets in the first 90 days of trading, so why do investors still lose in such a favorable bull market? Is the cause only due to the lack of basic investment knowledge or is it influenced by other factors, why investors who have been emtered the market for a long time still cannot have stable profit? The reason many successful investors agree is the

ability to control emotions in the investor's decision-making process.

In the stock market, individual investors always have to make risky choice under uncertainty, they are strongly influenced by emotions and many other psychological factors. In addition, unlike institutional investors, the individual investor's decision-making process is not controlled by another entity but managed by himself, which makes decision making process is easily influenced by subjective emotions. Understanding the influence of emotions on the decisionmaking process of individual investors is very important and urgent in helping investors improve investment performance, which is the reason why this study is being implemented.

## 2. THEORETICAL FRAMEWORKS

# **2.1.** Concept and characteristics of individual investors

*Concept:* Investors in the stock market include individual investors and institutional investors. The individual investor is usually an amateur investor who conducts investment transactions through traditional or online brokers. Individual investors buy securities for their individual accounts and typically trade in significantly smaller amounts than institutional investors.

## Characteristics of individual investors:

Individual investors are amateur investors in stock market and typically invest much smaller amounts of money than institutional investors.

The size of the investment is very small compared to the total investment size of the market, so the decision of each individual investor is difficult or almost impossible to influence the price in the market.

Individual investors have absolute freedom in making their investment decisions, they are not controlled by any other person or organization. Because of this freedom, individual investors will react quickly to market movements but at the same time face the risk of losing self-control, leading to hasty and ineffective decisions.

The self-control of individual investors makes studying the impact of emotions on their decision-making become more necessary and important, which determines their investment performance.

#### 2.2. Features of the stock investment environment

*The concept of the stock market:* The place where investors buy, sell securities is called the stock market. The stock market is a part of the long-term capital market that transfers capital directly from investors to issuers, thereby performing the function of the financial market to provide medium and long-term capital for the economy.

The nature of the trading environment:

Stock trading is a decision-making activity under uncertainty and risk because the investor is not sure what the probability of each event is, any trade is possible to get profit or loss results.

The stock market is an unstructured environment, like a never-ending river, with no beginning or ending, it can change the direction of flow at any time (prices are always fluctuating and can change direction at any time), investors themselves must completely decide to stay out or participate in the market, the time to join, the volume, the time to leave market. They take full responsibility for their ending results.

The traditional concept of right and wrong does not exist in the trading market, certificates, degrees, reputation, high IQ cannot guarantee investors will be right in trading, decision of buy or sell based on expectations, people who trade in the right direction of the market then make a profit are right.

The potential for profit and loss in this market is unlimited, the trading is completely different from a gambling game. In any gambling game, participants decide how much to bet, they always know exactly how much they can win when they right and how much they lose when they wrong even they know what is the probability of winning or losing, The gambling game will end automatically when there is a win or loss result, players only start to continue the new game when they make the decision to participate in it. But it is different in trading, when entering into a trade, the potential profit - loss of each trade is unlimited, investors only exit the trade when they have to make a decision to end position. If nothing is done, the losses or gains will continue to increase indefinitely or only automatically end when the funds in the investor's account has been exhausted.

Because of the specific characteristics of the trading combined with the freedom of individual investors in the decision-making process, it shows the necessity and importance of research the impact of emotions on the decision-making process of individual investors if they want to survive and gain long-term profits in the stock market.

#### 2.3. Decision making process

Decision-making is the process by which people make the choice of one option among many alternatives from a situation in order to find out good outcomes for them. The purpose of investment is to earn money and decision making is an important activity that determines investment performance and how much money investors earn. In this study, investors' decisions are studied under two actions: buying and selling securities.

Behavioral economics in which the branch of behavioral finance focuses research to provide explanations for investor behavior in decision-making processes that consider the investor as a normal human being, their thinking is based on cognitive and emotional abilities as well as affected by psychological and emotional factors.

