

A Study on the Role of Rural Revitalization in Preventing Rural Poor Households from Returning to Poverty Based on the Sustainable Livelihood Theory

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Abstract:

It is the key to poverty alleviation under the rural revitalization strategy to implement the accurate poverty alleviation effect and prevent and control the return to poverty. In this paper, based on the sustainable livelihood theory, the micro-survey data of 20 poor villages in Anhui Province were taken as the research object to empirically analyze the influence of individual capital, family capital, natural capital and social capital on the risk of returning to poverty in rural areas. The empirical results show that social capital and natural capital have the greatest impact on the risk of rural poor households returning to poverty among the four types of capital in the sustainable livelihood theory, followed by individual capital, and family capital has the least impact. The size of family population has a negative impact on the risk of rural poor households returning to poverty, the number of children in the family has not passed the significance test, and the other indicators have passed the significance test and have a positive impact, which effectively explains the influencing factors of the risk of rural poor households returning to poverty. Further analysis shows that the long-term employment of householders and their geographical location around towns have the greatest impact on the risk of poor rural households returning to poverty.

Keywords: Rural revitalization, Sustainable livelihood theory, Returning to poverty, Targeted poverty alleviation.

I. INTRODUCTION

Poverty has always been a historical problem in all countries in the world, and has received great attention from local governments. Therefore, poverty eradication has become one of the

important goals of sustainable development under the rural revitalization strategy. Xu Aigui pointed out that the prevention of returning to poverty should be given an important position in the fight against poverty[1]. What are the characteristics of the rural poor households that have a significant impact on the prevention of returning to poverty and what are the basic characteristics of poverty reduction? At present, with the successful ending of targeted poverty alleviation, the road of rural revitalization has started. Only by deeply understanding and analyzing the risk factors of farmers returning to poverty can we formulate more specific policies for their rural revitalization. Therefore, it is of great significance to study the risk of returning to poverty of rural poor households from the sustainable livelihood theory for opening up the "last mile" of rural revitalization and eliminating rural poor households completely.

The domestic and foreign scholars have conducted researches on the risk of returning to poverty mainly from the characteristics, causes and coping strategies of returning to poverty, but less on the measurement of returning to poverty. Zhang Chunxun believed that the path dependence and fundamental defects of the anti-poverty system are the main reasons for returning to poverty, and the government should increase the establishment of anti-poverty mechanism[2]. Luo Lili held that the main reason for returning to poverty is the lack of sustainable development mechanism[3]. Zheng Ruiqiang et al. believed that the poverty return of the impoverished population is mainly characterized by poverty return due to lack of capacity, poverty return due to policy, disaster and development[4]. Yang Yuanyuan et al. thought that because the poverty-stricken groups still have weak risk-taking ability and self-development ability, they have a high probability of returning to poverty due to illness or disaster, and the government lacks precise management and dynamic tracking of the poverty-stricken groups[5]. Fan Hesheng argued that the frequent occurrence of the phenomenon of returning to poverty is mainly due to the vulnerability of poverty itself, and the return to poverty of the poverty-stricken groups is caused by their inability to withstand any form of impact, the lack of poverty alleviation policies, or even any minor changes in characteristics[6]. In other words, an important reason for the phenomenon of returning to poverty is that the poor and individuals near the poverty level are "vulnerable"[7]. So how to effectively avoid returning to poverty has not been well answered.

In this paper, from the perspective of sustainable livelihood capital theory, 20 poor villages and 1,506 rural poor households in Anhui Province were taken as the research objects to empirically analyze the impact of individual capital, family capital, natural capital and social capital on the risk of returning to poverty. The innovation of this paper lies in: first, it broadens the poverty theory. In the past literature, the research focused on the characteristics of poverty among rural households and the effect of influencing factors on poverty alleviation. In this paper, the impact of the risk of rural poor households returning to poverty is studied from the perspective of returning to poverty. Second, an indicator system for returning to poverty is established. The indicator system of

returning to poverty, including individual capital, family capital, natural capital and social capital, has been established, which effectively explains the influencing factors of returning to poverty.

II. RESEARCH DESIGN

2.1 Data Sources

The data of the questionnaire in this paper come from the field investigation of 20 poverty-stricken villages in Anhui Province by the research team. Due to the difficulty in collecting information about the rural poor households and the fact that some of them did not understand the per capita income of the families, a total of 1,600 rural poor households were investigated with the assistance of the local poverty alleviation department and the poverty alleviation office. By excluding the households with incomplete and non-standardized answers, 1,506 valid data were obtained, with the effective rate reaching 94.13%, which met the needs of the questionnaire survey samples.

