

# Analysis of Optimizing the Allocation of Chinese Family Pension Financial Assets

a

## [Abstract]

In this era of national aging, social pension insurance can no longer meet the accelerated aging rate. According to statistics, by the end of 2021, the number of elderly people aged 60 and above in China had reached 267 million, accounting for 18.9% of the total population. In 2021, the number of elderly people aged 60 and above in China had reached 267 million, accounting for 18.9% of the total population. It is expected that by 2035, the elderly population will reach 300 million, accounting for 20% of the total population. In 2035, the elderly population will reach 300 million, accounting for 20% of the national population. Due to outdated concepts, the older generation believes that storing money in banks is not a good idea. In order to solve this problem, the country has promulgated the "Personal Pension Implementation Law", which is a type of pension insurance that individuals bear. Due to outdated concepts, the older generation believes that storing money in banks through real estate is safe and lacks correct financial management views. Therefore, the development of pension finance is difficult to implement, especially the understanding of that financial knowledge is needed for the allocation of pension products.

To solve the development problem of elderly care finance, it is necessary to first improve the financial concepts of the old so that they can understand the correct financial concepts. Therefore, we will explore the understanding of financial concepts and elderly care allocation among the elderly in China and demonstrate it through data. Therefore, we will explore the understanding of financial concepts and elderly care allocation among the elderly in China and demonstrate it through data. Then, we will combine the theories of some financial scholars to conduct research, hoping to discover the problems of elderly care asset allocation in China through research and propose some of our own opinions.

**[Keywords]** Pension Finance, Finance for elderly care Services, Asset Allocation



# I. Introduction

## (一) Background and significance of the study

Population aging is a social development dynamic in which the proportion of older persons in a country's total population increases as a result of a decrease in the younger population and an increase in the older population due to a decrease in the fertility rate and an increase in the life expectancy of the population.<sup>[1]</sup> The proportion of the old in the total population grows accordingly. According to data released by the China's National Bureau of Statistics (CNBS), the number of elderly people aged 60 and above reached 280 million in February 2023, accounting for 19.8% of the total population; the number of elderly people aged 65 and above reached 210 million, accounting for 14.8% of the total population. The speed and scale of China's population aging is unprecedented, from a ratio of 14.2% of the total population aged 65 and over in 2021 to 15.4% in 2023, which means that China has entered a deeply aging society. At present, the proportion of older persons in the total population is still growing, and it is expected that by around 2035, the number of older persons aged 60 and over will exceed 400 million, entering a severely aging society with a proportion of more than 30 percent of the total population.

Against the backdrop of an aging population, the traditional pension model has encountered problems such as socio-economic pressure, insufficient social care and pension services, and the promotion of a diversified pension model is a must to meet the diversified needs of the elderly.<sup>2022</sup> In April 2022, the State Council issued the Opinions on Promoting the Development of Individual Pensions, which established a systematic framework for the development of the personal pension system, the third pillar of the pension system in China. --In April 2022, the State Council issued the Opinions on Promoting the Development of Individual Pension, which established a systematic framework for the third pillar of China's pension insurance system, and in 2023, the Central Financial Work Conference explicitly proposed "doing a good job in pension finance,"

for the first time taking the development of pension finance as an important topic of financial reform from the top-level design level. In the future, while improving the government's basic security system, individuals need to ensure the adequacy of old age pensions through the rational allocation of family pension financial assets and to counteract the series of problems such as old age poverty that may be triggered by the risk of longevity.<sup>[2]</sup>

Pension resource allocation should be considered not only in terms of returns but also in terms of meeting retirement expenses for decades to come. Pension is money that will only be used in the future, during which it is likely to encounter the risk of inflation. If the investment of the pension to choose a low yield low-risk stocks, then the future income received is likely to be insufficient pension money; if the investment is now too high allocation of assets, then you need to withstand the high risk that may be encountered, and may even lose more than they gain.

Therefore, optimizing the allocation of family pension financial assets is an important goal in the development of pension finance. By continuously optimizing the allocation of family pension financial assets and weighing the returns and risks of various assets, it is of great significance to construct a pension plan that best suits oneself and one's family.

## (二) Status of research and current issues

In previous studies, scholars generally found that financial literacy can not only improve household income (Jiang Nan and Zhang Shuaihua, 2023) but also has a significant relationship with household financial asset allocation. However, to further explore how financial literacy affects the efficiency of household financial asset allocation. A significant influence path is that individuals with higher financial literacy are more inclined to diversify the allocation of household financial assets. Zhu Wenpei and Lin Yi (2022) found that the improvement of financial literacy can promote the diversification of household financial assets and

increase the tendency and proportion of risky financial assets held by households. From the existing research, risk appetite has a far-reaching impact on the efficiency of financial asset allocation. Capponi and Zhang(2020) found that for individuals with a higher risk preference, their portfolios have greater volatility and higher Sharpe ratio, so their asset allocation efficiency is higher.

At present, the overall size of household assets in China is continuing to grow. According to the China Wealth Report 2022 " and the Allianz Global Wealth Report 2022 ", China's total household financial assets hit a record in 2021, ranking second globally behind the U.S. In 2021, our total financial assets increased to 32 trillion euros, and its share of the global market increased from 7.2% in 2011 to 13.6% in 2021. In addition, the total financial assets of Chinese residents will rise from 20 trillion yuan in 2005 to 211 trillion yuan in 2021, increasing from 26% to 31% of total resident wealth.

