

A study on the Impact of Social Trust on Rural Households' Commercial Pension Insurance Participation in the Context of Rural Revitalization

Runye Wang, Mengli Li*

School of Finance, Anhui University of Finance and Economics, Bengbu, Anhui, China

* Corresponding author: 2963021905@qq.com

Abstract: Does social trust under the background of rural revitalization affect the participation of commercial endowment insurance for rural families? Based on CFPS data, this paper uses the two-way fixed effect model to explore the influence mechanism of social trust on the participation of rural families in the background of rural revitalization. The study found that: first, social trust is proportional to the participation of rural family commercial endowment insurance, and the results are still established after a series of robustness and endogenous tests; second, the participation of social trust on rural family commercial endowment insurance is different, family rural revitalization level is high, the influence of social trust on rural family commercial endowment insurance is weak, and families with high asset level can promote social trust. This study provides new ideas for promoting the development of commercial endowment insurance in rural areas of China, and provides suggestions for improving the endowment security system in rural areas.

Keywords: Social Trust; Rural Households; Commercial Pension Insurance.

1. Introduction

2024 Central Document No. 1 still put forward a strong and effective promotion of comprehensive revitalization of the countryside "roadmap". As the foundation of the country's development, the state of rural development is a matter of national concern. In recent years, as the process of urbanization has accelerated, the structure of the rural population has changed significantly, and the trend of ageing has become more serious. Data from the Seventh National Population Census clearly show that the elderly population in rural areas accounts for as much as 23.81 per cent of the population, far exceeding the urban ageing rate by 7.99 percentage points, and that the ageing process continues to be faster than that in urban areas. This situation has led to a sharp increase in the burden of rural old-age care, and the traditional model of old-age care has made it difficult to meet the demand. Commercial pension insurance, as an important part of the diversified pension system, has the advantages of flexibility and supplementation, which can theoretically inject new vitality into rural pension, and in 2021, the State Council issued the "14th Five-Year Plan for the Development of the National Aging Program and Pension Service System" (Guofa [2021] No. 35), in which it was also mentioned that it should vigorously The State Council issued the "14th Five-Year Plan for the Development of the National Elderly and the Pension Service System" (Guo Fa [2021] No. 35), which also mentions the need to vigorously promote and regulate the development of the third pillar of pension insurance, mainly commercial pension insurance. However, in reality, the participation of rural families is not satisfactory, in this context, it is crucial to explore in depth the factors affecting the participation of rural families in commercial pension insurance, and social trust, as a key element in the rural social relationship network, is worth exploring in depth the role played by its participation in the decision-making of rural families in commercial pension insurance.

From a micro perspective, this paper explores the influence of social trust on the participation of commercial endowment insurance in rural families under the background of rural revitalization. The marginal contribution of this paper lies in the deepening of the existing theoretical research based on the rural areas. Based on the theory of insurance demand theory, transaction cost theory and social trust theory, the transmission mechanism and comprehensive effect of social trust on rural families. In the related research on rural revitalization, most scholars study the macro data. This paper calculates the micro data of rural revitalization, and analyzes the influence of social trust on rural families at different levels of rural revitalization.

2. Literature Review

2.1. Connotation of Rural Revitalization

Rural revitalization is a concept and strategic idea put forward by China, and as an important initiative to solve the "three rural issues", it has been explored in various aspects by academics. Scholars at home and abroad have explored rural revitalization from different perspectives. First, from the perspective of the participating subjects, scholars have pointed out that the promotion of rural revitalization requires a bottom-up organizational approach, led by local governments and coordinated by financial institutions and various sectors of society (Opore, 2007). Secondly, from the perspective of economic development, it is believed that promoting rural revitalization is conducive to the improvement of the country's overall economic level (Michael, 2008); the relationship between rural revitalization and financial poverty reduction is explored, and it is pointed out that rural revitalization works through the effect of resource integration in order to increase the level of farmers' incomes (Dou Shulong et al., 2019); it is believed that vigorously developing rural revitalization is conducive to optimizing the structure of China's economic development,

promoting the modernization of basic industries, and at the same time is conducive to achieving the goal of common prosperity (Huang Wei, 2022); the rural revitalization strategy is inextricably linked to rural economic development, that is, rural revitalization can promote the development of the rural economy at the same time, the rural economic development is also laying a solid foundation for the rural revitalization strategy (Xiguanglian, 2024).

2.2. The meaning of Social Trust

Social trust is regarded as a complex and multi-layered social phenomenon, which is made between members of society based on a combination of moral and interest considerations, and is a kind of psychological contract of mutual expectation, mutual trust and mutual dependence. The study of trust, which first came out of sociological research, summarizes that trust is considered to be the expectation of the future development of a state of affairs. Through continuous research and development, the concept of a multidisciplinary intersection has evolved. Scholars have categorized social trust into different types according to the intimacy of trust and the object of trust. Uslaner (2002) categorizes social trust into two categories, special and general trust, according to the closeness of the trust. The former is established by a specific object, generally speaking, people are established through blood or kinship, while the latter is established without a fixed object, for example, people are established with their workmates, neighbors, classmates and so on (Luo Jiade, 2007). On this basis, a social trust system for farmers has been constructed through "blood ties" and "kinship". In rural areas, farmers are generally guided and cooperated by government officials due to their organization and propaganda, thus making farmers' trust in government officials become farmers' trust in government officials (Zhang Mingxin, 2014). In addition to this, the strength of government officials themselves will only have a certain impact on the implementation of policies, while the formulation of relevant government policies, rules and regulations, and other policies is an important factor in determining the level of farmers' trust in the government. The rational system of building a good platform for farmers for development is more likely to be recognized and trusted by farmers, and at the same time, it is easier to stimulate farmers' trust and recognition of government departments (Zou Yuchun, 2011).

