FACTORS INFLUENCING FINANCIAL INVESTMENT OF CHINESE MIDDLE-INCOME FAMILIES, KUNMING, YUNNAN

JIE ZHAO

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2024

FACTORS INFLUENCING FINANCIAL INVESTMENT OF CHINESE MIDDLE-INCOME FAMILIES, KUNMING, YUNNAN

JIE ZHAO

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MANAGEMENT IN MANAGEMENT SCIENCE
INSTITUTE OF SCIENCE INNOVATION AND CULTURE
RAJAMANGALA UNIVERSITY OF TECHNOLOGY KRUNGTHEP
ACADEMIC YEAR 2024

Thesis FACTORS INFLUENCING FINANCIAL INVESTMENT OF CHINESE MIDDLE-INCOME FAMILIES, KUNMING, YUNNAN
Author Jie ZHAO
Major Master of Management (Management Science)
Advisor Associate Professor Dr. Daranee Pimchangthong

THESIS COMMITTEE

...……..……Chairperson
(Associate Professor Dr. Sureerut Inmor)

……Advisor
(Associate Professor Dr. Daranee Pimchangthong)

……..…… Committee
(Dr. Pharatt Run)

Approved by the Institute of Science Innovation and Culture
Rajamangala University of Technology Krungthep in Partial Fulfillment
of the Requirements for the Master's Degree

……..……

(Assistant Professor Dr. Yaoping LIU)
Director of the Institute of Science Innovation and Culture
Date……Month……..Year…..…

Thesis FACTORS INFLUENCING FINANCIAL INVESTMENT OF CHINESE MIDDLE-INCOME FAMILIES, KUNMING, YUNNAN
Author Jie ZHAO
Major Master of Management (Management Science)
Advisor Associate Professor Dr. Daranee Pimchangthong
Academic Year 2024

ABSTRACT

This study aims to examine the relationship between demographic characteristics and various financial investment products and to explore the influence of risk preferences on financial investment decisions among middle-income families in Kunming. Data were collected using the convenience sampling approach, with a sample size of 400 determined by applying Cochran's formula. The statistics used to analyze the data included descriptive statistics, such as frequency, percentage, mean, and standard deviation, as well as inferential statistics, including the independent sample t-test, one-way ANOVA, and multiple regression, all at a statistical significance level of 0.05. The findings indicate that the age difference, total household assets, types of household debt, and household debt expenses significantly affect financial investment decisions differently. At the same time, gender and educational background do not have significantly different effects on the outcome. Risk preference significantly influences the choice of financial investments, with risk-averse investors having a negative impact on all investment types. In contrast, risk-seeking and risk-neutral investors exhibit positive influences. This study provides contemporary insights into how the post-pandemic era has reshaped financial decision-making processes, offering interpretations of risk preferences and financial investment recommendations for investors in Kunming.

Keywords: financial investment, risk preference, middle-income family

ACKNOWLEDGMENTS

First and foremost, I would like to express my deepest gratitude to my supervisor, Associate Professor Dr. Daranee Pimchangthong, for her invaluable guidance, encouragement, and constructive feedback throughout the entire research process. Her expertise and mentorship have been essential in shaping the direction and quality of my work.

I am sincerely grateful to the faculty members and staff of the Institute of Science, Innovation, and Culture, Rajamangala University of Technology Krungthep, Thailand, for their academic support and the resources they provided, which made this study possible.

I would also like to thank my classmates and friends for their encouragement, companionship, and helpful discussions during this research journey.

Finally, I am forever indebted to my family for their unwavering love, patience, and belief in me. Their constant support gave me the strength and motivation to persevere through the most challenging moments of this work.

This thesis would not have been possible without the support of all these individuals, to whom I express my heartfelt thanks.

Jie ZHAO

CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

CHAPTER I
INTRODUCTION

1.1 Background and Statement of the Problem

The yearslong Covid-19 pandemic has had significant economic implications worldwide. On a macro level, economic development has become more uncertain, exacerbating global economic challenges (World Bank, 2022). The pandemic has profoundly affected income, lifestyle, work dynamics, health conditions, and psychological well-being at the individual and family levels. At least two-thirds of households with children have experienced income loss since the onset of the pandemic, leading to increased financial instability and exacerbating existing inequalities (United Nations, 2022). Additionally, the uneven impact of COVID-19 on households, particularly those with children, has highlighted the lack of risk awareness among many families (Purdue University, 2022). As crucial micro-units within the social system, families possess significant social wealth, national income, and consumer goods resources. Consequently, their consumption and investment decision-making behaviors directly influence overall societal trends.

In China, there is a significant population of middle-income families. According to the National Bureau of Statistics, it is estimated that by 2022, around 460 million people will belong to this group, which accounts (National Bureau of Statistics, 2023). However, despite their large numbers, these families face various challenges, such as unstable income and uneven regional development. In emergencies or crises, the impact on middle-income families can be substantial and have ripple effects throughout society.

This study examines the influence study focuses on examining the influence of changes in risk perception on household decision-making regarding financial investment at the individual level following the impact of COVID-19. Previous research suggests that families tend to decrease their investment in risky assets during emergencies while increasing their allocation towards cash and bank deposits (Zhang et al., 2021). Additionally, post-pandemic households exhibit a more rational and frugal approach to consumption (Li, 2021). The China Wealth Report 2022, released by Ren

Zeping's team, also supports these findings by revealing that despite gradual diversification in financial investment among Chinese residents, cash and deposits still account for over 50% (Ren Zeping team, 2021). The report further highlights that high household savings are primarily driven by the need to cope with emergencies and medical expenses. These observations underscore the growing uncertainty surrounding risks and emphasize the significant role played by individuals' psychological expectations concerning economic development when allocating their financial assets (Jia et al., 2022).

According to the seventh national census data, as of November 1st, 2020, Kunming had a permanent resident population of 8.46 million and 3 million households. Among these households, approximately 1.2 million were classified as middle-income, with an annual income ranging from 100,000 to 500,000 yuan. This indicates that middle-income households accounted for around 40% of the city's total number of households (Kunming Statistics Bureau, 2023). Kunming serves as the capital city of Yunnan Province and is situated in its central region. It holds significance as the sole megalopolis within Yunnan Province and stands as one of Western China's crucial central cities. Given this context, selecting Kunming as the research location becomes pivotal in assessing its overall economic recovery post-COVID-19 pandemic. It also sheds light on the financial investment trends among middle-income households in Kunming following the crisis.

This research examines the relationship between demographic characteristics and various financial investment products and the preferences of individuals with different risk preferences for financial investment categories. This will be achieved by conducting a questionnaire and analyzing the collected data. Firstly, it is essential to acknowledge that human participation forms the foundation of market economy operations, and economic development cannot be dissociated from individuals. Therefore, the connection between people and financial investments is inseparable. Demographic characteristics influence economic growth and financial structure by shaping population dynamics and demand for financial assets and impact financial investments, risk preferences, and consumption behavior. Wealth, income levels, and social education attainment positively influence households' likelihood and extent of participating in financial assets. Factors like debt burden, gender disparities,

and age differences significantly affect households' choices regarding financial assets (He & Chen, 2020). Secondly, individuals' perception of risks contributes to their diverse attitudes, shaping distinct investment risk preferences. Various factors influence the development and alteration of risk preferences. Fundamental personal characteristics such as gender, age, and cognitive ability serve as the foundation for establishing behavioral preferences. In contrast, essential behavioral preferences like risk tolerance, time preference, and ambiguity aversion significantly impact individual decision-making behaviors. Varied risk preferences will influence investors' distribution among different financial products, their investment trading style, and investment returns (Jiang et al., 2021).

Examining these connections can enhance our comprehension of how the epidemic affects household decision-making regarding financial investment products. This enables us to focus on the influence of changing risk awareness on financial asset selection and offer guidance for rational and diversified allocation of household assets. Additionally, it can provide valuable insights and support for the financial market's supply and demand dynamics, financial education initiatives, and the formulation and adjustment of financial policies. Ultimately, this research contributes significant information and inspiration to finance development and innovation.

1.2 Research Questions

1. How do different demographic characteristics affect financial investments?

2. How does risk preference influence the choice of financial investments?

1.3 Research Hypothesis

Based on various sources and research inquiries, this paper presents the following hypotheses:

Hypothesis 1: The difference in demographic characteristics affects financial investments differently.

Hypothesis 2: The investors' risk preference influences their choice of financial investments.

1.4 Research Objectives

By conducting a survey and analyzing data, this study aims to:

1) Examine the effects of demographic characteristics on various financial investment products.

2) Understand the influences of investors' risk preferences on financial investment types.

1.5 The Scope and Limitations of Study

1.5.1 Area of Study

The study focuses on the customers of financial institutes in Kunming City, Yunnan Province. Data pertaining to demographic characteristics, risk preference, and financial investment were gathered through the distribution of questionnaires.

1.5.2 Samples and Population

The population of this study was the customers of the financial institute, located in Kunming City, Yunnan Province, which is an unknown population. Data was collected using the convenience sampling approach with a sample size of 400 samples determined by applying Cochran's formula.

1.5.3 Duration

Research duration was planned for 8 months, from October 2023 to June 2024.

1.5.4 Limitations of the Study

Several research limitations should be considered in this paper. Firstly, due to the limited sample scope of the study being focused on Kunming, it is important to acknowledge that the research findings may not fully represent the situation in other regions. Secondly, it is crucial to recognize that potential limitations might influence the accuracy and reliability of the research results in data collection methods and sources.

1.6 Research Framework

The research framework is based on the risk preferences theory (Von Neumann & Morgenstern, 1944) and the utility theory for decision-making under risk

(Fishburn, 1970). The research framework comprises three independent variables: demographic characteristics, risk preference, and financial investment types.

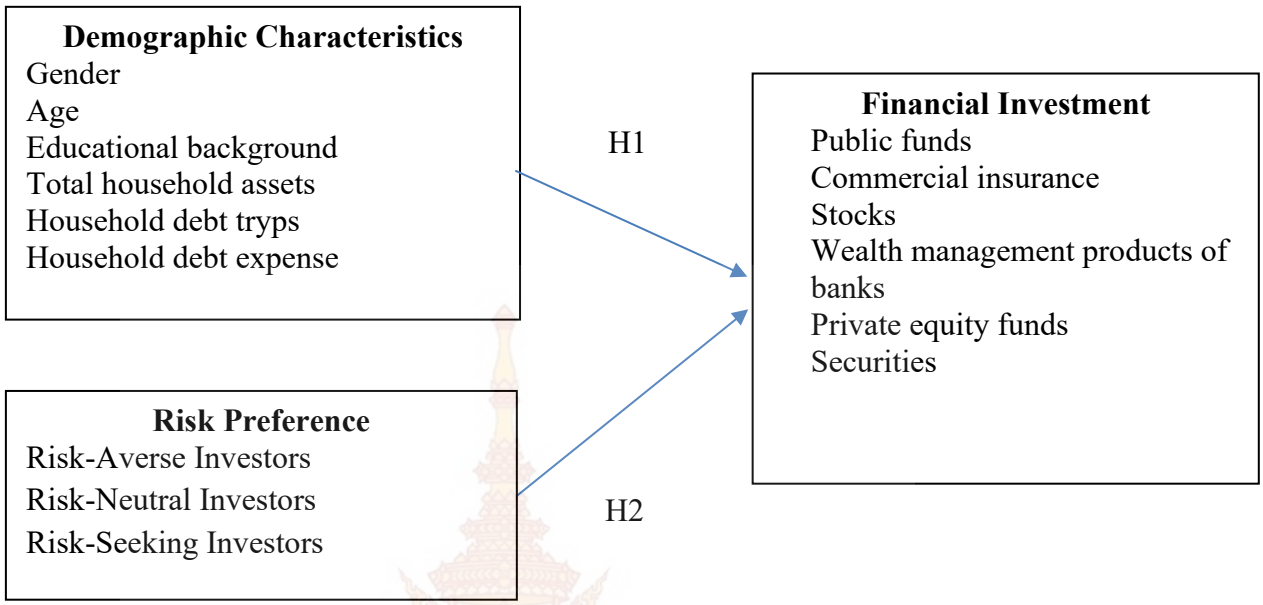


Figure 1.1 Research Framework

1.7 Definition of Key Terms

Middle-income family: This family has an annual income of 100,000 - 500,000 yuan.

Total household assets: It refers to the cumulative value of all assets owned by a household. In this study, total household assets primarily include financial assets, real estate, and other tangible assets.

Household debt types refer to various debts incurred by a family. In this study, the debts primarily include mortgage debts, car debts, and other debts.

Household debt expense: Refers to the proportion of a household's annual income used to repay various types of debt.

Risk preference: Refers to investors' inclination and tolerance towards risk, which can be categorized into risk-seeking, risk-averse, and risk-neutral.

Risk-averse investors: Refer to those investors who choose low-risk, low-return investment projects. They are very averse to risks and would rather give up some

potential returns than bear possible losses.

Risk-seeking investors: Refer to those investors who choose high-risk, high-reward investment projects. They are not afraid of risks and sometimes even keen to seek high returns in high risks.

Risk-neutral investors: Refer to investors with no special preference or risk aversion. They only focus on the expected returns of investment projects, regardless of the size of risks.

Financial investment: The economic behavior of investors to obtain income by purchasing various financial assets in the financial market.

Public funds: A securities investment fund that raises funds from public investors openly and takes securities as the investment object.

Commercial insurance: As a financial instrument, it provides the holder with a certain degree of financial risk protection and compensation in the event of an accident. Insurance assets are a special kind of financial asset because they have the value of protecting property and the function of risk management.

Stocks: These securities are issued by joint stock companies to shareholders as proof of ownership and a means of obtaining dividends and bonuses.

Banks' Wealth management products: Based on the analysis and research of potential target customers, commercial banks develop, design, and sell capital investment and management plans for specific target customers.

Private equity funds: Refer to the common stocks, preferred stocks that can be converted into common stocks, and convertible bonds that are not publicly issued and traded by unlisted and listed enterprises.

Securities: Marketable securities that can be circulated in the financial market. It is a certificate that the issuer promises to pay a certain amount of money to the investor or indicates that the investor enjoys certain rights and interests.

CHAPTER II
LITERATURE REVIEW

This Research on Factors Influencing the Financial Investment of Chinese Middle-Income Families in Kunming, Yunnan, has reviewed documents, textbooks, articles, and relevant research to formulate research concepts and is being carried out in the following sequence.

2.1 Related Theories

Risk Preference Theory

Risk preference theory is a fundamental concept in economics and finance that describes how individuals make decisions under uncertainty. The theory categorizes individuals based on their tolerance for risk into three main types: risk-averse, risk-neutral, and risk-seeking (Von Neumann & Morgenstern, 1944).

John von Neumann and Oskar Morgenstern laid the foundation of risk preference theory in their seminal work "Theory of Games and Economic Behavior" (1944). They introduced Expected Utility Theory (EUT), which posited that rational individuals make decisions under uncertainty by maximizing their expected utility. This framework helped categorize individuals based on risk tolerance into risk-averse, risk-neutral, and risk-seeking (Von Neumann & Morgenstern, 1944).

Using risk preference theory, Fishburn (1970) developed the utility theory for decision-making under risk. His work provided foundational insights into how individuals' risk preferences influence financial decisions. He demonstrated that individuals make choices based on the expected utility of outcomes, categorizing them as risk-averse, risk-neutral, or risk-seeking. These preferences significantly shape their investment behaviors and decisions (Fishburn, 1970).

Risk-averse investors tend to save more as a buffer against future uncertainties, preferring safer, less volatile investment options to protect themselves from potential financial shocks (Kimball, 1990).

Demographic factors, socio-economic status, and attitudes significantly impact financial risk tolerance. Younger individuals, those with higher incomes, and

those with more education are generally more willing to take financial risks. Additionally, personal attitudes toward risk, shaped by individual experiences and socio-economic background, play a crucial role in determining risk tolerance levels (Grable, 2000).

Gender and age significantly impact risk attitudes; men are generally more risk-seeking than women. Younger individuals are more inclined towards risk-taking than older individuals. The finding underscores the importance of demographic characteristics in understanding risk preferences and their influence on financial investment decisions (Lazányi et al., 2017).

Conclusively, these studies emphasized the importance of risk preference theory in financial decision-making and highlighted how demographic factors intersect with risk preferences to influence financial decisions. Using risk preference theory as the foundation of this study is crucial for understanding how demographic factors and varying risk preferences among investors influence household financial investments.

2.2 Related Studies

2.2.1 Demographic Characteristics

In the examination of household financial investment, demographic characteristics exert a notable influence on the decision-making process regarding financial investment within households (Wang, 2018).

Initially, it is important to note that the family's asset allocation is a dynamic process that adjusts over time. As the family progresses through life cycle stages, their asset needs will vary accordingly. The presence of elderly individuals within the household significantly influences how financial assets are allocated. When there is an increase in the proportion of the elderly population within a household, there tends to be a notable rise in investments in real estate and savings. In contrast, investments in riskier assets tend to decrease (He & Chen, 2020). As the life cycle unfolds, there is an initial increase followed by a decline in households holding risky assets. In contrast, savings initially decline but eventually experience an upward trend (Huang, 2022).

