An Empirical Study on the Driving Factors of Financial Management Behavior of the Middle-Aged and Elderly Based on Logistic Model

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Abstract

With the rapid development of economy and society, people's demand and participation in investment and financial management are also gradually increasing. With the advent of an aging society, the participation of the middle-aged and elderly people in investment and financial management behavior is also gradually increasing, but so far, there is still a large space for development. This paper takes the middle-aged and elderly people as the research object, analyzes the basic situation of the middle-aged and elderly people's investment and financial decision-making through the literature analysis method, collects the specific data of the factors affecting the investment and financial decision-making through the questionnaire survey, and uses the logistic model and other methods to analyze the data. Finally, the regression analysis results show that age, financial knowledge, herding, risk preference and future expectation will have a significant impact on the investment and financial decision-making of the elderly. Through this research, this paper hopes to provide relevant financial institutions with opinions and references related to products, help the middle-aged and elderly people avoid the risk of financial fraud, and make a certain contribution to the development of financial market and the improvement of the participation of the middle-aged and elderly people in investment and financial management.

Keywords: logistic model, middle-aged and elderly population, investment and financial decision-making

1. Introduction

With the high-quality development of economy and society, residents' wealth is also increasing. At the same time, the degree of population aging in China continues to deepen, and the demand of the middle-aged and elderly people for investment and financial management is also increasing. As an important participant in the development of investment and financial management industry in the future, the middle-aged and elderly people have relatively stable property savings and growing investment willingness. Developing the investment and financial management market for the middle-aged and elderly people has also become one of the important ways to achieve high-quality economic development. However, the middle-aged and elderly people in reality still face problems such as less targeted products, more investment fraud and weak awareness of personal investment and financial management. So far, the investment products launched for the middle-aged and elderly people are still weak in publicity and pertinence, and there is still a lack of adaptation to the investment needs of the middle-aged and elderly people. However, fraud cases against the middle-aged and elderly people emerge one after another. From health care products fraud to telecommunications fraud, the emergence of fraud events gradually weakens the investment desire and confidence of the middle-aged and elderly people. Moreover, when the middle-aged and elderly people are facing the information complexity brought by the emergence of new things and the development of big data, some inherent pension thinking makes it difficult for them to adapt to the rapid development of the information, so that their awareness of investment and financial management is relatively weak. In view of the above situation, how to explore the influencing factors of investment and financial decision-making of the middle-aged and elderly people and make corresponding suggestions according to the research results has become more and more important.

Aiming at the theme of the influencing factors of the middle-aged and elderly people's investment and financial decision-making, this study measures the main factors affecting the middle-aged and elderly people's investment and financial decision-making through literature analysis, factor selection, questionnaire design and survey and logit

regression analysis, and makes corresponding suggestions according to the research results. This study can enrich the literature on investment and financial management of the middle-aged and elderly people, has direct application value and practical significance, and has high innovation in the research of investment and financial management of the middle-aged and elderly people. The suggestions made according to the research results can help financial institutions make some reference and develop investment and financial products more suitable for the middle-aged and elderly people. At the same time, it can help government regulators understand the impact of market supervision and financial market security on the investment and financial decisions of the middle-aged and elderly people through the analysis of these influencing factors, which can be used as the reference conditions for policy formulation and law and regulation formulation.

According to the demographic report released by the National Bureau of statistics, the proportion of China's elderly population in the total population is increasing year by year. In 2019, the population aged 65 and over has reached 12.57%. According to international standards, China is a country with an elderly population. And the degree of China's aging population is increasing. The aging population has a profound impact on China's economic, political and cultural development. At the same time, it has also brought great pressure on Residents' pension. This pressure is reflected in two aspects: on the one hand, the burden of family pension has increased. In recent years, the elderly dependency ratio in China has been rising, and the rising speed is faster and faster; On the other hand, the social pension burden is also increasing. There is no doubt that the arrival of an aging society has brought new challenges to China's economic and social development.

