Does the Rural Labor Transfer Employment Promote the Sustainable Growth of Household Tourism Consumption in the Context of Internet?
--A Data Analysis Using Econometric Way on Instrumental Variable

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Abstract

With the rapid development of the Internet, the trend of taking the household as the basic tourism consumption unit is becoming more and more obvious. However, there are few studies focus on household tourism consumption potential from the perspective of rural labor transfer employment. Based on the data from the 2018 Chinese Family Panel Studies, the paper conducts an empirical analysis. The household group database has direct specific information about tourism consumption expenditure and household income and other expenditures. Therefore, this paper combines the data of "household group" and "adult group", using Stata 16 software to deal with logarithmic variables related to family income and expenditure. Household income variables are treated with up and down 2% to reduce the influence of outliers on the estimation results. Finally, 5342 samples of effective rural households were obtained. After overcoming the endogenous problem, it is found that the rural labor transfer employment has a restraining effect on the level of household tourism consumption expenditure. The larger the scale of labor transfer employment, the higher the family tourism consumption low. The reason is that households who have transfer employment usually face greater uncertainty, and precautionary savings are made in order to better protect the lives of the laborers themselves and their families.

keywords-rural labor transfer; household tourism consumption; precautionary savings

1. INTRODUCTION

The coordinated consumption, investment, and export drive the sustained, healthy and stable growth of Chinese economy. In recent years, with the transformation and upgrading of Chinese economic structure, consumption has played an increasingly important role in promoting China's sustained economic growth. The contribution rate of final consumption to China's national economic growth reached 57.8% by the end of 2019, which has been the number one "main engine" for China's economic growth for six consecutive years. Among the many types of consumption, tourism consumption has increasingly become one of the fastest-growing consumption points, and it is the rigid demand for a happy life of the people[1].

After China's reform and opening up, due to the acceleration of industrialization[2], the scale of rural labor transfer employment has expanded significantly. Studies have shown that income is an important factor affecting tourism consumption[3, 4]. The rural labor transfer employment can not only directly increase the income level of rural households and improve the welfare of rural residents[5], which lays the economic foundation for rural family tourism consumption. In order to study whether the transfer of rural labor can stimulate the tourism consumption potential of rural residents, this article uses the 2018 China Family Panel Studies (CFPS2018) data to conduct an empirical test.

2. LITERATURE REVIEW

China is the largest developing country in the world, which coexists agriculture based on traditional

production methods and modernized sectors based on manufacturing, thus forming a dual economic structure in Chinese urban and rural areas. On the one hand, the rural labor transfer employment will promote residents' consumption. The rural labor transfer employment contains industrial transfer and geographic transfer. The former indicates a transfer from agricultural to non-agricultural employment, and the later means a transfer employment from rural to urban[6]. The rural labor transfer employment has not only increased the consumption power of rural migrant labor by enhancing rural household income, but also its household consumption power[7]. In addition, it will have varying degrees of impact on the consumption habits of their families and surrounding people[8]. On the other hand, rural labor transfer has a restraining effect on household consumption. Lewis assumed that in developing countries with dual economies, as the process of industrialization accelerates, the demand for labor factors will increase, attracting a large number of cheap rural labor to flow into cities[9]. Although part of the labor force can overcome these factors to enter the urban labor market and obtain considerable income, they will also have to make precautionary savings because they cannot enjoy comprehensive social medical security, resulting in low effective consumption capacity[10].

Among the consumption field, the development of tourism consumption can not only provide a large number of employment opportunities[4] and increase residents' income, but also promote sustainable economic growth[11]. As mentioned before, the rural labor transfer can improve the level of household income, and increase the household marginal propensity for tourism consumption[12]. However, because the household consumption structure of transfer workers is dominated by subsistence consumption, and their income stability is weak[13]. Insufficient disposable income makes the economic conditions of rural households still the biggest obstacle to tourism consumption[14].

3. DATA AND METHOD

3.1. Model Setting

In order to investigate the impact of rural labor transfer employment on household tourism consumption expenditure, this paper establishes the following econometric model:

$$lntour\_exp_i = \alpha + \beta * LTE_i + \omega X_i + \mu_i \qquad (1)$$

where $lntour\_exp_i$ represents the tourism consumption expenditure of the ith household, LTE_i is the core explanatory variable of this article, the value of participation in labor is 1, otherwise it is 0; X_i represents the control variables, μ_i is the residual term.