When people think to make decisions, they are governed by two systems of thinking that Daniel Kahneman (2017) calls system 1 and system 2:

System 1 works automatically and quickly, with little or no effort and no automatic control, it includes innate skills of humans as well as other animals (system 1 works on subconscious, experience, habit)

System 2 focuses on effortful thinking that include complex calculations, it ends when people can no longer focus (system 2 works on consciousness, logical thinking)

In traditional economics, people are considered rational, which means they use system 2 to analyze, think, and make the best decisions in all situations. Unfortunately, however, system 2 only works when people intentionally use it and cause fatigue. In most situations, people's decisions are based on the system, due to its quick, automatic and effortless characteristics, when people start the decision-making process, system 1 will be started first, it's easy to see that people often act according to their habits, familiarity, experience, or initial intuitions. It is important to note that system 1 cannot be turned off in all situations. Although system 1 helps people to respond quickly and sometimes effectively, it also has biases that lead to systematic errors, which include cognitive deviations and emotional deviations that cause irrational actions. The scope of this article is only to study the impact of emotions on the decision-making process of individual investors.

## **2.4.** *Influence of emotions on decision making Definition and characteristics of emotions:*

Emotions are states such as: happiness, sadness, anger, amusement, contempt, disgust, pride, fear, surprise, regret. In the brain, most emotional activity is regulated by the limbic system, in which the cerebral ganglia play an important role in eliciting basic emotions such as anger and fear... which are considered automatic, not the result of a controlled evaluation. Psychologists define emotions through the six following features:

The first feature, cognitive antecedents, means that in some cases beliefs cause emotional responses. For example, you may become angry at a driver who ran a red light and nearly collided with you because you believe the driver was not careful enough to put you in danger.

The second feature, intentional objects, it means that the emotion related to a person or a certain situation, this is the feature that distinguishes emotions and moods. Emotion is related to something while mood is a general feeling that is not focused on specific thing . For example, you may feel angry at the driver who ran a red light, but you may also be in a general melancholy mood if you are depressed.

The third feature, the physiological arousal, means that the emotional responses are accompanied by changes in the hormonal and nervous systems. For example, when you are close to being in a car crash, you may feel your blood pressure rise.

The fourth feature, biological expressions, emotion can be expressed through an individual's physical markers and way of acting. For example, you might express your anger towards a negligent driver through your scowling face, shouting voice, or raising your fists.

The fifth feature, valence, this is a psychological term used to assess feelings of joy and pain (or happiness and unhappiness), levels of positive and negative emotions through a scale with a neutral point in the middle.

The sixth characteristic, emotions are associated with the action tendencies, when you experience an emotion you often feel a strong impulse to act in a certain way, even in some cases you even feel compelled to act. For example, you have the urge to chase careless driver and let him know what you think.

Psychologists found that emotions include cognitive, physiological and overt behavioral factors, however, in 1980 Robert Zajonc discovered that emotions can also develop independently of awareness.

Human emotions have evolved, inherited and become innate to promote the survival of the species, so emotions are similar among people of the same culture. Basic emotions are established in our brain and they evolved before other nervous systems, the higher brain framework controlling complex psychological processes evolved after the basic emotions had existed. Equally importance is that emotions are contagious, it means that emotions can produce similar emotions in observers, which often happens unconsciously and subconsciously. The transmissibility of emotions can be important when there is social pressure (snowball effect) where many people feel the same at the same time not just because the initial stimulus affects others but also because of the contagion of emotions.

## Influence of emotions in decision making:

Emotion and consciousness are inseparable in decision making just as we are not separate emotions and consciousness when considering whether emotions are good or bad in decision making. Antonio Damasio's research provides evidence that emotions have an important influence on reason, decision making become bad without emotions, emotions and rational decisions are complementary to each other, they are integral parts of the human being.

Neuroscientists conclude that emotions enhance decisions in two ways. First, when making a critical decision, emotions drive the implementation of that decision. Sometimes there are so many options that evaluating each option takes a long time to make a decision, emotions help us focus on the key aspect of a decision so we don't get confused by the details. Emotions help us optimize because the cost of processing all the information can be overwhelming. Second, emotions help us make better decisions, and although suboptimal decisions are often attributed to emotions, poor decisions can still occur in the absence of emotions. Positive emotions can facilitate access to information in the brain, creativity, problem solving and negotiation thereby shaping better decision making.

Emotions allow us to react to stimuli quickly and rationally, including various situations such as sudden danger or a financial decision if we have the ability to control our emotional response properly. Many argue that a person's ability to succeed depends largely on emotional intelligence as measured by emotional quotient (EQ).