Secondly, the level of education among investors plays a significant role in their ability to gather and analyze information. An individual's subjective perception

greatly influences their investment decisions, thereby impacting their involvement in the household financial market (Wang & Li, 2020). Research conducted by Zhang & Wang (2020) on demographic characteristics using data from the Survey of Consumer Finance in the United States revealed a strong correlation between residents' educational background and their investment choices regarding risky financial assets. In general, education has several key effects on household asset selection. Firstly, individuals with higher levels of education are more adept at overcoming information barriers due to their enhanced capacity for market research and analysis. This heightened ability enables them to identify market risks more effectively and make informed judgments about asset income trends. Secondly, individuals with higher levels of education possess greater comprehension skills when understanding complex financial markets and products. Consequently, they are more inclined towards embracing new financial assets. Lastly, those with a stronger educational background have accumulated substantial investment experience and are, therefore, more likely to invest in familiar financial assets. As a result, a positive correlation exists between educational attainment and investments made in risky financial assets (Han, 2020).

Additionally, the financial investment behavior of household investors is influenced by gender characteristics. Typically, men in households possess superior financial knowledge regarding investment and taxation. At the same time, women handle short-term and medium-term planning and daily expenses (He & Chen, 2020). This can be attributed to women's limited involvement in significant financial decisions within the household. Furthermore, male investors are more inclined towards risk than their female counterparts. Consequently, households where men dominate investment decisions are more likely to engage in risk asset markets (Wang & Li, 2019).

Risk tolerance significantly influences financial investment decisions, which is reflected in household debt and wealth income. Deng (2021) emphasized the importance of these factors as a basis for effective financial investment.

Initially, the selection of household financial assets is influenced by household debt, and households often combine their debt with investments (Wang, 2022). A higher household debt rate decreases the likelihood of households engaging in savings deposits. However, it increases their inclination towards riskier financial assets like stocks and funds. Moreover, an increase in the household debt rate leads to

a decrease in the proportion allocated to savings deposits while increasing the proportion allocated to risky financial assets within households (Lin, 2018).

Secondly, there is a significant positive correlation between household income and participation in the market for risky financial assets (Ma, 2021). Additionally, higher-income households tend to have stronger risk tolerance and preferences, leading them to actively engage in the financial market (Zhang, 2021). Consequently, they allocate more of their wealth towards financial assets, including those with higher risks. In contrast, households with lower levels of wealth are more susceptible to uncertainties regarding future income expectations. This often results in increased precautionary savings and a reluctance to invest in risky financial assets (Shu et al., 2021). Due to limitations imposed by their wealth size and risk tolerance, among other factors, these households avoid participating in risk assets and fail to achieve diversified investments. Therefore, it can be concluded that household wealth has a reciprocal influence on the selection of financial assets (He & Wang, 2021).

2.2.2 Risk Preference

The determination of household financial investment is influenced by numerous factors, with risk preference being a crucial factor significantly impacting decision-making behavior. In a market equilibrium setting characterized by market efficiency and completely symmetric information, rational households will make asset decisions in areas such as consumption, investment, and savings based on the economic environment to mitigate risks and achieve asset appreciation (Wang et al., 2021). Risk preference refers to investors' inclination and tolerance towards risk, which can be categorized into risk preference, risk aversion, and risk neutrality. Investors with varying risk preferences will opt for different asset portfolios to meet their specific requirements for risk management and potential returns. Consequently, individuals' risk preferences influence the allocation ratio of various household assets (Zhou, 2023).

Investors willing to take on more risk to achieve higher returns tend to have a larger proportion of risky assets in their household portfolios (Liu, 2020). The inclination towards risk positively influences the allocation behavior of household financial assets. It also significantly contributes to increasing the allocation of financial assets by households (Wang, 2022). Consequently, individuals with a risk appetite optimize their financial investments, promote diversification in their financial

portfolios, and attain greater investment returns (Zhao et al., 2020). Furthermore, a cyclical relationship exists between investment participation, risk preference, and wealth level, where higher levels of investment participation and risk preference among households lead to increased wealth accumulation. This subsequently expands their involvement in the risky market and further strengthens their appetite for risk while driving wealth appreciation.

However, most residents in China exhibit risk aversion, while only a minority display risk tolerance. This preference for lower-risk financial assets is prevalent among most Chinese households, resulting in limited participation in higher-risk financial investments (Li et al., 2019). Risk-averse individuals prioritize risk prevention and are more apprehensive about potential risks compared to those who are risk-neutral or risk-tolerant (Li & Wang, 2021). The impact of the COVID-19 pandemic has further discouraged households with poor health from engaging in risky financial ventures, leading them to favor safer options such as savings, real estate, and productive assets (Jia, 2021). Consequently, the objective is to encourage increased precautionary savings among households.

Risk neutrality is the opposite of risk preference and risk aversion. Risk-neutral individuals are investors who do not actively seek out or avoid risks when making decisions. They solely focus on the expected returns, disregarding the risks involved, and do not require compensation for taking on risks. When faced with risks, risk-neutral individuals neither exhibit a preference nor an aversion but maintain a fair attitude toward them (Zhang, 2021). Zhang (2021) discovered that risk neutrals are the largest proportion of individual investors in stocks. In a risk-neutral world, where all securities have an expected rate of return equal to the risk-free rate, risk neutrals would be considered ideal investors as they would not need to consider the impact of risks. However, in reality's financial market, there are relatively few risk neutrals, and most investors have unique risk preferences.

In addition, the risk profile of investors is not fixed. With the continuous advancement of information technology, social networks have gradually transformed individuals' perception of risk, enhanced their understanding of household financial matters, and reduced their apprehension towards risks (Jia & He, 2020). Consequently, this impacts their inclination towards risk, leading to increased participation in the

market by residents (and a higher allocation of stock assets (Lu & He, 2022).

2.2.3 Financial Investment

Recently, China has witnessed rapid economic growth, leading to increased national income and improved quality of life for its residents. As the total financial assets of individuals continue to rise, there is a growing inclination among them to participate actively in the financial market (Huang, 2022). Consequently, there is also a gradual diversification in their demand for various financial products (Tao et al., 2023). In this scenario, it becomes crucial for households to allocate their assets effectively and reasonably to ensure the preservation and appreciation of disposable income (Huang, 2022). When it comes to daily financial investment decisions made by individuals, they typically consider their risk preferences while allocating investments across different asset categories. This factor significantly influences wealth accumulation, portfolio allocation choices, insurance decisions, and retirement planning outcomes (Zhang & Man, 2020). Moreover, due to varying subjective risk preferences among investors, their composition of risky assets differs considerably (Liu et al., 2022).

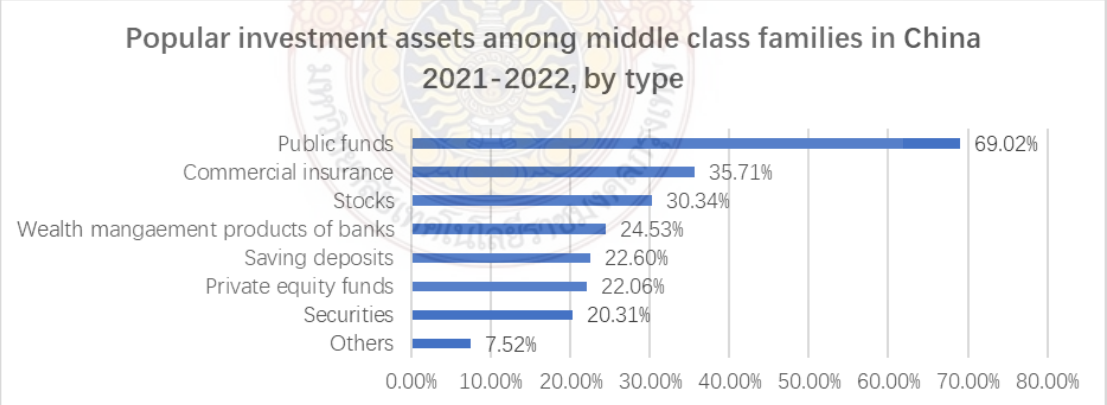


Figure 2.1 Popular Investment Assets among Middle-Class Families in China 2021-2022, by Type

According to Slotta's （2023）research report《Popular investment assets among middle-class families in China 2021-2022, by type》: As of January 2022, almost 70 percent of middle-class families like to invest in public funds. Other popular financial products among this demographic included commercial insurance, stocks, and

wealth management products. Only around one-fifth of respondents said they would deposit their money in a savings account.

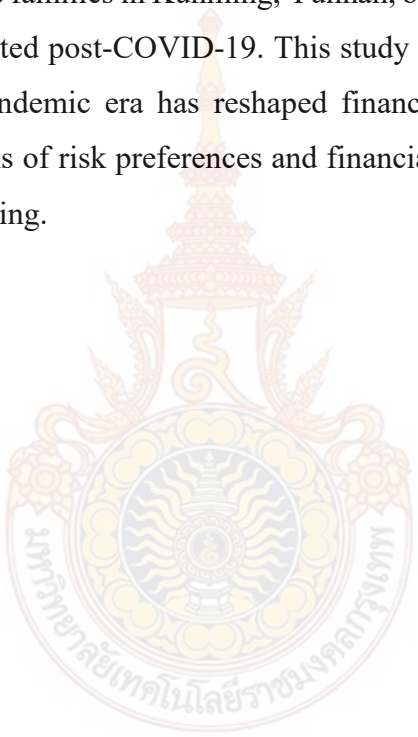
To conduct a more comprehensive study on financial investment trends, this research selects six financial investment products based on their proportion in the table: public funds, commercial insurance, stocks, wealth management products of banks, private equity funds, and securities. Literature review indicates that numerous scholars have extensively examined the factors influencing household financial investment behavior. Regarding the determinants of household financial investments, Yan (2019) suggested that age composition significantly impacts this decision-making process, with regional variations observed. Different age groups respond differently to health shocks, affecting their financial investment choices (Cao et al., 2020). The educational attainment of individuals also influences their approach to managing household wealth (Luo, 2020). Family income level, financial literacy, investment knowledge, and financial planning concepts all shape consumption patterns and decisions related to investment and financial planning within households (Yang et al., 2022).

Furthermore, a family's overall financial investments substantially influence financial asset allocation more than income alone (Zhang, 2021). Luo (2020) argues that Chinese residents currently exhibit limited selectivity in allocating household assets and emphasizes the need for enhanced risk awareness. Luo (2021) asserts that Chinese consumers should prioritize acquiring financial knowledge while urging government agencies to promote widespread financial education initiatives.

In the study on the impact of COVID-19 on household financial investments, Chen (2020) discovered that low-income households were disproportionately affected by the epidemic. This led to changes in both consumption and asset structures within households and influenced their risk preferences and financial behaviors. Gan et al. (2020) observed that Chinese households currently prefer medium- and low-risk assets, with an increased focus on commercial insurance and real estate investments while avoiding overseas ventures. Wang (2020) found evidence suggesting that the pandemic has resulted in an increased proportion of cash holdings and bank deposits, accompanied by a decrease in stock market investments and funds allocation. Furthermore, families' reactions to the epidemic varied based on age, gender, and health

conditions. Ren (2021) argued that Chinese residents have become more aware of the significance of investing in health protection measures and establishing household reserve funds following the pandemic.

In summary, while existing literature has extensively studied and explored household financial investments, further in-depth research is needed to understand how changes in investors' risk perceptions post-pandemic impact financial investments. The novelty of this research lies in its comprehensive examination of the interplay between demographic characteristics, risk preferences, and financial investment decisions among middle-income families in Kunming, Yunnan, by integrating these elements and leveraging data collected post-COVID-19. This study provides contemporary insights into how the post-pandemic era has reshaped financial decision-making processes, offering interpretations of risk preferences and financial investment recommendations for investors in Kunming.



CHAPTER III
RESEARCH METHODOLOGY

This chapter explains the research methodology used to verify the research framework, which consists of research procedures, sample size, data collection, data analytics procedures, inferential statistics, and measurement.

3.1 Research Design

This research was designed to examine the relationship between demographic characteristics and various financial investment products and to explore the influence of risk preference on the choice of financial investment types. The conceptual framework was developed based on Expected Utility Theory (EUT), which categorized risk preferences into risk-averse, risk-neutral, and risk-seeking innovators. The independent variables of this research were demographic factors and risk preference factors. The dependent variable was different types of household financial investments, such as public funds, commercial insurance, and stocks.

This research was designed as a quantitative research study by collecting numerical data from investors who are in the middle-income family. The questionnaire consisted of closed-ended questions related to the investor demographic, risk preference, and financial investment.

3.2 Research Population and Samples

3.2.1 Population

The population of this study is middle-income customers of the financial institutes located in the main urban area of Kunming, Yunnan Province, which comprises Wuhua District, Xishan District, Panlong District, Guandu District, and Chenggong District. Therefore, this study applies a non-probability sampling method.

3.2.2 Samples

Cochran's formula method is a widely utilized survey technique. To ensure the validity of the survey samples, the sample size is determined based on the

subsequent formula:

$$n = \frac{p\,(1-p)\,Z^2}{e^2}$$

Where n = the sample size needed

Z = the Z-value (the number of standard deviations from the mean, which corresponds to the desired confidence level = 1.96)

p = estimated proportion of the population (= 0.5, unknown, then used the maximum variability)

e = margin of error (.05)

$$n = \frac{0.5(1-0.5)*1.96^2}{.05^2} \cong 385$$

An additional 15 samples were collected just in case of error and for the integrity of the data. Therefore, the sample size is 400 samples. Data is collected from financial investment customers in Kunming, Yunnan Province.

3.2.3 Sampling Methods

The convenience sampling method was used to collect data with the screening question.

3.3 Data Collection

This study employed quantitative research. The questionnaire was designed based on a research framework to collect data with a convenience sampling method. The questionnaires were distributed to customers of financial institutes in Kunming, Yunnan Province's main urban area, through Questionnaire Star, an online survey platform. A link to the questionnaire was sent to the target group through social media platforms such as WeChat and QQ, and respondents could directly click on the link to answer the questionnaire.

In order to get a higher response rate, the questionnaire has a paragraph dedicated to the nature and purpose of this study. The questionnaire also indicated that it took only 5 minutes for the participants to complete. Respondents were informed that their contributions were important and valuable. The participants were assured that all responses were confidential and used only for research.

3.4 Research Instrument

A questionnaire was designed and used as a tool for collecting data. The tool has been developed with the following steps:

1. Study methods for developing questionnaires from related documents and textbooks.

2. Study related concepts, theories, and research documents by considering various details to cover the stated research objectives.

3. Draft the questionnaire by the conceptual framework and objectives of the research to be used to collect data from sample groups.

4. The developed questionnaire was evaluated by 3 experts in the field for content validity, e.g., check language understanding and content appropriateness.

5. The adjusted questionnaire from the experts' comments was used for a pretest by collecting data from 30 samples. The data were used to calculate the reliability test.

6. Take the completely edited questionnaire and pass a reliability test to collect data from the next designated sample group.

An online questionnaire survey research was set up and used to collect relevant data for this study. The questionnaire was divided into three parts.

Part I: Demographic characteristics. This section comprises six closed-ended inquiries aimed at gathering information regarding the demographic characteristics of the investors. The objective is to comprehensively understand their *gender, age, educational background, total household assets, household debt, and household debt expense.*

Part II: Risk preference. The Likert five-point scale assessed investors' preferences toward *risk-averse, risk-neutral, and risk-seeking investors.*

Part III: Financial investment. The five-point Likert scale was employed to assess investors' evaluations of financial investment *towards public funds, commercial insurance, stocks, wealth management products of banks, private equity funds,* and *securities*.

From parts 2 and 3, the participants were asked to rate their level of opinion about the questions in terms of the degree of agreement or disagreement that the following numbers can indicate: 1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree;

and 5: Strongly agree. Silpajaru (2010) interpreted the average values as shown in Table 3.1. See Appendix A for completed questionnaires.

Table 3.1 The Interpretation of the Average Values

Score Level	Average Value	Meaning
5	4.50 – 5.00	Strongly agree
4	3.50 – 4.49	Agree
3	2.50 – 3.49	Neutral
2	1.50 – 2.49	Disagree
1	1.00 – 1.49	Strongly

3.5 Content Validity and Reliability

The content validity test using Item Object Consistency (IOC) and the reliability test using Cronbach's Alpha were performed in the following details to ensure the quality and confidence of the questionnaires.

3.5.1 Content Validity

Three experts who have expertise in creating research tools and those who are managers of the financial institute examined the content and the measurement of the questions to cover and complete the research issues. The experts were required to rate the questionnaires according to the following meaning.

+1	The question is consistent with the content of the measurement objective.
0	Not sure that the question is consistent with the content of the measurement objective.
-1	The question is not consistent with the content of the measurement objective.

The results from all expert's evaluations were used to calculate the IOC index according to the formulas of Rovinelli and Hambleton (1977) as follows:

$$IOC = \Sigma R / N$$

Where ΣR = total rating score from all experts for each question

N = number of experts

If the calculated IOC index was greater than or equal to 0.5, it was considered that the questionnaire was measured following the research objectives. Therefore, questions with an IOC index of 0.5 or higher were chosen. If any question has a value that did not reach the 0.5 criterion, but it was necessary to use that question to cover what needs to be measured, that question was revised again according to the experts' advice.

For the questionnaires used in this study, the IOC index was more than 0.8 (See Appendix C); therefore, all the contents of the questionnaires passed the validity test.

3.5.2 Reliability

To test the confidence of the tools used in this research, the questionnaire was pre-tested with 30 qualified samples to test their understanding of the corresponding questions. The internal consistency was measured using Cronbach's alpha coefficient (α) test method. Hair et al. (2010) state that a Cronbach's alpha score higher than 0.70 denotes satisfactory dependability.

