

Land Employment Security and Land Transfer under the Background of Aging Labor Force

Liang Song^{1, a}

¹Institute of Food Economics OF Nanjing University of Finance and Economics, Nanjing, 210023, China.

^a619171950@qq.com

Abstract

Under the background of aging agricultural labor force, the land employment security still plays an important role, which in turn affects the land management decision. Based on the CHARLS2015 data, this paper empirically analyzes the relationship between the employment security level of the elderly agricultural operators and the land transfer behavior. The research results show that the employment level of the elderly agricultural operators will positively affect the land transfer; as the age of the elderly agricultural operators increases, the positive impact of the employment security level on the land transfer will be reduced. From the perspective of land scale, the large-scale operation of land still needs to rely on the transfer of labor in rural areas. However, in the context of the aging of domestic agricultural operations, the state has obtained the role of a stabilizer in rural areas through agriculture, and old-age farmers have gained employment security and labor meaning.

Keywords

Aging workforce; Employment security; Land transfer.

1. Introduction

With the acceleration of industrialization and urbanization, China's agricultural development is facing new situations and tasks. It is required to speed up the construction of a new agricultural management system, cultivate new agricultural management subjects, and develop land management on a moderate scale. Because our country's land is based on household contract management, the land of the main body of new agricultural management mainly comes from land circulation. Therefore, land transfer is the premise of large-scale operation, and the research on the influencing factors of land transfer is a hot issue in the current academic circles. Scholars analyze the influencing factors of land transfer from different perspectives, such as policy change, peasant household perspective, social change and so on. Under the long-term dual social structure of urban and rural areas in China, rural land is not only the means of production of farmers, but also the function of social security. However, the impact of land social security on land transfer has not been paid enough attention in China. Therefore, this paper examines the impact of the employment security function of land on land transfer, focusing on whether the employment security function of land is still one of the important functions of land security under the background of the aging of the agricultural population, and how the employment security function of land affects the rural land transfer.

2. Theoretical Analysis

From the point of view of natural attributes, land is one of the basic sources of all social wealth, the indispensable material basis for national economic and social development, and the necessary means of production for human survival. As far as the function of land social security

is concerned, there are many references in domestic literature. Many previous studies have reached a consensus that land is not only an indispensable means of production for agricultural production, but also a social security for Chinese farmers. As a comprehensive security, land includes all-round functions such as income security, employment security, medical security, old-age security, relief security and unemployment security, among which income security and employment security are the most important ones.

With a large number of migrant workers flowing to cities, the employment forms and income channels of migrant workers are gradually diversified, and the function of land security is weakened. Due to the weakening of the function of land security, farmers began to abandon land or abandon land management. Many research conclusions also prove this point of view. Some studies take the participation rate of rural old-age insurance and non-agricultural employment income as indicators to reflect the level of income security, and examine the impact of income security level on land transfer. They all show that the higher the level of income security, the higher the rate of land transfer. Apart from the function of income security, the function of employment security of land is also the most important embodiment of the function of land security. It guarantees that farmers' labor capacity, experience and other factors of production can be effectively utilized.

Under the background of the current aging of agricultural population, the employment security function of land is prominent. When the elderly agricultural operators lack competitiveness in the non-agricultural market, they may return to farmland management. Besides income security, they can get the meaning of labor. Social production theory holds that people tend to have positive self-identity and self-esteem, hoping to maintain or promote their own well-being through production activities. In the family, the sense of self-worth of the elderly is reflected in the form of inter-generational support, while in society it is expressed in the form of human resources. When the elderly agricultural operators can realize their sense of self-worth through family inter-generational support or employment, the employment security function of agriculture is not important. But if the sense of self-worth of agricultural managers is difficult to be realized through the family's inter-generational support or employment, the farmland management makes the agricultural managers' labor ability, experience and other factors of production play a full role, and the sense of self-worth of the elderly land managers can be realized. With the increase of the age of land managers and the deterioration of labor capacity, the clue value of the level of employment security in the formation of sense of value will gradually weaken when individuals and social subjects (including groups and others) recognize and evaluate the object.

3. Empirical Method

3.1. Econometric Model

Based on the above analysis, this paper establishes the following model to test the impact of rural labor employment security level on farmland transfer behavior, and uses Probit method to estimate the model.

$$Landout_i = \beta_0 + \beta_1 E-level + \beta_2 E-level_i * Age_i + \beta_3 Age_i + \beta_4 Z_i + \varepsilon_i$$

Among them, landout_i represents the decision-making behavior of the farmland transfer of the i farmer (1 represents the land transfer; 0 represents the land transfer); E-level_i represents the employment security level of i rural labor; E-level_i*age_i represents the intersection of the employment security level and age. For the control variables, the age and gender of individual characteristic variables are included; the income security variables include land contract area, economic support for sons and daughters, new rural insurance, old-age insurance for urban and rural residents, and life insurance. Beta₀ is a constant term, beta₁--beta₄ is a set of proxy coefficients, and epsilon_i is an error term.