3.2. Data and Variables

The data in this article comes from the 2018 China Family Panel Studies(CFPS2018), the data survey was implemented by the Chinese Social Science Survey Center of Peking University, covering 25 provinces, municipalities and autonomous regions in China, and selected representative communities, households, and individuals to follow up surveys at three levels to form a family relationship questionnaire. The questionnaire, surveyed every two years, aims to reflect social changes in China. The household group database has direct specific information about tourism consumption expenditure and household income and other expenditures. Therefore, this paper combines the data of "household group" and "adult group", and deals with logarithmic variables related to family income and expenditure. Household income variables are treated with up and down 2% to reduce the influence of outliers on the estimation results. Some variables come from the head of household, and refer to existing research, we define the head of the household who is the household financial manager. Finally, 5342 samples of effective rural households were obtained. Table 1 shows a detailed description of the variables. Compared with rural households that had not transferred, rural households had an additional tourism consumption expenditure of 0.187 yuan. In rural areas, rural households who transferred employment accounted for 49.96% of the total sample, and non-transferred employment accounted for 50.04%, the distribution was relatively even. In terms of education expenditure, approximately 1.773 yuan more than others, which was probably because children account for a larger proportion.

TABLE 1. DESCRIPTIONS OF VARIABLES

Variable	Transfer		Non-transfer	
	Mean	S.D. .	Mean	S.D.
Tourism exp	1.226	2.669	1.039	2.575
Edu exp	4.661	4.210	2.888	4.014
Medical exp	7.107	2.512	6.850	2.810
Wage inc	10.337	1.225	4.393	5.026
Net inc	10.785	0.748	10.011	1.438

4. RESULTS AND DISCUSSIONS

4.1. Benchmark Regression

Table 2 reports the benchmark regression results of the impact of rural labor transfer employment on household tourism consumption. In column (1), the regression coefficient of transferred employment is significantly negative at the 10% statistical level, with a coefficient of -0.1662, and the wage income coefficient is significantly positive at the 1% statistical level. This

shows that transfer employment has a negative impact on rural household tourism consumption, and the increase in wage income brought about by transfer employment can promote household tourism consumption to a certain extent.

Columns (2) report the regression results of the instrumental variable and the results of the DWH test. The DWH test results reject the null hypothesis that the transfer employment is not endogenous at the 10% level. The two-stage estimation results present that the F-values of the first stage are 702.294, which are far above the threshold value of 16.38[15]. The OLS method underestimates the impact of transfer employment on household tourism consumption. Additionally, the wage income coefficient is still significantly positive at the 1% level, which is consistent with the estimation result of OLS method.

TABLE 2. ESTIMATION RESULTS OF BENCHMARK MODELS

	Model 1	Model 2
Transfer	-0.1662*	-0.6501**
	(0.0961)	(0.3107)
Control	YES	YES
R^2	0.194	0.189
F-value		702.294
DWH test Chi^2		2.7814
(P-value)		(0.0954)
N	5342	5342

4.2. Robustness Check

In order to ensure the reliability of the above conclusions, the robustness test will be carried out in the form of replacing some variables and replacing model settings.

Firstly, replace wage income with net household income. Household income generally includes permanent income and temporary income, while household consumption and permanent income are highly correlated[16]. Then whether household income has an equally critical impact on tourism consumption requires empirical analysis. Model 3 uses the OLS method for estimation, and the estimation results are consistent with Model 1. Model 4 uses instrumental variable regression, and the estimation results further confirm that labor transfer employment has a significant negative impact on household tourism consumption, and the regression coefficient of household net income is positive, indicating that the estimation results in this paper are robust.

TABLE 3. ROBUSTNESS CHECK

	Model 3	Model 4	Model 5
Transfer	-0.1184	-0.5019**	-1.3277***
	(0.0766)	(0.2266)	(0.4999)
Wage inc			0.3983***
			(0.0639)
Net inc	0.2572***	0.3074***	
	(0.0436)	(0.0544)	
Control	YES	YES	YES
(P) R^2	0.182	0.175	0.0637
F-value		826.409	
DWH test Chi^2		3.3987	
(P-value)		(0.0652)	
N	5342	5342	5342

Secondly, Tobit regression. As a high-level spiritual enjoyment, tourism is still a kind of luxury consumption in most households. Therefore, quite a few households have no tourism consumption. A large proportion of households do not have travel consumption expenditure, which is a challenge to empirical analysis. In our sample, 83.8% of households do not have tourism expenditure. The essence of this question does not lie in non-zero expenditures, but whether there are differences between households with expenditures and households without expenditures[17]. In other words, due to some unobservable factors, such as the family's previous travel experience, consumption concepts, households with non-zero expenditures may have a more positive attitude towards tourism consumption. To overcome the zero cut-off phenomenon caused by non-tourism consumption, the Tobit model is selected to test the robustness. The regression result of model 5 is consistent with the benchmark regression results, which means the paper's results are robust.