Cronbach's alpha coefficient (α) values for risk preference and financial investment are 0.733 and 0.948 (See details in Appendix D), greater than 0.7. This indicates strong internal consistency and suggests that the questionnaire is highly reliable. This implies the tool can collect data for further analysis, aligning with commonly recognized academic literature thresholds (Cronbach, 1951; George & Mallery, 2003).

3.6 Data Analysis

This research used descriptive, inferential statistics, and statistical inference to analyze data.

3.6.1 Descriptive Statistics

Descriptive statistics were used to analyze the respondents' demographic characteristics, including gender, age, educational background, household debt types,

and household debt expense. The frequency, percentage, and mean were used to analyze data.

3.6.2 Inferential Statistics

Inferential statistics were used to analyze data and test the hypotheses at the statistical significance level of 0.05. An analysis to test the relationship or interplay between one dependent variable and several independent variables, which test.

Hypothesis 1: The difference in demographic characteristics affects investors' selection of financial investment types.

Independent sample t-tests and one-way variance analysis (ANOVA) were used to test hypothesis 1.

Hypothesis 2: The investors' risk preference influences their choice of financial investment types. The multiple linear regression analysis was used to test hypothesis 2.

CHAPTER IV
ANALYSIS RESULTS

This chapter presents the research results in two sections. The first section describes descriptive statistical data of variables used in the research process, including demographic characteristics, risk preference, and financial investment preference. The second section discusses the empirical results of hypothesis testing through independent sample t-test, one-way ANOVA, and multiple linear regression. The analysis results of all hypothesis tests are described and summarized.

4.1 Descriptive Statistics

The sample of this study is 400 customers who invest in the financial institute in Kunming, Yunnan province. This part presents the descriptive statistical results, including demographic, dependent, and independent variables.

4.1.1 Demographic Data

This part demonstrates the results based on the research objectives by splitting into 2 parts as follows

Part I: the analysis results of respondent's demographic data.

Part II: the analysis results of the level of opinion on risk preference and financial investment types.

As shown in Table 4.1, this research's demographic data involves six aspects: gender, age, educational background, total household assets, household debt types, and household debt expense.

Table 4.1 Demographic Data

Gender	**Number of People**	**Percentage**
Male	190	47.50
Women	210	52.50
Age	**Number of People**	**Percentage**
Under 35	68	17.00
35-45 years old	153	38.25
46-55 years old	115	28.75
56-65 years old	45	11.25
Age 66 and older	19	4.75
Educational Background	**Number of People**	**Percentage**
High school or less	117	29.25
Associate's degree	165	41.25
Bachelor's degree	78	19.50
Master's degree or higher	40	10.00
Household Assets	**Number of People**	**Percentage**
Under 1.5 million	298	74.50
1.5 to 2. 99 million yuan	52	13.00
3-4.5 million yuan	31	7.75
More than 4.5 million yuan	19	4.75
Household Debt Types	**Number of People**	**Percentage**
No debt	35	8.75
Mortgage debt	177	44.25
Car debt	32	8.00
Mortgage and car debt	124	31.00
Other debt	32	8.00
Household Debt Expense	**Number of People**	**Percentage**
0-10%	124	31.00
11% - 20%	116	29.00
21% - 30%	127	31.75
31% - 40%	21	5.25
More than 40%	12	3.00

Table 4.1 shows the sample data of 400 investment customers from the main urban area of Kunming, Yunnan Province. The sample is predominantly middle-aged (35-55 years old), accounting for 67%, with females slightly outnumbering males at 52.50%. In terms of educational background, the majority have an associate's degree

(41.25%), followed by high school education or less (29.25%), with fewer holding a bachelor's degree (19.50%) or higher (10.00%). The distribution of total household assets shows that 74.50% of households have assets under 1.5 million yuan, indicating relatively low asset levels. Regarding household debt types, mortgage debt is common, affecting 44.25% of households, and 31.00% have both car and mortgage debt. Additionally, household debt expense is below 30% of their annual income, indicating generally manageable debt levels. This group is characterized by moderate educational attainment and low asset levels, primarily burdened by mortgage debt.

4.1.2 Descriptive of the Opinion Level on Risk Preference

Table 4.2 presents descriptive statistics for respondents' opinions on risk preference, an independent variable in the study. Risk preference includes risk-averse, risk-seeking, and risk-neutral investors. Each variable was measured using a 5-point Likert scale, ranging from 1 to 5, with the highest score indicating a "strongly agree" opinion.

Table 4.2 Descriptive Statistics of Risk Preference

	Level of Opinion								
Risk Preferences	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**	**Meaning**	**Rank**
Risk-Averse Investors	54 13.5%	175 43.8%	108 27.0%	59 14.8%	4 1.0%	3.54	.936	Agree	3
Risk-Seeking Investors	78 19.5%	186 46.5%	99 24.8%	29 7.2%	8 2.0%	3.74	.921	Agree	2
Risk- Neutral Investors	150 37.5%	173 43.3%	61 15.3%	7 1.8%	9 2.3%	4.12	.887	Agree	1
***Overview of risk preferences**	**41 10.3%**	**259 64.8%**	**83 20.8%**	**17 4.3%**	**0**	**3.81**	**.667**	**Agree**	

**Numbers in this row are not the total frequencies of the responses from each variable.*

The analysis results indicated that respondents' opinions were at the agreement level for all variables, including an overview of risk preference, risk-averse, risk-seeking, and risk-neutral investors, with mean values of 3.81, 3.54, 3.47, and 4.12, respectively. The mean value for risk-neutral investors was the highest, indicating that these investors typically balance high-risk and low-risk investments while

demonstrating a greater willingness to engage in riskier opportunities. This investor group tends to focus solely on the expected returns of investment projects, regardless of the associated risks.

Risk-seeking investors ranked second, with a mean value of 3.74, indicating they are more willing to take risks than risk-averse investors. This type of investor is more likely to pursue high-risk, high-reward opportunities. Risk-averse investors ranked third, with a mean value of 3.54, meaning they are the least willing to take risks compared to the other two types of investors. These investors tend to avoid risk and prefer low-risk, low-return investment projects. They are very risk-averse and would rather forgo some potential returns than incur losses.

4.1.3 Descriptive of the Opinion Level on Financial Investment

Table 4.3 presents descriptive statistics for respondents' opinions on financial investment, an independent variable in the study. Financial investment encompasses public funds, commercial insurance, stocks, bank wealth management products, private equity funds, and securities. Each variable was measured using a 5-point Likert scale, ranging from 1 to 5, with the highest score indicating a "strongly agree" opinion.

The analysis results indicated that respondents' opinions were at the agreement level for all variables, including an overview of financial investment, public funds, commercial insurance, stocks, bank wealth management products, private equity funds, and securities, with mean values of 4.12, 3.98, 3.81, 4.01, 3.67, 4.17, and 4.17, respectively. The mean values for private equity funds and securities were equal and the highest, indicating that these investors prefer to invest in both types equally.

Stocks rank third with a mean value of 4.01, reflecting significant interest from investors in high-reward investments. Public funds rank fourth with a mean value of 3.98, suggesting they are a balanced investment option that offers moderate returns and diversification. Commercial insurance ranks fifth with a mean value of 3.81, receiving moderate preference due to its stability. Wealth management products from banks have the lowest ranking, with a mean value of 3.67, indicating a lower preference because of typically lower returns. Overall, this suggests that investors prefer medium to high-risk investments while still maintaining some interest in stable, low-risk options.

Table 4.3 Descriptive Statistics of Financial Investment

	Level of Opinion								
Financial Investments	**5**	**4**	**3**	**2**	**1**	**Mean**	**SD**	**Meaning**	**Rank**
Public funds	190 47.5%	89 22.3%	62 15.5%	40 10.0%	19 4.8%	3.98	1.209	Agree	4
Commercial Insurance	150 37.5%	128 32.0%	51 12.8%	37 9.3%	34 8.5%	3.81	1.267	Agree	5
Stocks	197 49.3%	78 19.5%	76 19.0%	32 8.0%	17 4.3%	4.01	1.178	Agree	3
Wealth management products of banks	123 30.8%	133 33.3%	66 16.5%	45 11.3%	33 8.3%	3.67	1.249	Agree	6
Private equity funds	234 58.5%	48 12.0%	80 20.0%	26 6.5%	12 3.0%	4.17	1.136	Agree	1
Securities	235 58.5%	52 13.0%	72 18.0%	28 7.0%	13 3.3%	4.17	1.146	Agree	1
***Overview of Financial investments**	**281 54.4%**	**74 18.5%**	**60 15.0%**	**33 8.3%**	**15 3.8%**	**4.12**	**1.163**	**Agree**	

**Numbers in this row are not the total frequencies of the responses from each variable.*

4.2 Inferential Statistics

In this study, gender is a two-point discrete variable. Age, educational background, total household assets, household debt types, and household debt expense are more than three discrete variables. Therefore, an independent sample t-test and one-way analysis of variance were used to test whether there were differences in the impact of demographic characteristics on financial investments in Kunming, Yunnan Province.

Multiple linear regression methods were used to test the impact of risk preference, including risk-averse, risk-neutral investors, and risk-seeking on financial investments in Kunming, Yunnan province.

According to the purpose of the study, the results are divided into two parts.

Part I: The analysis results of the difference in demographic characteristics affect financial investments differently.

Part II: The analysis results of the investors' risk preference influence their choice of financial investment types.

4.2.1 The Effect of Demographic Characteristics on Financial Investments

Hypothesis 1: The difference in demographic characteristics affects investors' selection differently on financial investment types.

H1a: The difference in gender affects financial investments differently

The independent sample t-test was used to examine the mean difference between the two data groups at the statistical significance level of 0.05.

Table 4.4 Gender Affects Financial Investments

** The mean difference is significant at the level of 0.05*

Financial investments	Gender	N	Mean	SD	t-value	*df*	Sig
Public funds	male	190	3.93	1.285	-.718	398	.473
	female	210	4.02	1.136			
Commercial insurance	male	190	2.97	1.170	-15.754	398	.001*
	female	210	4.56	.788			
Stocks	male	190	3.94	1.244	-1.178	381.360	.240
	female	210	4.08	1.115			
Wealth management products of banks	male	190	2.91	1.155	-14.124	398	.001*
	female	210	4.36	.871			
Private equity funds	male	190	4.05	1.238	-1.870	398	.062
	female	210	4.27	1.028			
Securities	male	190	4.05	1.255	-1.935	398	.054
	female	210	4.28	1.031			
Financial investments overview	male	190	4.05	1.225	-1.056	398	.292
	female	210	4.18	1.103			

Based on the analysis of the data in Table 4.4, the difference in gender does not significantly affect the choice of public funds, stocks, private equity funds, securities, and the overview of financial investments differently, with significance values of 0.473, 0.240, 0.062, 0.054, and 0.292, respectively. The difference in gender affects financial investment in commercial insurance and wealth management products of banks with significance values of 0.001 and 0.001, respectively.

H1b: The difference in age affects financial investments differently

One-way analysis of variance was used to analyze the data to examine the difference in the mean values of more than 2 sets of data at the statistical significance

level of 0.05.

Table 4. 5 Effects of Age on Financial Investments

Financial investments		Sum of Squares	df	Mean square	F	Sig.
Public fund	Between Groups	100.706	4	25.176	20.628	.001*
	Within Groups	482.092	395	1.220		
	Total	582.798	399			
Commercial insurance	Between Groups	66.006	4	16.501	11.352	.000*
	Within Groups	574.172	395	1.454		
	Total	640.177	399			
Stock	Between Groups	89.296	4	22.324	18.979	.000*
	Within Groups	464.614	395	1.176		
	Total	553.910	399			
Wealth management products of banks	Between Groups	140.711	4	35.178	28.845	.000*
	Within Groups	481.729	395	1.220		
	Total	622.440	399			
Private equity Fund	Between Groups	20.641	4	5.160	4.122	.003*
	Within Groups	494.469	395	1.252		
	Total	515.110	399			
Securities	Between Groups	21.853	4	5.463	4.294	.002*
	Within Groups	502.587	395	1.272		
	Total	524.440	399			
Financial investments overview	Between Groups	41.273	4	10.318	8.181	.000*
	Within Groups	498.205	395	1.261		
	Total	539.478	399			

** The mean difference is significant at the level of 0.05*

Based on the analysis of the data in Table 4.5, the age difference significantly affects financial investment types, including public funds, commercial insurance, stocks, wealth management products of banks, private equity funds, securities, and overview of financial investments, with significance values of 0.001, 0.000, 0.000, 0.000, 0.003, 0.002, and 0.000, respectively. The analysis of multiple

comparisons of different age groups using LSD is provided in Table 4.5.1-4.5.7.

Table 4.5.1 Multiple Comparisons Mean of Age Difference on Public Fund

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	4.40	-	-.002 (.992)	1.084 (.000*)	.886 (.000*)	.187 (.516)
35-45 years old	4.40		-	1.086 (.000*)	.888 (.000*)	.188 (.484)
46-55 years old	3.31			-	-.198 (.309)	-.897 (.001*)
56-65 years old	3.51				-	-.669 (.021*)
Age 66 and older	4.21					-

** Average difference at 0.05 level significant dependent variable: public fund*

Table 4.5.1 shows the mean comparison of public fund investments among different age groups. Investors under 35 and those aged 35-45 years have a higher mean than those aged 46-55 and 56-65, with significant values of 0.000. Additionally, investors aged 46-55 and 56-65 years have a lower mean than those aged 66 and older, with significant values of 0.001 and 0.021.

Table 4.5.2 Multiple Comparisons Mean of Age Differences on Commercial Insurance

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	3.94	-	-.222 (.207)	.750 (.000*)	.097 (.677)	-.164 (.600)
35-45 years old	4.16		-	.972 (.000*)	.319 (.120)	.058 (.843)
46-55 years old	3.19			-	-.653 (.002*)	-.914 (.002*)
56-65 years old	3.84				-	-.261 (.430)

Table 4.5.2 Multiple Comparisons Mean of Age Differences on Commercial Insurance (continued)

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Age 66 and older	4.11					-

** Average difference at 0.05 level significant dependent variable: commercial insurance*

Table 4.5.2 shows the mean comparison of commercial insurance investments among different age groups. Investors under 35 have a lower mean than those aged 46-55, with significant values of 0.000. Investors aged 35-45 years have a higher mean than those aged 46-55, with significant values of 0.000. Investors aged 46-55 have a lower mean than those aged 56-65 and those aged 66 and older, with significant values of 0.002.

Table 4.5.3 Multiple Comparisons Mean of Age Differences on Stock

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	4.34	-	-.080 (.613)	1.016 (.000*)	.494 (.018*)	.128 (.650)
35-45 years old	4.42		-	1.097 (.000*)	.574 (.002*)	.208 (.431)
46-55 years old	3.32			-	-.523 (.006*)	-.889 (.001*)
56-65 years old	3.84				-	-.366 (.218)
Age 66 and older	4.21					-

** Average difference at 0.05 level significant dependent variable: stock*

Table 4.5.3 shows the mean comparison of stock investments among different age groups. Investors under 35 have a higher mean than those aged 46-55 years and 56-65 years, with significant values of 0.000 and 0.018. Investors aged 35-

45 years have a higher mean than those aged 46-55 and 56-65 years, with significant values of <0.001 and 0.002. Investors aged 46-55 have a lower mean than those aged 56-65 and those aged 66 and older, with significant values of 0.006 and 0.001.

Table 4.5.4 Multiple Comparisons Mean of Age Differences on Wealth Management Products of Banks

		Mean Difference (I-J)				
Group	**X̄**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	4.03	-	-.141 (.383)	1.203 (.000*)	.696 (.001*)	-.234 (.415)
35-45 years old	4.17		-	1.344 (.000*)	.837 (.000*)	-.093 (.729)
46-55 years old	2.83			-	-.507 (.009*)	-1.437 (.000*)
56-65 years old	3.33				-	-.930 (.002*)
Age 66 and older	4.26					-

** Average difference at 0.05 level significant dependent variable: wealth management products of banks*

Table 4.5.4 shows the mean comparison of wealth management products of bank investments among different age groups. Investors under 35 have a higher mean than those aged 46-55 years and 56-65 years, with significant values of 0.000 and 0.001. Investors aged 35-45 years have a higher mean than those aged 46-55 and 56-65 years, with significant values of <0.001. Investors aged 46-55 have a lower mean than those aged 56-65 and those aged 66 and older, with significant values of 0.009 and 0.000. Investors aged 56-65 have a lower mean than those aged 66 and older, with significant values of 0.002.

Table 4.5.5 Multiple Comparisons Mean of Age Differences on Private Equity Fund

		Mean Difference (I-J)				
Group	**X̄**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	3.99	-	-.394 (.016*)	-.180 (.294)	-.037 (.864)	.564 (.053)
35-45 years old	4.38		-	.214 (.122)	.357 (.061)	.958 (.000*)
46-55 years old	4.17			-	.143 (.468)	.744 (.008*)
56-65 years old	4.02				-	.610 (.050)
Age 66 and older	3.42					-

** Average difference at 0.05 level significant dependent variable: private equity fund*

Table 4.5.5 shows the mean comparison of private equity fund investments among different age groups. Investors under 35 have a lower mean than those aged 35-45, with significant values of 0.016. Investors aged 35-45 years have a higher mean than those aged 66, with significant values of 0.000. Investors aged 46-55 have a higher mean than those aged 66 and older, with significant values of 0.008.