2.2 Variable Selection and Measurement

According to the theory of sustainable livelihood, the return to poverty of the people who have been lifted out of poverty is mainly due to their fragile survival ability under the impact of risks, including heterogeneous risks and synergistic risks. Synergistic risks have regional characteristics and have the same impact on the rural poor households in the same area, but the means to deal with them may be different, which is related to the feasible ability of the rural poor households and the precise poverty alleviation policy of the government. The heterogeneous risks of rural poor households differ greatly mainly because of the correlation between life cycle theory and health risks, which are the contents of human capital in sustainable livelihood capital theory. In this paper, the possible influencing factors of returning to poverty of rural poor households are studied from the perspectives of human capital, natural capital, financial capital and social capital of sustainable livelihood theory. It should be noted that human capital is subdivided into individual capital and family capital due to the large number of variable indicators, while financial capital includes operational income, wage income and transfer income, etc., which are combined into family per capita income as the explanatory variable in this paper. Therefore, this paper discusses the impact of individual capital, family capital, natural capital, social capital and other four types of capital of sustainable livelihood theory on the risk of rural poor households returning to poverty.

1. Explained variables: The explained variables of this paper are household income per capita and effect of targeted poverty alleviation. Household income per capita, including wage income, operational income, asset income, etc., is a continuous value, which is expressed by the natural

logarithm of family per capita income in this paper. The effect of targeted poverty alleviation refers to whether the rural poor households have completely lifted out of poverty through the government's targeted poverty alleviation policy, with 0 indicating not obvious effect of targeted poverty alleviation, and 1 indicating obvious effect of targeted poverty alleviation.

2. Explanatory variables: The explanatory variables of this paper include individual capital, family capital, natural capital and social capital of sustainable livelihood theory. Based on the sample data obtained, five indicators were selected in the individual capital dimension, namely, gender of the householder, age of the householder, education level of the householder, marital status of the householder and householder as a migrant worker. Four indicators were selected in the family capital dimension, namely, family population size, family labor ability, number of children in the family and health status of family members. Two indicators were selected in the natural capital dimension, namely, cultivated land area and geographical location. Four indicators were selected in the social capital dimension, namely, whether to join a rural cooperative, buy a new type of rural social endowment insurance, borrow loans and participate in poverty alleviation projects. The specific variable indicators are shown in Table I.

Table I. Indicators of related variables

Types of variables	Dimensions	Indicators	Descriptions of indicators
Explained variables	Poverty-returning indicators	Household income per capita	A continuous numerical value, taking logarithm
		Effect of targeted poverty alleviation	0 indicates not obvious effect of targeted poverty alleviation, and 1 indicates obvious effect
Explanatory variables	Individual capital	Gender of householder	1 for female, 2 for male
		Age of householder	A continuous numerical value
		Education level of householder	1 for illiteracy, 2 for primary school level, 3 for junior high school level, for 4 for senior high school and above level
		Marital status of householder	1 for others, 2 for married
		Householder as a migrant worker	1 for none, 2 for short-term migrant worker, 3 for long-term migrant worker
	Family capital	Family size	A continuous numerical value

	Family labor ability	A continuous numerical value
	Number of children in the family	A continuous numerical value
	Health status of family members	1 for disability, 2 for illness, 3 for normality
	Cultivated land area	A continuous numerical value
Natural capital	Geographical location	1 for remote mountainous area, 2 for hills, 3 for plain, and 4 for surroundings of cities and towns
	Whether to join a rural cooperative	0 for no, 1 for yes
Social capital	Whether to buy a new type of rural social endowment insurance	0 for no, 1 for yes
	Whether to borrow loans	0 for no, 1 for yes
	Whether to participate in poverty alleviation projects	0 for no, 1 for yes

2.3 Modeling

In order to study the influencing factors of the risk of poor rural households returning to poverty, the following regression equation is established in this paper:

$$\text{Income/Policy} = \alpha_0 + \alpha_1 \text{GT} + \alpha_2 \text{JT} + \alpha_3 \text{ZR} + \alpha_4 \text{SH} + \beta \quad (1)$$

Where,

Income = the explained variable, household income per capita, which is a continuous variable, suitable to be estimated by OLS regression method of continuous dependent variable;

Policy = the explained variable, the effect of targeted poverty alleviation, which is a discrete

distribution value, suitable to be estimated by Logit regression method of discrete dependent variable.