2.3. Factors Affecting the Participation of Rural Households in Commercial Pension Insurance

Domestic studies on the participation of rural residents in commercial pension insurance have mainly explored the formal and informal systems of rural residents' participation in commercial pension insurance. From the perspective of the formal system, this consists mainly of the ability to be insured. In terms of rural residents' ability to insure, rural residents' demand for commercial pension insurance is positively correlated with the level of rural residents' individual or household income. The study found that income level is the most basic factor affecting insurance consumption, and the insurance rate of low-income people with an annual personal income of less than 30,000 yuan or an annual household income of less than 50,000 yuan is significantly lower than the average level of the survey (Liu Kunkun et al., 2012). By using data from the American Consumer Survey it was

concluded that wealth level affects both investment and insurance decisions of individuals (Armantier et al., 2023). From the perspective of informal systems, the main ones include insurance awareness, social capital and social interaction. With regard to the rural population's awareness of insurance, rural areas in China are deeply influenced by the traditional idea of old-age insurance and lack a basic understanding of old-age insurance. Family pension is still the main way of pension for rural residents, carrying the heavy burden of rural residents' pension (Shang Qingsong and Zhao Yifu, 2020), the impact of social transformation and family structure changes on traditional family pension in rural areas has not completely weakened the role of children in providing the main support for old age, and the New Farmers' Cooperative and New Farmers' Insurance have reduced the burden of adult children's support; the "raising children to prevent old age" concept can inhibit residents' participation in commercial pension insurance (Zeng Quanhai, 2022). In terms of social capital, it was found that social capital significantly promotes the commercial insurance purchasing behavior of urban and rural residents in China (Wu Yufeng, 2018); social capital has a significant impact on the willingness of rural residents to participate in long-term mutual care insurance (Song Xuehong et al., 2022). In terms of social interaction, social interaction has a significant positive effect on residents' commercial pension insurance purchase (Zhou, Lin and Liang, 2023; Sun, Hui and Zhang, Renshou, 2023) Social interaction affects residents' demand for commercial pension insurance by moderating residents' attitudes toward risk and enhancing their sense of well-being.

2.4. Mechanisms of Social Trust Influencing Household Participation in Commercial Insurance

There are many domestic and international studies on the factors influencing social trust: for example, age, education, income level, and health status have a positive effect on the level of social trust of residents (Guiso et al., 2003). Residents' objective characteristics, including gender, age, marriage, education, income, religion, and occupation; and subjective characteristics, including optimism, sense of self-control, and happiness, are all able to significantly influence residents' level of social trust (Li Tao et al., 2008). And while residents' optimism, sense of control, and happiness sometimes significantly increase their level of social trust, the effect is not robust (Delhey and Newton, 2003).

As people live in society, social trust is the cornerstone of social harmony, stability and development, and influences people's behavioral decisions. Currently there are two main areas of focus for social trust in financial participation.

First, from the perspective of other financial subjects, the impact of social trust on household stock market participation has been studied (Yu Tao et al., 2023; Bogan, 2008); the role of social trust in the bond market has been examined (Yang Guochao and Pan Yuzhang, 2019) and it is found that social trust not only helps to improve the credit ratings of bonds but also helps to reduce bond credit spreads; trust significantly promotes household participation in the risky financial markets and increase risky asset allocation (Yin et al., 2022).

Second, from the perspective of insurance, social trust is conducive to promoting information exchange and cooperation among different groups, increasing residents' expectations of commercial medical insurance returns, and significantly influencing residents' commercial medical

insurance (Liu, Jinhua and Wu, Jing, 2019). Social trust has a positive effect on individuals' purchase decisions of both commercial pension insurance and commercial health insurance (Wang, T. et al., 2022), which promotes commercial insurance participation by expanding personal information channels and enhancing individual risk perception. For farmers trust reduces the cost of searching for information and increases expectations of financial investment, so the higher the general level of trust, the greater the likelihood that farmers will participate (Song Tao et al., 2012). The level of social trust has a significant contribution to the participation of rural residents in the new rural social pension insurance, and residents with a high level of social trust have a higher probability of participating in the new rural insurance than those with a low level of social trust (Ding Congming et al., 2019). By investigating the willingness to purchase of policyholders in third-party online insurance platforms, the results show that the dimensions of trust belief, competence and integrity have a significant effect on the willingness to purchase of policyholders (Luo et al., 2019). It has been found that households with a high level of social trust have a higher probability of participating in commercial insurance and spend a higher proportion of their income on premiums (Fan, Congying, 2020).

