

# FACTORS AFFECTING INDIVIDUAL INVESTORS' INTENTION TO INVEST IN SECURITIES AFTER THE COVID-19 PANDEMIC IN THE MEKONG DELTA, VIETNAM

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## Abstract

This study aims to analyze the factors affecting individual investors' intention to invest in securities after the Covid-19 pandemic in the Mekong Delta, Vietnam. By collecting primary data from 292 individual investors in 05 provinces in the Mekong Delta, Vietnam: Tra Vinh province, An Giang province, Vinh Long province, Ben Tre province and Soc Trang province. The authors have inherited related studies and used quantitative methods to analyze data such as: Testing the reliability of the scales by Cronbach's Alpha coefficient, exploratory factor analysis, and Binary logistic regression analysis. The study has found 6 factors affecting the intention to invest in securities of individual investors during the Covid-19 epidemic season in the Mekong Delta, respectively: COVID-19 pandemic, Confidence, Perceived behavioral control, Expected profit, Attitude, Risk perception. From the research results, the authors propose some governance implications to encourage and attract securities investment of individual investors in Vietnam in the coming time.

**Keywords:** investment intentions, securities, individual investors, Mekong Delta, policy implications.

**JEL Classification Code:** B31, D53, E44, G41, O16,

## 1. INTRODUCTION

Vietnam's stock market was born from the establishment of the State Securities Commission on November 28, 1996, according to Decree No. 75/1996/ND-CP of the Government. On July 28, 2000, the Stock Exchange Center of Ho Chi Minh City. Ho Chi Minh City Stock Exchange has officially come into operation and conducted the first trading session, marking a historic turning point of the Vietnamese stock market (State Securities Commission, 2021).

Up to now, Vietnam's stock market has really become a medium and long-term capital mobilization channel for the economy. From the establishment of Vietnam's stock market to June 2020, through the stock market, the Government and businesses have mobilized over 2.4 million billion VND to put into production and business, especially In the period 2011 to present, the scale of capital mobilization through the stock market has reached about 1.7 million billion dong, contributing on average 20% of the total investment capital of the whole society. By the end of 2021, VN-Index reached 1,498.28 points, up nearly 36% compared to the end of 2020, HNX-Index reached 473.99 points, increased by more than 133%, UPCoM-Index reached 112.68 points, increased by more than 51%. In 2021, although Vietnam is strongly affected by the Covid-19 pandemic, the stock market has experienced a remarkable growth, marked by the event that the VN-Index surpassed the historic peak of 1,200 points in April.

2021 after more than 20 years of operation, and reached a new peak on November when the VN-Index touched 1,500.81 points. With those historical milestones, it helps to confirm that the stock market is a potential investment channel in the future. (Thai Duy, 2023).

Currently, the stock market is strongly supported by the Government in preventing and handling violations in order to increase market transparency to protect investors' interests (Nguyen Dang Nam & Hoang Van Quynh (2009). Accordingly, the Ministry of Finance submitted to the Government to amend Decree No. 153/2020/ND-CP in the direction of tightening the issuance and tightening of professional securities companies, continuing to strengthen management, supervision and payment. , examine activities related to the issuance and provision of services on corporate bonds of securities companies, issuers and service providers, the system of legal documents guiding the Law Securities 2019 and stock market development policies are also being actively built and completed, information technology infrastructure and transaction system are gradually modernized to ensure smoothness and continuity (Minh Lam. 2023).

## 2. LITERATURE REVIEW

Aren and Aydemir (2015) surveyed from 112 people, the authors used hierarchical regression to test hypothetical relationships obtained results showing that risk aversion has a negative and significant impact. Taking into account risky investment behavior and financial literacy and perceived behavioral control that moderated these relationships. Aren and Zengin (2016) investigated the impact of financial literacy and general perception of risk on investment choice, using binary logistic regression analysis based on data obtained from 94 situations the authors concluded that risk perception and financial literacy have an impact on investment choice. Sivaramakrishnan et al. (2017) have shown that attitude, perceived behavioral control, risk and financial literacy have an impact on the investment intention of stock investors, with the research results on the effect of this study. The authors have suggested the implication to improve investment efficiency.