Explanatory variables GT, JT, ZR and SH represent individual capital, family capital, natural capital and social capital respectively.

α_0 = a constant term;

α_1 to α_4 are coefficients to be estimated, and β is the stochastic error term.

III. EMPIRICAL ANALYSIS

3.1 Descriptive Statistics

According to the descriptive statistics in Table II, the average value of the targeted poverty alleviation effect is 0.845, indicating that 84.5% of the rural poor households are satisfied with the effect of targeted poverty alleviation; the average household income is 8,401 yuan, which exceeds the poverty alleviation standard of 4,000 yuan for the rural poor households; the householders are mostly male, with the average age of about 57 years old; the householders are mostly illiterate and with primary school education level, and most of them do not go out as migrant worker or go out as migrant worker for a short time; the average size of the family population is 2.855, the average labor force per family is 1.463, and the average family has 1.025 children; most of the family members are suffering from illness; the family is geographically far away from the town; the average arable land is 2.061 mu. 98.8% of the families are enrolled in rural cooperatives, 67.8% of the families have bought pension insurances, 77.6% of the families are involved in free interest-free government loans, and 76.7% of the families are involved in targeted poverty alleviation projects. By calculating the correlation coefficient between the variables, it is found that the correlation coefficient between each variable is less than 0.5. At the same time, the variance expansion factor of each regression equation is also calculated, with the maximum value of 2.59 and the average value of 1.57, indicating that there is no multicollinearity problem.

Table II. Result of descriptive statistics

Variables	Sample size	Mean	SD	Min.	Max.	VIF
Effect of targeted poverty alleviation	1506	0.845	0.362	0	1	
Household income per capita	1506	8.918	0.466	7.31	11.51	
Gender of householder	1506	1.167	0.373	1	2	1.32

Age of householder	1506	57.003	12.550	12	96	1.37
Education level of householder	1506	1.940	0.794	1	4	1.35
Householder as a migrant worker	1506	1.968	0.886	1	3	1.27
Marital status of householder	1506	1.434	0.496	1	2	1.69
Family size	1506	2.855	1.378	1	9	2.59
Family labor ability	1506	1.463	1.055	0	5	2.16
Number of children in the family	1506	1.025	0.845	0	4	1.76
Health status of family members	1506	2.207	0.777	1	3	1.10
Geographical location	1506	2.279	1.140	1	4	1.08
Cultivated land area	1506	2.061	1.816	0	12	1.08
Whether to join rural cooperatives	1506	0.988	0.109	0	1	2.39
Whether to buy endowment insurance	1506	0.678	0.467	0	1	2.01
Whether to borrow loans	1506	0.776	0.417	0	1	1.38
Whether to join poverty alleviation projects	1506	0.767	0.423	0	1	1.06

3.2 Empirical Analysis

3.2.1 The influence of four types of capital of sustainable livelihood theory on poverty alleviation risk of rural poor households

To study the influence of individual capital, family capital, natural capital and social capital on the risk of returning to poverty, in this paper, the indicators of the four capitals are made dimensionless, and then each of them is given the same weight value and summed to get the measured value of each capital. Table III shows that individual capital, family capital, natural capital and social capital have a significant positive relationship with the risk of returning to poverty of rural poor households, indicating that the higher the individual capital and family capital of rural poor households, the more natural capital and social capital they have, which can effectively avoid returning to poverty. Specifically, according to the model 1 of household income per capita, social capital has the greatest impact on the risk of returning to poverty, reaching 51%, indicating that the government has played a decisive role in helping rural poor households get rid of poverty, especially the targeted poverty alleviation policy, free interest-free loans, joining rural cooperatives, etc., as well as the endowment insurance and serious illness relief, followed by individual capital, natural capital and social capital. According to model 2 of effect of targeted poverty alleviation, natural capital has the greatest influence on the risk of returning to poverty, followed by individual capital, social capital and family capital. However, from the perspective of adjusting the explanatory degree of R^2 , 52.85% of the model 1 of household per capita income is higher than 32.28% of the model 2 of effect of targeted poverty alleviation, so on the whole, social

capital and natural capital have the greatest influence on the risk of returning to poverty of rural poor households, followed by individual capital, and the family capital has the least influence.