From the existing literature, scholars have discussed the factors affecting the participation and decision-making of insurance from multiple perspectives, and some scholars have studied the influence of the insurance participation behavior of Chinese residents from the perspective of social interaction and trust, but there are still the following deficiencies. First, through combing the literature, it is found that most scholars study the influencing factors of commercial insurance based on urban and rural residents, but the income gap between urban and rural residents is still large, and the research of social trust on the participation of rural families in commercial endowment insurance is still insufficient. Second, in the related studies on rural revitalization and insurance, most scholars study the influence relationship between rural revitalization and agricultural insurance. Few scholars consider the heterogeneity of social trust in the participation of commercial endowment insurance in different levels of rural revitalization under the background of rural revitalization. Based on the limitations of the above literature, this paper analyzes the influence of social trust on the participation of rural families in the background of rural revitalization based on the research of domestic and foreign scholars.

3. Theoretical Analysis and Research Hypothesis

Social trust is recognized as a form of social capital that, like physical and human capital, can contribute to economic growth and social progress. From an economic perspective, social trust can fuel the development of financial markets, drive economic growth and thus promote economic prosperity. Individual social trust variability is theorized to influence insurance purchase decisions. Insurance contracts are entered into based on the principle of "utmost good faith", which is essentially a form of mutual trust between the parties to an insurance transaction.

3.1. Social Trust Affects Rural Households' Participation in Commercial Pension Insurance by Mitigating Information Asymmetry

(1) Social Trust Reduces Information Search Costs for Commercial Pension Insurance

Social trust reduces the costs of rural residents when searching for information about commercial pension insurance. There are two ways for individuals to obtain information, one is from neighbors, relatives and friends by word of mouth; the other is information obtained from the media, the former depends on interpersonal trust and the latter depends on the individual's trust in society. From a financial literacy perspective, a lack of financial knowledge leads to a lower understanding of financial products, which ultimately inhibits financial participation (Su Fang and Fang Lei, 2016; Guo Jun et al., 2019). Social trust improves the motivation to obtain personal information, information collection is expanded, cognitive level is raised, subjective initiative is enhanced, understanding of insurance products and services is deepened, and ultimately commercial insurance participation is increased. Kim, Jung-Ching (2019) In a survey study of residents' pension insurance in Anhui Province, farmers' high trust in their village domains would help them better understand the relevant policies through the government and the media, reduce the cost of information acquisition, and increase the likelihood of enrollment. Rural and urban areas are more neighborhood-oriented and trust people around them; when rural residents have trust in insurance companies or insurance products, they are more willing to take the initiative to learn about the relevant information and disseminate the information to their neighbors around them, thus reducing doubts and uncertainties arising from information asymmetry, deepening the understanding of insurance products and services, and ultimately increasing participation in commercial insurance.

(2) Social trust mitigates the transaction costs of information asymmetry

Social trust can also lead to a greater degree of certainty that the other party will not breach the responsibilities and obligations set out in the contract, thereby reducing transaction costs caused by information asymmetry. Specifically, the existence of social trust prior to the conclusion of a contract can save a great deal of work that would otherwise have to be spent on the verification of information, while also reducing the need for precautionary measures to be put in place to prevent potential risks. Further, even if disputes or controversies arise during contract enforcement, it is easier to resolve these disputes through less costly means, such as through non-litigious means such as negotiation and mediation, due to the high basis of trust that exists between the two parties. Of course, it should be clear that social trust cannot completely eliminate the problem of information asymmetry, but it can indeed reduce to a large extent some of the resulting transaction costs, thereby facilitating the smooth conduct of trading activities.

(3) Social trust has more confidence in the returns of commercial pension insurance products

Xu Yan (2016) argues that high social trust leads to higher psychological expectations of pension insurance products, willingness to believe in the potentially lucrative rewards of enrollment, and relatively high motivation to enroll.

The impact of social trust characteristics on individuals'

decisions to insure not only reduces rural residents' insurance information search costs and transaction costs arising from information asymmetry, but also manifests itself more in the fact that high-trust individuals increase their expected returns to commercial insurance, both in terms of financial rewards and psychological comfort. In addition, high-trust individuals

will believe that the insurance company will fulfill the insurance contract conscientiously and there is no insurance fraud, etc., to ensure that they will receive reasonable risk compensation or payment in case of insurance.

H1: Increased social trust promotes household commercial insurance participation.

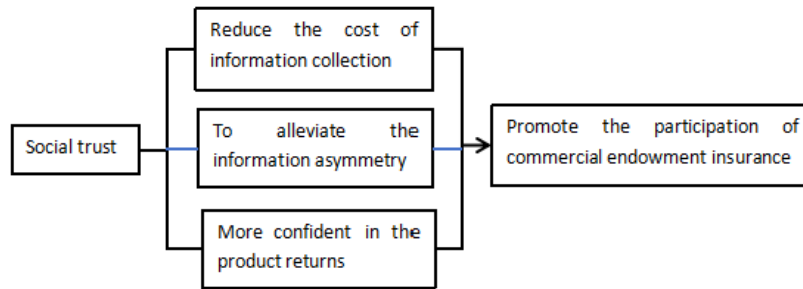


Figure 1. Mechanisms of Social Trust on Commercial Pension Insurance Participation

3.2. The Impact of Social Trust on Household Participation in Commercial Pension Insurance Under Conditions of Heterogeneity in Household Asset Levels

Individual wealth plays a key role in the mechanism of social trust leading to the demand for insurance. When an individual's wealth is limited, on the one hand, he has limited access to valid and reliable information, and on the other hand, he is more willing to trust the "cheap" and "reliable information" provided by his friends and family, i.e., the strong relationships. He is relatively more willing to trust the "cheap" "reliable information" provided by his friends and family, i.e., strong relationships, and is not willing to trust the "unreliable" information obtained from the "weak relationships" in his social circle, and the degree of social trust of the individual is lower. On the other hand, the lower wealth value of individuals also determines their weaker risk tolerance, and they are more likely to have a wait-and-see mentality when confronted with non-essentials such as insurance products, and do not choose to trust social security or insurance companies, thus suppressing their insurance needs. For wealthier individuals, who have access to multiple sources of knowledge and information, they are better able to recognize whether the information they have is reliable and are more likely to trust the insurance companies or products they know better. Accordingly, Hypothesis II of this paper is formulated.