Mai Trung Hieu et al (2022) analyzed the factors affecting the intention to invest in securities of individual investors in the context of the Covid-19 pandemic in Vietnam based on survey data by 525 individuals have interest and intention to invest in securities in Vietnam. Using linear structural modeling (SEM) was used to test the hypotheses. The research results have shown that the following factors: Impact of the Covid-19 pandemic, risk-taking tendency, attitude towards stock investment, self-finance performance and subjective norm have a positive influence on investment. To the investment intention of individuals in decreasing order. From there, the author gives some suggestions for securities companies in attracting individual investors.

Nguyen Huu Tho and Tran Ha Minh Quan (2020) explore individual personality traits that affect stock investment intentions through risk perception, uncertainty perception, and outcome evaluation. Investment results have a positive effect on investment intention. Mediating role of risk perception, uncertainty, investment outcome in the relationship between five personality traits and investment intention. Thereby, the author proposes policy implications to develop

Vietnam's stock market.

Phan Tran Trung Dung (2020) showed that there are 5 factors affecting the intention to invest in derivatives of individual investors: Attitude, perception of behavioral control, risk perception, past experience financial history and understanding. From there, the author gives insights on the motives and factors that promote investors' intentions to propose appropriate management and behavior measures. At the same time, Vo Thi Hieu et al (2020) concluded that there are 5 factors affecting the investment decision and efficiency of individual investors on the Ho Chi Minh City stock market: Determination, Overconfidence, Availability, Crowd Effect, and Case in point with the implication that individual investors should improve these 5 behavioral factors to increase their investment performance on Ho Chi Minh city stock market.

Vo Thi Hieu et al (2020) have carefully surveyed survey data from 411 individual investors on the Ho Chi Minh City stock market from which to conduct regression analysis, the authors have concluded that there are 5 factors affecting the investment decision and efficiency of individual investors on the Ho Chi Minh City stock market are: Decision anchor, Overconfidence, Availability bias, Crowd effect and Situation typically with the implication that individual investors should improve these five behavioral factors to increase their investment efficiency in the Ho Chi Minh City stock market.

Ngo Duc Chien (2015) found 5 factors: Profit rate, risk, working time, and market monitoring and securities investment experience of experts that influenced investment decisions in Securities. Securities of individual investors in the city. Da Nang at Stock Exchanges. Besides, Bui Thi Hong Ha (2012) has shown that the factors: Attitude, subjective norm, perceived control and past experience all have a positive influence on intention, in which factor the dominant attitude to the intention to carry out stock investment behavior is the strongest. While, Tran Minh and Nguyen Thi Thuy Dung (2008) said that there are 4 psychological factors affecting the decision of individual investors: crowd influence, profit expectation effect, overconfidence. Beliefs, moods. Bui Thi Hong Ha (2012) investigated the motivations and intentions of Vietnamese investors about their decision to invest in stocks by applying the Theory of Planned Behavior (TPB) as the main framework. A binary logistic regression model was used to test the hypotheses. The research results have shown that the factors: Attitude, subjective norm, perceived control and past experience all have a positive influence on intention, in which attitudinal factors influence intention. Stock investment behavior is the strongest. Particularly, Tran Minh and Nguyen Thi Thuy Dung (2008) concluded that there are 4 psychological factors affecting the decision of individual investors: crowd influence, profit expectation effect, overconfidence, and mood.

The above studies have not made broad conclusions about the factors affecting the intention to invest in securities of individual investors in many different countries. At the same time, the above studies still have many limitations in terms of research subjects and research scope as well as the application of the theory of intended behavior (TPB) to the study of investors' intention to invest in securities in Vietnam is still very limited. The research used Binary Logistic Regression model to identify and measure the factors affecting the intention to invest in securities of individual investors. The observed variables in the topic are selected and

inherited on the basis of domestic and foreign works in accordance with the actual research situation on factors affecting the intention to invest in securities of individual investors in the Mekong Delta, Vietnam.