Table 4.5.6 Multiple Comparisons Mean of Age Differences on Securities

		Mean Difference (I-J)				
Group	**X̄**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	3.88	-	-.503 (.002*)	-.335 (.053)	-.140 (.519)	.356 (.225)
35-45 years old	4.39		-	.168 (.228)	.363 (.058)	.859 (.002*)
46-55 years old	4.22			-	.195 (.326)	.691 (.014*)
56-65 years old	4.02				-	.496 (.109)
Age 66 and older	3.53					-

** Average difference at 0.05 level significant dependent variable: securities*

Table 4.5.6 shows the mean comparison of securities investments among different age groups. Investors under 35 have a lower mean than those aged 35-45, with significant values of 0.002. Investors aged 35-45 years have a higher mean than those aged 66, with significant values of 0.002. Investors aged 46-55 have a higher mean than those aged 66 and older, with significant values of 0.014.

Table 4.5.7 Multiple Comparisons Mean of Age Differences on Financial Investments Overview

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**Under 35**	**35-45 years old**	**46-55 years old**	**56-65 years old**	**Age 66 and older**
Under 35	4.35	-	-.052 (.750)	.666 (.000*)	.508 (.019*)	.142 (.625)
35-45 years old	4.41		-	.718 (.000*)	.561 (.003*)	.195 (.476)
46-55 years old	3.69			-	-.157 (.426)	-.524 (.060)
56-65 years old	3.84				-	-.366 (.234)
Age 66 and older	4.21					-

** Average difference at 0.05 level significant dependent variable: financial investments overview*

Table 4.5.7 shows the mean comparison of financial investments overview among different age groups. Investors under 35 have a higher mean than those aged 46-55 years and 56-65 years, with significant values of 0.000 and 0.019. Investors aged 35-45 years have a higher mean than those aged 46-55 years and aged 56-65, with significant values of 0.000 and 0.003.

H1c: The difference in educational background affects financial investments differently

One-way analysis of variance was used to analyze the data to test the

difference between the mean values of more than 2 groups at the statistical significance level of 0.05.

Table 4.6 The Effect of Educational Background on Financial Investments

Financial investments		**Sum of Squares**	**df**	**Mean square**	**F**	**Sig.**
Public funds	Between Groups	8.807	3	2.936	2.025	.110
	Within Groups	573.990	396	1.449		
	Total	582.797	399			
Commercial insurance	Between Groups	11.383	3	3.794	2.390	.068
	Within Groups	628.794	396	1.588		
	Total	640.178	399			
Stock	Between Groups	12.790	3	4.263	3.120	.026*
	Within Groups	541.120	396	1.366		
	Total	553.910	399			
Wealth management products of banks	Between Groups	21.611	3	7.204	4.748	.003*
	Within Groups	600.829	396	1.517		
	Total	622.440	399			
Private equity Fund	Between Groups	9.180	3	3.060	2.395	.068
	Within Groups	505.930	396	1.278		
	Total	515.110	399			
Securities	Between Groups	10.402	3	3.467	2.671	.047*
	Within Groups	514.038	396	1.298		
	Total	524.440	399			
Financial investments overview	Between Groups	5.773	3	1.924	1.428	.234
	Within Groups	533.705	396	1.348		
	Total	539.478	399			

** The mean difference is significant at the 0.05 level*

Based on the data analysis in Table 4.6, the difference in educational backgrounds does not affect financial investment types, including public funds, commercial insurance, private equity funds, and the financial investments overview differently, with significant values of 0.110, 0.068, 0.068, and 0.234, respectively. The

different educational backgrounds affect the financial investment in stocks, wealth management products of banks, and securities with significant values of 0.026, 0.003, and 0.047, respectively. The analysis of multiple comparisons of different educational background groups using LSD is provided in Table 4.6.1-4.6.3.

Table 4.6.1 Multiple Comparisons Mean of Educational Backgrounds Differences in Stock

		Mean Difference (I-J)			
Group	**X̄**	**High School or Less**	**Associate's Degree**	**Bachelor's Degree**	**Master's Degree or Higher**
High school or less	4.07	-	.250 (.077)	-.201 (.241)	-.107 (.619)
Associate's degree	3.82		-	-.451 (.005*)	-.357 (.084)
Bachelor's degree	4.27			-	.094 (.679)
Master's degree or higher	4.18				-

** Average difference at 0.05 level significant dependent variable: stock*

Table 4.6.1 shows the mean comparison of stock investments among different educational background groups. Investors with associate's degrees have a lower mean than those with bachelor's degrees, with significant values of 0.005.

Table 4.6.2 Multiple Comparisons Mean of Educational Backgrounds Differences in Wealth Management Products of Banks

		Mean Difference (I-J)			
Group	**X̄**	**High School or Less**	**Associate's Degree**	**Bachelor's Degree**	**Master's Degree or Higher**
High school or less	3.63	-	.178 (.233)	-.342 (.058)	-.443 (.051)
Associate's degree	3.45		-	-.520 (.002*)	-.620 (.004*)

Table 4.6.2 Multiple Comparisons Mean of Educational Backgrounds Differences in Wealth Management Products of Banks (continued)

		Mean Difference (I-J)			
Group	**X̄**	**High School or Less**	**Associate's Degree**	**Bachelor's Degree**	**Master's Degree or Higher**
Bachelor's degree	3.97			-	-.101 (.675)
Master's degree or higher	4.08				-

** Average difference at 0.05 level significant dependent variable: wealth management products of banks*

Table 4.6.2 shows the mean comparison of wealth management products of bank investments among different educational background groups. Investors with an associate's degree have a lower mean than those with bachelor's and master's degrees or higher, with significant values of 0.002 and 0.004.

Table 4.6.3 Multiple Comparisons Mean of Educational Background Differences on Securities

		Mean Difference (I-J)			
Group	**X̄**	**High School or Less**	**Associate's Degree**	**Bachelor's Degree**	**Master's Degree or Higher**
High school or less	4.03	-	-.323 (.019*)	-.056 (.739)	-.084 (.687)
Associate's degree	4.36		-	.268 (.088)	.408 (.043*)
Bachelor's degree	4.09			-	.140 (.529)
Master's degree or higher	3.95				-

** Average difference at 0.05 level significant dependent variable: securities*

Table 4.6.3 shows the mean comparison of securities investments among different educational background groups. Investors with high school or less have a lower mean than those with an associate's degree, with significant values of 0.019. Investors with associate's degrees have a higher mean than those with master's degrees or higher, with significant values of 0.043.

H1d: The difference in total household assets affects financial investments differently

One-way analysis of variance was used to analyze the data to examine the difference in the mean values of more than 2 sets of data at the statistical significance level of 0.05.

Table 4.7 The Effect of Total Household Assets on Financial Investments

Financial Investment		Sum of Squares	df	Mean Square	F	Sig.
Public funds	Between Groups	13.165	3	4.388	3.051	.029*
	Within Groups	569.633	396	1.438		
	Total	582.798	399			
Commercial insurance	Between Groups	1.244	3	.415	0.257	.856
	Within Groups	638.934	396	1.613		
	Total	640.178	399			
Stock	Between Groups	26.664	3	8.888	6.676	.000*
	Within Groups	527.246	396	1.331		
	Total	553.910	399			
Wealth management products of banks	Between Groups	1.676	3	.559	0.356	.785
	Within Groups	620.764	396	1.568		
	Total	622.440	399			
Private equity fund	Between Groups	177.951	3	59.317	69.669	.000*
	Within Groups	337.159	396	0.851		
	Total	515.110	399			
Securities	Between Groups	185.652	3	61.884	72.334	.000*
	Within Groups	338.788	396	0.856		
	Total	524.440	399			
Financial investments overview	Between Groups	14.275	3	4.758	3.588	.014*
	Within Groups	525.203	396	1.326		
	Total	539.477	399			

** The mean difference is significant at the 0.05 level*

Based on the data analysis in Table 4.7, the difference in total household assets does not affect financial investment types, including commercial insurance, wealth management products of banks, and the financial investments overview differently, with significant values of 0.856, 0.785, and 0.014, respectively. The different total household assets affect financial investment in public funds, stocks, private equity funds, and securities with significant values of 0.029, 0.000, 0.000, and

0.000, respectively. The analysis of multiple comparisons of different total household assets groups using LSD is provided in Table 4.7.1-4.7.5

Table 4.7.1 Multiple Comparisons Mean of Total Household Asset Differences on Public Funds

		Mean Difference (I-J)			
Group	**X̄**	**Under 1.5 million**	**1.5-2.99 million yuan**	**3-4.5 million yuan**	**More than 4.5 million yuan**
Less than 1.5 million yuan	4.06	-	.410 (.023*)	.483 (.033*)	-.094 (.740)
1.5-2.99 million yuan	3.65		-	.073 (.788)	-.504 (.118)
3-4.5 million yuan	3.58			-	-.577 (.099)
More than 4.5 million yuan	4.16				-

** Average difference at 0.05 level significant dependent variable: public funds*

Table 4.7.1 shows the mean comparison of public fund investments among different total household asset groups. Investors with total household assets of less than 1.5 million yuan have a higher mean than those with 1.5-2.99 million yuan and 3-4.5 million yuan, with significant values of 0.023 and 0.033.

Table 4.7.2 Multiple Comparisons Mean of Total Household Asset Differences on Stock

		Mean Difference (I-J)			
Group	**X̄**	**Under 1.5 million**	**1.5-2.99 million yuan**	**3-4.5 million yuan**	**More than 4.5 million yuan**
Less than 1.5 million yuan	4.13	-	.189 (.278)	.937 (.000*)	.394 (.150)
1.5-2.99 million yuan	3.94		-	.749 (.004*)	.205 (.507)
3-4.5 million yuan	3.19			-	-.543 (.107)
More than 4.5 million yuan	3.74				-

** Average difference at 0.05 level significant dependent variable: stock*

Table 4.7.2 shows the mean comparison of stock investments among different total household asset groups. Investors with total household assets of less than 1.5 million yuan have a higher mean than those with 3-4.5 million yuan, with significant values of 0.000. Investors with total household assets of 1.5-2.99 million yuan have a higher mean than those with 3-4.5 million yuan, with significant values of 0.004.

Table 4.7.3 Multiple Comparisons Mean of Total Household Asset Differences on Private Equity Fund

		Mean Difference (I-J)			
Group	**X̄**	**Under 1.5 million**	**1.5-2.99 million yuan**	**3-4.5 million yuan**	**More than 4.5 million yuan**
Less than 1.5 million yuan	4.48	-	1.807 (.000*)	.061 (.728)	1.585 (.000*)
1.5-2.99 million yuan	2.67		-	-1.746 (.000*)	-.222 (.371)
3-4.5 million yuan	4.42			-	1.525 (.000*)
More than 4.5 million yuan	2.89				-

** Average difference at 0.05 level significant dependent variable: private equity fund*

Table 4.7.3 shows the mean comparison of private equity fund investments among different total household asset groups. Investors with total household assets of less than 1.5 million yuan have a higher mean than those with 1.5-2.99 million yuan and more than 4.5 million yuan, with significant values of 0.000. Investors with total household assets of 1.5-2.99 million yuan have a lower mean than those with 3-4.5 million yuan, with significant values of 0.000. Investors with total household assets of 3-4.5 million yuan have a lower mean compared to those with more than 4.5 million yuan, with significant values of 0.000.

Table 4.7.4 Multiple Comparisons Mean of Total Household Asset Differences on Securities

		Mean Difference (I-J)			
Group	**X̄**	**Under 1.5 million**	**1.5-2.99 million yuan**	**3-4.5 million yuan**	**More than 4.5 million yuan**
Less than 1.5 million yuan	4.49	-	1.814 (.000*)	.003 (.988)	1.697 (.000*)

Table 4.7.4 Multiple Comparisons Mean of Total Household Asset Differences on Securities (continued)

Group	$\bar{X}$	Mean Difference (I-J)			
		Under 1.5 million	1.5-2.99 million yuan	3-4.5 million yuan	More than 4.5 million yuan
1.5-2.99 million yuan	2.67		-	-1.811 (.000*)	-.116 (.639)
3-4.5 million yuan	4.48			-	1.694 (.000*)
More than 4.5 million yuan	2.79				-

** Average difference at 0.05 level significant dependent variable: securities*

Table 4.7.4 shows the mean comparison of securities investments among different total household asset groups. Investors with total household assets of less than 1.5 million yuan have a higher mean compared to those with 1.5-2.99 million yuan and more than 4.5 million yuan, with significant values of 0.000. Investors with total household assets of 1.5-2.99 million yuan have a lower mean compared to those with 3-4.5 million yuan, with significant values of 0.000. Investors with total household assets of 3-4.5 million yuan have a higher mean compared to those with more than 4.5 million yuan, with significant values of 0.000.

Table 4.7.5 Multiple Comparisons Mean of Total Household Asset Differences on Financial Investments Overview

Group	$\bar{X}$	Mean Difference (I-J)			
		Under 1.5 million	1.5-2.99 million yuan	3-4.5 million yuan	More than 4.5 million yuan
Less than 1.5 million yuan	4.20	-	.205 (.238)	.689 (.002*)	.152 (.577)
1.5-2.99 million yuan	4.00		-	.484 (.065)	-.053 (.865)
3-4.5 million yuan	3.52			-	-.537 (.111)
More than 4.5 million yuan	4.05				-

** Average difference at 0.05 level significant dependent variable: financial investments overview*

Table 4.7.5 shows the mean comparison of financial investments overview among different total household asset groups. Investors with total household assets of less than 1.5 million yuan have a higher mean compared to those with 3-4.5 million

yuan, with significant values of 0.002.

H1e: The difference in household debt types affects financial investments differently

One-way analysis of variance was used to analyze the data to test the difference between the mean values of more than 2 groups at the statistical significance level of 0.05.

Table 4.8 The Effect of Household Debt Types on Financial Investments

Financial Investments		Sum of Squares	*df*	Mean Square	f	Sig.
Public funds	Between Groups	101.665	4	25.416	20.866	.000*
	Within Groups	481.132	395	1.218		
	Total	582.798	399			
Commercial insurance	Between Groups	65.351	4	16.338	11.227	.000*
	Within Groups	574.826	395	1.455		
	Total	640.178	399			
Stock	Between Groups	34.423	4	8.606	6.544	.000*
	Within Groups	519.487	395	1.315		
	Total	553.910	399			
Wealth management products of banks	Between Groups	16.411	4	4.103	2.674	.032*
	Within Groups	606.029	395	1.534		
	Total	622.440	399			
Private equity Fund	Between Groups	13.619	4	3.405	2.682	.031*
	Within Groups	501.491	395	1.270		
	Total	515.110	399			
Securities	Between Groups	16.804	4	4.201	3.269	.012*
	Within Groups	507.636	395	1.285		
	Total	524.440	399			
Financial investments overview	Between Groups	107.695	4	26.924	24.630	.000*
	Within Groups	431.783	395	1.093		
	Total	539.478	399			

** The mean difference is significant at the 0.05 level*

Based on the analysis of the data in Table 4.8, the difference in household debt types significantly affects the choice of financial investment types, including public funds, commercial insurance, stocks, wealth management products of banks, private equity funds, securities, and the financial investments overview differently, with significant values of 0.000, 0.000, 0.000, 0.032, 0.031, 0.012, and 0.000 respectively. The analysis of multiple comparisons of different household debt groups using LSD is

provided in Table 4.8.1-4.8.7.

Table 4.8.1 Multiple Comparisons Mean of Household Debt Types of Differences in Public Funds

			Mean Difference (I-J)			
Group	**X̄**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	2.74	-	-1.511 (.000*)	-.257 (.341)	-1.402 (.000*)	-1.382 (.000*)
Mortgage debt	4.25		-	-1.254 (.000*)	.109 (.399)	.129 (.542)
Car debt	3.00			-	-1.145 (.000*)	-1.125 (.000*)
Mortgage and car debt	4.15				-	.020 (.927)
Other debt	4.13					-

** Average difference at 0.05 level significant dependent variable: public funds*

Table 4.8.1 shows the mean comparison of public fund investments among different household debt types. Investors with no debt have a lower mean than those with debt, mortgages, cars, and other debt, with significant values of 0.000. Investors with mortgage debt have a higher mean compared to those with car debt, with significant values of 0.000. Investors with mortgage and car debt have a lower mean than those with mortgage and car debt and other debt, with significant values of 0.000.

Table 4.8.2 Multiple Comparisons Mean of Household Debt Types of Differences on Commercial Insurance

			Mean Difference (I-J)			
Group	**X̄**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	2.74	-	-1.263 (.000*)	-.382 (.196)	-1.233 (.000*)	-1.163 (.000*)
Mortgage debt	4.01		-	.881 (.000*)	.030 (.833)	.099 (.668)
Car debt	3.13			-	-.851 (.000*)	-.781 (.010*)
Mortgage and car debt	3.98				-	.070 (.771)
Other debt	3.91					-

** Average difference at 0.05 level significant dependent variable: commercial insurance*

Table 4.8.2 shows the mean comparison of commercial insurance investments among different household debt types. Investors with no debt have a lower mean than those with mortgages, mortgages, cars, and other debt, with significant values of 0.000. Investors with mortgage debt have a higher mean compared to those with car debt, with significant values of 0.000. Investors with car debt have a lower mean than those with mortgage, car debt, and other debt, with significant values of 0.000 and 0.010.