H2: There is a threshold effect of social trust in inducing commercial insurance participation, i.e., the induced effect of social trust is difficult to be realized when the level of household assets is low, whereas the induced effect of insurance participation of social trust rises as the value of household wealth increases. That is, compared to the low-income group, social trust contributes more significantly to the high-income group in terms of its impact on the demand for commercial insurance.

4. Research Design

4.1. Data and Models

This paper uses balanced panel data synthesized from CFPS 2014, 2016 and 2018 data. The data is organized and released by the China Family Finance Survey and Research Center of Southwestern University of Finance and Economics, which covers 25 provinces/municipalities/autonomous

regions, and reflects China's social, economic, and demographic realities and changes by tracking and collecting data at the individual, family, and community levels, providing a sufficient data foundation for the study of this paper on the demand for commercial insurance. For research purposes, the object of this paper is rural household commercial pension insurance participation, and the paper restricts the sample to rural residents with a rural household registration. In addition, this paper excludes missing samples and removes anomalous data, such as households where the head of the household is younger than 18 years old. The final sample of 4,498 households that participated in the Chinese Household Tracking Survey in all three periods of tracking was obtained.

To further explore the impact of social trust on rural residents' participation in commercial pension insurance, this paper constructs the following benchmark model.

$$\text{Insurance}_{it} = \alpha_0 + \alpha_1 \text{Trust}_{it} + \sum_j \text{Controls}_{it} + \theta_i + \mu_t + \varepsilon_{it}$$

Where, Insurance_{it} is the commercial pension insurance participation of household i in time period t ; the Trust_{it} represents the level of social trust of household i in period t ; and Controls_{it} is a series of control variables at the head of household and household level; This paper tracks a sample of households that participated in the China Household Tracking Survey in all three periods, and further tests for time effects (μ_t) and household fixed effects (θ_i) to control for; and ε_{it} is a randomized disturbance term.

4.2. Variables and Descriptive Statistics

4.2.1. Description of variables

The explanatory variable in this paper is commercial pension insurance participation, and the scope of the study is rural households. Participation in commercial pension insurance is a binary discrete variable that defines a sample household as participating in commercial pension insurance if any member of the household is participating in commercial pension insurance, otherwise it is considered as not participating in commercial pension insurance.

The explanatory variable in this paper is social trust. Different scholars have different definitions of social trust, here we adopt Li Tao's way of defining social trust, he defines social trust as the degree of trust that investors have in many people in the society, as well as institutions and governmental organizations. In this paper, when measuring social trust, the

principal component factor analysis was used to process the value of trust in CFPS data to finally get the explanatory variables of this paper. It mainly contains trust in relatives, trust in neighbors, trust in strangers, trust in doctors, and trust in cadres.

In order to clarify the independent role of different levels

of social trust on rural residents' commercial pension insurance participation behavior, we can draw on the practice of related studies, and selected control variables from the individual and household levels respectively. Table 1 lists in detail the assignment descriptions of all the main variables and control variables involved in this paper.

Table 1. Main Variables and Assignment Descriptions

Variable category	Variable name	Description of variables
explanatory variable	Commercial pension insurance	Any member of the family who is participating in commercial pension insurance is assigned a value of 1, while no member participates in commercial pension insurance is assigned a value of 0.
explanatory variable	social trust	Factor analysis of trust levels for the five categories of parents, neighbors, strangers, cadres, and doctors yielded
control variable	(a person's) age	Age of financial respondent
	distinguishing between the sexes	Males are assigned a value of 1 and females are assigned a value of 0
	educational attainment	Financial respondents were assigned values of 1, 2, 3, 4, 5, 6, 7 for illiterate and semi-illiterate, elementary school, junior high school, high school/secondary school/technical school/vocational high school, college, bachelor's degree, master's degree and above, respectively.
	political profile	The financial respondent is a member of the CPC is assigned a value of 1, otherwise 0.
	marital status	Financial respondent married is assigned a value of 1, otherwise 0
	health status	Financial respondents' self-assessed level of health is assigned a value of 1 to 5 in descending order.
	Per capita household income	Per capita household income
	Whether the household holds financial assets	Household ownership of financial products is assigned a value of 1, otherwise 0
	Family property status	Total household property greater than 0 is assigned a value of 1, otherwise it is 0.

4.2.2. Descriptive statistics

Descriptive statistics are shown in Table 2. The proportion of rural families in China participating in commercial pension insurance is only 0.028, indicating that the level of rural families' participation in commercial pension insurance is low, and the mean value of the level of social trust is 0.0197, with a standard deviation of 0.790, which indicates that the level of social trust in rural families is at a low level, and that the level of social trust varies greatly among different families. By analyzing the personality characteristics of the financial

respondents, we know that their average age is 50.9 years old, and men account for a larger proportion, and the overall level of education is low, a small part of the party members, most of them are married, the level of health is medium, and the family income is close to the medium level, which is consistent with the actual situation of the families in China, and only 2 out of 100 households have financial assets, and the proportion of financial assets owned is still The percentage of financial assets owned is still relatively low, and 92.9 percent of the households own real estate.