Population aging is not only a new challenge for China's economic development, but also brings new opportunities - considerable potential financial market. Firstly, as a potential market for investment and financial management, the middle-aged and the elderly have considerable accumulation of savings funds; Secondly, the younger of the elderly in China is relatively large, which makes it easier to accept new investment ideas. The latest census data show that the proportion of the elderly aged 60-69 account for 55.93% of the elderly population. Finally, the elderly have a strong tendency to save. According to the 2016 national middle aged and elderly network survey, 45% of the elderly have savings deposits, with a per capita deposit of nearly 80000 yuan. Through these data, we can see that encouraging the middle-aged and elderly people to participate in investment and financial management has broad prospects.

Based on the background of China's aging population, our team plans to carry out research on the current situation of investment and financial management of the elderly and the factors affecting investment and financial management of the middle-aged and elderly people. Understand the influencing factors of the current investment and financial decisions of the elderly from the demand side and the current situation of pension financial products from the supply side so as to provide practical suggestions for the government and financial institutions on the research results.

By searching professional literature and materials, this paper analyzes the current situation of investment and financial management of the middle-aged and elderly people and lists the influencing factors that mainly affect the investment and financial decision-making of the middle-aged and elderly people. At present, according to the discussion results of our team, the main influencing factors of investment and financial decision-making are age, gender, income, herd behavior, risk preference, financial knowledge, vulnerability to deception and future expectation. Then, the influencing factors are further adjusted and determined by selecting appropriate research models and research methods. Combined with the determined research model and research methods, we will identify the influence degree related to factors through questionnaire design, conduct online and offline random surveys on some elderly people in Guangdong Province, obtain relevant data, and then analyze these data by using statistical methods and logit regression to determine the weight of influencing factors of investment and financial decision-making of the middle-aged and elderly people. At the same time, go to Guangzhou, Shenzhen and other areas where financial institutions are well developed to further discuss the views on the investment and financial management market of the middle-aged and elderly people group through questionnaire survey.

The qualitative analysis on the investment of the middle-aged and elderly people is still limited at home and abroad, although the quantitative analysis on the investment of the middle-aged and elderly people is still limited. This paper will study the factors affecting the investment and financial decision-making of the middle-aged and elderly people through quantitative and qualitative methods, and put forward some construction suggestions to relevant institutions and according to the importance of the influencing factors, which is conducive to avoiding the risk of the middle-aged and elderly people being cheated, promoting the middle-aged and elderly people to make rational investment and financial decision-making, and making a certain contribution to the development of the financial market, which has a certain practical significance.

2. The Literature Review

2.1 Age

At present, most of the research conclusions on the relationship between age and investment and financing show that age will have a significant negative impact on investment and financing decisions. Through research and analysis, Yoo (1994) found that the influence of age on investment and finance is inverted U-shaped. As people get older, they will choose higher risk investment methods, but after retirement, they are more inclined to choose lower risk investment methods (Yoo, 1994). According to Bertaut's research, people will be more inclined to invest as they acquire more investment knowledge and experience with age (Bertaut, 1996). This paper takes age as one of the factors influencing investment decisions of the elderly and hopes to better study the relationship between the two through survey data.

2.2 Gender

Gender has been an important part of investment psychology and behavioral economics for a long time. There have been a lot of studies on whether gender has a significant impact on investment and financial planning at home and abroad. Guiso et al.'s study shows that men are more enthusiastic about high-risk financial assets such as stocks than women (Guiso, Sapienza, & Zingales, 2000). Qiu Yuedan's behavioral economic research shows that compared with men, women are more sensitive in psychology, more inclined to avoid risks, and more inclined to buy risk-averse financial products (Qiu, 2014). Xing Dawei (2009) analyzed the survey data of Yangzhou city and found that men were more enthusiastic about investing in high-risk assets such as stocks than women, while the latter preferred to invest in savings (Xing, 2009). It can be seen that gender has a significant impact on investment and financing, so this paper takes gender as an influential factor to study the investment and financing decisions of the elderly.

2.3 Income

Disposable income is the basis for the elderly to invest and manage their finances. In this article, the monthly income of the elderly refers to the pension of the elderly or the alimony given by their children. The higher the income level of investors, the higher their participation in the investment of stocks and bonds (Heaton, & Lucas, 2010). Guiso et al. (2001) also found that the proportion of stock investment of a family is positively correlated with the wage income of a family, which will increase with the increase of wage income (Guiso, Haliassos, & Jappelli, 2001). Based on this, this paper considers that income is an influential factor to study the investment and financial decisions of the elderly.