Table 4.8.3 Multiple Comparisons Mean of Household Debt Types of Differences on Stock

		Mean Difference (I-J)				
Group	**$\bar{X}$**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	3.20	-	-.964 (.000*)	-.394 (.161)	-.913 (.000*)	-.925 (.001*)
Mortgage debt	4.16		-	.570 (.001*)	.051 (.705)	.039 (.860)
Car debt	3.59			-	-.519 (.023*)	-.531 (.065)
Mortgage and car debt	4.11				-	-.012 (.958)
Other debt	4.13					-

** Average difference at 0.05 level significant dependent variable: stock*

Table 4.8.3 shows the mean comparison of stock investments among different household debt types. Investors with no debt have a lower mean than those with mortgages, mortgages, cars, and other debt, with significant values of 0.000, 0.000, and 0.001. Investors with mortgage debt have a higher mean compared to those with car debt, with significant values of 0.001. Investors with car debt have a lower mean compared to those with mortgage and car debt, with significant values of 0.023.

Table 4.8.4 Multiple Comparisons Mean of Household Debt Types of Differences on Wealth Management Products of Banks

			Mean Difference (I-J)			
Group	**X̄**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	3.37	-	-.465 (.043*)	.184 (.544)	-.314 (.186)	-.129 (.672)
Mortgage debt	3.84		-	.649 (.007*)	.151 (.300)	.336 (.158)
Car debt	3.19			-	-.498 (.043*)	-.312 (.314)
Mortgage and car debt	3.69				-	.185 (.451)
Other debt	3.50					-

** Average difference at 0.05 level significant dependent variable: wealth management products of banks*

Table 4.8.4 shows the mean comparison of wealth management products of bank investments among different household debt types. Investors with no debt have a lower mean compared to those with mortgage debt, with significant values of 0.043. Investors with mortgage debt have a higher mean compared to those with car debt, with significant values of 0.007. Investors with car debt have a lower mean compared to those with mortgage and car debt, with significant values of 0.043.

Table 4.8.5 Multiple Comparisons Mean of Household Debt Types of Differences on Private Equity Fund

			Mean Difference (I-J)			
Group	**X̄**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	3.77	-	-.545 (.009*)	-.322 (.243)	-.398 (.066)	-.041 (.882)
Mortgage debt	4.32		-	.223 (.304)	.147 (.266)	.504 (.020*)
Car debt	4.09			-	-.076 (.735)	.281 (.319)
Mortgage and car debt	4.17				-	.357 (.111)
Other debt	3.81					-

** Average difference at 0.05 level significant dependent variable: private equity fund*

Table 4.8.5 shows the mean comparison of private equity fund investments among different household debt types. Investors with no debt have a lower mean compared to those with mortgage debt, with significant values of 0.009. Investors with mortgage debt have a higher mean compared to those with other debt, with significant values of 0.020.

Table 4.8.6 Multiple Comparisons Mean of Household Debt Types of Differences on Securities

			Mean Difference (I-J)			
Group	**X̄**	**No Debt**	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	3.77	-	-.562 (.008*)	-.385 (.166)	-.398 (.067)	.053 (.849)
Mortgage debt	4.33		-	.177 (.417)	.164 (.218)	.615 (.005*)
Car debt	4.16			-	-.013 (.954)	.438 (.123)
Mortgage and car debt	4.17				-	.451 (.046*)
Other debt	3.72					-

** Average difference at 0.05 level significant dependent variable: securities*

Table 4.8.6 shows the mean comparison of securities investments among different household debt types. Investors with no debt have a lower mean compared to those with mortgage debt, with significant values of 0.008. Investors with mortgage debt have a higher mean compared to those with other debt, with significant values of 0.005. Investors with mortgage and car debt have a higher mean compared to those with other debt, with significant values of 0.046.

Table 4.8.7 Multiple Comparisons Mean of Household Debt Types of Differences on Financial Investments Overview

Group	$\bar{X}$	Mean Difference (I-J)				
		No Debt	**Mortgage Debt**	**Car Debt**	**Mortgage and Car Debt**	**Other Debt**
No debt	2.83	-	-1.533 (.000*)	-.296 (.247)	-1.486 (.000*)	-1.578 (.000*)
Mortgage debt	4.36		-	1.237 (.000*)	.047 (.701)	-.045 (.824)
Car debt	3.13			-	-1.190 (.000*)	-1.281 (.000*)
Mortgage and car debt	4.31				-	-.092 (.658)
Other debt	4.41					-

** Average difference at 0.05 level significant dependent variable: financial investments overview*

Table 4.8.7 shows the mean comparison of financial investments overview among different household debt types. Investors with no debt have a lower mean than those with mortgages, cars, and other debt, with significant values of 0.000. Investors with mortgage debt have a higher mean compared to those with car debt, with significant values of 0.000. Investors with car debt have a lower mean compared to those with mortgage, car debt, and other debt, with significant values of 0.000.

H1f: The difference in household debt expense affects financial investments differently

One-way analysis of variance was used to analyze the data to test the difference in the mean values of more than 2 sets of data at the statistical significance level of 0.05.

Table 4.9 Effects of Household Debt Expense on Financial Investments

Financial Investments		Sum of Squares	*df*	Mean Square	f	Sig.
Public funds	Between Groups	114.035	4	28.509	24.023	.000*
	Within Groups	468.762	395	1.187		
	Total	582.798	399			
Commercial insurance	Between Groups	88.804	4	22.201	15.905	.000*
	Within Groups	551.373	395	1.396		
	Total	640.178	399			
Stock	Between Groups	100.215	4	25.054	21.813	.000*
	Within Groups	453.695	395	1.149		
	Total	553.910	399			
Wealth management Products of banks	Between Groups	26.524	4	6.631	4.395	.002*
	Within Groups	595.916	395	1.509		
	Total	622.440	399			
Private equity Fund	Between Groups	7.460	4	1.865	1.451	.216
	Within Groups	507.650	395	1.285		
	Total	515.110	399			
Securities	Between Groups	4.683	4	1.171	0.890	.470
	Within Groups	519.757	395	1.316		
	Total	524.440	399			
Financial investments overview	Between Groups	110.471	4	27.618	25.428	.000*
	Within Groups	429.007	395	1.086		
	Total	539.478	399			

** The mean difference is significant at the 0.05 level*

Based on the analysis of the data in Table 4.9, the difference in household debt expense significantly affects the choice of financial investment types, including public funds, commercial insurance, stocks, wealth management products of banks, and the financial investments overview differently, with significant values of 0.000, 0.000, 0.000, 0.002, and 0.000 respectively. The various levels of household debt expense do not significantly affect the choice of private equity funds and securities, with significant values of 0.216 and 0.470, respectively. The analysis of multiple comparisons of different Household debt expense groups using LSD is provided in Table 4.9.1-4.9.5.

Table 4.9.1 Multiple Comparisons Mean of Household Debt Expense of Differences in Public Funds

		Average Difference (I-J)				
	X̄	**0-10%**	**11%-20%**	**21% - 30%**	**31% -40%**	**Over 40%**
0%-10%	3.23	-	-1.085 (.000*)	-1.144 (.000*)	-1.242 (.000*)	-.016 (.961)
11%-20%	4.32		-	-.059 (.674)	-.157 (.543)	1.069 (.001*)
21% - 30%	4.38			-	-.098 (.702)	1.128 (.001*)
31% - 40%.	4.48				-	1.226 (.002*)
Over 40%	3.25					-

** The mean difference is significant at the 0.05 level. Dependent variable: public funds*

Table 4.9.1 shows the mean comparison of public fund investments among different household debt expense groups. Investors with debt expenses of 0%-10% have a lower mean than those with debt expenses of 11%-20%, 21%-30%, and 31%-40%, with significant values of 0.000. Investors with debt expenses of 11%-20% have a higher mean than those with over 40%, with a significant value of 0.001. Investors with debt expenses of 21%-30% have a higher mean compared to those with debt expenses of over 40%, with significant values of 0.001. Investors with debt expenses of 31%-40% have a higher mean than those with over 40%, with a significant value of 0.002.

Table 4.9.2 Multiple Comparisons Mean of Household Debt Expense of Differences in Commercial Insurance

		Average Difference (I-J)				
	X̄	**0-10%**	**11%-20%**	**21% - 30%**	**31% -40%**	**Over 40%**
0%-10%	3.12	-	-.931 (.000*)	-1.092 (.000*)	-1.022 (.000*)	-.546 (.127)
11%-20%	4.05		-	-.161 (.290)	-.091 (.745)	.385 (.283)
21% - 30%	4.21			-	.070 (.802)	.546 (.127)
31% - 40%.	4.14				-	.476 (.266)
Over 40%	3.67					-

** The mean difference is significant at the 0.05 level. Dependent variable: commercial insurance*

Table 4.9.2 shows the mean comparison of commercial insurance

investments among different household debt expense groups. Investors with debt expenses of 0%-10% have a lower mean compared to those with debt expenses of 11%-20%, 21%-30%, and 31%-40%, with significant values of 0.000.

Table 4.9.3 Multiple Comparisons Mean of Household Debt Expense of Differences in Stock

		Average Difference (I-J)				
	X̄	**0-10%**	**11%-20%**	**21% - 30%**	**31% -40%**	**Over 40%**
0%-10%	3.37	-	-.957 (.000*)	-.991 (.000*)	-1.248 (.000*)	.454 (.162)
11%-20%	4.33		-	-.035 (.802)	-.291 (.252)	1.411 (.000*)
21% - 30%	4.36			-	-.257 (.310)	1.446 (.000*)
31% - 40%.	4.62				-	1.702 (.000*)
Over 40%	2.92					-

** The mean difference is significant at the 0.05 level. Dependent variable: stock*

Table 4.9.3 shows the mean comparison of stock investments among different household debt expense groups. Investors with debt expenses of 0%-10% have a lower mean compared to those with debt expenses of 11%-20%, 21%-30%, and 31%-40%, with significant values of <0.001. Investors with debt expenses of 11%-20% have a higher mean compared to those with debt expenses of over 40%, with a significant value of 0.000. Investors with debt expenses of 21%-30% have a higher mean compared to those with debt expenses of over 40%, with significant values of 0.000. Investors with debt expenses of 31%-40% have a higher mean compared to those with debt expenses of over 40%, with a significant value of 0.000.

Table 4.9.4 Multiple Comparisons Mean of Household Debt Expense of Differences in Wealth Management Products of Banks

		Average Difference (I-J)				
	X̄	**0-10%**	**11%-20%**	**21% - 30%**	**31% -40%**	**Over 40%**
0%-10%	3.32	-	-.393 (.014*)	-.646 (.000*)	-.344 (.236)	.344 (.355)
11%-20%	3.72		-	-.253 (.110)	.049 (.867)	.049 (.896)
21% - 30%	3.97			-	.302 (.298)	.302 (.416)
31% - 40%.	3.67				-	.000 (1.000)
Over 40%	3.67					-

** The mean difference is significant at the 0.05 level. Dependent variable: wealth management products of banks*

Table 4.9.4 presents the mean comparison of wealth management products among bank investments for different household debt expense groups. Investors with debt expenses of 0%-10% have a lower mean compared to those with debt expenses of 11%-20% and 21%-30%, with significant values of 0.014 and 0.000.

Table 4.9.5 Multiple Comparisons Mean of Household Debt Expense of Differences on Financial Investments Overview

		Average Difference (I-J)				
	X̄	**0-10%**	**11%-20%**	**21% - 30%**	**31% -40%**	**Over 40%**
0%-10%	3.40	-	-1.105 (.000*)	-1.054 (.000*)	-1.319 (.000*)	.062 (.845)
11%-20%	4.50		-	.051 (.702)	-.214 (.386)	1.167 (.000*)
21% - 30%	4.45			-	-.265 (.280)	-1.115 (.000*)
31% - 40%.	4.71				-	1.381 (.000*)
Over 40%	3.33					-

** The mean difference is significant at the 0.05 level. Dependent variable: Financial investments overview*

Table 4.9.5 shows the mean comparison of financial investments overview among different household debt expense groups. Investors with debt expenses of 0%-10% have a lower mean compared to those with debt expenses of 11%-20% and 21%-30%, with significant values of 0.000. Investors with debt expenses of 11%-20% have

a higher mean compared to those with debt expenses of over 40%, with a significant value of 0.000. Investors with debt expenses of 21%-30% have a higher mean compared to those with debt expenses of over 40%, with significant values of $p < 0.001$. Investors with debt expenses of 31%-40% have a higher mean compared to those with debt expenses of over 40%, with a significant value of 0.000.

4.2.2 Risk Preference Influences Choice of Financial Investments

Hypothesis 2: The investors' risk preference influences their choice of financial investment types.

Linear regression estimates the relationship between two or more independent variables (risk-averse investors, risk-seeking investors, risk-neutral investors) and one dependent variable (Financial investments). The estimation equation has the following form:

$$\hat{Y}_T = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_1 = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_2 = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_3 = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_4 = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_5 = b_0+b_1X_1+b_2X_2+b_3X_3$$

$$\hat{Y}_6 = b_0+b_1X_1+b_2X_2+b_3X_3$$

Where the dependent variable is:

$\hat{Y}_T$ = Financial investments

$\hat{Y}_1$ = Public fund

$\hat{Y}_2$ = Commercial insurance

$\hat{Y}_3$ = Stock

$\hat{Y}_4$ = Wealth management products of banks

$\hat{Y}_5$ = Private equity fund

$\hat{Y}_6$ = Securities

The independent variables are:

X_1= risk-averse investors

X_2 = risk-seeking investor

X_3 = risk-neutral investor

H2a: Risk preferences, including risk-averse, risk-seeking, and risk-neutral investors, influence financial investment overview

Multiple linear regression analyzes the data and builds prediction equations at 95% confidence.

Table 4.10 Summary of the Influence of Risk Preference on Financial Investments Overview

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.528	.278	.273	.992	1.937

a. Predictors: (constant) risk-averse investors, risk-seeking investors, risk-neutral investors
d. Dependent variable: financial investments overview

From Table 4.10, the results show that risk preference has a positive relationship with financial investments, as indicated by the multiple correlation coefficient (R) = 0.528. It can be inferred that the relationship between the predicted variables and the dependent variables is relatively high in the same direction, with the predicted value of the analysis equal to 27.8%.

Table 4.11 Regression Coefficient the Influence of Risk Preference on Financial Investments Overview

	Unstandardized Coefficients		Standardized Coefficient			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.773	.310		5.721	.000		
Risk-averse investors	-.280	.054	-.225	-5.171	.000	.962	1.039
Risk-seeking investors	.382	.056	.303	6.770	.000	.912	1.096
Risk-neutral investors	.462	.058	.353	7.929	.000	.921	1.086

a. Dependent variable: financial investments overview

Table 4.11 consists of three predictors: risk-averse investors, risk-seeking investors, and risk-neutral investors. The prediction equation is as follows.

$$\hat{Y}_T = 1.773 - 0.280X_1 + 0.382X_2 + 0.462X_3$$

(.000*) (.000*) (.000*) (.000*)

The regression results indicate that investor risk preferences have a significant influence on financial investment decisions. Risk-averse (X_1) behavior negatively affects investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to financial investments, with risk-neutral investors showing the strongest impact. These findings suggest that individuals who are more comfortable with risk or indifferent to it are more likely to engage in higher levels of financial investment.

H2b: Risk preference, including risk-averse investors, risk-seeking investors, and risk-neutral investors, influence the choice of financial investments in public funds.

Multiple linear regression is used to analyze the data and build prediction equations at a 95% confidence level.

Table 4.12 Summary of the Influence of Risk Preference on Public Funds

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.513[a]	.264	.258	1.041	1.912

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors
d. Dependent variable: public funds

According to Table 4.12, the results indicate a positive relationship between risk preference and public funds, with a multiple correlation coefficient (R) of 0.513. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 26.4%.

Table 4.13 Regression Coefficient of the Influence of Risk Preference on Public Funds

Model	Unstandardized Coefficients		Standardized Coefficient			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(constant)	1.807	.325		5.554	.000		
Risk-averse investors	-.322	.057	-.249	-5.669	.000	.962	1.039
Risk-seeking investors	.399	.059	.304	6.743	.000	.912	1.096
Risk-neutral investors	.440	.061	.323	7.197	.000	.921	1.086

a. Dependent variable: public funds

Table 4.13 consists of 3 predictors, including risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows:

$$\hat{Y}_1 = 1.807 - 0.322X_1 + 0.399X_2 + 0.440X_3$$
$$(.000^*)\ (.000^*)\ (.000^*)\ (.000^*)$$

The regression results indicate that investor risk preferences have a significant influence on public fund investment decisions. Risk-averse (X_1) behavior negatively affects public fund investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to public fund investments, with risk-neutral investors showing the strongest impact. Overall, the model suggests that individuals who are either risk-seeking or risk-neutral tend to invest more, while risk-averse individuals tend to invest less. This aligns with economic theory, which holds that willingness to accept risk often correlates with higher investment activity.

H2c: Risk preference, including risk-averse investors, risk-seeking investors, and risk-neutral investors, influences the choice of financial investments in commercial insurance.

Multiple linear regression is used to analyze the data and build prediction equations at a 95% confidence level.

Table 4.14 Summary of the Influence of Risk Preference on Commercial Insurance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.416[a]	.173	.167	1.156	2.086

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors
d. Dependent variable: commercial insurance

According to Table 4.14, the results indicate a positive relationship between risk preference and commercial insurance, with a multiple correlation coefficient (R) of 0.416. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 16.7%.