Table 2. Descriptive Statistics of Variables

Variable name	Sample size	Average value	Standard deviation	Minimum value	Maximum values
Commercial pension insurance	13482	0.028	0.166	0.000	1.000
social trust	13482	1.97e-09	0.790	-2.856	2.741
(a person's) age	13482	50.090	13.791	17.000	90.000
distinguishing between the sexes	13482	0.558	0.497	0.000	1.000
educational attainment	12226	2.502	1.122	1.000	7.000
political profile	13482	0.075	0.264	0.000	1.000
marital status	13482	0.854	0.353	0.000	1.000
health status	13431	2.875	1.252	1.000	5.000
Per capita household income	13473	20092.750	60915.883	0.000	5660000
Whether the household holds financial assets	13482	0.025	0.156	0.000	1.000
Family property status	13482	0.929	0.256	0.000	1.000

Descriptive statistics are shown in Table 2. The proportion of rural families in China participating in commercial pension insurance is only 0.028, indicating that the level of rural families' participation in commercial pension insurance is low, and the mean value of the level of social trust is 0.0197, with a standard deviation of 0.790, which indicates that the level

of social trust in rural families is at a low level, and that the level of social trust varies greatly among different families. By analyzing the personality characteristics of the financial respondents, we know that their average age is 50.9 years old, and men account for a larger proportion, and the overall level of education is low, a small part of the party members, most

of them are married, the level of health is medium, and the family income is close to the medium level, which is consistent with the actual situation of the families in China, and only 2 out of 100 households have financial assets, and the proportion of financial assets owned is still The percentage of financial assets owned is still relatively low, and 92.9 percent of the households own real estate.

5. Empirical Results and Analysis

5.1. Baseline Regression

This paper first estimates the effect of social trust on commercial pension insurance participation using a two-way fixed effects model, and the regression results are shown in Table 3. In particular, theregression coefficient of social trust on commercial pension insurance participation is 0.008, which is significant at the 1% level, controlling for individual-level control variables incolumn (1); column (2) adds household-level control variables, and column (3) controls for the addition of province-level control variables, and the results of the latter two estimations are basically the same as those estimated by the bidirectional fixed-effects model, which controls only for the individual level.

Table 3. Impact of Social Trust on Commercial Pension Insurance Participation

	(1)	(2)	(3)
variable name	any_insur ance	any_insur ance	any_insu rance
social trust	0.008*** (18.44)	0.007*** (18.68)	0.007*** (18.24)
(a person's) age	-0.000 (-0.65)	-0.000 (-1.35)	-0.000 (-1.35)
distinguishing between the sexes	0.002 (1.09)	-0.001 (-0.40)	-0.000 (-0.01)
educational attainment	0.004 (0.98)	0.005 (1.64)	0.005 (1.64)
political profile	-0.036 (-2.01)	-0.038 (-2.14)	-0.038 (-2.14)
marital status	-0.012 (-1.54)	-0.012 (-1.55)	-0.012 (-1.54)
health status	-0.001 (-0.73)	-0.001 (-0.72)	-0.001 (-0.72)
Per capita household income		0.008 (0.38)	0.000 (1.08)
Whether the household holds financial assets		0.000 (1.08)	0.008 (0.38)
Family property status		0.013 (2.43)	0.013 (2.41)
provinces			-0.000 (-1.40)
constant term (math.)	0.054 (1.29)	0.044 (1.34)	0.058 (1.62)
Observations	9,399	9,391	9,391
R-squared	0.520	0.521	0.521
pidFE	YES	YES	YES
yearFE	YES	YES	YES

Note: Numbers in parentheses are t-values. *, **, ***, ***,

, **, ** and **, * represent significant at the 10%, 5%, and 1% levels, respectively, and the same table below.

5.2. Robustness Tests

To further verify the robustness of the regression results, this paper conducts a robustness test by replacing the core variables and deleting the municipality samples. First, replace the core explanatory variables. Referring to the practice of related articles, the proportion of members participating in commercial pension insurance in household size can effectively measure the degree of participation in commercial pension insurance of households and use it as a proxy variable for commercial pension insurance of households to conduct robustness regression. Second, delete the sample of municipalities. Economic development is closely related to the degree of participation in commercial pension insurance, in order to reduce the possible impact of extreme samples from regions with higher quality economic development on this study, this paper further excludes the sample of municipalities from the regression.