Among the broad categories of financial assets, the growth rate of deposit and pension assets in the Chinese region will be 10.4% and 16.8% respectively in 2021, while the growth rate of securities assets will increase to 13.2%. Deposits account for 48% of Chinese households' financial asset portfolio, securities and wealth management products account for 41.4%, and insurance and pension assets account for 10.6% of the portfolio<sup>[3]</sup>

It can be seen above that although the total financial assets of Chinese residents are continuously growing, due to the deep-rooted traditional concepts, most Chinese residents still maintain the traditional concept of "raising children for old age", and the financial literacy of the elderly is still relatively unavailable, so that investors do not know enough about the financial products and services for the elderly, and the proportion of the investment in the financial assets for the elderly is still relatively low. As a result, investors do not know enough about pension financial products and services, and the proportion of investment in pension financial assets is still relatively low.

### (三) Research objective

Existing literature focuses on the impact of pension financial literacy on household asset allocation from the demand side, and there is a lack of research that transitions from a demand perspective to a supply-side perspective. And there are relatively few domestic studies on pension finance family asset allocation. The innovation of this paper is that based on studying the impact of the development of pension finance on the allocation of family financial assets in China, it not only puts forward the planning of personal financial investment for the middle-aged and the elderly from the demand side, but also puts forward the necessity of the government's innovation in the development of pension service finance from the supply side, and calls on the enterprises to pay attention to the upgrading of the pension financial products together with the government. It also examines the relationship between national financial investment literacy and the transformation and development of pension finance, as well as the impact of the financial inclusion of pension services on the allocation of pension finance assets. It is hoped that the perspective of financial services for the elderly will provide new ideas for strengthening the economic function of family pensions and actively responding to the challenges of an aging society.

Pension financial allocation is the financial asset allocation behavior for the realization of pension goals, through the consideration of multiple factors, from the customer's needs, taking into account the long-term goals and the customer's risk tolerance ability, to build a scientific and reasonable asset portfolio, to help the pension investment "long run".

## II. Literature review

### (i) Measurement of the extent of financial literacy

In 2018 Liu then stated in his inquiry that age affects the idea of

understanding finance differently through different hump effects, with the degree of understanding finance first increasing with age and then starting to decline later on<sup>[6]</sup> Zhou Hong<sup>[18]</sup> et al. (2020) explored the impact of financial literacy on household risk attitudes and commercial insurance participation rates based on data from the 2014 CFPS. It was found that increased household financial literacy significantly increases the diversity of retirement plans, whereas financial literacy enhances the commercial insurance purchase rate by increasing consumer trust in insurance products. Joelle H.F<sup>[19]</sup> et al. (2021) collected a sample of 6,573 Singaporean seniors aged 50 years old or older and found a positive correlation between retirement financial decisions and financial literacy. In their study, retirement financial decision-making was measured by credit card repayment behavior, elderly stock market participation, and household asset diversification. Those in the working period, with a continuous source of income and greater risk tolerance, can hold more risky financial assets when preparing for retirement. For the retired elderly, on the one hand, due to the difficulty of continuing to work to increase additional income after retirement, the elderly have greater financial vulnerability and find it more difficult to bear the consequences of poor financial decisions; on the other hand, cognitive ability shows a declining trend with age, resulting in lower average financial literacy among the elderly, who are more prone to investment errors (Calvet<sup>[20]</sup>, L.E et al., 2009) . Therefore, the allocation of risky financial assets shows a fluctuating trend with age group.

## (ii) Pension asset allocation

For the elderly to bring pension income assets is the pension financial assets, many elderly people on the configuration of pension assets lack of knowledge, which also leads to many elderly people lack of opportunities to make money, in China's earliest forward pension assets is Yang Yansui the study of pension assets<sup>[7]</sup> Other scholars began to configure financial pension assets research on the situation in China, later found that the residents of the education level of the pension Rong

assets configuration impression is relatively large, later there are some scholars to look at the stability of income, risk attitudes, etc. on the configuration of the impact of the residents of the education level is relatively large, the domestic research is mainly to look at the impact of individual differences in the configuration of pension financial assets. Chen Xi and Jiang Shiyin have shown that the degree of individual differences is particularly important for the allocation of pension financial assets.<sup>[8]</sup> In their study, Chen Xi and Jiang Shiyin showed that individual differences are particularly important for the allocation of pension financial assets.

Domestic research on the allocation of pension financial assets is very little, and for some financially developed countries to carry out the allocation of pension financial assets is even less, Zeng Zhigeng today in his report said that the<sup>[9]</sup> The report said.

How to optimize the allocation of pension assets? Some scholars have found the reasons affecting the allocation of pension assets through research, the size of the pension fund and the proportion of funds and all the wealth of the investors are important reasons affecting the allocation of pension assets, and some scholars have studied the relationship between age and the allocation of pension assets, and found that the proportion of the allocation of the youth is 25%-35%, middle-aged 10%-15%, and old age is 4%-6%.

Overall allocation of pension financial assets has a long way to go, strengthening the residents' understanding of financial knowledge, so that more people to improve thier financial literacy, and accelerate the reform of China's pension finance.