*Emotions influence individual investor decisionmaking in the stock market:* 

In the stock market, the emotions of traders translate into the mood of the market and then moving the price. Many recent studies have concluded that abnormal financial behavior can be explained by emotions. Emotions will influence an investor's attitude towards risk, negative emotions are often felt more strongly than positive emotions. Many empirical studies have provided evidence that emotions have a strong impact on investment decision-making in the stock market, common emotions include regret and fear.

Regret is a negative emotion, investors often feel regret about a bad investment decision that caused a loss, or achieved a lower return than they had the opportunity to receive, that negative feeling is magnified if they have to tell others about their loss, so people have a strong incentive to avoid feeling regret, which forms a fear of regret. Pride is the

opposite emotion of regret, people often feel proud and like to tell others about their good achievements, this is a positive emotion. Remarkable thing is that the effects of regret and pride are disproportionate, regret (negative emotion) often brings people stronger feelings and more drastic reactions than pride (positive emotions).

The fear of loss is the psychology of not wanting to lose, so investors will take actions to avoid losses. The loss aversion will increase as the bet amount increases but not suddenly. The fear of loss is the psychological basis that shapes people's attitudes to risk, which is the basis of the disposition effect.

The disposition effect is a phenomenon in which investors often tend to sell gaining securities too soon while holding on losing securities for too long. This phenomenon is common in most investors, even in ourselves if we are investors, this is a result of the impact of emotions on behavior. When securities are profitable, investors often experience a fear of regret, if the price goes against, then the profit is reduced or lost, so they quickly realize the profit by selling. When the profit is realized, they will feel proud and happy because they have made a profit. And if the stock is losing, the feeling of regretting the capital often makes them tend to hold that loss longer in the hope that the price can come back to not lose or reduce the loss, so they feel regret when having to close a losing position. The disposition effect often brings bad investment results to investors because when they make a profit they often make very little profit, but when they lose, they often suffer huge losses.

# 3. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The impact of emotions on decision making has been studied by many economists and included in teaching materials in economics and finance, such as books by Lucy F. Ackert, Richard Deaves (2018)), Richard J. Taffler, David A. Tuckett (2012). Especially in the field of stock investment, emotions are mentioned by many investors as an important factor affecting investment results, Rita Stevens (2021) has analyzed in detail the emotional movements of investors when they win as well as when they lose, how emotions influence investment actions, decisions and results, emotional mistakes that investors often make that lead to poor investment performance. Jack D. Schwager (2021) analyzes emotional movements and the impact of emotions on investors' trading, in order to be able to have stable long-term profits, investors must know how to control their emotions in the making decision process. The two main emotions that govern investors are fear and hope, Warren Buffett said that "be fearful when others are greedy, and greedy when others are fearful".

The impact of emotions on investment decisions is also studied in many empirical studies in countries around the world. Starting in developed countries as the studies of Solvic (1969, 1972), Tversky and Kahnneman (1974, 1979), Shefrin (1985), followed by a lot of research from Asian countries, the Middle East and Western countries such as Suzaida Bakar & Amelia Ng Chui Yi (2016), Jasman Tuyon & Zamri Ahmad (2016), Kengatharan (2014), Qadri and Shabbir (2014) and Nofsingera and Varmab (2013) all provide evidence for investors who are affected by emotions. Recently, the impact of emotions has received more attention not only in large economies but also in emerging countries, countries with economies in transition, in India some studies can be mentioned such as Devi. S., Karthikeyan G. B. (2018), Vipin Benny (2018), Shilpi Gupta, Monica Shrivastava (2021), Swati Prasad, Ravi Kiran and Rakesh Kumar Sharma (2021), in Parkistan there are studies Bilal Aziz. Muhammad Abdullah khan (2016), Muhammad Rehan, Jahanzaib Alvi, Lubna Javed, Baber Saleem (2021), Shahzeb Khurshid, Ashfaq Ahmed and Lubna Irrum (2021), in Malaysia with research by Jasman Tuyon, Zamri Ahmad (2016), Suzaida Bakar, Amelia Ng Chui Yi (2016), in Indonesia there is research by Kartini KARTINI, Katiya NAHDA (2021) and many other studies in other countries. These studies used quantitative models to examine the impact of emotions on decision-making and found that this process is strongly influenced by emotions, in which two main emotions are loss aversion and regret aversion.