Table 4. Robustness Tests

	(1)	(2)
variable name	any_insur ance	any_insur ance
social trust	0.002** (5.32)	0.008*** (28.51)
(a person's) age	-0.001** (-9.43)	-0.000 (-0.93)
distinguishing between the sexes	-0.002 (-0.47)	-0.004 (-0.29)
educational attainment	-0.002 (-1.25)	0.005 (1.91)
political profile	-0.011 (-1.76)	-0.041 (-2.31)
marital status	0.002 (2.29)	-0.024** (-4.59)
health status	-0.001 (-1.13)	-0.002 (-1.00)
Per capita household income	0.000 (1.17)	0.000 (1.11)
Whether the household holds financial assets	-0.002 (-0.36)	0.032 (1.29)
Family property status	0.001 (1.69)	0.013** (4.91)
provinces	-0.000 (-1.58)	-0.000 (-2.05)
constant term (math.)	0.052** (5.75)	0.069* (4.01)
Observations	9,391	9,017
R-squared	0.496	0.521
pidFE	YES	YES
yearFE	YES	YES

Regression results Column (1) replaces the core explanatory variables, Column (2) deletes the municipality sample, Column (1) social trust is regressed on the participation rate of commercial insurance, and the results are still significant at the 5% level, and Column (2) deletes the municipality sample The results are consistent with the

baseline regression sample in Table 3, which suggests that social trust has a positive impact on the participation in commercial pension insurance, i.e., Hypothesis H1 is valid.

5.3. Endurance Test

Typically, the root causes of endogeneity problems include mutual causation, omitted variables, measurement bias, and selectivity bias. Since there are very many variables affecting the demand for commercial insurance, the author sets control variables based on the professional foundation and related literature, but it is still debatable whether there are still omitted variables causing coefficient distortion in the empirical process of Internet use on the commercial insurance consumption of middle-aged and elderly families. Therefore, in order to test the endogeneity issue, this paper introduces an instrumental variable for social trust in terms of whether the respondent made a donation in the past year.

Table 5. Endogeneity Test

	(1)	(2)
variable name	any_insurance	any_insurance
social trust	0.323*** (2.64)	0.296** (2.47)
(a person's) age	-0.002*** (-3.19)	-0.002*** (-2.90)
distinguishing between the sexes	-0.024*** (-2.84)	-0.022*** (-2.81)
educational attainment	-0.004 (-0.79)	-0.005 (-0.93)
political profile	-0.044** (-2.34)	-0.040** (-2.19)
marital status	0.022*** (2.69)	0.024*** (2.98)
health status	-0.024*** (-2.65)	-0.022** (-2.50)
Per capita household income		0.000* (1.89)
Whether the household holds financial assets		0.038** (2.46)
Family property status		-0.001 (-0.11)
constant term (math.)	0.189*** (2.89)	0.171** (2.45)
Observations	12,198	12,192
Phase I F-value	11.042	10.328
p	0.000	0.000

Social trust contributes to the construction of social donations, which indicate greater trust in society, and social donations may not have a direct effect on individuals' decisions to purchase commercial insurance, so social donations can be used as an instrumental variable. For the data, the question in the questionnaire "Expenditure on social contributions in the last 12 months?" was selected. Family contributions greater than 0 are assigned a value of 1, otherwise they are assigned a value of 0. The test results are shown in Table 5.

First, the attention is paid to the effectiveness of tool

variables. Before and after the addition of commercial endowment insurance to the family level, the F value of the tool variable in the first stage is greater than the threshold value of 10, indicating that social donation is an effective tool variable and there is no problem of weak tool variable. For endogeneity, the Wald test results all rejected the exogenous hypothesis at the 1% significance level, indicating that the samples had endogeneity. From the regression results, after correcting the endogenous bias, social trust still has a significant effect on promoting the participation of commercial endowment insurance, which is consistent with the conclusion of basic regression.

5.4. Heterogeneity Analysis of Social Trust on Rural Households' Participation in Commercial Pension Insurance in The Context of Rural Revitalization

5.4.1. Heterogeneity of rural revitalization level

Considering the influence of social trust on commercial endowment insurance in different rural levels of the family, this paper reference (Hu Hongbing and Zhu tao, 2023) for common prosperity, from the perspective of micro family, using the panel data entropy evaluation index of rural empowerment, to measure the rural revitalization level.

This paper measures the indicators of rural revitalization from three aspects of rich life, rural civilization and ecological livability. In the dimension of rich life, wealth and consumption are important manifestations of residents' prosperity. This paper selects three indexes: per capita income, per capita expenditure and Engel coefficient; in the dimension of rural civilization, education and recreational consumption can reflect the situation of local civilization, mainly including recreational consumption, education and educational expenditure; in the dimension of ecological livability, two indexes of commercial endowment insurance and medical insurance are selected from the perspective of social livability (Zhang Ting et al., 2018).

Table 6. Rural Revitalization Evaluation Indicator System

Level 1 indicators	Secondary indicators	Tertiary indicators
Rural revitalization	well-off	Per capita household income
		Engel's coefficient
		Per capita household expenditure
	civilization of village morals	Per capita household consumption of culture and recreation
		Education per household
		Percentage of total expenditure on culture and education
	ecologically livable	Pension insurance participation rate
		Medical insurance participation rate

In this paper, after finding the annual rural revitalization level of each family, the median of rural revitalization is obtained, which is divided into the sample of families with high rural revitalization level and families with low rural revitalization level, and regressed respectively. It can be seen from Table 7 that under different levels of rural revitalization, the effect of social trust on rural families is different. Specifically, with the improvement of the level of family rural revitalization, the impact of social trust on the participation of family commercial endowment insurance gradually weakens. It can be seen that social trust has a better effect on the

participation of commercial endowment insurance for families with a lower level of rural revitalization, and has a certain universality. The possible reason for this is that with the improvement of rural revitalization, the level of family wealth and the ability to deal with risks are constantly improving, and the effect of social trust is constantly weakened.