Table III. Regression analysis of the impact of four types of capital of sustainable livelihood theory on poverty alleviation risk of rural poor households

	Model 1-Income		Model 2-Policy	
	Coefficient	t value	Coefficient	t value
Individual capital	0.083***	4.07	1.781***	7.15
Family capital	0.026*	2.29	0.729***	5.83
Natural capital	0.037**	3.27	2.146***	10.17
Social capital	0.510***	38.24	1.171***	8.23
Constant term	8.918	1080.45	2.664	19.82
Prob>F	0.000		0.000	
Pseudo R ²	0.5285		0.3228	

Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, the same as in the following tables.

3.2.2 The influence of different indicators of individual capital on the risk of rural poor households returning to poverty

To compare the difference of the influence of different indicators of individual capital on the risk of poor rural households returning to poverty, regression model 3-4 is constructed to carry out regression analysis on the sample data, and the specific results are shown in Table IV below. Obviously, different indicators of individual capital are positive for the risk of returning to poverty of rural poor households, indicating that the higher the individual indicators, the more effective it can be to avoid returning to poverty. No matter what the explanatory variable is, the education level of the householder has the greatest impact on the risk of returning to poverty of the rural poor households, indicating that education can largely avoid returning to poverty, so the government should increase the investment in education of the rural poor households; followed by the gender of the householder, because the male householder has more labor ability and can create more value, which can avoid returning to poverty to a certain extent; the third is the household going out as a migrant worker, which can create more income from wage and salary in addition to the family income, in order to increase the per capita income of the household and avoid returning to poverty, and the fourth is the marital status, unmarried or widowed are more likely to return to poverty, because married families have more family working ability, can create more income, thus avoiding returning to poverty. To a certain extent, the age of the householder can also affect the risk of returning to poverty that the older the householder, the richer his social experience and more opportunities to create more value. In summary, the influencing factors of rural poor households'

return to poverty risk in individual capital are ranked as follows: education level, gender, migrant worker or not, marital status and age of the the householder.

Table IV. Regression analysis of the influence of different indicators of individual capital on the risk of returning to poverty of rural poor households

	Model 3- Income		Model 4- Policy	
	Coefficient	t value	Coefficient	t value
Gender of householder	0.076 [*]	2.23	0.726 ^{**}	3.01
Age of householder	0.002 [*]	1.91	0.047 ^{***}	6.93
Education level of householder	0.117 ^{***}	7.12	1.483 ^{***}	11.3
Household going out as a migrant worker	0.066 ^{***}	4.64	0.537 ^{***}	5.34
Marital status of householder	0.065 [*]	2.49	0.229 [*]	1.35
Constant term	8.267	84.67	-5.659	-8.59
Prob>F	0.000		0.000	
Pseudo R ²	0.0587		0.1771	

3.2.3 The influence of different indicators of household capital on the risk of rural poor households returning to poverty

To compare the difference of the influence of different indicators of household capital on the risk of poor rural households returning to poverty, regression model 5-6 is constructed to carry out regression analysis on the sample data, and the specific results are shown in Table V below. The impact of family labor ability and family health status of family capital on the risk of poor rural households returning to poverty is positive. The more the family labor ability is, the greater the probability of avoiding returning to poverty, regardless of the per capita income of the family or the precise poverty alleviation effect. Because the more the family labor force is, the more income can be generated and the family income level can be improved. A better health of the family members also avoids a return to poverty, not only because it saves money on medical treatment, but also because it allows them to work and create more value. Family size is negatively correlated with the risk of poor rural households returning to poverty, indicating that the more family members, the easier it is to fall back into poverty, because under the condition of fixed family working ability, the rest of family members are either older people or relatives with physical diseases, and most of them have no working ability, which will lead to the increase of family expenditure and return to poverty. The number of children is negatively but not significantly related to the risk of poor rural households returning to poverty, probably because no distinction is made between adult children

and minor children that most adult children can increase their income, but minor children will increase their expenditure. In summary, the family labor ability and family health of family capital have a positive impact on the risk of rural poor households returning to poverty, while the family size has a negative impact and the number of children has no significant influence.