In Vietnam, the factors affecting the investor's decision-making process including emotional factors have also received much attention from researchers, there have been empirical studies using economic models which evaluate the impact of emotions on investment decisions such as Vuong Duc Hoang Quan, Bui Chien Cong (2016), Cao Minh Man, Nguyen Ty Nhu, Tran Tuyen Thanh (2021), the results show that Vietnamese investors is affected by the loss aversion and regret aversion.

From previous studies, two emotions that investors often experience are loss aversion and regret aversion. The expression of these emotions is show in below table 1.

 Table 1: Measurement criteria

Loss aversion (LOSS)	LOSS1: After a profit, do not dare to continue trading due to fear of losing this profit even though the market trend is continuing LOSS2: When losing, do not dare to cut loss, move or cancel the stop loss, waiting for the price to return to or near the entry level to avoid losses	Swati Prasad (2021), Daniel Kahneman (2017), Mark Minervini (2019), Lucy F. Ackert, Richard Deaves (2018)					

		LOSS3: Stress when the current position is losing	
		LOSS4: When losing, open more positions to average your	
		losses in the hope of getting capital back	
Regret aversion (REG)		REG1: When the position has just made a little profit, hurry to	
		close this position even though the trend is still continuing	
		because of fear of losing that profit	
	REG2: When the market continues to move in the predicted		
	direction, regret for closing orders too soon, open a large	Swati Prasad (2021), Rita	
	auanian	volume position to offset when the market is nearing the end of	Stevens (2021), Daniel
	aversion	the trend (creating a top or a bottom)	Kahneman (2017), Lucy F.
		REG3: Avoid realizing losing positions to avoid the regret of	Ackert, Richard Deaves
		bad investment	(2018)
		REG4: Regret because not opening an position after the market	
		moved in the predicted direction	
		REG5: Being hesitant, do not wanting to sell stocks that used	
		to make big profits but now only meager profits	

*Hypothesis:* Loss aversion and regret aversion affect investment decisions of individual investors in Vietnam. The article uses descriptive statistics through a survey to assess the impact of these two factors on investors' investment decisions.

## 4. METHODOLOGY, DATA DESCRIPTION

#### 4.1. Research methodology:

The topic uses qualitative research methods in the following parts: literature review, theoritical frameworks using logical and historical methods, synthetic analysis method and expert methods.

The topic uses quantitative methods in assessing the influence of emotions on investors' decisions on the Ho Chi Minh City Stock Exchange, including economic statistics and data analysis method.

## 4.2. Data description:

The study uses primary data collected through surveys and interviews. The survey uses a 6-level Likert scale with the aim of letting investors express their opinions clearly, avoiding the median answer with 1 being "strongly disagree" and 6 being "strongly agree". The number of survey questionnaires must ensure the minimum number based on the number of variables in the model for the results to be reliable, based on the above principle and individual resource limit, 150 survey questionnaires were collected from individual investors who have trading accounts on the Ho Chi Minh City Stock Exchange of all ages and genders, convenient sample selection. Besides, interviewing the financial experts helps to adjust the model to suit the actual characteristics.

## 5. EMPIRICAL FINDINGS

## 5.1. Sample characteristics:

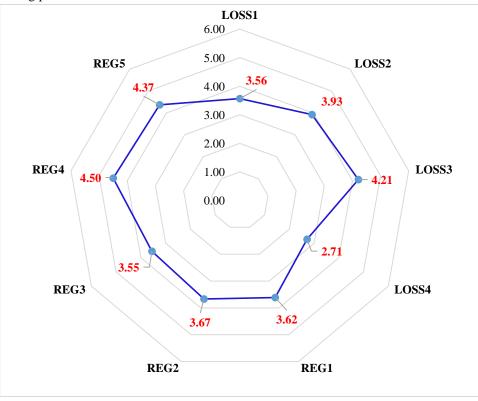
The author distributed a survey to 159 individual investors with trading accounts at the Ho Chi Minh City Stock Exchange, in which 9 questionnaires were not reliable enough, so they were excluded

As for age, investors are mostly young, 52% of investors are under the age of 30, 37.2% are between 30 and 45, and 9.6% are over 45 to 60 years old and only 1.2% investors are over 60 years old. Among the investors interviewed, 55.3% were female and 44.7% were male. 87.2% of them have a university education, 4.3% have a high school or college degree, and 8.5% have a master's degree. The majority of investors were trained or worked in the financial field, accounting for 71.3% of the investors interviewed. The number of investors just starting to invest in the stock market is quite large, 61.7% of the investors in the sample have less than 3 year experience, 35.1% have an investment period of 3 to 5 years, the number of investors with more than 5 years of experience accounts for only 3.2%.