Table 7. Heterogeneity in Levels of Rural Revitalization

	High level of rural revitalization	Low level of rural revitalization
	any_insurance	any_insurance
social trust	0.008**	0.009***
	(5.567)	(15.249)
(a person's) age	-0.001	0.001
	(-2.158)	(1.403)
distinguishing between the sexes	0.001	0.000
	(0.161)	(.)
educational attainment	0.003	0.004
	(0.272)	(0.606)
political profile	0.001	-0.071*
	(0.438)	(-2.953)
marital status	-0.007	0.003
	(-1.618)	(1.762)
health status	-0.002	0.001
social trust	(-0.513)	(0.362)
	0.082	-0.054
(a person's) age	(2.534)	(-1.294)
Observations	4408	4264
R-squared	0.527	0.529
pidFE	YES	YES
yearFE	YES	YES

5.4.2. Heterogeneity in household asset levels

Using the median household net worth of 202180 in 2020 as the cutoff, households are distinguished into high-asset and low-asset households and regressed separately. The results show that the induced effect of social trust on household participation in insurance rises significantly as the value of personal wealth increases, i.e., compared to the low-income group, social trust promotes the higher-income group more significantly in terms of its impact on commercial insurance participation.

From the results, the induced effect of social trust on household participation in insurance rises significantly as the value of personal wealth increases, i.e., compared to the low-income group, social trust promotes the high-income group more significantly in terms of its impact on commercial insurance participation. And this point verifies hypothesis two in the previous section. The author believes that there are two possible reasons for this phenomenon: First, when the value of wealth is more limited, the risk of "being cheated" that the family can bear is lower, and the family will be more cautious to face the "commercial insurance" as a "stranger" that is foreign to the family. First, when the wealth value is limited, the risk of "being deceived" is lower, and households are more cautious in dealing with "commercial insurance", which is a stranger to the household, and the lower wealth accumulation makes it easier for households to be paranoid about the inherent impression of commercial insurance, i.e., if

households believe that there is a possibility of negative impacts from commercial insurance, their higher social trust will reinforce this impression, and in turn, will limit the participation of the household in commercial insurance. Second, household wealth is often closely related to the social circle in which the household is embedded, and households with lower wealth accumulation tend to be able to obtain cheaper information from their social circle, which may be biased and thus affect the decision-making behavior of the household in deciding whether to take out commercial insurance.

Table 8. Analysis of Heterogeneity in Household Asset Levels

	High-asset households	Low-asset households
variable name	any_insurance	any_insurance
social trust	0.021**	0.002
	(5.46)	(2.03)
(a person's) age	-0.002	0.001
	(-1.25)	(0.99)
distinguishing between the sexes	0.007	0.010
	(0.44)	(1.12)
educational attainment	-0.064	-0.003
	(-1.93)	(-0.64)
political profile	-0.049*	-0.011
	(-4.08)	(-0.83)
marital status	0.003	-0.003**
	(0.75)	(-5.47)
health status	0.172***	-0.044
	(10.88)	(-0.95)
Observations	3,330	4,303
R-squared	0.554	0.542
pidFE	YES	YES
yearFE	YES	YES

6. Conclusions and Suggestions

This paper empirically investigates the impact of social trust on commercial pension insurance participation in the context of rural revitalization at the micro level using CFPS data. Based on the use of two-way fixed-effects model, this paper firstly deals with the factors of social trust with the method of factor analysis and derives the level of social trust; secondly, it investigates whether the level of social trust will increase the participation of household commercial pension insurance from the level of social trust and does the test of robustness and endogeneity; lastly, in the issue of heterogeneity, this paper also analyzes the impact of social trust on the level of rural revitalization and the level of household assets in terms of the impact of household commercial pension insurance participation. Based on the above analysis, this paper arrives at the following view:

6.1. Social Trust is Positively Related to Rural Households' Participation in Commercial Pension Insurance

One The higher the social trust of a household, the more likely it is to participate in commercial pension insurance, hypothesis one holds. This shows a positive correlation between the level of social trust in the family and participation in commercial pension insurance. The higher the level of social trust of residents, the more willing their families will

be to purchase commercial pension insurance, and it can be concluded through the robustness test that social trust is also significantly positively correlated with the level of participation in commercial pension insurance.

6.2. And After Regressing on Subgroups Based on Different Household Characteristics the Following Conclusions Were Obtained

Group regression based on the level of family rural revitalization found that, as the level of family rural revitalization rises, the impact of social trust on family commercial pension insurance participation gradually weakened, probably because as the level of rural revitalization rises, the level of family wealth and the ability to cope with risk continue to rise, and the effect of the role of social trust continues to weaken; After group regression based on the level of family assets found that Social trust has a wealth threshold effect, i.e., when household wealth meets a certain threshold, the promotion effect of social trust on insurance participation can only be highlighted, and the effect of social trust is more obvious in households with a higher level of wealth.

The Government proposes, first, to use institutionalized methods to achieve the separation of powers and interests and to base legitimacy exclusively on jurisprudential authority, which is the fundamental way to enhance institutional trust. Secondly, all governmental organizations, social organizations and institutions should strengthen strong internal management, pay attention to professionalism training, and improve information disclosure and other processes. Once again, the government should establish credit files and improve them in a timely manner, develop relevant supervision and punishment mechanisms, and also smooth credit platforms to implement the credit lifelong system to improve the credit system, improve the relevant laws and regulations in a timely manner to form a complete system, carry out more activities to promote the law and increase law enforcement, and increase the cost of violating the law.

