

The Influence of A Financial Professional Background on Family Pension Insurance Decisions

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Abstract. Based on data from the China Household Finance Survey (CHFS) spanning 2015 to 2019, this study empirically examines the impact of a household member's financial professional background on the family's decision to purchase commercial endowment insurance. A key innovation of this research lies in its use of multi-period micro-survey data to investigate how individual occupational backgrounds influence retirement-related decision-making, while employing a two-way fixed effects model to mitigate endogeneity issues. The empirical findings indicate that the presence of a financial professional within a household significantly increases the likelihood of the family obtaining commercial endowment insurance. This conclusion remains robust after undergoing a series of robustness tests and model specification checks. Furthermore, this study focuses on analyzing the heterogeneous characteristics of the impact exerted by financial professional backgrounds on retirement decisions, which, to some extent, expands the existing literature in the field of health economics. Results from the heterogeneity analysis reveal that the positive effect of having a financial professional is more pronounced in urban households, high-income households, and households where the head of the household has a higher level of education. This research provides a new perspective for understanding household decision-making regarding endowment insurance and offers empirical evidence to support the improvement of China's multi-level elderly care security system.

Keywords: CHFS, Financial Professional Background, Pension Insurance.

1. Introduction and Literature Review

1.1. Introduction

From the policy practice perspective, China is currently undergoing a critical phase in the development of its multi-level pension insurance system, with considerable room for expansion in the market coverage of commercial pension insurance. If a financial professional background indeed exerts a systematic influence on pension insurance decision-making, this finding would carry significant policy implications. Drawing on microdata from the China Household Finance Survey (CHFS), this study innovatively constructs an analytical framework centered on "household finance practitioners," aiming to examine how the proportion of household members employed in financial occupations affects decisions regarding participation in commercial endowment insurance. Compared with existing literature, this research makes three key academic contributions: First, in terms of variable design, it introduces the financial professional background as a novel explanatory variable, thereby enriching the empirical analysis of household financial decision-making. From the policy practice perspective, China is currently undergoing a critical phase in the development of its multi-level pension insurance system, with considerable room for expansion in the market coverage of commercial pension insurance. If a financial professional background indeed exerts a systematic influence on pension insurance decision-making, this finding would carry significant policy implications. Drawing on microdata from the China Household Finance Survey (CHFS), this study innovatively constructs an analytical framework centered on "household finance practitioners," aiming to examine how the proportion of household members employed in financial occupations affects decisions regarding participation in commercial endowment insurance.



1.2. Literature Review: Financial Careers and Pension Insurance Decisions

Bahnsen and Wimmesberger conducted a study on Germany's long-term care insurance system, revealing that the introduction of the "sustainability factor" led to a 9.5 percentage point increase in the renewal rate among families of financial practitioners [1]. Chen pointed out that the improvement of China's pension legal system has enhanced the confidence index of financial practitioners' families in the sustainability of the system, and this "institutional trust premium" effect is particularly significant in the 40-55 age group [2]. The IPAYGO system proposed by De Santis emphasizes the intelligent correlation between pension benefits and labor income, and such complex institutional design requires more professional financial knowledge to understand [3]. The "intelligent payment" reform plan proposed by Devriendt et al. shows that the design of linking pensions to income in the late career stage has increased the average pension replacement rate of financial practitioners' families by 18% [4]. Through a quasi-natural experiment, Li et al. found that institutional integration has narrowed the urban-rural income gap by 15%-20%. Among them, due to their advantages in information acquisition and stronger policy understanding ability, the insurance participation rate of financial practitioners' families has increased by 8 percentage points more than that of ordinary families [5]. Another study by Li et al. indicated that urban insured families are 2.3% more likely to invest in high-risk assets, and this effect is more prominent in families with higher risk preferences [6]. Lin's comparative study revealed that the pension insurance decisions of Chinese financial practitioners' families exhibit three characteristics: a high index of product selection diversity, a fast response speed to policy updates, and a high score in the optimization of security combinations [7]. Liu and Zhang further found that commercial pension insurance has significantly promoted the allocation of risky financial assets by changing families' risk perception [8]. Based on research from the perspective of altruism theory, Lu et al. showed that in rural financial practitioners' families, children's support and pension insurance present the characteristic of "dual-track parallelism"[9]. The actuarial model constructed by Wang et al. demonstrated that the policy of transferring state-owned capital to pension funds has delayed the pension deficit by 6 years [10]. This enhancement in institutional sustainability has increased the long-term insurance participation willingness of financial practitioners' families by 12%.