2.4 Herd Behavior

Herd behavior usually refers to the decision-making behavior in which the subject of behavior neglects his own private information and imitates others' actions due to the influence of others' actions in the incomplete information environment. The phenomenon of herd behavior among multiple actors is also called herd effect (Li, & Zeng, 2006). Spyros Spyrou (2013) believes that herding may be both rational and irrational behavior (Spyrou, 2013). Keynes (1936) believed that individual investors are easily influenced by sociological factors, such as social customs that drive investors to make the same investment decisions as others. (Keynes, 1936) Li Xu et al. (2006) observed the game process between different investment objects and pointed out that individual investors tend to follow institutional investors' investment actions to obtain safer returns due to their lack of information, capital and investment experience. (Li, Zhou, & Deng, 2006) The study of Yang Xin et al. (2004) pointed out that individual investors would follow the changes of market return rate for investment behavior, that is, there is herd effect on immediate market return rate. (Yang, Wang, & Teng, 2004) Shleifer and Summbers (1990) put forward the concept of noise trader and believed that such irrational investors could not obtain internal information and were easy to make decisions with noise as information. (De Long, Shleifer, Summers, & Waldmann, 1990) The elderly are individual investors. Compared with other investors, they are prone to information inequality due to the influence of personal ability and knowledge, resulting in herd effect in investment and financial management. The research of Lu Minfeng et al. (2019) shows that the elderly have an obvious herd mentality and are more likely to have natural trust and dependence when purchasing financial products from relatives and friends (Lu, & Xu, 2019), which promotes the effect of herd effect. Since most senior citizens lack relevant financial knowledge, it is difficult to distinguish the advantages and disadvantages of financial products, and they are more susceptible to the influence of social investment trends. (Lu, & Xu, 2019) They are also more likely to trust institutional investors with high credibility and make joint investment decisions with institutional investors. Wang Fang (2017) pointed out that the elderly are more likely to be attracted by the returns when they invest and finance, and ignore the corresponding risks. They tend to blindly buy investment products, which not only increases the risk of fraud, but also further influences the investment decisions of other elderly people (Wang, 2017). Therefore, this paper included herd effect into the

independent variable to study, and believed that the elderly are vulnerable to herd behavior in investment and financial decisions, and the decisions of relatives and friends will affect the elderly's own investment and financial decisions.

2.5 Risk Preference

Risk preference is an important concept in management science. In this paper, risk preference is interpreted as the attitude of actively pursuing risks and pursuing volatility of returns while avoiding stability. The expected utility theory proves that the risk preference of individual investors reflects the maximization of individual expectations in pursuit of a certain amount, and plays an important role in investors' behavior, even in the elderly group. Kaufmann et al. (2013) showed in their study that the lower people's perception of risk, the more willing they are to invest in products with high risk (Kaufmann, Weber, & Haisley, 2013). Zhou Zhikai (2008) mentioned in his study that among the participants of the default fund in Chile, men aged over 56 and women aged over 51 tend to invest in D funds with lower risks. Compared with investors with younger ages, most middle-aged and elderly people pay more attention to avoiding investment risks (Zhou, 2008). Yao Ping and Lin Zuoming (2015) also mentioned in their study that due to the imperfect market security and supervision of the current economic market for the elderly, the legitimate rights and interests of the elderly are difficult to be effectively guaranteed, which will affect their risk preference and make them more inclined to avoid risks (Yao, & Lin, 2015). The research structure of Alanko and Elias (2009) on investment risk attitude shows that older investors tend to be more risk averse (Alanko, 2009). It can be seen that the attitude to risk has a certain impact on whether the middle-aged and elderly will invest in financial management. Therefore, this paper takes risk preference as a factor to study the influence of investment decisions of the elderly, and believes that the investment and financial decisions of the elderly are affected by individual risk preference.

