
THE EFFECT OF DEMOGRAPHIC CHARACTERISTICS ON RISK PERCEPTION AND INVESTMENT DECISION: AN EMPIRICAL STUDY IN VIETNAM

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ABSTRACT

The purpose of this study is to investigate how demographic characteristics, such as gender, age, income, investing experience, education, marital status, and occupation, affect risk perception and investment decision by surveying of investors in Vietnam. The research also examines the relationship between risk perception and investment decision. This paper helps researchers have a clear understanding of how Vietnamese investors with different demographic profiles will invest their money and how the demographic characteristics will affect their risk perception. The research discovers that demographic factors such as age, income, occupation, and investing experience have significant effects on the risk perception of investors meanwhile income, gender, and investing experience are

strongly related to investment decision. The analysis result also verifies that risk perception is associated with investment decision. The survey data were collected from 167 samples including students, company employees, or people who run their own business with the age of 18 to 45. It was conducted for general investors and had practical implications for mutual funds, financial advisors, and bankers.

Keywords: Financial Behavior, Demographic Characteristics, Risk Perception, Investment Decision.

JEL Classification Codes: G11, G40, G41.

INTRODUCTION

Nowadays, financial behavior is a crucial part of the decision-making process, because it substantially affects investors' behavior and decision making. Risk is always an essential factor need to be considered when making an investment decision. In recent years, the impact of risk perception on investment decisions is an emerging subject in the financial behavior literature. Hence, a better understanding of financial behavior in general and risk perception, in particular, will assist the investors to make a better investment decision. There are several economic and behavioral financial theories assuming that investors act rationally; however, they are only human. They act according to the majority's opinions and some even follow their instinct and feeling when making financial decisions (Raiz, Hunjra, & Azam, 2012). Demographic profile and risk perceptions play an important role to select a particular choice of investment as the result of previous researches. Rohrmann (1999) focused on six issues that influence an individual's perception of risk, one of them being the issue of personality characteristics and demographic differences among a diversified population of subjects and respondents. Bashir, Shaheen, Batool, Butt, and Javed (2014) investigated what factors influence risk perception of the individual investors and found demographic characteristics (such as age, gender, income, and education) have significant effects on risk perception in the case of Pakistani investors. Abdeldayem (2015) found that individual investors' decision-making is influenced by risk perception when they invested in the bonds market. Yuliani, Isnurhadi, and Jie (2017) discovered that emotion, moods, and other factors of investors affect perception. Patel and Modi (2017) revealed that demographic factors (age, gender, and income) have significant effects on investment decisions.

Risk is an inherent feature of all types of financial investments. Risk in investing always attracts attention from an investor because of its uncertainty and unpredictability. The researches of risk perception have been well studied in developed markets for a long time. This study will extend previous researches to examine the effect of risk perception on investment decisions in the case of emerging market such as Vietnam. Vietnam is a developing country that has the advantage of a stable political system and various investment opportunities. However, the majority of individual investors in Vietnam still make their investment decisions trending without assessment and perception of the potential risks. That is the reason why this study is made to discover the factors that affect their risk perception as well as how risk perception affects their investment decisions. Financial investment is increasingly popular with Vietnamese people; they do not simply deposit money in the bank and get profit from a small interest rate. They have access to other new investment types like stock (established in 2007), bond, and mutual fund (established in 2014). The common feature of these investment types is higher risk than traditional investment types. However, most individual investors haven't equipped sufficient knowledge and information about risk in investing. This study will help investors to have a better understanding of how risk perception affects their investment decision and have appropriate action. Different groups in terms of demographic characteristics such as age, gender, education background, income, occupation, investment experience, and marital status may have different risk perceptions and through this study, they will get some useful information for themselves. In addition, there are just a few studies about risk perception and investment decisions of individual investors, particularly in Vietnam. Therefore, this study will extend the previous studies to research the impact of demographic characteristics include age, gender, income, education, occupation, investment experience, and marital status on an individual's risk perception in Vietnam to contribute to further

researches in the field of financial behavior. This study also helps investment organizations like mutual funds, stock companies, brokers understand at a certain degree how demographic factors affect investors' risk perception and to find appropriate investment types for each group of investors.