Table 4.15 Regression Coefficient of the Influence of Risk Preference on Commercial Insurance

	Unstandardized Coefficients		**Standardized Coefficient**			**Collinearity Statistics**	
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
(Constant)	1.780	.361		4.925	.000		
Risk-averse investors	-.237	.063	-.175	-3.755	.000	.962	1.039
Risk-seeking investors	.334	.066	.243	5.070	.000	.912	1.096
Risk-neutral investors	.393	.068	.275	5.773	.000	.921	1.086

a. Dependent variable: commercial insurance

Table 4.15 is composed of three predictor variables, including risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows:

$$\hat{Y}_2 = 1.780 - 0.237X_1 + 0.334X_2 + 0.393X_3$$

(.000*) (.000*) (.000*) (.000*)

The regression results indicate that investor risk preferences have a significant influence on commercial insurance investment decisions. Risk-averse (X_1) behavior negatively affects commercial insurance investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to commercial insurance investments, with risk-neutral investors showing the strongest impact.

Overall, the model suggests that risk-averse investors show a lower willingness to participate in commercial insurance investments. In contrast, risk-seeking and risk-neutral investors show a higher willingness to invest in commercial insurance.

H2d: Risk preference, which includes risk-averse investors, risk-seeking investors, and risk-neutral investors, influences the choice of financial investments in stocks.

Multiple linear regression is used to analyze the data and build prediction equations at a 95 percent confidence level.

Table 4.16 Summary of the Influence of Risk Preference on Stock

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.530[a]	.281	.276	1.003	1.987

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors d. Dependent variable: stock

According to Table 4.16, the results indicate that risk preference has a positive relationship with stock allocation, with a multiple correlation coefficient (R) of 0.530. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 28.1%.

Table 4.17 Regression Coefficient of the Influence of Risk Preference on Stock

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.721	.321		5.367	.000		
Risk-averse investors	-.304	.055	-.241	-5.516	.000	.962	1.039
Risk-seeking investors	.390	.057	.305	6.828	.000	.912	1.096
Risk-neutral investors	.463	.059	.349	7.848	.000	.921	1.086

a. Dependent variable: stock

Table 4.17 consists of three predictors: risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows.

$$\hat{Y}_3 = 1.721 - 0.304X_1 + 0.390X_2 + 0.463X_3$$

(.000*) (.000*) (.000*) (.000*)

The regression results indicate that investor risk preferences have a significant influence on stock investment decisions. Risk-averse (X_1) behavior

negatively affects stock investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to stock investments, with risk-neutral investors showing the strongest impact.

Overall, the results suggest that risk-neutral and risk-seeking investors are the primary drivers of stock investment, while risk-averse individuals are less inclined to participate. This highlights the importance of investor risk profiles in shaping participation in higher-risk stock investments.

H2e: Risk preference, which includes risk-averse investors, risk-seeking investors, and risk-neutral investors, influences the choice of financial investments in bank wealth management products.

Multiple linear regression is used to analyze the data and build prediction equations at a 95 percent confidence level.

Table 4.18 Summary of the Influence of Risk Preference on Wealth Management Products of Banks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.447[a]	.200	.194	1.121	2.158

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors d. Dependent variable: wealth management products of banks

According to Table 4.18, the results indicate that risk preference has a positive relationship with banks' wealth management products, with a multiple correlation coefficient (R) of 0.447. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 19.4%.

Table 4.19 Regression Coefficient of the Influence of Risk Preference on Wealth Management Products of Banks

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.644	.358		4.771	.000		
Risk-averse investors	-.276	.061	-.207	-4.521	.000	.962	1.039
Risk-seeking investors	.334	.064	.247	5.241	.000	.912	1.096
Risk-neutral investors	.425	.066	.302	6.454	.000	.921	1.086

a. Dependent variable: wealth management products of banks

Table 4.19 consists of three predictors: risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows.

$$\hat{Y}_4 = 1.644 - 0.276X_1 + 0.334X_2 + 0.425X_3$$

(.000*) (.000*) (.000*) (.000*)

The regression results reveal that investor risk preferences have a significant influence on bank wealth management products' investment decisions. Risk-averse (X_1) behavior negatively affects bank wealth management products investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to stock investments, with risk-neutral investors showing the strongest impact.

Overall, participation in bank wealth management products is most strongly influenced by risk-neutral investors, followed by risk-seeking investors, while risk-averse investors tend to participate less. This suggests that individuals who are comfortable with a moderate level of risk are more likely to opt for such bank wealth management products.

H2f: Risk preference, which includes risk-averse investors, risk-seeking investors, and risk-neutral investors, influences the choice of financial investments in a private equity fund.

Multiple linear regression is used to analyze the data and build prediction equations at a 95 percent confidence level.

Table 4.20 Summary of the Influence of Risk Preference on Private Equity Fund

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.547[a]	.299	.294	.955	1.949

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors d. Dependent variable: private equity fund

According to Table 4.20, the results indicate a positive relationship between risk preference and private equity funds, with a multiple correlation coefficient (R) of 0.547. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 29.4%.

Table 4.21 Regression Coefficient of the Influence of Risk Preference on Private Equity Fund

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.534	.299		5.141	.000		
Risk-averse investors	-.221	.052	-.182	-4.238	.000	.962	1.039
Risk-seeking investors	.462	.054	.375	8.509	.000	.912	1.096
Risk-neutral investors	.408	.056	.319	7.277	.000	.921	1.086

a. Dependent variable: private equity fund

Table 4.21 consists of three predictors: risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows.

$$\hat{Y}_5 = 1.534 - 0.299X_1 + 0.462X_2 + 0.408X_3$$

(.000*) (.000*) (.000*) (.000*)

The regression results indicate that investor risk preferences have a significant influence on private equity fund investment decisions. Risk-averse (X_1) behavior negatively affects private equity fund investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to private equity fund investment, with risk-neutral investors showing the strongest impact.

Overall, participation in private equity funds is highest among risk-seeking

and risk-neutral investors, while risk-averse individuals are much less likely to invest. This pattern is consistent with the nature of private equity as a high-risk investment vehicle that appeals to those with a greater tolerance for uncertainty.

H2g: Risk preference, which includes risk-averse investors, risk-seeking investors, and risk-neutral investors, influences the choice of financial investments in securities.

Multiple linear regression is used to analyze the data and build prediction equations at a 95 percent confidence level.

Table 4.22 Summary of the Influence of Risk Preference on Securities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.548[a]	.300	.295	.963	2.033

a. Predictors: (constant) risk-averse investors, risk-seeking investors, and risk-neutral investors d. Dependent variable: securities

According to Table 4.22, the results indicate that risk preference has a positive relationship with securities, with a multiple correlation coefficient (R) of 0.548. This indicates that the relationship between the predicted variables and the dependent variable is relatively moderate in the same direction, with the predicted value of the analysis equal to 30.0%.

Table 4.23 Regression Coefficient of the Influence of Risk Preference on Securities

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	1.494	.308		4.965	.000		
Risk-averse investors	-.217	.053	-.177	-4.129	.000	.962	1.039
Risk-seeking investors	.476	.055	.383	8.693	.000	.912	1.096
Risk-neutral investors	.403	.057	.312	7.124	.000	.921	1.086

a. Dependent variable: securities

Table 4.23 consists of three predictors: risk-averse investors, risk-seeking investors, and risk-neutral investors, and its prediction equation is as follows.

$$\hat{Y}_6 = 1.496 - 0.217X_1 + 0.476X_2 + 0.403X_3$$
$$(.000^*)\ (.000^*)\ (.000^*)\ (.000^*)$$

The regression results indicate that investor risk preferences have a significant influence on securities investment decisions. Risk-averse (X_1) behavior negatively affects securities investment levels, indicating that more cautious investors tend to invest less. In contrast, both risk-seeking (X_2) and risk-neutral investors (X_3) contribute positively to securities investment, with risk-neutral investors showing the strongest impact.

Overall, the model suggests that securities investments are most attractive to risk-seeking and risk-neutral investors. In contrast, risk-averse individuals are less likely to participate, likely due to the perceived volatility and uncertainty associated with securities markets.

4.3 Summary Results for Data Analysis

Table 4.24 Summary Result for Hypothesis 1

Demographic Characteristics	**Financial Investments**	**Results**
Gender	t(398) = -1.061, p=0.289	-
Age	F(4, 396) = 8.181, p = 0.001*	√
Educational background	F(3, 396) = 1.428, p = 0.234	-
Total household assets	F(3, 396) = 3.588, p = 0.014*	√
Household debt types	F(4, 395) = 24.630, p = 0.000*	√
Household debt expense.	F(4, 395) = 25.428, p = 0.000*	√

- Reject hypothesis at the significance value less than 0.05
✓ Accept hypothesis at the significance value less than 0.05

According to Table 4.24, the results show that age, total household assets, household debt types, and household debt expenses significantly affect financial investments. However, gender and educational background do not significantly affect financial investments. This means that age differences, total household assets, types of

household debt, and household debt expenses affect different financial investment behaviors.

Table 4.25 Prediction Equation for the Effect of Risk Preference on Financial Investments

		Prediction Equation
Public funds	$\hat{Y}_1$	$= 1.807 - 0.322X_1 + 0.399X_2 + 0.440X_3$ (.000*) (.000*) (.000*) (.000*)
Commercial insurance	$\hat{Y}_2$	$= 1.780 - 0.237X_1 + 0.334X_2 + 0.393X_3$ (.000*) (.000*) (.000*) (.000*)
Stock	$\hat{Y}_3$	$= 1.721 - 0.304X_1 + 0.390X_2 + 0.463X_3$ (.000*) (.000*) (.000*) (.000*)
Wealth management product of banks	$\hat{Y}_4$	$= 1.644 - 0.276X_1 + 0.334X_2 + 0.425X_3$ (.000*) (.000*) (.000*) (.000*)
Private equity fund	$\hat{Y}_5$	$= 1.534 - 0.299X_1 + 0.462X_2 + 0.408X_3$ (.000*) (.000*) (.000*) (.000*)
Securities	$\hat{Y}_6$	$= 1.496 - 0.217X_1 + 0.476X_2 + 0.403X_3$ (.000*) (.000*) (000*) (.000*)
Financial investments	$\hat{Y}_T$	$= 1.773 - 0.280X_1 + 0.382X_2 + 0.462X_3$ (.000*) (.000*) (.000*) (.000*)

X_1= risk-averse investors, X_2 = risk-seeking investor, X_3 = risk-neutral investor

Table 4.25 demonstrates that risk-averse investors consistently avoid financial investment products, regardless of the type, even with traditionally safer options like commercial insurance. This analysis highlights the **predictive power of risk preferences** in determining investor behavior across different financial investments. Understanding these behavioral patterns can help financial institutions tailor products and strategies to meet the needs of different investor profiles better.

CHAPTER V
CONCLUSIONS AND DISCUSSION

This chapter provides a summary of the results, discussions, and recommendations. Firstly, this section presents the research conclusion. Secondly, a discussion of the findings and limitations. Finally, suggestions for future research and recommendations are provided based on the findings.

5.1 Conclusions

The objectives of this study were to examine the effect of demographic characteristics on various financial investment products and to understand the influences of risk preferences on financial investment types. The research framework was developed based on the Research framework derived from the risk preferences theory (Von Neumann & Morgenstern, 1944) and the utility theory for decision-making under risk (Fishburn, 1970). The research aims to analyze the factors influencing the investment of middle-income families in Kunming. The analysis focuses on demographic characteristics, risk preferences, and types of financial investments. The research questions examine how various demographic characteristics impact financial investment decisions and how risk preferences influence the selection of financial investments.

The population consisted of investors from middle-income families who were residents of Kunming. The sample was based on the Yamane table at a 95% confidence level, with a sample size of 400. Data were collected through online questionnaires distributed to financial investors in Kunming.

The research tool is a questionnaire divided into 3 parts: demographics, risk preference, and financial investment types. The questions in parts 2 and 3 appear to have multiple choices and 5-point Likert scales. The content validity of the questionnaire was assessed using the Index of Congruence (IOC) for each question, evaluated by three experts in the field, with a criterion of 0.5. The questionnaire that passed the IOC test was used to collect 30 samples for the reliability test, using

Cronbach's alpha coefficient (α), with values ranging from 0.891 to 0.959, which were considered acceptable and reliable.

The data analysis statistics included descriptive statistics, such as frequency, percentage, mean, and standard deviation, as well as inferential statistics, including an independent sample t-test, a one-way ANOVA, post hoc analysis using the least significant difference (LSD) method, and multiple linear regression. The research results are summarized in the following two sections.

5.1.1 Demographic Characteristics

The analysis results demonstrate that most respondents were males between 35 and 55 years old with an associate's degree, whose households have assets under 1.5 million yuan, mortgage debt, and household debt below 30% of annual income. In detail, the 400 respondents are comprised of 52.5% females and 47.5% males. The sample is predominantly middle-aged (35-55 years old), accounting for 67%. Most respondents have an associate's degree (41.25%), followed by those with a high school education or less (29.25%). A smaller proportion holds a bachelor's degree (19.5%) or higher (10.0%). Regarding total household assets, 74.5% of households have assets of less than 1.5 million yuan, indicating relatively low asset levels. Regarding household debt types, mortgage debt is the most common, affecting 44.25% of households, while 31.0% have both car and mortgage debt. Additionally, household debt expense is below 30% of their annual income, suggesting generally manageable debt levels. This group is characterized by moderate educational attainment and low asset levels, primarily burdened by mortgage debt.

From the opinion level, on average, most respondents were neutral-risk investors, followed by risk-seeking and risk-averse investors. Regarding financial investment types, on average, securities and private equity funds were the top priorities for investors' consideration.

5.1.2 Demographic and Financial Investments Types

The study found that age differences, total household assets, household debt types, and household debt expenses significantly affected the overview of financial investment among investors in Kunming. However, the differences in gender and educational background did not significantly affect the overview of financial investment types. These findings indicate that demographic characteristics factors, e.g.,

age, asset levels, and debts, play crucial roles in shaping investment choices. At the same time, gender and educational background do not significantly affect the selection of investment types in the overview. This provides valuable insights for financial institutions and policymakers in understanding and managing the factors that affect investment behaviors in this context.

In detailed consideration, age and household debt differences affected all investment types differently. At the same time, the differences in educational background affect stocks, wealth management products of banks, and securities differently. The differences in household assets affect public funds, stock, private equity funds, and securities differently. The differences in household debt expenses affect public funds, commercial insurance, stocks, and banks' wealth management products in varying ways.

5.1.3 Risk Preference and Financial Investments Types

Risk-averse investors show a weaker willingness towards financial investments, with negative values for overall investments, public funds, commercial insurance, stocks, wealth management products of banks, private equity funds, and securities with the coefficient value in the prediction equations of -0.280, -0.322, -0.237, -0.304, -0.276, -0.299, and -0.217, respectively, all significant values of 0.000. Risk-seeking and risk-neutral investors exhibit a strong inclination towards financial investments, with all coefficient values in the prediction equation being positive and significant at the 0.000 level. For risk-seeking investors, the coefficient values in the prediction equations range from 0.334 to 0.476 across overview financial investments, public funds, commercial insurance, stocks, wealth management products of banks, private equity, and securities. Similarly, for risk-neutral investors, the coefficient values in the prediction equations range from 0.393 to 0.463 in the same categories.

In detail, the analysis results showed that risk-neutral investors had the greatest influence on investing in overall financial investments, public funds, commercial insurance, stocks, and bank wealth management products. Risk-seeking investors had the highest influence on investing in private equity and securities.

5.2 Discussion

5.2.1 Demographic Characteristics

The results suggest that age differences, total household assets, types of household debt, and household debt expenses significantly affect financial investments. Differences in demographic characteristics can affect investors' financial investment decisions differently. These findings align with previous studies (Bricker, Moore, & Thompson, 2019; OECD, 2024).

For Age: This study demonstrated the significant differences in financial investment behavior across different age groups. Investors aged 45 and under are more willing to invest in financial investment than those aged 46 and above. These findings align with previous studies (Bricker, Moore, & Thompson, 2019; OECD, 2024; Yuan, Puah, & Yau, 2022). Investors aged 45 and under are typically in the early stages of their careers, with a longer investment horizon, and are more inclined to choose high-risk, high-reward investment products such as stocks and private equity funds. Conversely, investors aged 46 and above tend to prefer more stable and lower-risk investment options, such as bank wealth management products, commercial insurance, and securities. They focus more on retirement planning and asset preservation. Additionally, as investors age, they accumulate more investment experience and knowledge, which in turn influences their investment decisions.

For Total Household Assets: According to the study results, household total assets are a significant determinant of financial investment behavior. Investors with household assets less than 1.5 million yuan are more willing to invest in financial products than those with assets exceeding 1.5 million yuan. These findings align with previous studies (Bricker, Moore, & Thompson, 2019; OECD, 2024; PLOS ONE, 2023). This behavior can be explained as a risk management strategy where investors with less than 1.5 million yuan tend to choose high-risk, high-reward investment products, such as public funds, stocks, private equity funds, and securities, to accumulate wealth quickly. However, investors with household assets exceeding 1.5 million yuan likely have a more stable economic foundation, extensive investment experience, and higher financial knowledge. As a result, they focus more on wealth preservation and appreciation, preferring more stable and lower-risk investment options, such as bank wealth management products and commercial insurance.

For Household Debt Types: According to this study, the type of debt plays a significant role in financial investment behavior. Investors with debt are more willing to invest in financial investments than those without debt. These findings align with previous studies (Bricker, Moore, & Thompson, 2019; OECD, 2024; Song et al., 2023). The influence of debt type on investment behavior can be explained through risk management strategies. Investors with debt typically prefer high-risk, high-reward investment products such as stocks, private equity funds, and securities. This preference may stem from their desire to quickly accumulate and increase wealth through high returns, thereby better managing and repaying their debts. Conversely, investors in debt tend to choose more stable and lower-risk investment products, such as public funds, commercial insurance, and bank wealth management products. This tendency is likely because debt-free investors are financially more stable and prioritize wealth preservation and growth rather than taking high risks for high returns.