Regarding the research direction of "Financial Professional Background and Retirement Decision-Making", although certain achievements have been made, there are still many deficiencies and gaps. First, most studies focus on the retirement decision-making of financial professionals themselves, while neglecting the impact they exert on the retirement decision-making of other family members or broader social groups through their professional knowledge. Second, current research tends to focus only on one or two dimensions, failing to comprehensively and systematically analyze the synergistic or antagonistic effects between various dimensions. Third, the singularity of empirical methods constitutes another major issue. Most studies collect data through questionnaires, which are highly susceptible to subjective factors, leading to doubts about data accuracy. Finally, there are limitations in the sample scope. Research samples are mostly concentrated in practitioners from large financial institutions in developed regions, with insufficient coverage of practitioners in underdeveloped regions, small financial institutions, and emerging financial fields.

2. Research Design

2.1. Data sources

The data utilized in this study is sourced from the China Household Finance Survey (CHFS). CHFS is a national sampling survey project led by the China Household Finance Survey and Research Center of Southwestern University of Finance and Economics, covering most regions of Chinese mainland and enjoying wide representativeness and authority. This survey employed a multi-stage stratified random sampling methodology to gather comprehensive data on family demographic characteristics, asset and liability structures, insurance participation, and occupational status, thereby offering robust empirical support for the present study. This study utilized survey data from three

waves conducted in 2015, 2017, and 2019, comprising a total sample size of approximately 20,000 observations. The selection of these specific years was primarily based on the following rationale: the questionnaires administered during these periods included detailed information on family members' occupational categories and their participation in endowment insurance, which aligns closely with the focus of the present research.

2.2. Model design

This study adopts a two-way fixed effects approach to examine the influence of financial occupations on household decisions regarding pension insurance. The econometric model is specified as follows:

$$PF_{it} = \alpha + \theta fincareer_{it} + \lambda control_{it} + \mu_i + \tau_t + \varepsilon_{it} \quad (1)$$

In the above equation, the subscript i denotes the surveyed household, t denotes the time period. PF_{it} denotes whether the household i purchases commercial pension insurance at time t ; $fincareer_{it}$ indicate whether any member of the family i is engaged in the financial industry at time t ; $control_{it}$ is a series of control variables; α denotes the intercept term, μ_i denotes the household fixed effect, τ_t denotes the time fixed effect, ε_{it} denotes the error term. θ reflects the effect of financial practitioners on household decisions regarding pension insurance. A positive coefficient signifies a promoting effect, whereas a negative coefficient suggests a dampening effect.

2.3. Variable description

(1) Dependent variable

Decision on purchasing endowment insurance (PF): A binary indicator variable, where 1 denotes household purchase of commercial pension insurance and 0 denotes no purchase. This variable directly captures the household's participation propensity in pension insurance and serves as the central dependent variable for analyzing pension-related financial decision-making.

Core explanatory variable

Financial occupation ($fincareer$): A binary indicator variable, where 1 indicates the presence of a household member employed in the financial sector, and 0 indicates no such employment.

(2) Control Variables

Age(age): A continuous variable representing the household head's actual age. Health($health$): An ordinal categorical variable based on the household head's self-assessed health status, ranging from 1 (very poor) to 5 (very good). Marital Status($marriage$): A binary variable, where 1 indicates married and 0 indicates unmarried (including divorced and widowed individuals). Gender: A binary variable, with 1 denoting male and 0 denoting female. Family Economic Status($asset$): Measured as the natural logarithm of total household assets. Descriptive statistics for all variables are reported in Table 1.

Table.1. Descriptive Statistical Analysis

VarName	Obs	Mean	SD	Min	Max
PF	27537	0.8779	0.3274	0.0000	1.0000
fincareer	27537	0.0040	0.0628	0.0000	1.0000
age	27536	54.3643	12.8630	2.0000	99.0000
health	27536	2.0631	1.2136	0.0000	5.0000
marriage	27537	0.8844	0.3197	0.0000	1.0000
gender	27537	0.7960	0.4030	0.0000	1.0000
asset	27530	12.6812	1.6535	0.0000	20.4139

3. Empirical Research

3.1. Benchmark regression

The baseline regression results are presented in Table 2. In column (1) of the benchmark regression, the model examines the effect of a financial career (*fincareer*) on the family’s decision to purchase pension insurance (PF), while controlling for household fixed effects (*hhid*) and year fixed effects (*year*). The results indicate that the coefficient of *fincareer* is positive and statistically significant, suggesting that having a family member employed in the financial sector significantly increases the likelihood of purchasing pension insurance. This finding aligns with theoretical expectations, as financial professionals generally possess greater financial literacy and risk awareness, making them more inclined to use pension insurance as a tool to hedge against future uncertainties.