LITERATURE REVIEW

Investment decisions could have been influenced by psychological or emotional factors like risk perception. To make an optimized investment decision and avoid repeating their mistakes in the past, investors need to understand those factors (Charles & Kasilingam, 2013). There are numerous researches which studied the relationship between risk perception and investors' decisions. Risk perception is defined as how investors recognize and assess the potential risk of financial assets, based on not only their concerns, experience but also the market situation, expert's opinion. Baghani and Sedaghat (2016) found risk perception and risk tolerance have a direct and positive relationship with investors' decisions. Sindhu and Kumar (2014) examined the relationship between individual investors' risk perception and their investment decision in mutual funds and found that investors tend to perceive of principle that if they can take a higher risk, they can get a higher return. Simultaneously those mutual fund investors tend to agree that diversified portfolios will reduce the risk. Athira and Kakkakunnan (2020) found demographic traits of the investors such as gender, occupation, and monthly income have a significant effect on their risk-bearing capacity. Additionally, the study of Yadav and Narayanan (2021) revealed there is a significant relationship between personality traits and investment decision-making.

Charles and Kasilingam (2013) indicated that behavioral biases are directly influenced by demographic characteristics such as age, gender, education, occupation, and income and specifically mentioned that age plays a critical role in their behavior and may decide the success of their investment decisions. Bashir et al. (2014) also found age has a positive and significant relationship with risk perception. However, Sachsea, Jungermann, and Belting (2012) implied there was a significant negative correlation between age and perceived risk. There was a consensus that women make more conservative decisions than men when investing. Fisher (2010) showed that females are less risk-seeking than males irrespective of familiarity and framing, cost, or ambiguity. Islamoğlu, Apan, and Ayvali (2015) studied and sought to understand the patterns of differences in the risk-taking habits of men and women. Their studies reaffirmed the result that women significantly differ in their investment behaviors than men. Wang, Keller, and Siegrist (2011) revealed that women's risk perception is more than that of men after working and comparing various investment avenues like valuable securities, bonds, stocks. In the contrast, Sachsea et al. (2012) revealed there is no significant difference between men and women in terms of perceived risk. Bashir et al. (2014) supported income level of investors affects their behavior toward investment. Relative risk aversion of persons reduces as the income level rises. Gutter and Fontes (2006) stated that education plays an important role in risky investment decision. Investors with a higher level of financial knowledge will prefer stock equities and with a low level of financial knowledge investors choose a safer option is bank deposits. On the contrary, Yao, Sharpe, and Wang (2011) concluded that the general education level of investors is not always an effective factor in investment decision.

Occupation means the activity in which people engaged for pay, it can be a job or profession. Those people who work for others and receive monthly salaries tend to take a lower risk level than those who generate their income directly from their own business, trade, or profession (Sindhu & Kumar, 2014). People with higher ranking occupational status are more risk seekers as compared to low ranking occupational status. According to the research of Dhiraj and Mandot (2012), occupations and qualifications have a major impact on the investment decisions of investors in Rajasthan (India). Experience is a characteristic of perception which is accumulated from similar events, situations, or activities in the past. Therefore experienced investors and financial risk perception might differ according to the degree of experience that can range from very low to very high. Lodhi (2014) surveyed Pakistan to examine the impact of experience and age on the investment decision of individual investors. With correlation analysis, the survey's result suggested that when age and experience increase, investors tend to make less risky investments. Aren and Zengin (2016) indicated

that single tend to take more risks than those who are married. According to the study of Islamoğlu et al. (2015), marital status has a significant effect on investment decisions. Married investors are demonstrating more aggressive investment behavior than single investors and they are more willing to take risks than others.

RESEARCH METHODOLOGY

Hypotheses

This study was conducted to investigate the effect of demographic characteristics (Age, Gender, Income, Education, Occupation, Experience, Marital status) on risk perception and investment decision. In addition, this study also examined the relationship between risk perception and investment decision. Based on the literature review, the study developed three null hypotheses as follows:

H1₀: There is no significant difference between demographic factors and risk perception.

H2₀: There is no significant relationship between demographic factors and investment decision.

H3₀: There is no significant relationship between risk perception and investment decision.