## 5.2. Empirical findings

Survey results show that most investors are influenced by loss aversion and regret aversion in the decision-making process of buying and selling securities. The average rating point for loss aversion is 3.6/6 and for regret aversion is 3.94/6.

Figure 1: The average rating point



Source: Author

From the results shown in Figure 1, the most common manifestation of the loss aversion is the feeling of stress when the price of securities they bought falls under the purchase price and they are suffering a loss. 76,6% investors agree, in which 46.8% strongly agree, the average score of this expression is 4.21/6.

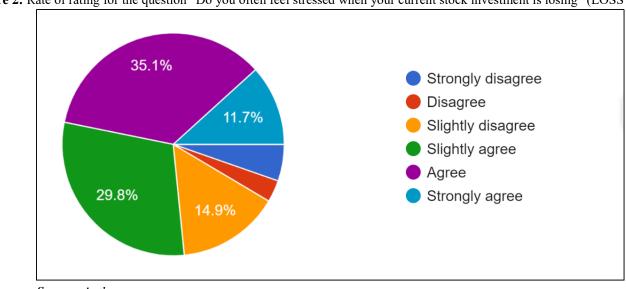
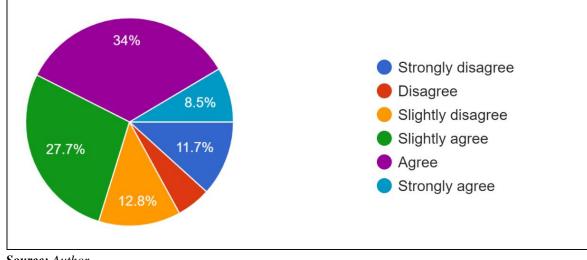


Figure 2: Rate of rating for the question "Do you often feel stressed when your current stock investment is losing" (LOSS 3)

Source: Author

Next is the feeling of confusion when the trade is losing, investors are hesitant to sell to stop loss, they move or extend the stop loss more than the initial planned level, even many investors delect the stop loss, hold the security in the hope that the price can come back to or near the purchase price to avoid a loss. 70% of investors said that they had that expression in which 42.5% of investors highly agreed.

**Figure 3:** Rate of rating for the question "When a trade is losing, you often hesitate, do not dare to cut loss order, move or cancel your stop loss, waiting for the price to return to close to or equal to the entry price to avoid losses" (LOSS 2)

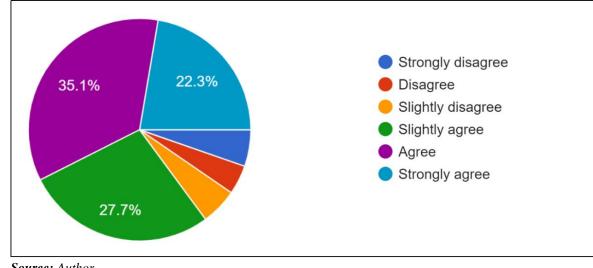


Source: Author

Fortunately, despite the loss aversion, there are few investors who open new positions to average your losses, this rate is only 34%. As for the regret aversion, this emotion affects investors more than the loss aversion, it was showed

by the feeling of regret when not buying the security after the security's price moves in the predicted direction, 85.1% of investors said they used to do, in which 57.4% of investors highly agreed.

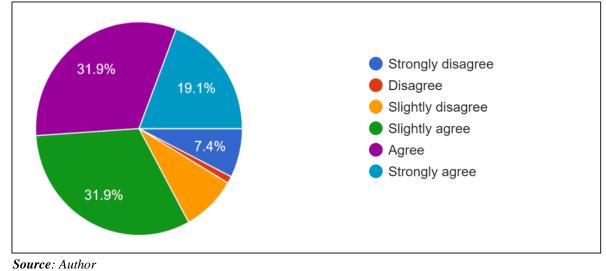
Figure 4: Rate of rating for the question "You often feel regret because not opening an position after the market moved in the predicted direction" (REG 4)



Source: Author

The feeling of regret appears when there is not only a loss, but also a profit, after the stock price increases and the investor has a strong profit, but they do not sell to take profit, they continue to keep it, then the price falls again and their profit was reduced, investors often feel regret and do not want to sell that security anymore, they hope the price can return to the high price it used to be. 82.9% of investors said they have experienced in which 51% highly agree.