Table V. Regression analysis of the influence of different indicators of household capital on the risk of poor rural households returning to poverty

	Model 5-Income		Model 6-Policy	
	Coefficient	t value	Coefficient	t value
Family size	-0.072***	-5.81	-0.219***	-2.87
Family labor capacity	0.145***	9.66	0.646***	6.32
Number of children	-0.013	-0.75	-0.018	-0.17
Health status of family members	0.048***	3.18	0.481***	5.05
Constant term	8.817	216.04	0.488	2.08
Prob>F	0.000		0.000	
Pseudo R ²	0.0684		0.065	

3.2.4 The influence of different indicators of natural capital on the risk of rural poor households returning to poverty

To compare the difference of the impact of different indicators of natural capital on the risk of poor rural households returning to poverty, a regression model 7-8 is constructed to carry out regression analysis on the sample data, and the specific results are shown in Table VI below. Different indicators of natural capital have a positive impact on the risk of poor rural households returning to poverty, indicating that higher natural indicators can effectively avoid returning to poverty. When the explained variable is household per capita income, the geographical location has the greatest influence on the risk of poor rural households returning to poverty, because the closer they are to cities and towns, the more opportunities they have to increase their income, for example, by selling household agricultural products and going out to work nearby, followed by the cultivated land area, because the more cultivated land area, the more crops can be planted, the more food can be produced and the more income can be obtained. When the explained variable is the effect of targeted poverty alleviation, the cultivated land area has the greatest impact on the risk of rural poor households returning to poverty, followed by geographical location. However, from the point of view of the explanation degree of adjusted R², the explanation degree of targeted poverty alleviation effect model 8 is 24.8% higher than that of family per capita income model 7, which is 5.16%. Therefore, on the whole, the cultivated land area has a greater impact on the risk of poor

rural households returning to poverty, followed by the geographical location.

Table VI. Regression analysis of the influence of different indicators of natural capital on the risk of poor rural households returning to poverty

	7-Income Model 7-Income		8-Policy Model 8- Policy	
	Coefficient	t value	Coefficient	t value
Geographical location	0.054***	5.260	0.677***	8.06
Cultivated land area	0.044***	6.730	1.127***	10.53
Constant term	8.704	310.200	-1.100	-5.76
Prob>F	0.000		0.000	
Pseudo R ²	0.0516		0.248	

3.2.5 The influence of different indicators of social capital on the risk of rural poor households returning to poverty

To compare the difference of the influence of different indicators of social capital on the risk of poor rural households returning to poverty, a regression model 9-10 is constructed to carry out regression analysis on the sample data, and the specific results are shown in Table VII below. Different indicators of social capital have a positive impact on the risk of poor rural households returning to poverty, indicating that the higher the indicators of social capital can effectively avoid returning to poverty. When the explained variable is per capita household income, the purchase of old-age insurance has the greatest impact on the risk of returning to poverty, indicating that the purchase of old-age insurance is equivalent to an additional important guarantee, followed by joining the rural cooperatives, because buying shares in the rural cooperatives can generate additional income, thus increasing the overall household income and avoiding returning to poverty to a certain extent, next is loans, because the free interest-free loans provided by the government not only enable farmers to work for a short time, but also generate income, thus effectively preventing the return to poverty, and finally is participation in poverty alleviation projects, because it can effectively prevent the return to poverty through poverty alleviation methods such as industrial poverty alleviation, financial poverty alleviation and education poverty alleviation. When the explained variable is the effect of targeted poverty alleviation, the order of influencing factors of returning to poverty risk of rural poor households is participation in poverty alleviation projects, endowment insurance, loans and rural cooperatives.

Table VII. Regression analysis of the influence of different indicators of social capital on the

risk of poor rural households returning to poverty

	Model 9-Income		Model 10- Policy	
	Coefficient	t value	Coefficient	t value
Whether to participate in poverty alleviation projects	0.151 [*]	2.100	2.432 ^{***}	4.26
Whether to join rural cooperatives	0.349 ^{***}	13.960	0.522 ^{***}	2.66
Whether to buy endowment insurances	0.374 ^{***}	14.580	1.120 ^{***}	5.75
Whether to borrow loans	0.353 ^{***}	16.670	0.789 ^{***}	4.58
Constant term	7.971	108.480	-2.304	-3.9
Prob>F	0.000		0.000	
Pseudo R ²	0.5877		0.1179	

3.3 Stability Test

In order to ensure the stability and effectiveness of the empirical results, the stability test was carried out in this paper. First, the explained variables were replaced. As shown in the above table, the explained variables with different household per capita income and effect of targeted poverty alleviation were regressed respectively. As shown by the results, the significance level and coefficient direction remained basically unchanged. Second, the sample interval was narrowed. In this paper, the stability was tested by reducing the sample interval, from the original 1,506 samples to 1,300 samples. The significance level and coefficient direction of regression analysis were basically unchanged. Third, the social capital indicator was deleted. By deleting the four indicators of social capital, a regression equation of 11 indicators of individual capital, family capital and natural capital was established, with the household per capita income and targeted poverty alleviation effect as the explained variables, and its significance level and coefficient direction basically unchanged.

