The Poverty Reduction and Income Increase Effect of the Integrated Development of Rural Industries based on the Rural Revitalization Strategy

-- Based on Panel Quantile Model Analysis

Shuang Song[1], Jiajia Gu[1], Yuqi Liu[2]

[1]School of Finance, Anhui University of Finance and Economics, Bengbu 233030, China

[2]School of Economics, Anhui University of Finance and Economics, Bengbu 233030, China

Abstract

Emphasizing agriculture and consolidating the basics is the foundation of people's peace, and it is the key to governing the country. my country has made great efforts to improve the rural economy. By 2020, significant progress has been made, and it has entered the stage of rural revitalization and development. By combining qualitative and quantitative analysis methods, on the basis of theoretical explanation, this paper uses 30 inter-provincial panel data in China from 2015 to 2020, adopts LSDV (least squares dummy variable) method and panel fractional regression method, and empirically tests rural industries The impact and nonlinear effect of integrated development on the poverty reduction and income increase standards for farmers, focusing on the relationship between industrial integrated development and rural residents' income, and putting forward suggestions for optimal paths. The research conclusions will help to further improve the poverty management system, improve the efficiency of poverty management, establish a long-term effect mechanism to prevent poverty recovery in the "post-poverty assistance era", and provide new inspiration for the realization of rural revitalization goals.

Keywords

Integrated Development of Rural Industries; Rural Revitalization; Poverty Reduction and Income Increase; Panel Quantile Regression.

1. Introduction

Based on the internal mechanism that the integrated development of rural industries affects rural poverty alleviation, using China's 2015-2020 provincial panel data, the LSDV method and the panel quantitative regression method are used to verify the standard impact and nonlinear effect of rural industrial integrated development on rural poverty alleviation. The results show that the negative relationship between the degree of rural poverty and the integrated development of rural industries is very obvious, that is, the integrated development of rural industries has a significant role in alleviating rural poverty. At the same time, the integrated development of rural industries has an obvious marginal decreasing effect on alleviating rural poverty. In the nonlinear driving effect, that is, the dynamic process of rural poverty from high to low, the marginal effect of rural industrial integration development on the deceleration of rural poverty gradually weakens. The research conclusions are helpful to understand the relationship between rural industrial integration and rural poverty alleviation, and provide new inspiration for the revitalization of rural areas and the integrated development of rural industries [1].

Since the reform and opening up, China's rural poverty alleviation work has made great achievements that attract worldwide attention. Based on 2011, by 2020, China's rural poor will be 11.09 million, an average annual decrease of 18.96 million. From 2013 to 2021, the actual growth rate of the per capita disposable income of rural residents showed a downward trend year by year, and the per capita disposable income of rural residents in 2021 was 1,711 yuan. Among them, the development of agricultural industrialization has played an extremely important role in alleviating rural poverty and increasing agricultural income. Since the "No. 1 Document" of the central government in 2015 formally proposed "promoting the integrated development of rural industries", it has become the focus of the central government's work and an important way to solve the "three rural" problems.

After entering the stage of rural revitalization and development, the integrated development of rural industries will implement the requirements of the "Government Work Report" of the National Two Sessions in 2022, implement new development concepts, and help bring the rural revitalization industry on track in real time. Secondly, actively respond to the call of the "14th Five-Year Plan", expand the industrial chain of poverty alleviation, and organize and announce a number of financial incentive measures. These measures are an effective way to cultivate new industries, new formats and new models in rural areas, and promote the continuous and rapid increase of farmers' income. important support. Therefore, how the integrated development strategy of rural industries can play a positive role in reducing poverty and increasing income, and promoting the prosperous economic development of rural industries in the long term, to achieve the stability of the domestic agricultural fundamentals, and to cope with the uncertainty of the external environment, is to consolidate the achievements of poverty alleviation and realize the strategy of rural revitalization. The key to the goal, this is a question of great research value.

Therefore, analyzing the impact of the rural industrial integration development strategy on poverty reduction and income increase in rural areas will help to promote the expansion and upgrading of China's rural residents' income-consumption level, optimize China's agriculture-friendly policies, and accelerate the realization of the strategic goals of rural revitalization. Relying on the analysis of the improvement effect of the rural economy, this study implements policy linkages on the integration of resources, attempts to coordinate the process of agricultural system reform and the transformation of national macroeconomic development, narrows the gap between urban and rural rich and poor, and achieves common prosperity, which has far-reaching significance[2].