Figure 5: Rate of rating for the question "You often feel hesitant, do not wanting to sell stocks that used to make big profits but now only meager profits" (REG 5)



#### 6. DISCUSSION

When investors' decisions are influenced by emotions, it is easy to lead to the effectiveness of those decisions being reduced, negatively affecting investment results. When the trade is losing, the investor cannot keep calm but feels stressed, this feeling negatively affects their physical and mental health, the decisions made in the stress is often not the optimal decision, they cannot even make any decision when stressed. As a result, investors do not sell securities to cut loss when the price drops to the target stop-loss price, investors begin to hold losing securities and hope for the price to recover to avoid losses. In some cases, the price actually turns back, investors avoid the pain of losing, but the feeling of stress makes investors often sell securities when the price returns to the purchase price to exit the trade, it also means getting rid of a psychological burden. In most of the other cases, the loss continues to grow until the investor can no longer bear it and has to sell or when the investor's account runs out of money. Thus, in the long run, if maintaining this trading way, if there is a profit, the profit will be very little, but if there is a loss, the loss will be huge, so investors will not be able to have a positive profit in the long-term.

Regreting can also lead to hasty trades, when they regret not buying the stock and now the stock price is rising as predicted, instead of patiently waiting for another better trade, this regret can encourage investors to buy when the stock price is too high, at this time the profit/risk ratio has increased significantly which reduces the potential profit of the trading, they can even buy when the price is about to peak leading to a loss. When the trade used to be high profitable but the investor did not sell to take profit, the price fell again reducing the investor's profit, the regret of the paper profit make decisions no longer based on reason, instead of re-analyzing the market to see if the market trend continues or not, they often stubbornly hold on securities in the hope that the price can return, they don't want to accept a small current profit because their mentality is anchored at the previous high price, as a result a profitable trade can turn into a breakeven trade even loss. Humans are always affected by emotions, it has formed according to human evolution and is ingrained in the subconscious as a natural instinct, and in order to succeed, people must know how to restrain and control them. If you can control your emotions, the more rational the decisions you make, the more effective they will be.

To control the emotions in trading, investors must first know the emotions they will experience when trading, understand it, understand how it affects their decisions, and most importantly, be willing to change so that you can gradually control yourself. The way to minimize decisions influenced by emotions is that before trading, investors must analyze carefully, give a trading plan as detailed as possible, identify specific buying prices, stop loss price and target price to take profit. When conducting a transaction, it is only the implementation of the plan, and investors must be really disciplined to follow the plan, should not change for any reason.

Why determine all these prices before trading? The answer is that at this time, investors are completely awake and wise, they have not been affected by emotions because they are still outside the market. Once in the market, seeing the price fluctuate, the profit and loss numbers are changing on your account, emotions will appear to occupy the investor's mind and at this time the decisions are very emotional. Therefore, at this stage, investors should only try to be disciplined to do exactly what they have planned no matter how the emotions are.

In short, to be able to overcome psychological barriers to success in financial trading, investors need to have a trading plan and specific principles and follow them disciplined. It requires investors to constantly practice self-discipline - it is the process of learning how to actively self-control and it is also an arduous and difficult process. It takes a lot of effort

because "you are your biggest enemy", once you have conquered it, success will come by itself.