3.4 Further Analysis

In the above, the single indicator of individual capital, family capital, natural capital and social capital of the explained variables was analyzed. In order to further test their effectiveness, the single indicator was classified and tested to see whether it was significant or not. The specific results are shown in Table VIII below. As there are more than three classified explanations for both the householder as a migrant work and the geographical location, Models 11-12 are used to classify and explain the householder as a migrant work. Compared with the householder's not going out as a migrant worker, the coefficient of the householder's short-term migrant work is positive and

negative, and is not significant, probably because the income generated by the short-term migrant work is less than that generated by the family's asset income, so the long-term migrant work of the householder has a significant impact on the risk of returning to poverty for the rural poor households. Models 13-14 are used to classify and explain the geographical location. When the explained variable is per capita income of households, the geographical location is hills and plains has no significant impact on the risk of returning to poverty, but the geographical location of cities and towns has a positive significant impact on the risk of returning to poverty. When the explained variable is the effect of targeted poverty alleviation, compared with the geographical location in remote areas, the geographical locations of hills, plains, and cities and towns have a positive significant impact on the risk of returning to poverty, and the coefficient is gradually increasing, in which the geographical location of cities and towns has the largest impact.

Table VIII. Regression analysis of the influence of householder' going out as a migrant worker and geographical location on the risk of poor rural households returning to poverty

	Model 11-Income		Model 11-Income		Model 11-Income		Model 11-Income	
	Coefficien	t	Coefficien	t	Coefficien	t	Coefficien	t
	t	value	t	value	t	value	t	value
Householder ' going out as a migrant worker - short-term	-0.016	-0.79	0.011	0.04				
Householder ' going out as a migrant worker - long-term	0.063**	3.38	0.697**	2.75				
Geographica l location-hill s					0.011	0.55	0.644**	2.7
Geographica l location- plain					0.011	0.5	0.646*	2.19
Geographica l location- cities and towns					0.117***	5.55	2.589***	6.08
Prob>F	0.000		0.000		0.000		0.000	
Pseudo R ²	0.6269		0.4439		0.6277		0.4492	

IV. RESEARCH CONCLUSIONS

In this paper, based on the theory of sustainable livelihood capital, 20 poor villages and 1,506 rural poor households in Anhui Province were taken as research objects to empirically analyze the influence of individual capital, family capital, natural capital and social capital on the risk of returning to poverty. The main conclusions are as follows: 1) The influence of four types of capital of sustainable livelihood theory on the risk of rural poor households returning to poverty. Individual capital, family capital, natural capital and social capital have a significant positive relationship with the risk of rural poor households returning to poverty. Among them, social capital and natural capital have a greater impact on the risk of rural poor households returning to poverty, followed by individual capital and family capital. 2) The influence of each capital indicator on the risk of poor rural households returning to poverty. In the individual capital, all indicators have positive influence on the risk of returning to poverty of rural poor households, among which the education level of the householder has the greatest influence. In the family capital, the family labor ability and family health status have a positive impact on the risk of poor rural households returning to poverty, while the family size has a negative impact, and the number of children in the family has no significant impact. In natural capital, all indicators have positive effects on the risk of returning to poverty of rural poor households, among which the cultivated land area has the greatest influence, followed by the geographical location. In the social capital, all indicators have a positive impact on the risk of rural poor households returning to poverty, in the order of participating in poverty alleviation projects, purchase of endowment insurance, borrowing loans and joining rural cooperatives in turn. 3) Further analysis shows that, compared with householders not going out to as migrant workers, short-term employment has no significant influence on them, and long-term employment can effectively avoid returning to poverty. Compared with the remote areas, hills, plains and towns all have positive significant impact on the risk of returning to poverty, and the coefficient is gradually increasing, among which the geographical location of cities and towns has the greatest influence on it.

However, there are still some inadequacies in this study, mainly including: First, individual capital, family capital and social capital each have more than four indicators, but there are only two indicators of natural capital due to the limited data collection capacity, which reduces the interpretation of natural indicator, and more natural indicators should be extracted through literature and sample data in the later stage; Secondly, in this paper, only 1,506 rural poor households in 20 poor villages in Anhui Province are analyzed due to the limited ability to collect data, making it not possible to make a comparative analysis between other provinces and Anhui Province. Later, it will focus on collecting poverty data from other provinces.

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