2.6 Financial Knowledge

As for whether financial knowledge has a certain influence on financial decision-making, the research results of Guiso and Jappelli (2004) show that the level of understanding of the stock market will affect whether families invest and finance (Guiso, & Jappelli, 2004). Compared with investors who have a sufficient understanding of the financial market, those who lack financial knowledge will be less inclined to hold stocks (Rooij, Nederl, & Bank, 2013). The more investors know about the financial market, the more likely they are to invest in the stock market (Lusardi, & Mitchell, 2005). In addition, financial knowledge is associated with education level in most research literatures, and both of them are often used to analyze investment and financial factors. Campbell's research conclusions all show that there is a certain correlation between education level and investment and financial planning (Campbell, 2006).

2.7 Vulnerability to Deception

At present, many studies have conducted in-depth studies on fraud vulnerability of the elderly. Vulnerability to deception refers to the ability of individual investors to deal with risks effectively. The elderly are more vulnerable to fraud than other groups, mainly because of their cognitive and health limitations and lack of ability to deal with fraud (He, & Shen, 2020). Generally, elderly people are cheated in specific situations such as medical treatment, consumption and finance (Cross, 2016; Dove, 2018). With the rapid development of digital inclusive finance, digital finance supported by information technology has gradually become a new financial format for individual investors (Tang, Li, & Tao, 2019), and the small, medium and weak groups, including the elderly, have become the focus of inclusive finance (Bei, & Zhang, 2017). But the following network financial fraud is a serious threat to the financial security and investment confidence of individual investors. Current studies have shown that older people are more likely to be cheated by online fraud than younger people, and their negative Internet attitudes are more significant when they are informed of online fraud. The elderly who do not know enough about the Internet are further reluctant to use the Internet, believing that the "Internet is not safe", and then developing stronger negative attitudes (Diao, & Zeng, 2020). Fraud will also affect the risk perception of the elderly, and further affect their investment and financial decisions. In the research on the influence mechanism of equity crowdfunding investment willingness based on risk perception theory. The risk is divided into credit, fraud, project, counterparty and liquidity risk. Through the study of scale model, it is concluded that investors' perception of fraud risk negatively affects their investment intention. (Su, 2017) In another article on the impact of risk perception on Internet investment behavior, Through the scale analysis of five risk dimensions including financial risk, it is considered that the stronger the risk perception ability of investors, the lower the possibility of participating in investment decision-making (Zhang, 2020), It can be inferred that fraud improves the elderly's perception of financial risk by causing losses to personal property. So they are unwilling to make investment and financial decisions. Lichtenberg (2015) believes that the more fraud experienced by the elderly, the lower their confidence on investment and finance, which to some extent reflects the high

vulnerability of the elderly to fraud. (Peter Alexander Lichtenberg, 2016) Accordingly, this paper included "fraud vulnerability of the elderly" into the independent variable to study, and believed that the elderly who were unfamiliar with the investment and finance field and had the experience of fraud in the financial field would tend to be more conservative. Compared with investment and financial management, the elderly are more willing to take the safer method of preserving their money by depositing it in the bank.

2.8 Future Expectations

In this article, expectations refer to decision-makers' predictions of future values of economic variables related to their current decisions. Consumers' views on an asset will affect their future portfolio adjustments. When investors are optimistic about the future, the future vitality of investment will increase correspondingly, which means that when investors believe that the value of future investment will rise, they will be more willing to make investment and financial decisions. Meanwhile, Shackle and G.L.S. (1940) also mentioned in their study that non-investors are more likely to overestimate the loss rate of future investment than investors, and these negative future expectations will affect their further reduction of investment intention (Shackle, 1940). The impact of future expectations on the investment and financial management of middle-aged and elderly people is often reflected in the investment in pension and nursing. Karlsson et al. (2006) showed in their study that the prediction of the future health status of middle-aged and elderly people will affect their demand for long-term care (Karlsson, Mayhew, Plumb, & Rickayzen, 2006)[0]. As the main body of economic decision-makers in this study, middle-aged and elderly people will be affected by the above expectations to a certain extent. Therefore, this paper takes future expectation as the latent variable of this study and analyzes its effect on the dependent variable.