### (iii) Brief summary

In summary, the relevant literature focuses on discussing the impact of personal financial asset allocation on individual retirement planning and family asset allocation, and there is a lack of relevant suggestions from the supply-side perspective, and there are fewer studies on pension asset allocation in China. Unlike developed countries where the third pillar of pension insurance is supported by a mature financial market, China's pension financial market is less mature, and the development of

financial services for the elderly is still in its infancy, with problems such as insufficient supply of financial products for the elderly, lack of innovation, low penetration rate, and low willingness of consumers to purchase, which also restricts the provision of financial products and services for the elderly to a certain extent. This paper, based on the study of the impact of financial literacy on China's family pension financial asset allocation, from the government, enterprises, individuals, and the three parties, to the innovative combination of supply and demand point of view on the proposed long-term development of pension finance recommendations.

### 三、Data analysis

#### (i) Selection and interpretation of variables

In the chfs2019 questionnaire, which contains a multitude of variables, in terms of financial assets, the author has selected several broad asset classes to analyze below in terms of the impact of the Pension Finance Index, such as property, deposits, bonds, stocks, and funds.

However, in the actual analysis, as it is difficult to distinguish between pension financial assets and general financial assets, the author refers to the practice of Bai Lu <sup>【 2022 】</sup> and introduces the commercial pension insurance variable to measure household pension activeness through household participation.

The author obtained 18344 observations by removing abnormal values and missing values, and firstly selected 17 control variables related to household asset allocation, including age and gender (male takes 1, female takes 0), marital status (married takes 1, unmarried takes 0), age, gender, health (physical condition is divided into 1-5 levels, from extremely poor to healthy), risk preference (from extreme risk aversion to extreme risk preference, divided into 5 levels),

whether living in rural areas (yes takes 1, no takes 0), education level of household members (no education to doctoral degree is divided into 1-9 levels). (5 levels), whether they live in rural areas (1 for yes, 0 for no), and the education level of household members (1-9 levels from no education to a doctoral degree). The level of attention to financial information (0 for never, 1 for more attention, and 2 for frequent attention) is shown in Table 3-1.

(ii) Descriptive statistics

variant	observ ed value	averag e value	(stati stics) standa rd deviat ion	varian ce (stati stics)	minimu m value	maximu m values
(a person's) age	18344	54.36	12.708	161.494	26	83
Residence in rural areas	18344	0.4	0.49	0.24	0	1
distinguishing between the sexes	18344	0.8	0.403	0.162	0	1
marital status	18344	0.88	0.32	0.102	0	1
healthiness	18344	2.68	0.98	0.961	1	5
educational level of family members	18344	3.29	1.505	2.264	1	9
Financial Information Attention	18344	0.09	0.286	0.082	0	1
Pension insurance participation	18344	0.88	0.327	0.107	0	1
Time deposits held or not	18344	0.2	0.402	0.162	0	1
Whether or not you own a property	18344	0.92	0.269	0.072	0	1
Participation in financial	18344	0.94	0.233	0.054	0	1

markets						
Participation in the stock market	18344	0.06	0.242	0.058	0	1
Have a credit card	18344	0.16	0.366	0.134	0	1
risk appetite	18344	2.09	2.197	4.825	0	5
Whether or not you own internet financial products	18344	0.07	0.25	0.062	0	1
Digital Economy Development Index	18344	2.4067	0.5549	0.308	1.55	3.78
Use of information technology in the home	18344	0.98	0.156	0.024	0	1

Table 1 Descriptive statistics

According to the descriptive statistical analysis of the selected variables related to family asset allocation, it can be seen that the standard deviation of the health degree of family members is 0.98, and the variance is 0.961, which indicates that the average age of China's population is expected to rise year by year in today's modernization level of basic medical facilities, as shown in the figure. However, this also brings new problems of population aging, which is not conducive to the development of social productivity, coupled with the fact that young men and women in today's society generally marry late and have children late, or even do not get married and do not have children, our country has now developed into the embryonic form of deep aging.

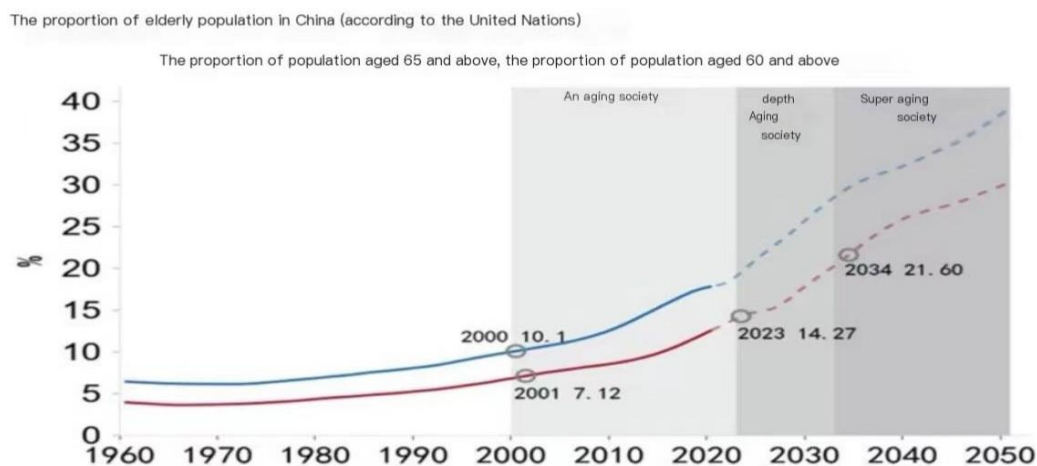


Figure 1 Development of China's Aging Society (Source: China Merchants Bank Research)

Among the control variables, the mean value of the gender variable of the head of household is 0.8, which indicates that male members have more say in deciding the financial planning of the family. The mean value of the residential address variable is 0.4, and the standard deviation is 0.49, which shows that the urban population is more active in the allocation of household retirement assets and planning. Nowadays, as society tends to transition to urbanization, more people choose to settle their families in cities with convenient transportation, school teachers and excellent geographical locations. However, with the loss of more people from rural areas, the problem of empty nesters and rural retirement needs to be addressed.