### 3. RESEARCH METHODOLOGY

In this study, data samples were collected by convenient sampling method, directly interviewing 292 individual investors who have been and are participating in stock investment. The study the factors affecting the intention to invest in securities of individual investors in the Mekong Delta, Vietnam applies the Binary Logistic model used in the article inheriting the research of Greene (2003) and The brief studies are as follows Binary logistic regression model used in the study:

$$\text{Log} \frac{P(Y=1)}{P(Y=0)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9$$

In there:

Y: Intention to invest in securities, receive 2 values (0: No intention to invest in securities in the near future; 1: Intent to invest in securities in the near future)

X1: Attitude

X2: Subjective standards

X3: Perceived behavioral control

X4: Confidence

X5: Risk perception

X6: Expected profit

X7: Past Experience

X8: Financial literacy

X9: Covid-19 pandemic

$\beta_1 \dots \beta_9$ : The coefficient of influence of the independent variables on the dependent variable Y.

**Table 1: Basis of variable selection and variable expectations**

No	Variable Code	Explanation of Variable	Source Reference	Expectation sign
		<b>Dependent variable</b>		
	Y	Intention to invest in securities	Synthesis of research and expert survey	1/0
	X	<b>Independent variables</b>		
1	X <sub>1</sub>	Attitude	Ajzen (1991), Sivaramakrishnan et al (2017), Longjie,	+

			X., & Anfeng, Z. (2017), Aren and Aydemir (2015), Mai Trung Hieu et al (2022), Phan Tran Trung Dung (2020) ), Bui Thi Hong Ha (2012)	
2	X <sub>2</sub>	Subjective standards	Ajzen (1991), Dean, M., Raats, M. M., & Shepherd, R. (2012); Mai Trung Hieu et al (2022), Phan Tran Trung Dung (2020), Ho Huy Tuu et al (2018), Hoang Van Thanh (2018), Bui Thi Hong Ha (2012)	+
3	X <sub>3</sub>	Perceived behavioral control	Ajzen (1991), Aren and Aydemir (2015), Sivaramakrishnan et al (2017), Madden et al (1992), Taylor and Todd (1995), Phan Tran Trung Dung (2020).	+
4	X <sub>4</sub>	Confidence	H. Kent Baker & John R. Nofsinger (2010), Pi-Chuan Sun & Shu Chun Hsiao (2006), Longjie and Anfeng (2017), Tran Minh and Nguyen Thi Thuy Dung (2008), Vo Thi Hieu et al. 2020).	+
5	X <sub>5</sub>	Risk perception	Fatima Akhtar (2020); Mai Trung Hieu et al (2022), Phan Tran Trung Dung (2020), Ngo Duc Chien (2015), Hussein A. Hassan Al-Tamimi (2006).	-
6	X <sub>6</sub>	Expected profit	Hussen A.Hassan Al-Tamimi (2006), Ngo Duc Chien (2015), To Thi My Dung (2006), Nguyen Thi Ngoc Diep and Nguyen Minh Kieu (2011), Tran Minh and Nguyen Thi Thuy Dung (2008).	+
7	X <sub>7</sub>	Past Experience	Bagozzi (1981), Shu Chun Hsiao, Sun Pi-Chuan (2006), Phan Tran Trung Dung (2020), Bui Thi Hong Ha (2012), Hussein A. Hassan Al-Tamimi (2006)	+
8	X <sub>8</sub>	Financial literacy	Aren, S. & Zengin, A. N. (2016); Bhushan (2014), Aren and Aydemir (2015), Sivaramakrishnan et al (2017), Chu et al (2017), Hsiao and Tsai (2018), Phan Tran Trung Dung (2020).	+
9	X <sub>9</sub>	Covid-19 pandemic	Aren, S. & Zengin, A. N. (2016); Bhushan (2014), Aren and Aydemir (2015), Sivaramakrishnan et al (2017), Chu et al (2017), Hsiao and Tsai (2018), Phan Tran Trung Dung (2020).	+

(Source: Compiled from review studies)

After evaluating the reliability of the scale by Cronbach's Alpha coefficient and exploratory factor analysis (EFA), the study continued to test the Binary Logistic Regression model. With this method, the dependent variable (Y) will receive the value 1 when individual investors intend to invest in securities in the near future and the dependent variable (Y) will receive the value 0 when the individual investor do not intend to invest in securities in the near future.

#### 4. RESEARCH RESULTS AND DISCUSSIONS

The results of data analysis show that out of the 9 independent variables included in the research model, 6 are statistically significant with the sig value. < 0.05.