4.3. Further Analysis

The above results indicate that the rural labor transfer has a restraining effect on household tourism consumption, however, what causes this phenomenon has not yet been clarified. Uncertainty will greatly change consumer behavior[18], the saving and consumption behavior of rural residents is highly correlated with subjectively perceived uncertainty risk[19]. Compared with cities, the education and employment system in rural areas is not perfect, and social security systems such as pension and medical services are not sound enough, which makes rural families face a higher risk of uncertainty. In addition, the temporary migration of labor is a process full of risks and uncertainties. The labor transfer makes the families face greater uncertainty. Families actively make precautionary savings in response to uncertain events such as unemployment, medical care, and education. The income growth brought about by labor transfer is more converted into family precautionary savings instead of consumption. This paper believes that the impact of rural labor transfer on household consumption behavior should take into account the household's motivation for precautionary

savings in response to uncertainty. Since lower human capital accumulation will aggravate the risk of unemployment. The higher the average years of education of the labor force, the higher the job stability and the lower the unemployment risk faced by the family. The greater the number of elderly people, the more precautionary savings the family will make to cope with the medical expenses that the elderly may incur. The elderly members may be an important source of family risks. The more children in the family, the greater the uncertainty of education expenditure. This shows that an important reason why the income growth brought about by labor transfer fails to promote household tourism consumption is that families actively make precautionary savings in response to uncertainty.

TABLE 4. FUTHER ANALYSIS

	Model 6	Model 7	Model 8
Tran	-0.3907***	-0.2262**	-0.2497**
	(0.1410)	(0.0967)	(0.1060)
Tran*unem	0.0334*		
	(0.0198)		
Tran*medi		-0.8551***	
		(0.3246)	
Tran*edu			-0.0460*
			(0.0242)
Control	YES	YES	YES
N	5342	5342	5342

5. CONCLUSION

As a typical representative of the sunrise industry, tourism is an important channel for people to improve their quality of life and meet their needs and aspirations for a better life. In the new era context of the rapid economic development of China and the rapid increase of domestic tourism market, the trend of tourism consumption growth and its influencing factors have attracted more and more attention from the academic community. The research results can be briefly summarized as follows: firstly, the rural labor transfer employment has a negative inhibitory effect on household tourism consumption expenditure, and as the number of labor transfers increases, the level of household tourism consumption is lower; secondly, wage income has a significant role in boosting household tourism consumption expenditure; thirdly, households with transfer employment actively save in response to the uncertainty, resulting in the increase in income brought about by this part of transfer employment does not promote household tourism consumption.

These results vividly portray Chinese rural residents as tourism consumers, providing enlightening significance for the government to formulate relevant policies and improve people's livelihood. For example, insufficient income from rural labor transfer employment is still the main problem restricting household tourism consumption. The labor transfer can not only directly increase income, but also have an impact on family consumption concepts. Therefore, it is crucial to increase labor transfer employment opportunities, reduce the cost of transfer employment. It is also important to strengthen the vocational training of rural residents, improve their employment level, so as to achieve more wealthy and higher-quality employment, broaden the channels for rural laborers to employ, then increase the wage income of rural labor and enhance rural households' willingness to travel.

Furthermore, the uncertainty faced by migrant families reflects the inadequacy of the current social security system in rural areas, leading families to tend to precautionary savings and maintain their original consumption patterns. In rural areas, it is difficult to treat illnesses and provide for the elderly. In general, there are still problems such as narrow coverage of social security, low level of security, and lagging services. Rural residents also have more concerns about the future and have a strong sense of self-protection. Savings for the prevention of old age and illness, children's education is the first choice, and immediate consumption is restricted. Simultaneously, rural households are easily affected by the traditional consumption concepts, and most residents still decide on the limits of expenses based on income. Saving money for later consumption is widespread, loan consumption and advanced consumption are not yet accepted by rural households. Consequently, the government should perfect the rural social security system and try the best to solve the problems of rural residents' social security, employment, children's education, etc., so that rural residents could eliminate their worries about tourism consumption, and increase the confidence of rural households in tourism. The purpose of series policies is to turn high savings and high accumulation into tourism consumption demand, and further promote the sustainable development of rural residents' tourism consumption.

China's rural tourism market has huge consumption potential, which is the hope for maintaining sustainable and healthy economic development. Expanding rural households' tourism consumption and effectively releasing the potential of the rural residents' tourism market can not only validly resolve and eliminate overcapacity problems, but also create employment opportunities to a greater extent, promote residents' income, improve the quality of rural life, and stimulate sustainable consumption growth. Although our research results have important implications for rural household tourism consumption, yet some limitations leave for

future research. First, although we have included as many uncertain factors as possible, we cannot list all the factors that might influence households' tourism consumption behavior due to secondary data. Second, in addition to the endogenous problems caused by reverse causality and missing variables, the econometric model may also have some self-selection problems. Third, since this paper uses cross-sectional data, it might not dynamically reflect the changes in a household's tourism consumption, and future research can consider using panel data for analysis.

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