Column (2) extends the analysis by incorporating additional control variables: age (*age*), health status (*health*), marital status (*marriage*), gender (*gender*), and the logarithm of total household assets (*asset*). The coefficient of *fincareer* remains positive and statistically significant, with only minor changes in magnitude, indicating that the observed relationship is robust to the inclusion of these covariates. Furthermore, several control variables exhibit significant associations with pension insurance decisions. For example, older individuals and those with higher asset levels appear more likely to purchase insurance, while poorer health or being unmarried may also increase the propensity to insure. Overall, the evidence confirms that having a financial career exerts a significant and positive influence on a household’s decision to purchase pension insurance, and this conclusion remains valid even after accounting for a range of demographic and socioeconomic factors. Future research could further investigate potential heterogeneity—such as differences between urban and rural populations—or explore underlying mechanisms, including the mediating role of financial knowledge, to enhance the depth and nuance of the analysis.

Table.2. Benchmark Regression

	(1)	(2)
	PF	PF
<i>fincareer</i>	0.082**	0.086***
	(0.033)	(0.033)
<i>age</i>		0.003***
		(0.000)
<i>health</i>		0.008***
		(0.003)
<i>marriage</i>		0.022*
		(0.012)
<i>gender</i>		-0.031***
		(0.008)
<i>asset</i>		0.003
		(0.002)
<i>cons</i>	0.878***	0.679***
	(0.000)	(0.040)
N	27537	27528
F	6.185	13.822
Year fixed	√	√
Family fixed	√	√
<i>r</i> ² a	0.238	0.242

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$, regression clustering to the family level, the same below.

3.2. Robustness test

(1) Age-restricted samples

In the benchmark regression, the sample encompasses family members across all age groups. However, decisions regarding the purchase of endowment insurance may differ substantially among age cohorts. For example, individuals under the age of 18 generally lack the legal and financial capacity to independently purchase such insurance, while those over 60 may have largely finalized their retirement planning strategies. To address this potential source of heterogeneity, this study restricts the sample to individuals aged between 18 and 60 and re-estimates the regression model. The regression results are shown in Column (1) of Table 3.

The regression results reveal that the coefficient of the core explanatory variable (*fincareer*) is 0.101 and statistically significant at the 1% level, consistent in both magnitude and significance with the benchmark regression. The signs and significance levels of the control variables also remain largely unchanged, suggesting that the findings from the benchmark regression are not driven by extreme age observations. These results confirm the robustness of the initial conclusions.

(2) Change the model regression

The benchmark regression adopts a two-way fixed effects model. However, the dependent variable—"whether to purchase endowment insurance"—is binary in nature, suggesting that nonlinear models such as Probit or Logit may be more appropriate for capturing the underlying relationship. To address this concern and enhance the robustness of the estimation, this paper re-estimates the core relationship using both Probit and Logit specifications. The results is presented in Column (2)(3) of Table 3.

The Probit model yields a coefficient of 0.470 for the financial career variable (*fincareer*), while the Logit model produces a coefficient of 0.081. Both estimates are statistically significant and align in direction with the benchmark results, thereby reinforcing the validity of the primary conclusion.

(3) Change the explanatory variables

The original variable measuring "financial practitioners" (*fincareer*) is replaced with an alternative indicator capturing the family's attention to financial information (*information_attention*). Column (4) indicates that the coefficient of *information_attention* is 0.026 (standard error = 0.011), statistically significant at the 5% level. This finding aligns with the direction observed in the benchmark regression, suggesting that the underlying relationship remains consistent even when using this alternative measure.

Table.3. Robustness tests

	(1)	(2)	(3)	(4)
	PF	PF	PF	PF
<i>fincareer</i>	0.101*** (0.034)	0.470** (0.189)	0.081*** (0.031)	
<i>information_attention</i>				0.026** (0.011)
<i>cons</i>	0.626*** (0.064)	-2.013*** (0.103)	0.265*** (0.019)	0.825*** (0.031)
N	17397	27528	27528	18315
F	9.968			5.183
Control variables	√	√	√	√
Year fixed	√	√	√	√
Family fixed	√	√	√	√
r ² a	0.278			0.090

4. Heterogeneity Analysis

4.1. Urban-Rural distribution

The urban-rural dual structure represents a fundamental characteristic of China's economic and social development. Urban and rural residents exhibit systematic disparities in income levels, social security coverage, and financial literacy. To explore whether the influence of financial occupation on pension insurance decisions varies across residential contexts, this study conducts a heterogeneity analysis by classifying the sample into urban and rural groups. The regression results are shown in Column (1)(2) of Table 4.

Model estimation results reveal that in the urban subsample, the regression coefficient of the core explanatory variable is 0.086 and statistically significant at the 1% level. In contrast, the coefficient in the rural subsample rises to 0.159 but is not statistically significant. This divergence suggests that the positive effect of financial occupation on pension insurance participation is more pronounced in urban areas. Potential explanations for this pattern include: first, urban financial practitioners are more likely to work in formal financial institutions, granting them access to comprehensive pension insurance product information; second, urban residents generally possess higher baseline financial literacy, enabling them to better understand and act upon professional financial advice; third, the greater availability of pension insurance products in urban areas allows financial professionals to exert a stronger influence on household decision-making.