Data and Sample

This study used primary data collected by questionnaire. The questionnaire is adapted from the research of Bashir et al. (2014) and Sindhu and Kumar (2014). Participant in this study is individual investors including professional investor and non-professional investor in Vietnam. Different respondent groups will be chosen to distribute the questionnaire such as university students, employees working in investment companies and other industries, service companies, members in professional investing groups/forums. The questionnaire was divided into two parts. In the first portion, nine statements were designed to identify the risk perception of respondents and its relationship with investment. The second portion was designed to collect demographic information. The questionnaire was distributed to target respondents by Google survey. Risk perception is defined as the way that investors recognize and assess the potential risk of financial assets, based on not only their concerns, experience but also the market situation, expert's opinion. To measure the risk perception of individual investors, nine statements were developed based on these factors and the opinions of the respondents and measured on a ten-point rating scale. These statements include "my approach is to be cautious and avoid all risky investment"; "an investment that involves a great deal of risk is not really investing but it is gambling"; "the more money one has, the more investment risk one can take"; "my broker decides the best investment level for me"; "the more familiar an investment, the less risky it is"; "a diversified portfolio reduces risk"; "the older people take lesser investment risk"; "the need to liquidate quickly prohibits me from considering riskier products"; and "the higher an investments' yield or rate of return, the greater is its associated risk". A scale of ten-points designed by decreasing from 10 to 1 was given to each statement for the responses from strong agreement to strong disagreement respectively. Making investing decisions is related to many aspects of an investment like how much to invest, how long to invest, which type of investment, and other concerns. Because of the limitation of time and resources, this study only uses the total amount of money invested in stock out of the total investing fund to measure investment decision. Stock equity is one of the investment types in which investors can get a high return along with high potential risk.

Data Analysis Technique

This research uses the MANOVA test to discover the effect of demographic factors on multi dependent variable-risk perceptions. Multiple regressions test was used to discover the relationship between risk perception and investment decision and the effect of demographic factors on investment decision. The two-way MANOVA was used to compare the mean differences between groups that have been split into two demographic factors (independent variables). The primary purpose of a two-way MANOVA is to understand if there is an interaction between the two demographic factors on the risk perception (dependent variable). Before the statistical analysis, age and experience year are grouped. The age of participants is in the range from 20 to 45 years old and it was divided into three

groups: 25 or less: This group includes students and graduate who start working, do not have too much experience and high income. 26–30: This group has more working experience (over 3 years) and has a higher income and most people in this range of age get married. Over 30: People in this group have a more stable income and life. Participants have investing experience from 1 to 10 years, there are a few participants who have experience over 5 years, therefore experience variable was divided into three groups as below: 1 Year or less: In this stage of investing, people focus on learning experience and practicing investing. 2–3 Years: In this stage, people got some experience and invest more skillfully. Over 3 years: Investors have accumulated their own experience and have their perception, thinking about investment as well as risk.

Multiple regressions were used to test the relationship between investment decision and demographic factors (age, gender, marital status, occupation, education, experience, and income).

$$Y_i = \alpha + \beta_1 \text{Age}_i + \beta_2 \text{Gender}_i + \beta_3 \text{Marital Status}_i + \beta_4 \text{Occupation}_i + \beta_5 \text{Education}_i + \beta_6 \text{Experience}_i + \beta_7 \text{Income}_i + \varepsilon_i$$

Y: percentage in stock (investment decision)

To analyze the relationship between risk perception and investment decision, multiple regression was conducted with the dependent variable (investment decision) measured by percentage in stock and independent variables measured by nine risk perceptions.

$$Y_i = \alpha + \beta_1 \text{S1-portfolio}_i + \beta_2 \text{S2-yield}_i + \beta_3 \text{S3-familiar}_i + \beta_4 \text{S4-cautious}_i + \beta_5 \text{S5-liquidate}_i + \beta_6 \text{S6-money}_i + \beta_7 \text{S7-gambling}_i + \beta_8 \text{S8-older}_i + \beta_9 \text{S9-broker}_i + \varepsilon_i$$

Y: percentage in stock (investment decision)