For Household Debt Expenses: According to this study, household debt expenses play a significant role in financial investment behavior. Investors with household debt expenses between 11% and 40% are more willing to invest in financial investments than those with household debt expenses below 10% and above 40%. These findings align with previous studies (Smith & Kim, 2020; Johnson & Wong, 2021). This can be explained as a risk management strategy. Investors with household debt expenses between 11% and 40% have the highest investment willingness. They choose high-risk, high-reward investment products to quickly accumulate wealth, better manage their finances and repay their debts. This is particularly evident in high-risk, high-reward investment products such as public funds, stocks, and private equity funds.

Investors with household debt expenses below 10% and above 40% have lower investment willingness. They prefer more stable and lower-risk investment products, such as commercial insurance and bank wealth management products. Due to their low debt levels, investors with household debt expenses below 10% are financially more stable and focus more on wealth preservation and appreciation rather than taking high risks for high returns. Due to high debt pressure, investors with household debt expenses above 40% may adopt conservative investment strategies to avoid further financial risks.

5.2.2 Risk Preference

The results suggest that risk preference significantly influences public funds, commercial insurance, stock, wealth management products of banks, private equity funds, securities, and financial investments. Individuals' risk preferences play a crucial role in determining their choices across various financial investment options. These findings align with previous studies (Sobaih & Elshaer, 2023; Abideen et al., 2023).

For Risk-Averse Investors:

According to this study, risk-averse investors exhibit significant aversion tendencies in their financial investment behavior. This trend is evident across all the studied investment types, including public funds, commercial insurance, stocks, bank wealth management products, private equity funds, and securities. These findings align with previous studies (Smith & Kim, 2020; Johnson & Wong, 2021; Liu et al., 2021; Kim & Lee, 2020; Zhang et al., 2022). Risk-averse investors have lower investment willingness.

For all types of financial investments, including public funds, commercial insurance, stocks, bank wealth management products, private equity funds, and securities, risk-averse investors have a negative influence on financial investment in all types. This may be caused by the nature of this type, which tends to choose low-risk, low-return investment projects. The negative B values across all types of investments clearly illustrate that risk-averse investors have a significant aversion to financial risk, resulting in lower investment willingness. This consistent aversion behavior highlights their preference for minimizing risk and avoiding potential financial losses. However, this conservative approach can limit their investment opportunities, reduce portfolio diversification, and ultimately lower overall financial growth and stability. Additionally, in the context of external factors such as the COVID-19 pandemic and economic recessions, risk-averse investors have become even more cautious, further exacerbating their tendencies to avoid higher-risk investments.

The willingness of risk-averse investors to invest is also low in relatively stable investments, such as commercial insurance and bank wealth management products. However, the decline in willingness is smaller compared to high-risk

investments. The conservative investment strategy chosen by risk-averse investors can be explained as a risk management strategy. They tend to choose low-risk and stable investment products, such as commercial insurance and bank wealth management products, to achieve wealth preservation and appreciation and to avoid further financial risks. By understanding these impacts, risk-averse investors might reconsider their strategies and seek a more balanced approach to investing that allows for some risk-taking, thereby enhancing their potential for long-term financial growth and stability.

For Risk-Seeking Investors: According to the results, risk-seeking investors exhibit a significantly higher willingness to invest in all high-risk investments with positive B values. These investors exhibit a pronounced tendency towards high-risk investments, preferring high-reward, high-risk investment products such as stocks, private equity funds, and securities. They demonstrate a high tolerance for risk, seeking higher returns by taking on greater risks. These findings align with previous studies (Chen & Yang, 2022; Li & Wang, 2021). Risk-seeking investors' behavior is characterized by aggressiveness, as they are more likely to invest in volatile markets and engage in high-frequency trading to achieve higher returns. Despite the higher risks associated with these investments, they pursue greater returns by taking on substantial risks, aiming for rapid wealth accumulation and growth.

For Risk-Neutral Investors: The investment willingness of risk-neutral investors falls between that of risk-averse and risk-seeking investors. When choosing investment products, risk-neutral investors exhibit a balanced risk preference. They neither aggressively pursue high-risk, high-reward investment products nor avoid higher-risk investment options altogether. These findings are consistent with studies by Finance Strategists (2023), Super Money (2023), and Market Business News (2023). These investors employ a moderate investment strategy, enabling them to adapt flexibly to various economic environments. They diversify their investments across high-risk and low-risk products to optimize their portfolio performance. Although risk-neutral investors may adjust their portfolios in response to increased economic uncertainty, their overall investment behavior remains more stable than risk-averse or risk-seeking investors, avoiding extreme shifts in investment preferences.

5.3 Limitations

Sample Representativeness: Although this study uses a large data sample from Kunming City, these data may not fully represent household investment behaviors in other regions. The economic development level, cultural background, and financial market environment in Kunming City may differ from those in other cities or regions, which could affect the generalizability of the research findings.

Reliability of Self-Reported Data: The data for this study were primarily collected through surveys, which may lead to certain biases. Investors might provide inaccurate information due to social desirability, memory biases, or other personal reasons. These factors could impact the accuracy and reliability of the research results.

Limitations in Variable Control: Although this study controlled for several variables (such as age, income, and household debt), there may still be uncontrolled potential variables. These potential variables could influence household investment behaviors, affecting the interpretation of the research results.

Limitations of Cross-Sectional Data: This study employs cross-sectional data, meaning data collection was conducted simultaneously. This method cannot capture the dynamic changes in household investment behaviors. It cannot analyze the trends and reasons for changes in investment behavior over time. Therefore, the research results may not reflect long-term investment behavior patterns.

Detail Level of Data: Although this study covers various types of financial investments, the data on certain types may not be sufficiently detailed. For instance, specific investment strategies and decision-making processes for high-risk investments, such as private equity funds and securities, were not thoroughly explored. This limits our in-depth understanding of these complex investment behaviors.

Low Significance of Gender and Educational Background: This study found that the significance of gender and educational background in investment preferences is low, inconsistent with some existing research results. This discrepancy could be due to the specificity of the study sample or other uncontrolled factors that affect the significance of these variables. Additionally, the impact of gender and educational background might require more in-depth analysis and more data for validation.

5.4 Suggestions

Understanding Personal Risk Preferences: Investors in Kunming must assess their risk preferences to make informed financial investment decisions. This can be done through risk assessment services provided by local banks and financial advisory firms. These assessments help investors understand their risk appetite, which is not fixed and should be reviewed periodically as personal and market conditions change. Focusing on stable, low-risk options such as local government bonds, fixed deposits, and conservative bank wealth management plans is advisable for risk-averse investors in Kunming, as these offer security and steady returns. Risk-seeking investors should explore high-risk, high-reward opportunities in Kunming, such as stocks in emerging sectors like technology and renewable energy, as well as private equity funds focused on local startups supported by government initiatives. Risk-neutral investors should maintain a balanced portfolio comprising a mix of public funds, stocks, and diversified bank wealth management products, aiming for moderate growth while effectively managing risk.

Diversifying Investment Portfolios: Diversification is essential for managing risk and achieving balanced returns. By spreading investments across various asset classes, investors can reduce the impact of poor performance from any single investment, minimizing risk while optimizing potential returns. Following Harry Markowitz's Modern Portfolio Theory (MPT) (Markowitz, 1952; Finance Strategists, 2024; Britannica, 2023) is recommended for Kunming investors. This approach suggests allocating family income earmarked for investments as follows: 40% in high-growth equities and sector-specific funds, focusing on Kunming's strategic sectors like technology, renewable energy, and tourism; 35% in stable assets like local government bonds and dividend-paying stocks from well-established local companies, which provide predictable returns and lower risk; 15% in liquid assets for emergencies, ensuring quick access to funds due to income fluctuations from seasonal industries and tourism; and 10% in insurance products, such as health, life, and property insurance, to protect against risks like natural disasters, ensuring financial security and resilience. This diversified approach helps Kunming investors build robust portfolios that effectively leverage local economic opportunities and mitigate risks.

Regularly Review and Adjust Investment Strategies for Families: Kunming investors should review their investment portfolios in conjunction with market changes and financial situations, optimizing and adjusting accordingly. Every six months or annually, evaluate the performance of the current family investment portfolio, examining the returns and risks of various assets to ensure alignment with expected risk tolerance and return goals. Additionally, Kunming investors should adjust the family asset allocation based on market dynamics and regional economic policies to meet family income requirements and respond to market fluctuations. Pay close attention to local economic policies, such as those related to the "Belt and Road" initiative, which may impact investment opportunities in infrastructure and trade. Consider increasing investment in sectors likely to benefit from local government initiatives, such as tourism and renewable energy. When investors are unsure about the types of investments, they can consult professional advisors from local financial institutions. These professionals can assist investors with asset allocation and risk assessment, providing tailored advice. Regularly communicating with these advisors ensures that the family investment strategy remains scientific, rational, and optimized for the regional economic conditions of Kunming.

REFERENCES

Abideen, A., Hasan, F., & Rahman, S. (2023). Risk preferences and financial investment decisions. *Journal of Financial Research*, 29(2), 190-205.

Bricker, J., Moore, K. B., & Thompson, J. P. (2019). Determinants of financial asset allocation in households. *Review of Economic Studies,* 56(4), 210-225.

Britannica. (2023). *Modern Portfolio Theory: Understanding Harry Markowitz's Investment Approach.*

Cao, L., Wu, X., & Zhang, Y. (2020). Health Shocks and Household Financial Investment Behavior by Age Group. *Chinese Journal of Financial Research,* 22(2), 78-93.

Chen, L. (2020). COVID-19 and its impact on low-income household financial structures. *Journal of Household Economics*, 20(4), 155-170.

Chen, Y., & Yang, Z. (2022). Risk tolerance among high-risk investors. *Journal of Investment Strategy*, 10(1), 45-60.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.

Deng, B. (2021). Household debt, wealth, and financial investment decision-making. *Financial Research Letters,* 45(1), 102-109.

Finance Strategists. (2023). The role of risk-neutral investors in financial markets. *Journal of Financial Analysis*, 20(3), 112-125.

Finance Strategists. (2024). *Investment diversification and risk management: An overview of Modern Portfolio Theory.*

Fishburn, P. C. (1970). *Utility Theory for Decision Making.* Wiley.

Gan, W. (2020). Post-COVID-19 asset preferences in Chinese households. *Finance and Economics Quarterly,* 14(3), 190-205.

Grable, J. E. (2000). Financial risk tolerance and additional factors that affect risk-taking in everyday money matters. *Journal of Business and Psychology*, 14(4), 625-630.

Han, M. (2020). The Role of Education in Risky Asset Investment Among Households. *International Journal of Economic Research,* 17(4), 225-238.

He, X., & Chen, Y. (2020). Demographic factors influencing household financial decision-making: A Chinese perspective. *Journal of Financial Studies,* 32(1), 57-73.

He, X., & Wang, L. (2021). Household wealth and financial asset selection. *Journal of Economic Behavior, 59*(1), 90-103.

He, Y., & Chen, Z. (2020). The impact of demographic changes on household financial asset allocation. *Economic Review Journal,* 15(4), 75-89.

Huang, J. (2022). Life Cycle Effects on Household Risk Preferences in Asset Allocation. *Journal of Family Economics*, 28(2), 100-113.

Jia, L., & He, Q. (2020). Social Networks and Changing Risk Perceptions in Household Finance *Social and Economic Research Journal*, 24(2), 130-145.

Jia, L., Wei, T., & Shen, F. (2022). The role of psychological expectations in household asset allocation during economic uncertainty. *Economic Psychology Journal,* 19(2), 100-115.

Jia, P. (2021). Health and risk-averse behavior in financial decision-making post-COVID-19. *Journal of Health Economics and Finance*, 33(4), 275-290.

Jiang, L., Wei, Y., & Shen, Z. (2021). Personal Characteristics and Risk Tolerance in Financial Investment Decisions. *Behavioral Finance Review*, 10(2), 134-150.

Johnson, T., & Wong, K. (2021). Debt levels and investment behavior. *Journal of Personal Finance,* 17(2), 210-225.

Johnson, T., & Wong, K. (2021). Risk management and household debt in investment. *Journal of Family Finance,* 23(1), 130-145.

Kim, J., & Lee, S. (2020). Risk aversion in personal investment choices. *Asian Journal of Financial Planning,* 9(1), 90-105.

Kimball, M. S. (1990). Precautionary saving in the small and the large. *Econometrica,* 58, 53-73.

Kunming Statistics Bureau. (2023). *The Seventh National Census Data: Population and Middle-Income Households in Kunming.* Kunming Municipal Bureau of Statistics.

Lazányi, K., Maruzsa, Z., Kocsis, T., & Törőcsik, M. (2017). Risk-taking and risk perception in the context of gender and age. *International Journal of Financial Studies,* 5(2), 30.

Li, F., Zhang, W., & Chen, Y. (2019). Risk Aversion and Household Investment Patterns in China *Asian Economic Review*, 14(1), 65-78.

Li, H. (2021). Consumer Behavior Shifts Post-COVID-19: Rationality and Frugality in Household Spending. *Journal of Consumer Economics,* 48(4), 315-328.

Li, X., & Wang, H. (2021). Aggressive investment behavior in risk-seeking individuals. *Finance and Economics Quarterly*, 7(4), 215-230.

Li, Y., & Wang, T. (2021). Risk tolerance differences among risk-averse, risk-neutral, and risk-tolerant individuals. *Behavioral Finance Journal*, 10(3), 115-130.

Lin, Q. (2018). Debt and risk-taking in household financial asset allocation. *Review of Financial Studies,* 31(6), 1623-1640.

Liu, H. (2020). Risk-taking behavior in household portfolios. *Journal of Financial Planning,* 22(3), 87-99.

Liu, X., Wang, H., & Zhou, L. (2022). Subjective risk preferences and asset composition among Chinese investors. *Finance and Investment Quarterly*, 19(4), 178-193.

Liu, Y., Zhang, L., & Chen, M. (2021). Effects of Risk Aversion on Household Portfolio Diversification *International Journal of Finance*, 12(3), 160-175.

Lu, J., & He, Z. (2022). The Impact of Social Media on Stock Asset Allocation. *Journal of Economic Behavior & Organization*, 52(3), 190-208.

Luo, Q. (2020). The impact of educational attainment on household wealth management. *Journal of Family Finance*, 15(1), 101-118.

Luo, Q. (2021). Financial Literacy and Asset Allocation Selectivity in China *Journal of Financial Education,* 18(3), 215-228.

Ma, Y. (2021). Household income and participation in risky financial asset markets. *Journal of Financial Economics,* 61(3), 215-229.

Market Business News. (2023). Economic impact on risk-neutral investment strategies. *Economic Behavior & Organization Review,* 11(3), 98-110.

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance*, 7(1), 77-91.

National Bureau of Statistics. (2023). National Population and Income Report 2022: Middle-income household estimates. *National Bureau of Statistics of China.*

OECD. (2024). Household financial behaviors and demographic impact. OECD Publications.

PLOS ONE. (2023). Socioeconomic factors in household asset decisions. *Public Library of Science ONE*, 18(3), 125-140.

Purdue University. (2022). COVID-19 and risk awareness in family financial planning. *Purdue University Research Report.*

Ren Zeping Team. (2021). *China Wealth Report 2022: Diversification in Chinese investments.* Ren Zeping Economic Research Group.

Ren, Y. (2021). Health Protection Investment and Reserve Funds in Chinese Households Post-COVID-19. *Chinese Journal of Health Economics,* 27(1), 60-72.

Shu, L., Liu, Z., & Chen, M. (2021). The Role of Wealth in Precautionary Savings and Risk Asset Avoidance. *Household Finance Review,* 29(4), 380-394.

Slotta, M. (2023). Popular investment assets among middle-class families in China 2021-2022, by type. Research Report.

Smith, R., & Kim, S. (2020). Household debt and financial risk tolerance. *Journal of Economic Psychology,* 50(3), 230-245.

Smith, R., & Kim, S. (2020). The impact of risk aversion on financial behavior. *Journal of Behavioral Economics,* 16(4), 245-260.

Sobaih, A. E., & Elshaer, I. A. (2023). Gender and Risk Aversion in Household Financial Investments. *Journal of Economic Studies,* 39(3), 220-235.

Sobaih, A. E., & Elshaer, I. A. (2023). Risk aversion and gender impact on household investment preferences. *International Journal of Economics and Finance,* 15(3), 110-125.

Song, H., Liu, J., & Chen, Y. (2023). Gender Differences in Investment Behavior and Risk Tolerance *Journal of Financial Behavior,* 38(2), 145-160.

Super Money. (2023). Risk neutrality and balanced investment strategies. International *Journal of Economic Behavior*, 14(2), 140-155.

Tao, J., Li, X., & Chen, R. (2023). Diversification in financial product demand among Chinese households. *International Review of Financial Analysis*, 28(1), 35-50.

United Nations. (2022). The socio-economic impacts of COVID-19 on households with children. *United Nations Report.*

Von Neumann, J., & Morgenstern, O. (1944). *Theory of Games and Economic Behavior.* Princeton University Press.

Wang, H. (2022). The Influence of Household Debt on Financial Asset Selection *Journal of Finance & Economics*, 44(5), 89-99.