And from the family pension participation and financial information resources attention, whether to participate in financial investment, under the influence of cultural qualifications 2.264 variance, the level of education on the choice of participation in pension financial planning also has a certain correlation, the mean value of 0.88 shows that the majority of families in China are still popularized by the pension insurance, the coverage is broader.

Through the ownership of Internet financial products, it can be seen that with a standard deviation of 0.25 and a variance of 0.062, families in China are more inclined to buy traditional bank financial products, and Internet pension financial products are not sufficiently adapted to diversified needs and not sufficiently mature in development. However, in terms of the use of information technology, the mean value of 0.98 indicates that at least every member of the family owns a smartphone, and the digital economy development index variable indicates that the development of the digital economy in urban and rural areas is unbalanced, but the digitalization construction situation is developing steadily, which provides a certain development potential for the intelligent transformation of pension finance.

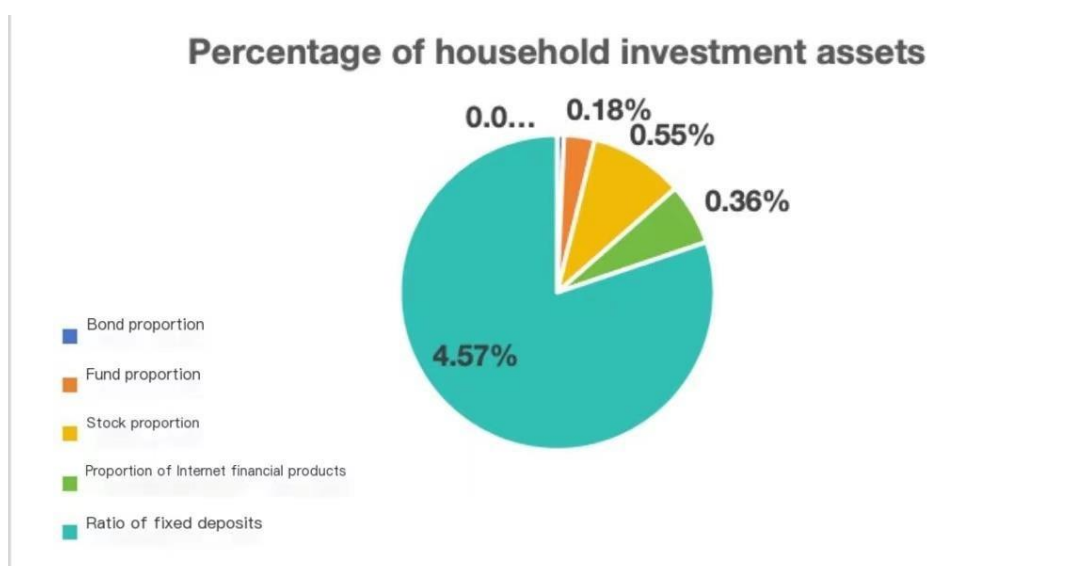


Figure 2 Percentage of household investment assets

The allocation of financial assets for family retirement includes two major parts, mainly investment behavior and savings behavior. Categorizing different financial assets, investment assets include cash deposits, bonds, stocks and so on. Influenced by the traditional investment habits of the residents, and the cultural influence of Confucianism in China, the proportion of time deposits in the overall assets of China's pension financial family asset allocation is relatively large, reaching 4.57%. To analyze the main reason, China's elders have learned the concept of saving money that the security of time deposits is high, compared with the convenience and flexibility of demand deposits in the eyes of young people, China's middle-aged and elderly people tend to prefer traditional time deposits with higher interest rates. The higher long-term interest rates on such deposits indicate that most families in China have future financial plans for their retirement.

Due to the wave of electronic payment in the era, China's WeChat payment and other ways to cover the far-reaching impact, many middle-aged and elderly groups have gladly accepted the new payment methods, and even learned smartphones for financial investment,

bought Internet pension financial products, for the long term planning for the retirement planning, and thus the proportion of assets of the Internet financial products exceeded bonds, funds, and together with the stock as one of the pillars of the family assets.

(iii) Correlation analysis

relevance		Sharpe ratio	Pension insurance participation
Sharpe ratio	Pearson Correlation	1	.118**
	Significance (two-tailed)		0
	Number of cases	18344	18344
Pension insurance participation	Pearson Correlation	.118**	1
	Significance (two-tailed)	0	
	Number of cases	18344	18344

\*\* Significant correlation at the 0.01 level (two-tailed).

Table 2 Correlation analysis: household pension insurance and asset Sharpe ratio

As the main indicator of family asset allocation is the Sharpe ratio, the author, to explore the correlation between family pension insurance and the Sharpe ratio, carried out a correlation analysis, and obtained Table 2. According to the analysis of the table, the correlation coefficient is 0.118,  $p < 0.05$ , presenting a significant and weak correlation between the Sharpe ratio and pension insurance, and showing a positive correlation. As the first

pillar of China's pension, the basic family pension insurance occupies a dominant position, and the social security system is complete. What about in the field of other financial assets investment?