RESULTS AND DISCUSSIONS

Descriptive Statistics

Most of the participants are working and have stable incomes. A total of 167 respondents was analyzed in this research. Table 1 showed that the percentage of male and female participants in this research is not too different, respectively is 47.9% and 52.1%. The findings showed male participants have a higher mean of risk perception and percentage of investing in stock than females. This result supported the conclusion of previous researches that men have a higher rate of investing stock than women. More than 50% of participants are from 26–30 years old, participants over 30 years old account for 26.9% and the rest is 25 years old or less. Participants over 30 years old have the highest mean of risk perception and percentage in stock. There is 40.7% of participants are married and 59.3% of participants are single, they have a higher mean of risk perception and percentage of investing in stock than married participants. Percentages of the three groups of income are not too different, investors in the group have income over 15 VND millions have the highest percentage of investing stock. The second group has a 13.05 percentage of investing in stock is investors have income from 10–15 VND millions. Most of the participants have education level are bachelor (62.3%). People with education level are college or under college, having the highest mean of risk perception, while people with Master's or Ph.D. degree have the highest mean of the percentage of investing in the stock. 40.7% of participants invested in stock in one year or less than one year. Participants with over 3 years of experience have the highest mean of risk perception and percentage of investing in the stock. Participants who work in private and foreign companies account for 41.1%, 31% of participants are working in government, 17.4% participants are students and 10.8% participants have their own business. Investors who have their own business have the highest mean of investment decision while students have the highest mean of risk perception. There is 54.5% of participants send their money in bank deposits and 29.3% spend their money on stock equities. Those who invest their money in gold have the highest mean of risk perception.

Table 1. Descriptive Statistics of the Respondents

Characteristics		Number	Percentages	Mean of risk perception	Mean of investing in stock (%)
Gender	Male	80	47.9	7.28	21.81
	Female	87	52.1	7.02	6.92
Age	25 or less	31	18.6	7.18	6.29
	26-30	91	54.5	6.98	12.99
	Over 30	45	26.9	7.46	21.56
Marital Status	Single	99	59.3	7.17	13.4
	Married	68	40.7	7.12	15
Income	Less than 10 million	53	31.7	7.04	2.64
	10-15 million	59	35.3	7.26	13.05
	Over 15 million	55	32.9	7.14	26.13
Education	College or under	21	12.6	7.44	10.24
	Bachelor	104	62.3	7.08	13.41
	Master or PhD	42	25.1	7.16	17.55
Experience	1 year or less	68	40.7	6.85	3.68
	2 – 3 years	60	35.9	7.27	18.87
	Over 3 years	39	23.4	7.48	24.74
Occupation	Student	29	17.4	7.38	9.31
	Private company employee	69	41.3	7.11	20.03
	Government employee	51	30.5	7.21	5.29
	Own Business	18	10.8	6.73	23.61
Type of Investing	Gold	16	9.6	6.89	3.44
	Bank deposit	91	54.5	7.15	5.93
	Real Estates	11	6.6	7.56	6.36
	Stock equities	49	29.3	7.14	34.33
Percentage in Investing Stock	5% or less	92	55.1	6.95	0.05
	6% - 25%	35	21	7.5	14.14
	26% - 45%	17	10.2	7.31	31.88
	Over 45%	23	13.8	7.3	56.74

Source: Compiled from questionnaire

The risk perception scale was assessed by Cronbach's Alpha, this is a common measure used to determine internal consistency or reliability of a survey with multiple Likert questions, and 10 point scales were applied in this survey. The result of Cronbach's Alpha scale test is 0.878 which was above the acceptable minimum of 0.70. Table 2 illustrated the mean and standard deviation for each statement of risk perception. The statement "The older people take lesser investment risk" has the highest mean of 7.99; this finding implied that participants highly agreed that the older people prefer to take lesser investment. And investors also perceive that "An investment that involves a great deal of risk is not really investing but it is gambling" which has a mean of 7.47. The statement "My broker decides the best investment level for me" has the lowest mean of 6.61 which implied people do not consider a broker can decide the best investment for them.

Table 2. Means of Statements related to Risk Perception

Variables	Mean	Std. Deviation	Statement
S1-portfolio	7.22	2.349	“A diversified portfolio reduces risk.”
S2-yield	6.81	2.550	“The higher an investments' yield or rate of return, the greater is its associated risk.”
S3-familiar	7.41	2.086	“The more familiar an investment, the less risky it is.”
S4-cautious	6.76	2.462	“My approach is to be cautious and avoid all risky investment”
S5-liquidate	7.25	2.203	“The need to liquidate quickly prohibits me from considering riskier products.”
S6-money	6.81	2.461	“The more money one has, the more investment risk one can take.”
S7-gambling	7.47	2.641	“An investment that involves a great deal of risk is not investments but it is gambling.”
S8-older	7.99	1.911	“The older people take lesser investment risk.”
S9-broker	6.61	2.349	“My broker decides the best investment level for me.”
Risk perception	7.15	1.231	Mean of nine statements.