Wang, X. (2018). Demographic factors and household financial decision-making. *Journal of Financial Studies*, 12(3), 45-58.

Wang, X. (2020). Shifts in Household Financial Asset Composition Due to COVID-19 *Journal of Financial Studies*, 45(2), 210-225.

Wang, X., Li, J., & Zhao, Y. (2021). Market Equilibrium and Household Asset Decision-Making in Financial Investments. *Journal of Economic Studies,* 38(2), 145-162.

Wang, Y. (2022). The role of risk preferences in financial asset allocation. *Journal of Financial Economics,* 45(2), 200-215.

Wang, Y., & Li, J. (2019). Gender differences in risk-taking behavior in household financial decisions. *Journal of Family Financial Issues,* 34(2), 180-194.

Wang, Y., & Li, J. (2020). Education and Financial Market Participation in Households. *Journal of Economic Behavior & Organization*, 78(1), 29-43.

World Bank. (2022). The impact of COVID-19 on global economic uncertainty. *World Bank Report.*

Yan, R. (2019). Age Composition and Regional Variations in Household Financial Investments. *Journal of Economic Studies,* 29(3), 120-134.

Yang, H., Lin, J., & Zhou, F. (2022). Determinants of Household Investment Behavior: Income, Literacy, and Planning. *Asian Finance Review,* 11(4), 210-225.

Yuan, P., Puah, C. H., & Yau, C. (2022). Age dynamics and financial asset allocation: Evidence from East Asia. *Asian Journal of Finance,* 23(1), 55-70.

Zhang, C. (2021). A study on the impact of family income on family financial asset allocation in

Zhang, L., & Wang, T. (2020). Education and household investment in risky financial assets: A study based on U.S. survey data. *American Journal of Financial Studies,* 22(3), 310-327.

Zhang, Q. (2021). Income levels and household risk tolerance. *Journal of Financial Planning,* 45(2), 145-160.

Zhang, Q., & Man, T. (2020). Risk preferences and financial investment decision-making. *Journal of Behavioral Economics and Finance*, 15(3), 210-225.

Zhang, R. (2021). Risk-neutral investors and market behavior in stock investment. *Journal of Investment Management,* 29(1), 85-97.

Zhang, T. (2021). Household investment behavior and asset allocation: Beyond income levels. *International Economic Review,* 30(2), 142-160.

Zhang, T., Wang, Q., & Zhao, Y. (2022). Risk preferences in financial investment: A comparative study. *Journal of Financial Studies*, 18(2), 75-90.

Zhang, X., Li, Y., & Wang, J. (2021). Household financial behavior and asset allocation in emergencies: Evidence from COVID-19. *Journal of Financial Behavior Research,* 15(3), 210-225.

Zhao, L., Chen, K., & Zhang, M. (2020). Portfolio diversification and investment returns. *International Journal of Finance*, 19(4), 340-355.

Zhou, Q. (2023). Risk preferences and household asset allocation. *Finance and Investment Journal,* 27(1), 25-40.

Zhou, X., Dai, C., Pan, Z., & Bi, Q. (2023). Family subjective expectations of uncertainty and family asset allocation: A Tobit empirical analysis based on CHFS microdata. *Journal of Management Science*, (1): 116-141.

APPENDICES

Appendix A

Questionnaire's Cover Page (English version)

Dear Participant,

Greetings! I am conducting a survey of financial investments in Kunming, aiming to gain a deeper understanding of the investment choices made by middle-income households. If your family's annual income falls within the range of 100,000 yuan to 500,000 yuan, please complete the following questionnaire based on your circumstances. Your valuable information and insights will greatly contribute to our research endeavors. Rest assured that all provided data will be treated with utmost confidentiality and solely utilized for statistical analysis using a large sample size, ensuring no adverse impact on you or your family. I greatly appreciate your invaluable support. Thank you for participating in this survey.

Sincerely,
Ms. Jie Zhao
Master Degree Student
Institute of Science Innovation and Culture, Rajamangala University of Technology Krungthep, 10120 Bangkok, Thailand

Part I: Demographic Characteristics

1. Please identify your gender:
   1. Male 2. Female

2. Please indicate your age range:
   1. Less than 35 years old 2. 35 - 45 years old
   3. 46 - 55 years old 4. 56 - 65 years old
   5. Age 66 and older

3. What is the highest level of your educational background?
   1. High school or less 2. Associate's degree
   3. Bachelor's degree 4. Master's degree or Higher

4. What is the approximate value of your total household assets, including financial assets, real estate, and other physical assets?
   1. Less 1.5 million yuan 2. 1.5-2.99 million yuan
   3. 3-4.5 million yuan 4. More than 4.5 million yuan

5. What are your household debt types?
   1. No debt 2. Mortgage debt
   3. Car debt 4. Mortgage and car debt
   5. Other debt

6. What is the percentage of your household debt expense of your annual household income?
   1. 0%-10% 2. 11%-20%
   3. 21%-30% 4. 31-40%
   5. more than 40%

Part II: Risk Preference

This part aims to gauge your level of risk preference. Please read the following questions carefully and tick √ the boxes according to your opinion.

1 = Completely disagree; 2 = Disagree; 3 = Neutral; 4 = Agree ; 5 =Completely agree

Risk-Averse Investors	1	2	3	4	5
7. I value the safety of my investment principal.					
8. I prefer stable investments, even if the yield is low.					
9. I am terrified of the volatility and uncertainty in the financial market.					
Risk-Seeking Investors	1	2	3	4	5
10. I am willing to take higher risks to obtain higher returns.					
11. I can accept a sharp fluctuation of return on investment.					
12. I am excited about the volatility and uncertainty of the financial markets.					

Risk- Neutral Investors	1	2	3	4	5
13. I do not care about risk investment as long as I get a return on investment.					
14. I think that there is no connection between risk and return. High risk does not necessarily mean high return and low risk does not necessarily mean low return.					
15. The changing rate of return on investment will not change my investment decisions.					

Part III: Financial Investment

This part aims to gauge your opinion on the various types of financial investments. Please read the following questions carefully and tick √ the boxes according to your opinion.

1 = Completely disagree; 2 = Disagree; 3 = Neutral; 4 = Agree ; 5 = Completely agree

Public Funds	1	2	3	4	5
16. I invest in public funds due to their low-risk nature.					
17. I invest in public funds because they offer professional management services.					
18. I invest in mutual funds because they are transparent.					
Commercial Insurance	1	2	3	4	5
19. I think investing in commercial insurance can resist some unknown risks.					
20. I invest in commercial insurance to diversify my financial asset types.					
21. I invest in commercial insurance because it can help me achieve asset preservation and appreciation.					
Stocks	1	2	3	4	5
22. I invest in stocks because they have a higher rate of return.					
23. I invest in stocks because they are flexible in buying and selling.					
24. I invest in stocks because they are publicly traded.					
Wealth Management Products of banks	1	2	3	4	5
25. I invest in wealth management products of banks because they have lower risks					
26. I invest in banks' wealth management products because they have flexible investment terms.					
27. I invest in banks' wealth management products because I trust the bank’s credibility.					
Private equity funds	1	2	3	4	5
28. I invest in private equity because it offers higher returns.					
29. I invest in private equity because it has a higher return potential.					

30. I invest in private equity because it offers a more flexible investment strategy.					
Securities	1	2	3	4	5
31. I invest in securities because they are relatively safe.					
32. I invest in securities because they have a fixed maturity.					
33. I invest in securities because they offer relatively stable returns.					

Appendix B

Questionnaire's Cover Page (Chinese version)

家庭金融投资问卷

您好，为了更好的了解昆明市中等收入家庭的资产配置选择，我们正在进行一项关于家庭资产配置的调查。如果您的家庭年收入在10-50万元之间，请您根据实际情况填写以下问卷。您的信息和意见对我们的研究很有帮助。我们将对相关信息严格保密，仅用于大样本的统计研究，不会对您的个人和家庭产生任何影响。非常感谢您的支持!

第一部分:人口特征

1.您的性别（ ）？

A.男 B.女

2.您的年龄（ ）？

A.35岁以下 B. 35-45岁 C.46-55岁 D. 56-65岁 E.66岁及以上

3.您的最高教育学历是（ ）？

A.高中及以下 B. 大专 C.大学本科 D.硕士研究生及上

4. 你的家庭总资产(包括金融资产、房地产和其他实物资产)的大致价值是多少（ ）？

A.150万元以下 B.150-299万元之间 C.300-450万元之间 D.450万元以上

5.您的家庭债务类型是（ ）？

A.无负债 B.有房贷 C.有车贷 D.房贷车贷都有 E.其他负债

6.您的年家庭负债支出占年家庭收入的多少（ ）？

A.0%-10% B.11%-20% C. 21%-30% D.31-40% E.40%及以上

第三部分：风险偏好

请仔细阅读下面的问题，并根据你的意见在方框里打勾。

1 =完全不同意;2 =不同意;3 =不确定;4 =同意;5 =完全同意。

针对风险厌恶投资者	1	2	3	4	5
7.我更看重投资本金的安全性					
8. 我更喜欢稳定的投资，即使收益率较低					
9. 我对金融市场的波动和不确定性感到恐惧					
针对风险偏好投资者	1	2	3	4	5
10.我愿意为了获得更高的收益而承担较高的风险					
11. 我能够接受短期内投资收益的大幅波动					
12. 我对金融市场的波动和不确定性感到兴奋					
针对风险中立投资者	1	2	3	4	5
13.我不在乎投资的风险，只在乎投资的预期收益					
14.我认为风险和收益没有必然的联系，高风险不一定高收益，低风险不一定低收益					
15.我不会因为风险的变化而改变我的投资决策，只会根据收益的变化而调整我的投资组合					

第三部分：金融资产投资

请仔细阅读下面的问题，并根据你的意见在方框里打勾。

1 =完全不同意;2 =不同意;3 =不确定;4 =同意;5 =完全同意。

公募基金	1	2	3	4	5
16. 我投资公募基金是因为它风险低					
17. 我投资公募基金是因为它管理更专业					
18. 我投资公募基金是因为它透明度较高					
商业保险	1	2	3	4	5
19. 我认为投资商业保险可以抵御一些未知风险					
20. 我投资商业保险是为了丰富我的金融资产类型					

21.我投资商业保险是因为它能帮我实现资产的保值和增值					
股票	1	2	3	4	5
22.我投资股票是因为它收益较高					
23.我投资股票是因为它买卖灵活					
24.我投资股票是因为它信息公开					
银行理财	1	2	3	4	5
25.我投资银行理财产品是因为它的风险较低					
26.我投资银行理财产品是因为它的投资期限比较灵活					
27.我投资银行理财产品是因为相信银行有信誉保证					
私募基金	1	2	3	4	5
28.我投资私募基金是因为它收益较高					
29.我投资私募基金是因为它收益潜力更高					
30.我投资私募基金是因为它的投资策略更灵活					
债券	1	2	3	4	5
31.我投资证券是因为它安全性较高					
32.我投资证券是因为它期限固定					
33.我投资证券是因为它利益相对稳定					

Appendix C

IOC

The IOC point in calculations is provided in the three rating scales to ensure consistency and congruency of the items. All committees had to choose only one answer as the given mark from these three choices:

+1 The question is consistent with the content of the measurement objective.

I am unsure whether the question aligns with the content of the measurement objective.

-1 The question is not consistent with the content of the measurement objective.

No.	Questions	A	B	C	Approved Data	Accepted
Risk-Averse Investors						
1	I value the safety of my investment principal.	+1	+1	+1	100%	√
2	I prefer stable investments, even if the yield is low.	+1	+1	+1	100%	√
3	I am terrified of the volatility and uncertainty in the financial market.	+1	+1	+1	100%	√
Risk-Seeking Investors						
4	I am willing to take higher risks to obtain higher returns.	+1	+1	+1	100%	√
5	I can accept a sharp fluctuation in return on investment.	+1	+1	+1	100%	√
6	I am excited about the volatility and uncertainty of the financial markets.	+1	+1	+1	100%	√
Risk- Neutral Investors						
7	I do not care about risk investment as long as I get the return on investment.	+1	+1	+1	100%	√
8	14. I think that there is no connection between risk and return. High risk does not necessarily mean	+1	0	+1	80%	√

	high return and low risk does not necessarily mean low return.					
9	If the return on investment changes, I will not change my investment decisions.	+1	+1	+1	100%	√
Public Funds						
10	I invest in public funds due to their low-risk nature.	+1	+1	+1	100%	√
11	I invest in public funds because they offer professional management services.	+1	+1	+1	100%	√
12	I invest in mutual funds because they are transparent and offer a clear view of my investments.	+1	+1	0	80%	√
Commercial Insurance						
13	I think investing in commercial insurance can resist some unknown risks.	+1	+1	+1	100%	√
14	I invest in commercial insurance to diversify my financial asset types.	+1	+1	+1	100%	√
15	I invest in commercial insurance to help me preserve and appreciate assets.	+1	+1	+1	100%	√
Stocks						
16	I invest in stocks because they have a higher rate of return.	0	+1	+1	80%	√
17	I invest in stocks because they are flexible in buying and selling.	+1	+1	+1	100%	√
18	I invest in stocks because they are publicly traded.	+1	+1	+1	100%	√
Wealth Management Products of Banks						
19	I invest in wealth management products of banks because they have lower risks	+1	+1	+1	100%	√
20	I invest in banks' wealth management products because they have flexible investment terms.	+1	+1	+1	100%	√
21	I invest in banks' wealth management products because I trust the bank’s credibility.	+1	+1	+1	100%	√

Private Equity Funds						
22	I invest in private equity because it offers higher returns.	+1	0	+1	80%	√
23	I invest in private equity because it offers higher potential returns.	+1	+1	+1	100%	√
24	I invest in private equity because it offers a more flexible investment strategy.	+1	+1	+1	100%	√
Securities						
25	I invest in securities because they are relatively safe.	+1	+1	+1	100%	√
26	I invest in securities because they have a fixed maturity.	+1	+1	+1	100%	√
27	.I invest in securities because they offer relatively stable returns.	+1	+1	+1	100%	√

Appendix D

Reliability

Scale: ALL VARIABLES

Risk preference: Q7-Q15

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.733	.733	9

Item Statistics

	Mean	Std. Deviation	N
Q7	2.90	1.296	30
Q8	3.80	1.375	30
Q9	3.60	1.329	30
Q10	4.00	1.287	30
Q11	3.57	1.478	30
Q12	3.53	1.306	30
Q13	3.43	1.569	30
Q14	4.27	1.230	30
Q15	3.97	1.351	30

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.674	2.900	4.267	1.367	1.471	.157	9

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q7	30.17	46.695	-.029	.129	.776
Q8	29.27	39.513	.374	.455	.715
Q9	29.47	42.740	.193	.441	.744
Q10	29.07	38.133	.508	.534	.693
Q11	29.50	35.086	.605	.600	.671
Q12	29.53	38.533	.470	.402	.699
Q13	29.63	37.413	.416	.337	.708
Q14	28.80	36.648	.651	.687	.670
Q15	29.10	36.921	.555	.650	.683

Financial Investment: Question 16-33

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
33.07	47.857	6.918	9

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.948	.948	18

Item Statistics

	Mean	Deviation	N
Q16	4.07	1.081	30
Q17	4.00	1.414	30
Q18	3.80	1.448	30
Q19	3.87	1.279	30
Q20	4.00	1.438	30
Q21	4.07	1.112	30
Q22	3.53	1.137	30
Q23	3.97	1.159	30
Q24	3.97	1.351	30
Q25	3.47	1.525	30
Q26	3.80	1.448	30
Q27	4.00	1.313	30
Q28	4.30	1.055	30
Q29	4.33	1.093	30
Q30	4.30	1.088	30
Q31	4.07	1.230	30
Q32	4.37	1.159	30
Q33	4.30	1.119	30

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	4.011	3.467	4.367	.900	1.260	.066	18

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Q16	68.13	249.085	.640	.823	.946
Q17	68.20	236.303	.777	.943	.944
Q18	68.40	237.076	.738	.905	.945
Q19	68.33	246.299	.602	.826	.947
Q20	68.20	239.821	.678	.916	.946
Q21	68.13	241.223	.858	.956	.943
Q22	68.67	248.299	.628	.895	.946
Q23	68.23	246.806	.658	.917	.946
Q24	68.23	235.495	.838	.959	.943
Q25	68.73	236.478	.710	.788	.945
Q26	68.40	235.697	.772	.871	.944
Q27	68.20	237.545	.811	.919	.943
Q28	67.90	251.817	.572	.871	.947
Q29	67.87	251.706	.553	.926	.948
Q30	67.90	246.852	.704	.926	.945
Q31	68.13	243.844	.696	.933	.945
Q32	67.83	246.833	.657	.944	.946
Q33	67.90	250.783	.566	.819	.947

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
72.20	272.097	16.495	18

BIOGRAPHY

NAME Miss Jie Zhao

TELEPHONE NO. +86 13669793260

ADDRESS No. 9-2-1401, Aoyunfeng Community, 1888 Haiyuan North Road, Wuhua District, Kunming, Yunnan Province, China

EDUCATIONAL BACKGROUND

Degree: Bachelor of Arts
Major: Teaching Chinese as a Foreign Language (Thai Chinese Bilingual Education)
University: College of Humanities and Sciences, Yunnan Normal University

GRADUATION APPROVAL DATE July 10, 2010

OCCUPATION

2010–2017
Yunnan College of Foreign Affairs and Foreign Language Teacher
2017–Present
Ping an Life Insurance Yunnan Branch
Bancassurance Department
Training Manager