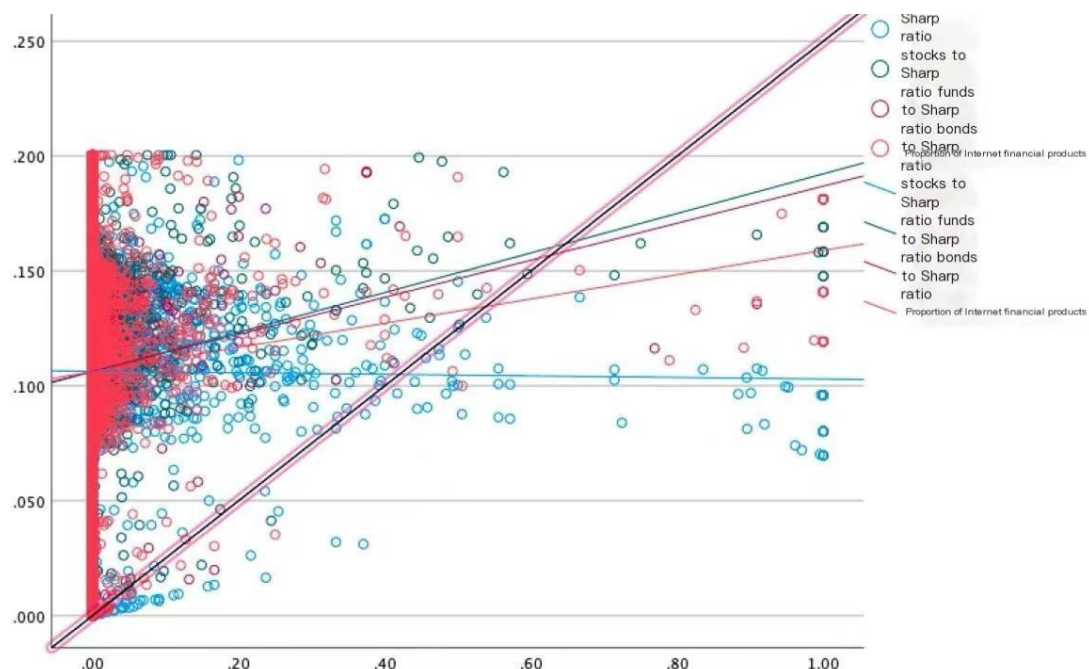


Figure 3 Scatterplot of correlation between Sharpe ratio and share of stocks, funds, bonds and internet financial products

The next step is to conduct a specific inquiry into the relationship between specific asset investment choices in household financial assets and the Sharpe ratio by selecting several financial assets that account for a larger share of the total, including stocks, funds, bonds and Internet financial products. As can be seen in Figure 3, the largest correlation is the share of fund investment assets.

However, the other two pillars of China's pension system are currently suffering from development difficulties, with the development of supplementary pension security lagging and the development of personal pension security in a single form. In 2018, China's Securities Regulatory Commission officially released the Guidelines for Pension Target Securities Investment Funds (Trial),

which introduced public pension target funds. And the pilot work was implemented beforehand in Shanghai, Xiamen, Fujian Province, and Suzhou Industrial Park. It provides strong support for the improvement of the pension system and promotes the innovation and transformation of the pension financial market.

To further explore how pension finance affects the efficiency of household asset allocation by improving pension finance financial products, the following regression analysis is conducted.

#### (iv) Regression analysis

The original hypothesis for the predictor variables is first made: that is, the beta weights of the selected variables of old age, health insurance, risk preference, literacy, and age = 0.

Table 3 shows that the largest standardized coefficients and t-values are for pension insurance participation and investment diversification, and both are significant, then the original hypothesis is rejected, indicating that these selected variables significantly predict the Sharpe ratio of household assets. However, the degree of fit shows that the fit is not good. Overall, age and education level do influence to some extent the choices made by households for retirement asset allocation planning. Under the influence of relevant education, some family members pay more attention to financial information and also pay more attention to the investment and choice of pension insurance and pension fund. And the older they are, the more they pay attention to the efficiency of pension asset allocation.

The effectiveness of asset allocation is also linked to stability, under the significant influence of investment diversification and risk appetite. Some families tend to fall into the investment misconception of "putting all their eggs in one basket" when planning their investments, relying on inertia and

purchasing only financial products with similar industries and themes to avoid greater asset losses.

After the introduction of the "New Regulations on Capital Management" in 2022, the "rigid payment" was broken, however, although it is stipulated that financial products are no longer principal-protected, some middle-aged and elderly people still favor third-party investment and financial products sold by banks, and most of them insisted that the principal would not be lost in the case of higher risks, so the actual investment risks are different from the safety of the residents' investment. There is a big gap between actual investment risks and residents' investment security expectations. However, elderly people over 65 years old are at a stage in their lives when their sources of income are decreasing, and they invest a large amount of money in financial products such as bank wealth management, asset management and trust, which increases the uncertainty of their investment and old age. Table 3 shows the appreciation of pension and healthcare in 2017-2018, both of which are the main indicators of China's pension security development index. The significant impact of pension and medical insurance on asset allocation is verified.

In order to explore the impact of pension financial development on household asset allocation in 2019, I selected the previous year's Pension Today Development Index for model fit, as shown in Table 5.