Source: Compiled from questionnaire

Test Hypothesis H1o

To examine the effect of demographic factors on risk perception, two-way MANOVA test was conducted in four pairs of demographic factors, they are age and experience, occupation and income, education and marital status, as well as gender and income; dependent variables are risk perception. As shown in Tables3 and 4, the results of multivariate tests suggested that age, experience, income, and occupation have significant effects on risk perception. In addition, there is an interaction effect between income and occupation on risk perception. Therefore, null hypothesis one was rejected. The finding of this study support demographic factors have significant effects on the perception of risk.

Table 3. Multivariate Tests of Risk Perception by Age and Experience

	Wilks' (Λ) = 0. 822		Wilks' (Λ) = 0.815		Wilks' (Λ) = 0. 807	
	Age group		Experience group		Age* Experience	
	F	P	F	P	F	P
Multivariate	1.717	.036*	1.796	.025*	.923	.601
Univariate						
S1-portfolio	.483	.618	1.402	.249	.745	.563
S2-yield	3.690	.027*	1.256	.288	2.141	.078
S3-familiar	.664	.516	1.018	.364	.809	.521
S4-cautious	3.457	.034*	1.164	.315	1.585	.181
S5-liquidate	2.505	.085	.578	.562	.486	.746
S6-money	.968	.382	1.828	.164	1.164	.329
S7-gambling	1.604	.204	.481	.619	.233	.919
S8-older	1.336	.266	8.764	.000*	.276	.893
S9-broker	3.691	.027*	4.804	.009*	2.178	.074

Note. *Significant at 5% level
Source: Compiled by the authors

Table 4. Multivariate Tests of Risk Perception by Occupation and Income

	Wilks'(Λ)= 0.752		Wilks'(Λ) = 0.780		Wilks'(Λ) = 0.598	
	Occupation Group		Income Group		Occupation*Income	
Multivariate	1.633	.025*	2.160	.005*	1.481	.016*
Univariate	F	P	F	P	F	P
S1-portfolio	3.581	.015*	5.577	.005*	2.398	.030*
S2-yield	1.495	.218	1.317	.271	.317	.927
S3-familiar	3.305	.022*	4.181	.017*	3.148	.006*
S4-cautious	.995	.397	3.450	.034*	1.755	.112
S5-liquidate	.722	.540	.762	.468	.566	.757
S6-money	2.680	.049*	5.962	.003*	1.733	.117
S7-gambling	1.134	.337	.568	.568	.166	.985
S8-older	.063	.979	.562	.571	1.107	.361
S9-broker	1.515	.213	.225	.799	1.410	.214

Note. *Significant at 5% level
 Source: Compiled by the authors

According to the means shown in Table 5, the result implied that younger investors tend to disagree with the risk perception “The higher an investments' yield or rate of return, the greater is its associated risk”, compared to older ones. The finding also implied that younger ones are new in the field of investment and tend to be more cautious, compared to older ones. The result also showed that younger investors tend to agree with the risk perception “My broker decides the best investment level for me”, compared to older ones. This finding implied that younger investors with less experience and skill believe that brokers will help them decide the best and profitable investment. The finding also implied that investors with shorter experience years tend to disagree with the risk perception “The older people take lesser investment risk”, compared to those with longer experience years. The result also showed that investors with longer experience years tend to be more cautious in their investment decisions, compared to the investors with shorter experience years. The result may imply that the longer experience years make investors more understand about risk and become more careful when making an investment decision.