**Table 2: General results of Binary Logistic regression analysis**

Variable	B Coefficient	Wald	Sig.	Exp(B)	95% Coef.	Dy/dx
Attitude (X1)	0,147**	5,790	0,016	1,158	11,4%	5
Subjective standards (X2)	0,080 <sup>ns</sup>	0,768	0,381	1,083	-	-
Perceived behavioral control (X3)	0,178***	10,118	0,001	1,195	11,7%	3
Confidence (X4)	0,243***	10,171	0,001	1,275	12,4%	2
Risk perception (X5)	-0,394***	9,754	0,002	0,674	6,9%	6
Expected profit (X6)	0,170***	10,343	0,001	1,186	11,6%	4
Past Experience (X7)	0,095 <sup>ns</sup>	1,113	0,291	1,100	-	-
Financial literacy (X8)	0,051 <sup>ns</sup>	0,354	0,552	1,053	-	-
Covid-19 pandemic (X9)	0,259**	5,598	0,018	1,296	12,6%	1
Constant (C)	-9,274	12,999	0	0		

(Variable (s) entered on step 1: \*\*\* with level of significance 99%; \*\* with with level of significance 95% and ns: non-statistical)

(Source: Summary of survey data processing results)

In which, there are 6 variables that have a positive impact on investment intention of individual investors including Attitude with value Sig. = 0.016, the variable Perceived behavioral control has a value of Sig. = 0.001. The Confidence has value Sig. = 0.001, and Expected profit has the value Sig. = 0.001 and the COVID-19 Pandemic with the value Sig. = 0.018. Besides, Risk perception has a negative impact on investment intention with the value of Sig. = 0.002. However, Variables: Subjective standards, past experience and literacy are not statistical in the binary regression model.

## **5. POLICY IMPLICATIONS TO DEVELOP AND ATTRACT INVESTORS TO PARTICIPATE IN SECURITIES IN THE COMING TIME**

### **5.1. For the Pandemic factor**

Securities companies need to pay more attention to macro variables of the economy in order to have timely and effective policies in each context. Along with that, securities companies need to encourage customers to use financial leverage tools (Margin) at their units through preferential policies on interest rates to better attract customers' idle cash flows. In addition, securities companies need to promote self-trading activities, because in the context of exciting and positive market movements, securities trading is also a profitable segment, contributing to affirming their position, its brand in the market to better attract potential customers.

### **5.2. The confidence factor**

It is necessary to encourage individual investors to confidently and boldly invest in the stock market as soon as possible through face-to-face seminars or by online means. Along with



propaganda activities to encourage individual investors to invest, investment consulting and support activities should be promoted because investors have insufficient investment experience, so they will not perform invest now if you have not yet grasped the information and developments on the stock market. At the same time, to encourage them to invest, securities companies need to support courses to provide investment knowledge so that they can be more confident and make investments.

### **5.3. For perceived behavioral control**

Securities companies need to clearly grasp the difficulties of students in accessing investment products of their units through online survey means or organize seminars for individual investors can share their feelings about securities investment in order to promptly support and create the best conditions for students to invest. Securities companies need to be equipped with software to support investors and continuously improve technology, modern interface, and closer to individual investors. At the same time, actively promote programs and preferential policies for students to encourage them to participate in investment.

### **5.4. The expected profit**

For individual investors, the creation of active income is something they are very interested in because they do not have much time for investment, so securities companies need to meet this need of individual investors by offering investment products that guarantee substantial returns in the future, along with securities companies needing to provide data on the profitability of investment products in order to generate profits. Trust for them in using services at their units, and continuously improve and expand investment analysis and guidance programs to bring the highest investment efficiency to individual investors.

### **5.5. The attitude factor**

Securities companies need to pay more attention to the management of information related to their products in order to promptly prevent false information that negatively affects the attitude of individual investors towards with investment. Securities companies should also organize investment programs and contests in order to provide a good experience for investors so that their attitude towards investment becomes positive. In addition, in order for individual investors to have a positive attitude towards investment and products and services of their units, securities companies need to strengthen their staff management in order to advise them. And timely support individual investors so that they can participate in investment.

### **5.6. The risk perception**

It is necessary to improve and diversify products and investment types that are safe but still ensure significant profits in the future to attract more individual investors. In addition, securities companies need to continuously update information and developments in the market quickly, combined with judgments and future action orientations, in order to better support individual investors in the future to timely grasp of the situation and how to handle the related risks.

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