3. The Model and Method for Analyzing the Factors Influencing the Financial Decisions the Middle-Aged and Elderly People Make

The logistic model is set as the research model in this paper to study the factors affecting whether the middle-aged and elderly people make financial investment. Since whether the middle-aged and elderly people make investment and financial decisions is a binary choice, and the answer is "Yes" or "No", where the linear probability model cannot be applied. Therefore, this paper also sets the explanatory variable as discrete variable, and uses the cumulative distribution function of logical distribution, which is called Logistic model, a research method specially used to analyze the research subject where the explanatory variable is discrete. This paper takes the investment and financial decision-making of the middle-aged and elderly people as the explanatory variables, and takes age, gender, monthly income, herding, risk preference, financial knowledge, vulnerability to deception and future expectation as the explanatory variables and meanwhile give different scores to different decisions.

Therefore, this paper constructs a logistic regression model based on eight influencing factors as follows:

$$\mathrm{Ln}\frac{P}{1-P}=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\beta_6X_6+\beta_7X_7+\beta_8X_8$$

Where, P represents the probability of occurrence of dependent variables that may have an impact on the investment and financial decision-making of middle-aged and elderly people.

At the same time, the questionnaire survey method is mainly used to collect the data. Questionnaire survey method is a research method to collect the actual situation of the research object by asking questions in writing. The advantage of questionnaire survey method is that it has a wide range of survey and can obtain more people's feedback for data statistical analysis. The questionnaire was distributed in the form of offline field research, and Chaozhou, Guangzhou and Shenzhen. The middle-aged and elderly people over the age of 50 were taken as the research subjects. The sample data were collected by random sampling, and finally the questionnaire data were collected and studied.

4. Empirical Analysis

Through off-line investigation in Chaozhou, Foshan and Shenzhen, taking the elderly over the age of 50 as the survey object, 186 questionnaires are collected. Through the collection of the basic information of the respondents, the sample data can represent the overall level to some extent. Table 1 shows the result of sample collection.

Table 1. Descriptive statistical analysis

Variable	Variable type	Variable assignment	Number (percentage)	Mean value
Financial investment decision	Dependent variable	1=yes	137(73.66%)	0.26
		0=no	49(26.34%)	
Age	independent variable	0=50-55	63(33.87%)	2.42
		1=55-60	41(22.04%)	
		2=60-65	42(22.58%)	
		3=65-70	21(11.29%)	
		4=above 70	19(10.22%)	
Gender	independent variable	1=male	102(54.84%)	0.55
		0=female	84(45.16%)	
Monthly		0=below 1000	10(5.38%)	3.16
Income		1=1000-2000	49(26.34%)	
		2=2000-4000	63(33.87%)	
		3=4000-6000	30(16.13%)	
		4=6000 and above	34(18.28%)	
Herd behavior	independent variable	1= follow	28(15.05%)	0.15
		0= not follow	158(84.95%)	
Risk preference	independent variable	0= low	94(50.54%)	1.86
		1=low to medium	55(29.57%)	
		2=medium	29(15.59%)	
		3=medium to high	7(3.76%)	
		4=high	1(0.53%)	
Financial knowledge	independent variable	0=no financial knowledge	128(68.82%)	1.4
		1=some financial knowledge	42(22.58%)	
		2=good financial knowledge	16(8.6%)	
Vulnerability to deception	independent variable	1=financial fraud	16(8.6%)	0.09
		0=no financial fraud	170(91.4%)	
Future expectations	independent variable	1=save	119(63.98%)	0.64
		0=not save	67(36.02%)	