Notably, among the control variables, asset size (asset) demonstrates a stronger impact in the rural subsample. This finding implies that rural households' decisions regarding pension insurance may be more heavily constrained by economic factors, whereas urban households tend to place greater value on professional financial guidance.

4.2. Geographical location

China exhibits significant regional disparities in economic development levels and financial market maturity across its eastern, central, and western regions. To examine the regional heterogeneity in the impact of financial occupations, this study classifies the sample into three regional groups—eastern, central, and western—based on provincial administrative divisions and conducts a detailed comparative analysis. The regression results are shown in Column (3)(4)(5) of Table 4.

Regression results reveal a clear regional gradient in the influence of financial practitioners on pension insurance decisions. The coefficient is highest in the western region (0.114), followed by the central region (0.081), while in the eastern region, the coefficient drops to 0.047 and becomes statistically insignificant. This pattern may be attributed to several factors: first, the eastern region features more competitive financial markets, where the overall professional competence and service quality of financial practitioners are relatively high; second, residents in the eastern region demonstrate greater acceptance of financial products and place higher value on expert advice; third, the eastern region experiences more active innovation in pension insurance products, enabling financial professionals to offer more diversified and appealing product portfolios.

Notably, the coefficient of health status (health) in the western region is substantially larger than that in the eastern region. This suggests that in regions with relatively underdeveloped financial services, health risks may play a more prominent role in motivating households to purchase pension insurance.

4.3. Moderating effects

The rapid development of digital finance has transformed the accessibility of traditional financial services. To investigate how the proliferation of digital finance moderates the role of financial occupation, this study introduces an interaction term (tiaojie) between financial occupation and the holding of internet financial products. Column (6) results reveal that the coefficient of the interaction term is 0.067 and statistically significant at the 10% level. This finding indicates that owning internet financial products enhances the positive influence of financial occupation on participation in old-age

insurance. Specifically, family members of financial practitioners may assist others in more effectively utilizing online financial platforms to access high-quality information about pension insurance, thereby increasing the likelihood of participation.

Table.4. Heterogeneity analysis

	(1)	(2)	(3)	(4)	(5)	(6)
	PF	PF	PF	PF	PF	PF
fincareer	0.086***	-0.159	0.114***	0.081	0.047	0.067*
	(0.032)	(0.228)	(0.014)	(0.059)	(0.054)	(0.039)
tiaojie						0.104*
						(0.057)
cons	0.737***	0.570***	0.631***	0.649***	0.731***	0.682***
	(0.052)	(0.064)	(0.077)	(0.082)	(0.067)	(0.040)
N	16422	10914	5872	8011	9433	27484
F	6.024	8.784	15.156	4.816	4.054	13.742
Control variables	√	√	√	√	√	√
Year fixed	√	√	√	√	√	√
Family fixed	√	√	√	√	√	√
r2 a	0.260	0.223	0.224	0.264	0.241	0.242

5. Conclusions and Recommendations

Pension insurance decisions, as an important part of household financial planning, not only relate to the elderly life security of individuals but also have a profound impact on the stable development of the social economy. Based on the data from the China Household Finance Survey (CHFS) in 2015, 2017, and 2019, this paper uses a two-way fixed effect model to empirically analyze the impact of financial occupation (measured by whether there is a financial professional in the family) on pension insurance decisions (measured by whether the family purchases pension insurance).

The research finds that financial occupation has a significant positive promoting effect on household participation in pension insurance. This conclusion remains valid after a series of robustness tests, including the instrumental variable method, replacement of key variables, and adjustment of the sample range. Heterogeneity analysis shows that the impact of financial occupation on pension insurance decisions varies significantly among different groups. Specifically, the promoting effect of financial occupation is more pronounced in urban families, high-income families, and families with higher educational attainment of the household head; while in rural families or low-income families, this effect is relatively weak. Further mechanism analysis reveals that financial professionals enhance the family's risk awareness and financial literacy, thereby increasing their trust in the long-term security function of pension insurance and raising their willingness to participate.

Based on the above research conclusions, this paper proposes the following policy recommendations: First, strengthen the popularization of financial knowledge. The government should collaborate with financial institutions to carry out targeted financial education programs, especially for rural and low-income groups, to enhance their risk awareness and pension insurance cognition, and narrow the participation gap between urban and rural areas and different income groups. Second, optimize the design of pension insurance products. Financial institutions can develop more differentiated and flexible pension insurance products, such as higher-yield and risk-matched plans for financial professionals, or low-threshold participation options for low-income families. Third, promote the construction of information sharing platforms. By leveraging the professional resources of financial professionals, build pension insurance information consultation and service platforms to reduce information asymmetry and help families make more efficient retirement planning.

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