Table 5. Mean of Age and Experience to Risk Perception

Risk Perception	Age Group			Experience		
	25 OR LESS	26-30	OVER 30	1Y OR LESS	2Y-3Y	OVER 3Y
S1-portfolio	6.9	7.16	7.53	6.9	7.1	7.79
S2-yield	6.00	6.92	7.16	6.54	6.82	7.28
S3-familiar	7.29	7.38	7.56	7.28	7.45	7.59
S4-cautious	7.87	6.11	6.51	7.01	6.73	6.36
S5-liquidate	7.48	6.91	7.78	6.96	7.45	7.46
S6-money	6.32	6.52	7.76	6.26	6.93	7.59
S7-gambling	7.74	7.04	8.16	7.22	7.33	8.13
S8-older	8.00	7.79	8.38	7.10	8.6	8.59
9-broker	7.03	6.6	6.33	6.4	6.93	6.49

Source: Compiled by the authors

Based on the means shown in Table 6, the result implied that investors such as students tend to diversify their portfolios to reduce risk, and private and foreign company employees believe that the more familiar an investment, the less risky it is, compared to investors who run a business. The result

also showed government employees tend to agree with the risk perception “The more money one has, the more investment risk one can take”, compared to those who run their own business. This finding implied that if investors who work in government tend to take more risk in investing if they have more capital. According to furthermore analysis on the effect of income, the result implied that investors with higher income tend to agree with the risk perception “A diversified portfolio reduces risk”, compared to those who have lower income. The finding implied that the investors who have higher income tend to believe that the more familiar an investment, the less risky it is, compared to those who have lower income. The result also showed that investors with lower income tend to be more cautious in their investment decisions, compared to the investors who have higher income. The finding implied that investors with lower income levels will be more cautious in making an investment decision because if the result of the investment is a loss that may destroy their life. The results also showed that investors with higher income tend to agree with the risk perception “The more money one has, the more investment risk one can take”, compared to those who have lower income. The result shown in Table 7 implied when income levels increase, investors tend to agree that a diversified portfolio can help them reduce risk. The results also indicated that when income levels increase, private and foreign company employees tend to agree with the risk perception “The more familiar an investment, the less risky it is”, however, investors such as students were discovered on the opposite side.

Table 6. Mean of Occupation and Income to Risk Perception

Risk perception	Occupation				Income		
	Student	Private and foreign company employee	Government employee	Own business	less than 10VND million	10-15 VND million	over 15 VND million
S1-portfolio	8.07	7.45	6.65	6.56	6.6	7.39	7.62
S2-yield	7.34	7.28	5.78	7.11	6.02	6.86	7.53
S3-familiar	7.52	7.58	7.31	6.89	7.4	7.07	7.8
S4-cautious	7.14	6.52	7.29	5.56	7.34	7.00	5.95
S5-liquidate	7.03	7.3	7.55	6.56	7.19	7.44	7.11
S6-money	6.86	6.8	7.02	6.22	6.08	6.98	7.35
S7-gambling	7.97	6.9	8.02	7.33	7.85	7.69	6.87
S8-older	7.97	7.99	7.98	8.06	7.89	8.24	7.82
9-broker	6.52	6.22	7.29	6.33	7.02	6.63	6.2

Source: Compiled by the authors

Table 7. Mean of an Interaction effect between Income and Occupation

Risk perception	Occupation	Income		
		less than 10VND millions	10-15 VND millions	over 15 VND millions
S1-portfolio	Student	7.8	8.08	8.43
	Private and foreign company employee	7.67	7.38	7.42
	Government employee	6.30	6.94	7.33
	Own business	2.50	7.33	7.82

S3-familiar	Student	8.30	7.17	7.00
	Private and foreign company employee	7.42	7.5	7.71
	Government employee	7.48	6.89	7.83
	Own business	4.5	4.0	8.55

Source: Compiled by the authors

Test Hypothesis H2o

The result of regression analysis in Table 8 showed that $R^2=0.592$ and gender, experience years, and income level have statistically significant effects on investment decision. The estimated parameter of gender is significantly negative and experience and income have a positive sign. Therefore, null hypothesis two is rejected. There is a significant relationship between demographic factors (gender, investing experience year, and income level) and investment decision. According to the results of further analysis by ANOVA, males have a higher mean percentage in stock than females at all income levels. The finding supported that men are more risk-taking than women in their attitudes and behaviors toward investment decisions. Investors with higher income levels tend to invest more capital in stock, compared to those with lower income levels. The results also showed that individual investors with more investing experience tend to invest a higher percentage of their total fund in stock than those with less investing experience.