Using panel data from the China Household Finance Survey 2019, this paper examines the impact of factors influencing the development of pension finance on household financial asset allocation and its path and draws the following conclusions. First, the aging level of Chinese society has entered the stage of 'deep aging', which points out the necessity and urgency of developing pension finance. Second, the participation of urban and rural residents in pension insurance has a significant impact on the allocation of household financial assets, which is manifested in the reduction of the allocation of financial risky assets, such as bonds and stocks, and the increase of the allocation of low-risk assets, such as savings deposits, after the participation of urban and rural residents in pension insurance. Third, the degree of participation in pension insurance reflects the prevalence of financial literacy, which further affects household financial asset allocation decisions. Third, at present, the financial products and services related to pension insurance are in urgent

need of transformation and upgrading, which not only affects personal financial planning and family asset allocation, but especially has a greater impact on participation in the financial asset allocation decisions of urban residents, families with lower incomes, higher financial pressure on old-age pensions, or lower levels of education. At the same time, it is also necessary for the government to rely on the development potential of the digital economy to promote the popularisation of the concept of pension asset planning, and for insurance companies and relevant pension service providers to promote the innovation of pension financial services platforms, drawing on the development direction of developed countries, focusing on the diversification of pension needs, and researching a pension product and service system suitable for the current society, so that the elderly can have a sense of security and a sense of belonging to the elderly to cope with the arduous challenges of aging. The following is a summary of the latest development of the financial services platform for the elderly.

Table 3 China's old-age security development index

Independent index	Weights	Rating value	Change situation from 2017
<b>PENSIONS</b>	8%	0.0467	Value added 0.0022
Medical coverage	8%	0.0591	Value added 0.0044
Elderly care services	8%	0.0240	Basic-value,no change
Age-friendly society	8%	0.0240	Basic-value,no change

Table 4

		coefficient				
Model		Unstandardized coefficient		Standardization coefficient Beta	t	significance
		$\beta$	Standard error			
1	(Constant)	093.	002.		40.719	000.
	Endowment insurance participation Participation 1 No participation 0	009.	001.	073.	9.504	000.
	Health insurance participation Participation 1 No participation 0	001.	001.	005.	657.	511.
	Risk appetite	- 001.	000.	- 051.	6.792	000.
	Age	6.834 e-5	000.	024.	3.023	003.
	The level of literacy of the family members	001.	000.	043.	5.394	000.
	Health level 1 good -5 bad	- 001.	000.	- 019.	2.511	012.
	Marital status Married 1 Unmarried 0	- 001.	001.	- 007.	- 980.	327.
	Gender Male 1 Female 0	- 001.	001.	- 014.	1.812	070.
	Invest in diversity	071.	002.	266.	35.605	000.
	Financial information attention	- 002.	001.	- 015.	2.012	044.

a. Dependent variable: Sharpe ratio

Table 5

### Model summary

Model	R	R square	R square after adjustment	Errors in standard estimates
1	.305a	093.	092.	034828.

a. Predictive variables: (constant), financial information attention, age, gender male 1 female 0, medical insurance participation participation 1 no participation 0, risk appetite, investment diversity, health degree 1 good to 5 bad, marital status married 1 unmarried 0, pension insurance participation 1 no participation 0, family member's education level

## IV. Problems and recommendations

### (i) Major problems

1. Insufficient innovation of pension financial products. At present, China's pension financial products launched in the pension market are relatively similar, homogenization phenomenon is

prominent, personalized, precise design is insufficient, and it is difficult to meet the needs of diversified pension investment. Taking banking products as an example, in recent years, many banks have developed a lot of pension financial products, but basically, they are mainly of the guaranteed income type, and compared with other non-pension financial products, there is not much difference in terms of both duration and income. On the other hand, some of the pension financial products do not live up to their name and do not highlight the long-term attributes of pension, and in essence, they are still short-term financial products.<sup>[10]</sup>

2. Insufficient power of pension savings products. At present, after the introduction of the new rules of asset management, many financial products are no longer capital guaranteed, most banks are still selling third-party investment and financial risk products, and most residents do not know much about this and still think that in the bank to buy financial products will not lose the principal, which results in the actual risk of investment and the residents of the investment is expected to have a large gap<sup>[11]</sup> The risk of the actual investment of the residents and the expectation of the residents will have a big gap. Moreover, the elderly group over 65 years old is in a stage of decreasing income sources, and if they invest a large amount of money in financial products such as bank wealth management, asset management and trust, it will largely increase the uncertainty of investment and pension.<sup>[12]</sup> The following are some of the reasons for this.

3, the three pillars of pension imbalance. Affected by the traditional concept of raising children to prevent old age and family pension, our people's awareness of pension planning is still relatively lacking, and most people still stay in the basic pension insurance when they think of the first choice of pension investment. In the current three pillars of pension, the first pillar of the basic pension insurance can be said to be " dominant", because it is mandatory according to the national unified policy and the implementation of the higher level and a larger scope of the realization of the social integration of pension insurance premiums

and mutual aid of a pension option, has covered about 1 billion people, the coverage rate of 70%; the second pillar is affected by the business situation of enterprises, and the second pillar is affected by the business situation of enterprises.<sup>[13]</sup> The second pillar is affected by the business situation of the crowd coverage is narrow, enterprise annuity covers only 27 million people, occupational pension covers 35 million people, and the two together cover more than 60 million people, accounting for 6.9% of the total urban employment population<sup>[14]</sup> The third pillar is still in its infancy, with even fewer participants, a low market share, and a large gap in individual pension planning and pension preparation.<sup>[15]</sup> The third pillar is still in a nascent stage, with a low market share and a large gap in individuals' pension planning and preparation.