Through descriptive statistics of the data, we can get the following basic information: from the regional distribution of respondents, 76 respondents are from Chaozhou, 56 respondents are from Foshan and 54 respondents are from Shenzhen. In this survey, the gender ratio of men and women is 1.21:1, indicating that the proportion of men and

women in the survey objects is basically the same, which can better obtain the balanced relationship between respondents of different genders. According to the income level distribution of the respondents in the questionnaire results, the average income is 3450 yuan, of which the monthly income level of 2000–4000yuan accounts for the largest proportion. There are 49 elderly people in the income level between 1000 yuan and 2000yuan, accounting for 5.38%. There are 10 elderly people with an average income of less than 1000 yuan. At the same time, 16.13% and 18.28% of the respondents have a monthly income of 4000-6000 yuan and more than 6000 yuan. Among the sources of income, the incomes of 83 elderly people mainly come from wages. In addition to formal work wages, property leasing such as renting houses are also included, accounting for 44.62%. Secondly, the number of respondents with pension as the main source of monthly income is 45, accounting for 24.19%. The monthly income of 40 elderly people mainly comes from their children's alimony, accounting for 21. 51%. Finally, the remaining 18 old people take pensions as their main source of income.

Taking the financial investment decision as the explanatory variable and taking age, gender, monthly income, herding, risk preference, financial knowledge, vulnerability to deception and future expectation as the explanatory variables, logistic regression is carried out on all sample data, and the probability of success is 87.63%, indicating that the research model has a good effect. The regression results are shown in Table 2. The results show that under the significance level of 5%, herd behavior, risk preference, financial knowledge and future expectation pass the significance level test, which will have a significant impact on the investment and financial decision-making of the middle-aged and elderly. Secondly, age can also have a significant impact on the explained variables at the significance level of 10%. However, gender, monthly income and vulnerability to fraud do not have a significant impact on the investment and financial decision-making of the middle-aged and elderly.

Table 2. Logistic regression results

Financial investment decision	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Age	-.419	.239	-1.76	.079	-.887	.049	*
Gender	.16	.544	0.29	.769	-.906	1.225	
Monthly income	-.052	.272	-0.19	.848	-.585	.481	
Herb Behavior	2.111	.675	3.13	.002	.788	3.434	***
Risk preference	.303	.149	2.03	.042	.011	.594	**
Financial knowledge	2.169	.464	4.68	0	1.26	3.079	***
Vulnerability to deception	.232	1.022	0.23	.82	-1.771	2.235	
Future expectation	1.715	.715	2.40	.016	.313	3.117	**
Constant	-4.03	1.054	-3.82	0	-6.095	-1.965	***

Mean dependent var	0.263	SD dependent var	0.442
Pseudo r-squared	0.524	Number of obs	186
Chi-square	112.403	Prob > chi2	0.000
Akaike crit. (AIC)	120.102	Bayesian crit. (BIC)	149.134

*** $p<.01$, ** $p<.05$, * $p<.1$

Among them, the marginal effect of each variable on the investment and financial decisions of the middle-aged and elderly is shown in Table 3. Among all significant variables, age is the only variable that has a negative effect on the investment and financial decisions of the middle-aged and elderly, and other significant variables have a positive effect on the Explained variables. With the increase of age, the willingness of middle-aged and elderly people to

invest in financial management decreases. With each level of age increasing, the possibility of middle-aged and elderly people to invest in financial management decreases by 5%. The middle-aged and elderly people with relatives and friends are more likely to invest and finance than those without friends and relatives, which will increase by 38.6%. If the middle-aged and elderly people have more wealth of financial management knowledge, they are more inclined to invest in financial management. The middle-aged and elderly people who are saving for uncontrollable events that may in the future be more inclined to invest in financial management than the middle-aged and elderly people who do not have a savings plan, with an increase probability of 17.9%. If the middle-aged and elderly people are a risk preference, they are more inclined to invest and manage money. For each level of risk preference, the possibility of investment and financial management of middle-aged and elderly people increases by 3.6%.

Table 3. Marginal effects of each factors on investment and financial management decisions

variable	dy/dx	Std.Err.	z	P>z	[	95%	C.I.
age	-0.050	0.029	-1.750	0.080	-0.106	0.006	1.419
gender*	0.019	0.064	0.300	0.767	-0.106	0.144	0.548
monthly income	-0.006	0.032	-0.190	0.848	-0.069	0.057	2.156
herd effect*	0.386	0.153	2.530	0.012	0.087	0.686	0.151
risk appetite	0.036	0.018	2.050	0.041	0.002	0.071	1.726
financial knowledge	0.259	0.067	3.880	0.000	0.128	0.389	0.398
Vulnerability to deception*	0.030	0.140	0.210	0.832	-0.245	0.304	0.086
future expectation*	0.179	0.061	2.940	0.003	0.060	0.298	0.640