3.2. Data and Description of Main Variable

The data in this paper are from CHARLS. The survey is conducted by the National Development Research Institute of Peking University. The sample covers 150 counties in 28 provinces (autonomous regions and municipalities directly under the Central Government) and about 21,000 people. The questionnaire includes basic personal information, family structure and financial support, health status, physical measurement, utilization of medical services and medical insurance. Work, retirement and pension, income, consumption, assets and basic conditions of the community. The sample collected by CHARLS takes the age of 45 as the age line, which is highly representative of the main agricultural operators of the elderly in China.

Table 1. Descriptive Statistics of Variables

Variable	mean	std	max	min
Landout	.2257761	.4182892	1	0
E-level	7.912594	3.962533	12	0
Healthy	2.428571	.6803736	5	1
Age	53.74718	7.64333	79	45
Support	3972.385	18102.53	500000	0
A-insurance	.6165414	.4864571	1	0
R-insurance	.0244361	.1544713	1	0
L-insurance	.0761278	.2653272	1	0
Scale	4.681184	8.893987	150	1

4. Empirical Analysis Results

From probit regression 1 in Table 2, we can see that the level of employment security of rural labor force has a positive impact on land transfer at the 5% significant level. The higher the level of employment security of rural labor force, the more inclined to land transfer. Further analysis shows that the interaction between employment security level and age is negative and significant on land transfer at the 5% significant level. With the increase of the age of rural labor force, it is more inclined to transfer land, which indicates that with the increase of age, the utility of reflecting self-worth through agricultural operation is also reduced. Based on the consideration of age heterogeneity, this paper divides the total sample into samples older than or equal to 60 years old and samples younger than 60 years old for probit regression. As shown the Probit Regression 2 and Probit Regression 3 in Table 2, the conclusions of the two sub-samples are basically consistent with those of the total sample: employment security level can positively affect land transfer, and the interaction between age and employment security level has a negative impact on land transfer.

The regression results of other control variables are as follows. Age variables have a positive impact on land transfer at the 5% significant level. The variable of land contracted area has a positive impact on land transfer at the 5% significant level. Several control variables of income security are not significant except whether entering the new rural insurance variables can negatively affect land transfer, including children's support to parents, whether joining the old-age insurance for urban and rural residents, whether joining the life insurance or not. The effect of children's support to parents on land transfer of the elderly rural labor force is not significant. The reason may be that from the parents' point of view, children's support to parents is only an internal transfer of family income, and does not form an external source of income.

Table 2. Empirical regression results

	Probit 1 Full sample	Probit 2 <60 years old	Probit 3 >=60 years old
E-level	.8206973**	1.173341**	2.941348*
	2.46	2.19	1.93
E-level*Age	-.1966128**	-.288005**	-.7033678*
	-2.36	-2.11	-1.92
Age	1.954293**	2.829349**	8.48468 **
	2.49	2.20	2.50
Gender	.3119471***	.4342978***	-.365125
	3.29	4.05	0.150
Scale	.009996**	.0105167**	.0001973
	2.19	2.24	.0246396
Support	-2.84e-06	-2.68e-06	-.0000113
	-1.22	-1.27	-0.99
A-insurance	-.2266768**	-.2883002***	-.0545174
	-2.53	0.005	-0.26
R-insurance	.4086393	.3213389	1.099109
	1.59	1.16	1.57
L-insurance	-.2202769	-.2224562	-.0449877
	-1.27	-1.23	-0.08
R2	0.0390	0.0561	0.0499

5. Conclusions and Suggestions

Based on the perspective of land employment security function, this paper theoretically analyzed the mechanism of land to play the employment security function of the elderly labor force under the background of the aging of agricultural labor force, and made an empirical analysis using CHARLS2015 data.(1) When the employment level of middle-aged and old agricultural operators is low, they will maintain the employment level through farmland management, thus restraining the land transfer behavior.(2) With the increase of the age of middle-aged and old agricultural operators, the positive effect of employment security level on land transfer will be reduced. If we only consider the function of land income security, we will overestimate the positive effect of income security measures on land transfer. Under the background of the current aging of agricultural labor force, employment security function is still the most important land security function. The elderly realize employment security function through land management.

The conclusions have the following implications. From the perspective of land scale requirements, the large-scale operation of land also needs to rely on the transfer of rural labor force. Promoting the large-scale management of land is not only in rural areas and agriculture, but also in urban and non-agricultural areas. Only by improving farmers' non-agricultural employment level and promoting the improvement of farmers' employment level, can we improve the large-scale management level of land more effectively. Therefore, the realization of large-scale land management depends more on the rural labor transfer. If the rural labor transfer cannot be realized, farmers will not get non-agricultural employment channels, which will solidify on their own contracted land, and the large-scale land management will be inhibited.

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