Based on the results shown in Table 8, the general form of regression model predicting the relationship between demographic characteristics and investment decision can be described as follows:

$$Y = 6.626 - 8.511\text{Gender} + 1.819\text{Experience} + 6.763\text{Income}$$

Y: percentage in stock (investment decision)

Table 8. Regression Analysis of Demographic Factors and Investment Decision

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6.626	12.886		.514	.608
AGE	-.130	.491	-.032	-.266	.791
GENDER	-8.511	2.956	-.210	-2.879	.005*
MARITAL STATUS	-5.524	3.700	-.134	-1.493	.137
OCCUPATION	-.122	1.652	-.005	-.074	.941
EDUCATION	-.072	2.521	-.002	-.029	.977
EXPERIENCE	1.819	.770	.250	2.363	.019*
INCOME	6.763	1.749	.312	3.866	.000*
$R^2 = 0.592$					

Note. *Significant at 5% level /-**-+8

Source: Compiled by the authors

Test Hypothesis H3o

The result of regression analysis in Table 9 showed that $R^2=0.62$. Risk perceptions (S4-cautious, S8-older, and S9-broker) have statistically significant effects on investment decisions. The estimated parameter of S4-cautious and S9-broker is significantly negative while S8-older has a positive sign. Risk perception “my approach is to be cautious and avoid all risky investment” had a negative relationship with an investment decision, which means the more investors agree with this statement, the less they invest in stock. Risk perception “the older people take lesser investment risk” had a

positive relationship with an investment decision, which means investors who agree with this statement tend to invest more capital in stock. Finally, Risk perception “my broker decides the best investment level for me” showed a negative relationship with investment decision; this result implied that investors who disagree with this statement tend to invest a lot of their funds in stock. Therefore, null hypothesis three is rejected. There is a significant relationship between risk perception and investment decision. The finding supports the study of Prabhakaran and Karthika (2011), which indicated that the risk perception of investors is an essential factor that influences investment decisions.

Based on the results shown in Table 9, the general form of regression model predicting the relationship between risk perception and investment decision can be described as follows:

$$Y = 7.442 - 2.869CAUTIOUS + 1.773OLDER - 2.415BROKER$$

Y: percentage in stock (investment decision)

Table 9. Regressions Analysis for Risk Perception and Investment Decision

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Risk perception
	B	Std. Error	Beta			
(Constant)	7.442	8.496		.876	.382	
S1-portfolio	.983	.692	.114	1.421	.157	A diversified portfolio reduces risk.
S2-yield	.745	.591	.093	1.261	.209	The higher an investments' yield or rate of return, the greater is its associated risk.
S3-familiar	.374	.688	.038	.543	.588	The more familiar an investment, the less risky it is.
S4-cautious	-2.869	.584	-.348	-4.917	.000*	My approach is to be cautious and avoid all risky investment
S5-liquidate	1.439	.766	.156	1.878	.062	The need to liquidate quickly prohibits me from considering riskier products.
S6-money	.224	.714	.027	.313	.755	The more money one has, the more investment risk one can take.
S7-gambling	.121	.600	.016	.202	.840	An investment that involves a great deal of risk is not really investing but it is gambling.
S8-older	1.773	.865	.167	2.051	.042*	Older people take lesser investment risks.
S9-broker	-2.415	.651	-.279	-3.706	.000*	My broker decides the best investment level for me.
R ² = 0.62						

Note. *Significant at 5% level
Source: Compiled by the authors

CONCLUSION AND RECOMMENDATIONS

In order to have a comprehensive and insightful study of the relationship among demographic profile, risk perception, and investment decision, this research extends previous researches with the case of Vietnam. The research tried to get reach of people in various educations, occupations, ages, and incomes to have a more general status of investing in Vietnam. The analysis results of this research show that demographic factors such as age, income, occupation, and investing experience have

significant effects on the risk perception of investors, which was consistent with the findings of Bashir et al. (2014) that demographic characteristics (age, gender, and income), except education, affect risk perception. The result further discovers that gender, income, and investing experience have a significant relationship with investment decision, which is similar to the finding of Patel and Modi (2017). The result also reveals that there is a relationship between risk perception and investment decision, which supported the finding of Bairagi and Chakraborty (2018) that psychological or emotional factors like risk perception have effects on investment decision. The findings of this study provided various effects of demographic characteristics on risk perception as well as investment decision, which have practical implications for mutual funds, financial advisors, bankers, and individual investors.

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CONFLICT OF INTEREST STATEMENT

The authors declare that they have no competing interests.

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