Rural residents suggest that developing leaders can help rural residents increase their trust in the outside world. Rural social leaders are the objects that rural residents are willing to trust, and they have been disseminating and transmitting information to rural residents for a long time, so that residents can easily form a kind of dependence and unconditionally believe in their views, which in turn has an impact on the construction of the rural social trust system. Therefore, to improve the level of trust in people's distant relations in rural social organizations, attention should be paid to the training of rural leaders.

Insurance companies suggest that insurance companies should establish a good corporate image, build a reliable marketing team, and create highly credible insurance products that will lead to enrollment behavior in a way that will increase the social trust of potential policyholders. Households' mistrust of insurance products often manifests itself in concerns about whether insurance claims will meet expectations or fears of "fraudulent" insurance incidents. Therefore, insurance companies should build up a positive image of their companies and insurance products, continuously improve the quality of their marketing teams through strict supervision and systematic staff training, strengthen the legal and professional ethics of the entire process, and enhance the level of service, to give the residents a positive feeling of "trustworthy insurance", thus increasing

the probability of their enrollment in the insurance program.

Acknowledgments

This study was funded by the Innovation and Entrepreneurship Training Program for Undergraduates of Anhui University of Finance and Economics (202410378289)

References

- [1] Xiguanglian. Research on the Path of Rural Economic Development in the Context of Rural Revitalization [J]. *China Collective Economy*, 2024, (09): 13-16.
- [2] Zeng Quanhai. Analyzing the Factors Affecting Residents' Participation in Commercial Pension Insurance by the Concept of "Raising Children for Old Age" [J]. *Journal of Henan College of Pastoral Economics*, 2022, 35 (02): 50-55.
- [3] SUN Hui, ZHANG Renshou. Transmission mechanism and effect of social interaction on household commercial insurance allocation [J]. *Journal of Shenzhen University (Humanities and Social Sciences Edition)*, 2023, 40 (03): 72-82.
- [4] Weijia H, Shi T, En Y L, et al. Share pledging, social trust and cash dividend payout: evidence from China [J]. *Applied Economics Letters*, 2023, 30(21). 3006-3012.
- [5] HU Hongbing, ZHU Tao. Commercial Insurance for Common Wealth Enhancement: Mechanisms and Effects [J]. *Insurance Research*, 2023, (11):3-20.
- [6] Wolfgang D, Marwin M, Ignacio R, et al. Foreign bias in institutional portfolio allocation: The role of social trust [J]. *Journal of Economic Behavior and Organization*, 2023, 214 233-269.
- [7] Gao L, Wang L, Sun S, et al. Does Music Encourage Residents to Purchase Commercial Insurance? Evidence From China [J]. *SAGE Open*, 2023, 13(3).
- [8] Yu T, Cai J, Yu Han. How does social trust affect household stock market participation? --An empirical test based on CHFS data [J]. *Investment Research*, 2023, 42(06):38-49.
- [9] WANG Tai, ZHU Heng, ZHUO Zhi. The effect of social trust on individuals' commercial insurance purchasing decisions-an empirical study based on CGSS data [J]. *Insurance Research*, 2022, (08):3-16.
- [10] Sun T. Societal trust, risk avoidance and corporate risk taking: evidence from the global insurance industry [J]. *The Geneva Papers on Risk and Insurance-The Geneva Papers on Risk and Insurance Issues and Practice*, 2020, (prepublished): 1-34.
- [11] Guiso L, Sapienza P, Zingales L. People's opium? Religion and economic attitudes [J]. *Journal of Monetary Economics*, 2003, 50 (1): 225-282.
- [12] LIU Jinhua, WU Jing. The effects of social interaction and social trust on residents' commercial medical insurance enrollment behavior [J]. *Social Security Research*, 2019, (06):73-79.
- [13] DING Congming, WU Yujia, QIN Shuyuan, et al. Social trust and the implementation efficiency of public policies - micro evidence based on rural residents' participation in the new rural insurance [J]. *China Rural Economy*, 2019, (05):109-123.
- [14] Wu Yufeng. Social class, social capital and commercial insurance purchasing behavior of urban and rural residents in China--Based on the survey data of CGSS2015 [J]. *China Soft Science*, 2018, (06):56-66.
- [15] LI Tao, HUANG Chun-chun, HE Xing-qiang, et al. What affects the level of social trust of residents? --Empirical Evidence from Guangdong Province [J]. *Economic Research*, 2008, (01): 137-152.

- [16] Xu Yan. Relationship intensity, social interaction and farmers' willingness to purchase commercial pension insurance - based on a revised S-O-R model [J]. Finance Theory and Practice, 2016, (04): 84-89.
- [17] YIN Zhichao, PAN Beixiao, YANG Haoran. Trust and Asset Choice of Chinese Families [J]. Fujian Forum (Humanities and Social Sciences Edition), 2022, (02): 38-58.
- [18] Yang, G.C., Pan, Y.Z. Is Trust Priced? --Evidence from the bond market [J]. Financial Research, 2019, (01): 35-53.
- [19] Zhou Lin, Liang Dong. Impact of Social Interaction on Commercial Pension Insurance - A Mechanism Test Based on Multi-Scenario Interaction Perspective [J]. Journal of Henan College of Pastoral Economics, 2023, 36 (06): 17-27.