(*) dy/dx is for discrete change of dummy variable from 0 to 1

5. Conclusion and Suggestion

By using Logistic model to study the influencing factors of investment and financial decision-making of middle-aged and elderly people, this paper finds that four influencing factors, age, herd effect, risk preference, financial knowledge and future expectation, have significant impacts on the willingness of middle-aged and elderly people to make financial and investment decisions. Among them, age will have a reverse effect on the financial investment decision of the middle-aged and elderly, and other significant variables will have a positive effect on the degree of investment and financial willingness of the middle-aged and elderly. That is, the older the middle-aged and old people are, the less willing they are. In other words, with the increase of age, the middle-aged and old people tend to decline their risk preference and are not willing to take additional risks. They only hope to rely on pension and retirement income to guarantee their basic living needs and are afraid of taking the risk of loss. In actual questionnaires, most middle-aged and elderly people think they have not been subjected to financial fraud. Middle-aged and elderly people have strong defensive psychology, so they distrust the investment and financial services recommended by strangers. When strangers recommend their financial products, they mostly think that the other party is engaged in financial fraud and ignore them. But when the middle-aged and the elderly face familiar people, the defensive psychological attention is greatly reduced. Middle-aged and elderly people are easily influenced by their relatives and friends. When relatives and friends around them have financial investment experience or recommend them to buy financial products, they trust the people they are familiar with very much, so they tend to follow them to invest in financial management to pursue capital preservation and increase value of assets. Old people mastering more financial knowledge will more clearly understand the returns and risk of investment products. However, the middle-aged and elderly people with weak financial knowledge often have wrong misunderstandings about financial products. In the process of questionnaire collection, many middle-aged and elderly people believe that financial products are "deceptive", so they will not choose investment and financial management. The elderly who are saving often mean that their monthly income is in surplus except for normal living expenses. Therefore, the elderly who have savings planning are more inclined to invest and finance their excess funds to pursue capital preservation and value increase.

In addition, in the questionnaire survey conducted in this paper, the results of open question collection show that nearly half had certain products professional knowledge learned from friends or family in the elderly, secondly from financial institutions that understanding to the finance and investment products, and then the network and traditional channels, such as television and radio magazines. In terms of the choice of investment financial products, the middle-aged and elderly people buy the most stocks, followed by funds, and then bonds. Nearly half of the middle-aged and old people prefer to invest for 0 to 3 months, and 56.45% of them have an expected return target of 0 to 10%. Among all the elderly surveyed by the questionnaire, 13.44% of middle-aged and elderly people said they were not sure whether they would buy financial products in the future.

With the deepening of the aging trend of China's population, middle-aged and elderly groups will be important participants in the financial market in the future. So based on the above research results, this paper argues that both governments, financial institutions, and the elderly group, should pay attention to the elderly to participate in financial market conditions, timely corrective elderly group investment behavior deviation. It is of great significance to improve the investment level of the elderly group, promote the healthy investment of the elderly group, and promote the development and prosperity of the financial market. Firstly, for middle-aged and elderly people, we should constantly strengthen the study of professional knowledge related to investment and financial management, correctly understand the risks and benefits of financial products, and maintain rational investment. In addition, the middle-aged and elderly groups should beware of financial fraud by criminals using compassion and trust to avoid risks. For financial institutions, it is clearly shown that China's commercial banks do not attach much importance to the middle-aged and elderly market at present, and the financial products for the elderly are few in variety and low in return. Therefore, at this stage, we should strengthen the design and promotion of financial products for the middle-aged and elderly to fill the gap in the financial product market. Finally, from the perspective of the government, the corresponding financial market supervision mechanism and laws and regulations should be improved to create a green and healthy financial market environment and protect the interests of middle-aged and elderly groups as much as possible. In addition, the government can use public channels, such as the Internet, Television and public lectures, to popularize investment and financial knowledge to the middle-aged and elderly, which is of great significance to enhance the national awareness of financial management and stimulate economic development.

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