4, the current state of China's family financial asset allocation also shows that, as families now more or less have a certain amount of housing security, medical care and health, social pensions and other aspects of expenditure, many families are more in favor of investing in low-risk bank deposits resulting in cash, deposits and other non-risk or low-risk assets have a higher proportion. Moreover, the distribution of urban and rural pension insurance coverage is not balanced, and the coverage of rural areas is still relatively low, and there is still a certain gap compared to urban areas.<sup>[16]</sup> . The scope of rural pension insurance is smaller, the coverage is narrower, the main thing is still low participation rate, and rural residents' financial concepts are conservative, financial literacy is low, the understanding of financial products is limited, and even many families think that financial products are only a single bank deposit.

## (ii) Recommendations

1、Strengthen the innovation of age-friendly financial products and avoid highly homogenized products. Financial institutions should innovate age-friendly financial products and promote product iteration and upgrading. From the perspective of meeting the

pension needs of different age groups, different income levels and different risk-tolerance abilities, combining the actual situation and giving full consideration to the characteristics of different families themselves, such as family income, financial literacy, risk aversion, etc., targeting the provision of financial products in line with the characteristics of the family, and designing more diversified and innovative financial products, and, for families with family assets at different levels of high school and low school, designing Different financial product investment threshold standards, reduce the financial threshold of risky financial asset investment, so as to provide families with richer and more diversified investment choices, so that every family can find investment products suitable for their own families, thus expanding residents' investment channels, increasing residents' incomes, and thus optimizing the structure of asset allocation, improving the effectiveness of allocation, fully stimulating the vitality of the financial market, and realizing the vitality of financial institutions, government and families to achieve multi-party development and win-win situation.<sup>[16]</sup> The financial market will be fully energized to achieve multi-party development and a win-win situation for financial institutions, government and families.

2、When financial institutions innovate financial products, they should do so based on legal compliance, paying attention to risk prevention and forming a systematic risk prevention system. Financial institutions should do a good job of publicizing and disclosing relevant information, which is conducive to family investors' in-depth understanding of financial institutions and financial products, so that they can make better asset allocation choices in combination with their own actual situation, and the asset allocation is more reasonable and the degree of allocation effectiveness is stronger. When selling products, financial institutions should do a good job of assessing customers' risk tolerance informing them of the risks, and recommending different financial products according to the level of risk tolerance of different customer groups. In line with the trend of online financial management services, improve the relevance, effectiveness and accuracy of services,

and face different investor groups, take differentiated services.<sup>[16]</sup> (c) To improve the relevance, effectiveness and precision of its services in line with the trend of online financial management services, and to adopt differentiated services for different investor groups.

3、The government should also standardize the form of third-pillar pension insurance by improving the coverage of enterprise annuities, improving and perfecting the social security system from multiple perspectives, expanding the level and scale of insurance, increasing the coverage of rural insurance, and improving the residents' sense of well-being and security so that the residents will have the confidence to configure their financial assets and scientifically guide the residents to configure their risky financial assets, and promote the development of China's financial market.<sup>[16]</sup> The social security system should be improved and perfected.

4、At the same time, the government should speed up the formulation and improvement of relevant laws and regulations, clarify the principles to be observed by the social pension insurance system in the form of law, to have a law to follow and gradually establish a sound social pension insurance protection system.<sup>[16]</sup> The government should also speed up the formulation and improvement of relevant laws and regulations to clarify the principles to be observed by the social pension insurance system in the form of laws, to fulfill the legal basis and gradually establish a sound social pension insurance protection system. In addition, on the one hand, we should increase the management constraints of the social pension insurance fund, on the other hand, we should vigorously develop the rural social pension insurance, increase the financial subsidies to the social security in rural areas, adhere to local conditions, based on the actual needs of the farmers' old age groups, and steadily push forward the protection work by combining the actual economic situation of the locality, which is suitable for the family's affordability, to realize that the old-age pension insurance system and the old-age pension insurance measures are matching, and to form an organic Integral<sup>[16]</sup> (c) To ensure that the pension insurance system and pension insurance measures are compatible and form an organic whole.

## Conclusion

Learn about financial asset allocation to better optimize your family's asset allocation. The higher the level of financial literacy and the more educated the family, the higher the effectiveness of the family's financial asset allocation. Therefore, as an investor, you should take the initiative to understand the latest economic and financial situation, learn the knowledge of financial asset allocation, improve your level of financial literacy, and learn and master the skills of asset allocation, to make the appropriate configuration choices in combination with your actual situation, and obtain the maximization of returns.<sup>[17]</sup> The following is a list of the most important things that you can do to maximize your returns.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

Option 2:

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc have been used during writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

- 1.
- 2.
- 3.