## REFERENCES

- 1. Bilal Aziz, Muhammad Abdullah khan. (2016). Behavioral factors influencing individual investor's investment decision and performance, Evidence from Pakistan Stock Exchange. International Journal of Research in Finance and Marketing (IJRFM).
- Daniel Kahneman. (2017). *Tư duy nhanh và chậm*. Hà Nội: NXB. Thế Giới.
- Jack D. Schwager. (2021). Tâm lý hành vi trong đầu tự chứng khoán. Hà Nội: NXB. Dân Trí.
- Jasman Tuyon & Zamri Ahmad. (2016). Behavioural fifinance perspectives on Malaysian stock market effificiency. *Borsa \_ Istanbul Review*, 16(1), 43-61.
- Kartini KARTINI, Katiya NAHDA. (2021). Behavioral Biases on Investment Decision: A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(3), 1231–1240.
- Lingesiya Kengatharan, Navaneethakrishnan Kengatharan. (2014). The Influence of Behavioral Factors in Making Investment Decisions and Performance: Study on Investors of Colombo Stock Exchange, Sri Lanka. *Asian Journal of Finance & Accounting*, 6(1), 1-23.
- Lucy F. Ackert, Richard Deaves. (2018). Tài Chính Hành Vi. TP. Hồ Chí Minh: NXB. Hồng Đức.
- Mark Minervini. (2019). Giao dịch như một phù thủy chứng khoán. TP. Hồ Chí Minh: NXB Kinh Tế TP. HCM.
- Minh Man Cao, Nhu Ty Nguyen, Thanh Tuyen Tran. (2021). Behavioral factors on individual investors' decision making and investment performance: A Survey from the Vietnam stock market. *Journal of Asian Finance, Economics and Business*, 8(3), 0845-0853.
- Muhammad Rehan, Jahanzaib Alvi, Lubna Javed, Baber Saleem. (2021). Impact of Behavioral Factors on Investment Decisions and Performance: Evidence from Pakistan Stock Exchange. *Market Forces*, 16(1).
- Nofsingera, J. R., Varmab, A. (2013). Availability, Recency and Sophistication in the Repurchasing Behavior of Retail Investors. *Journal of Banking & Finance*, 37(7), 2572–2585.
- Qadri, S. U., Shabbir, M. (2014). An Empirical Study of Overconfidence and Illusion of Control Biases, Impact on Investor's Decision Making: An Evidence from ISE. *European Journal of Business* and Management, 6(14), 38-44.

- 13. Richard J. Taffler, David A. Tuckett. (2011). Tài chính cảm xúc: vai trò của vô thức trong các quyết định tài chính," trong *Tài chính Hành vi: Nhà đầu tư, doanh nghiệp và thị trường.* 1<sup>st</sup> ed. H. Kent Baker, John R. Nofsinger, Ed. TP. Hồ Chí Minh: NXB Kinh Tế Thành phố Hồ Chí Minh, 273-303.
- Rita Stevens. (2021). Thoát bẩy tâm lý giao dịch trong chứng khoán: gồng lời không gồng lỗ. Hà Nội: NXB. Lao Động.
- 15. Shahzeb Khurshid, Ashfaq Ahmed and Lubna Irrum. (2021). An examination of behavioral factors affecting the retail investor's investment decisions: the moderating role of Covid-19. *Journal of ISOSS*, 7(1), 105-120.
- Shefrin, Hersh, and Meir Statman. (1985). The disposition to sell winners too early and ride losers too long: Theory and evidence. *Journal of Finance*, 40(3), 777-790.
- Shilpi Gupta, Monica Shrivastava. (2021). Impact of Behavioral Biases on Investment Decisions: Moderating Effect of Preferred Sector of Investment. *Ramanujan International Journal of Business and Research*, 6, 37-48.
- Slovic, Paul. (1969). Analyzing the expert judge: A study of the stockbroker's decision process. *Journal of Apply Psychonology*, 53(1), 255-263.
- 19. Slovic, Paul. (1972). Psychonogical study of human judgment: Implication for investment decision making. *Journal of Finance*, 21(3), 61-74.
- 20. Suzaida Bakar, Amelia Ng Chui Yi. (2016). The Impact of Psychological Factors on Investors' Decision Making in Malaysian Stock Market: A Case of Klang Valley and Pahang. *Procedia Economics and Finance*, 35, 319-328.
- Swati Prasad, Ravi Kiran and Rakesh Kumar Sharma. (2021). Behavioural, Socio-economic Factors, Financial Literacy and Investment Decisions: Are Men More Rational and Women More Emotional?. *The Indian Economic Journal*, 69(1), 66–87.
- 22. Tversky Amos, and Kahnneman. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124-1131.
- 23. Tversky Amos, and Kahnneman. (1979). Prospect theory: Analysis decision under risk. *Econometrica*, 47(2), 263-291.
- 24. V. Benos. (1998). Aggressiveness and Survival of Overconfident Traders. *Journal of Financial Markets*, 1, 353-383.
- 25. Vương Đức Hoàng Quân, Bùi Chiến Công. (2016). Yếu tố ảnh hưởng đến quyết định của nhà đầu tư chứng khoán. *Tạp chí Tài chính*, 2.