## Reference

- [1] Chen Lu Xue Ye. Analysis of the current situation and future forecast of population aging in Jiangsu Province[J]. Statistics and Management, 2017, (08): 107-108.
- [2] Zhu, W. P., Lin, Y.. Does the digital divide in old age inhibit household financial asset allocation for retirement? [J]. Consumer Economics:1-15.
- [3] Cynthia Yang. Chinese household financial assets rise to a record €32 trillion in 2021 [EB/OL] (2022-10-14) [2024-5-31]. <https://www.yicai.com/news/101561918.html>
- [4] Lusardi A, Mitchell O S. Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth[J]. Journal of Monetary Economics, 2007, 54(1): 205-224.
- [5] Atkinson A, Messy F A. Assessing financial literacy in 12 countries: an OECD/INFE international pilot exercise[J]. Journal of Pension Economics & Finance, 2011, 10(4): 657-665.
- [6] Wang Dongying. Research on Financial Literacy Measurement and Influencing Factors of Tibetan Farmers and Herders[D]. Tibetan College of Agriculture and Animal Husbandry, 2023. DOI:10.27979/d.cnki.gadce.2023.000234.
- [7] Yang Yansui. Report on China's aging society and the development of old-age security [M]. Beijing: Tsinghua University Press, 2014. 55-57;127-128.
- [8] Chen Xi, Jiang Shiyin. Research on the Influencing Factors of China's Residents' Retirement Financial Asset Allocation[J]. Financial Development Research, 2020, No. 459(03):65-71.
- [9] Zeng Zhigeng, He Qing, Wu Yu et al. Financial literacy and household portfolio diversity[J]. Economist, 2015, No. 198(06):86-94.
- [10] Wang Xiao. Development and thinking of pension financial products of rural commercial banks in Jiangsu Province[J]. China Small and Medium-sized Enterprises, 2020, (05):203-204.
- [11] Wang Qi. A brief analysis of the impact of the new regulations on asset management on the bank wealth management market[J]. China Credit Card, 2018, (08):75-79.
- [12] QI Mingzhu, ZHANG Chengcheng. The impact of population aging on residents' h

- ousehold investment risk preferences [J]. *Population Studies*, 2019, 43 (01): 78-90.
- [13] Lou Feipeng. The History, Problems and Suggestions of the Construction of China's Three-Pillar Pension System [J]. *Financial Development Research*, 2020, (02): 69-74. DOI:10.19647/j.cnki.37-1462/f.2020.02.009.
- [14] Liu Fagen. Literature review of research on coverage expansion of enterprise annuities in China [J]. *Reform and Strategy*, 2014, 30 (02): 136-140. DOI: 10.16331/j.cnki.issn1002-736x.2014.02.030.
- [15] Jiang Yuqing. Enhancing the supply capacity and innovation of pension financial products[N]. *China Securities Journal*, 2022-07-04 (A03). DOI:10.28162/n.cnki.nczjb.2022.003123.
- [16] Wu, Yi-wen. Research on the factors influencing the effectiveness of financial asset allocation of elderly families [D]. Yangzhou University, 2022. DOI: 10.27441/d.cnki.gyzdu.2022.001496.
- [17] Yu Tong Finance. What are some suggestions for improving financial asset allocation for older families? [EB/OL] (2022-12-17) [2024-6-1] <https://baijiahao.baidu.com/s?id=1752445145345304525>
- [18] ZHOU Hong, WU Yuyu. The path of climbing household leverage affecting residents' happiness--an empirical study based on CHFS data[J]. *Journal of Southwest Petroleum University (Social Science Edition)*, 2020, 22(05):14-20.
- [19] Fong J H, Koh B S, Mitchell O S, et al. Financial Literacy and Financial Decision-Making at Older Ages[J]. *Pacific-Basin Finance Journal*, 2021, 65(2):15- 28.
- [20] [17] Calvet, L. E., Campbell, J. Y., Sodini, P. Measuring the financial sophistication of households[J]. *Am. Econ. Rev.*, 2009, 99(2):393-398.
- [21] [18] Arshanapalli, Bala, Nelson, et al. Asset Allocation Options for Wealth Accumulation[J]. *Journal of Wealth Management*, 2012, 14(2):22-27.
- [22] [19] Jappelli T, Padula M. Investment in financial literacy, social security and portfolio choice[J]. *CFS Working Paper Series*, 2013, 14(4):369-411.
- [23] [20] Blake. *Pension Finance*[M]. London: John Wiley, 2006:32.
- [24] [21] Dang Junwu. Ageing finance is a strategic high point to cope with population ageing[J]. *Scientific Research on Aging*, 2013, 1(5):3-10.
- [25] [1] ZHANG Chunxia, LIU Chun, LIAO Li. Determining investors' risky asset allocation using logistic regression models - an empirical analysis based on individual investor questionnaire data[J]. *Journal of Tsinghua University (Na*

tural Science Edition), 2012, (08):1142-1149. DOI:10.16511/j.cnki.qhdxxb.2012.08.001.

[26][1] Chunxia Zhang, Chun Liu, Liao Li. Determining investors' risky asset allocation using logistic regression models - an empirical analysis based on individual investor questionnaire data[J]. Journal of Tsinghua University (Natural Science Edition), 2012, (08):1142-1149. DOI:10.16511/j.cnki.qhdxxb.2012.08.001.

[27][1] Chunxia Zhang, Chun Liu, Liao Li. Determining investors' risky asset allocation using logistic regression models - an empirical analysis based on individual investor questionnaire data[J]. Journal of Tsinghua University (Natural Science Edition), 2012, (08):1142-1149. DOI:10.16511/j.cnki.qhdxxb.2012.08.001.

[28][1] Zhang YQ, Zhuang TH. Digital economy empowers pension finance: intrinsic mechanism, realistic challenges and path choice[J]. Contemporary Economic Management, 2023, (06):91-96. DOI:10.13253/j.cnki.ddjjgl.2023.06.011.