2. Literature Review

Judging from the relevant domestic and foreign literature obtained by CNKI and the Internet, there are not many literatures on the performance evaluation of rural poverty alleviation and income increase by the integrated development of rural industries. The relevant research mainly focuses on the poverty alleviation effect of agricultural industrialization development. Organized according to the policy timeline, China's rural industrial integration development policy was first released and submitted in 2015 by the No. 1 Central Document. This is also the fundamental way for poverty-stricken areas to get rid of poverty and become rich. This view has also been recognized by scholars such as Zhang Bing and Weng Chen. At the same time, on this basis, Ma Xiaohe, Jiang Changyun, etc. (2016) of the National Development and Reform Commission Hongyuan Institute and the research group of the Agricultural Economics Department sorted out the practical significance, development status and existing problems of the integrated development of the primary, secondary and tertiary industries in rural areas, and analyzed the constraints on agricultural industrialization. major factor in poverty alleviation. Secondly, comprehensively refer to international experience: the Dutch modern

agricultural industrialization has put forward the enlightenment to my country and the path and measures of agricultural industrialization for poverty alleviation (Cao Jincheng, 2013); Japan's "sixth industrialization" of agricultural development emphasizes the importance of strengthening agricultural competitiveness , increase farmers' income, prevent rural decline and marginalization of farmers' interests (Naraomi Imamura, 2016). In the new era, China's industrial poverty alleviation work implements ten major projects and "five series" of measures for targeted poverty alleviation. Scholars such as Jiang Yongpu, Mo Rongmei, Xu Hanze, and Li Xiaoyun (2020) studied the main models and typical practices of "correct" poverty alleviation in agricultural industrialization. Industrial poverty alleviation itself is flexible, diverse and sustainable. Each region develops advantageous industries based on its own conditions and demonstrates the management experience of letting a hundred flowers bloom in poverty alleviation. Poverty alleviation practice has proved that industrial poverty alleviation is a fundamental means to accelerate the optimization of rural regional systems, promote the flow and equal exchange of urban and rural elements, and effectively improve the lives of the poor (An Feng, 2022).[3]

After the victory in the battle against poverty, General Secretary Xi Jinping (2021) pointed out that "we must be soberly aware that the problem of unbalanced and insufficient development in my country is still prominent, and the gap between urban and rural development and income distribution is large", and "promoting common prosperity is the most difficult and most difficult task." The daunting task remains in the countryside". More and more scholars hope to obtain a more objective development path of science-industry integration through empirical research. Scholars such as Tian Xiujuan, Wu Manhua, Ma Lin (2021) used household-level data collected from the third national agricultural survey and provincial-level data collected in the Wind database. The authors used Logit and Probit regression models to estimate the impact of rural finance on rural industrial integration. The findings enrich the literature on rural finance development and economic growth. Rural revitalization is a special stage in the process of rural transformation (Guo Yuanzhi, 2022). Li Wenhong (2020) used the interactive effect model to quantitatively analyze the mechanism of industrial integration development to increase farmers' income, tax revenue, and industrial structure adjustment, which provides a theoretical basis for this paper. [4]

To sum up, the research results can be reviewed from two aspects of research content and research methods.

(1) In terms of research content

The above related research provides important and useful reference for this paper, but according to the existing literature, it does not reveal the detailed impact mechanism of rural industrial integration development on rural poverty reduction and income increase; There are not many literatures, and related research mainly focuses on the poverty alleviation effect of agricultural industrialization development under the traditional agricultural concept, and industrial integration development is to use the advantages of industrialization to integrate a single industry with each other. , a virtuous circle, the road of coordinated development.

This paper intends to carry out empirical research from the following three aspects. First, the integrated development of rural industries is conducive to alleviating rural poverty; secondly, in the dynamic change process of China's rural poverty level from high to low and the cumulative increase of farmers' disposable income, the integrated development of rural industries has an impact on rural poverty. The increase of farmers' income has a nonlinear driving effect with obvious diminishing marginal utility; once again, the "hematopoietic" function of rural industrial integration to promote the increase of farmers' disposable income is deeply studied, and by means of rural industrial integration and other means, it can expand the self-development ability of poor people, and rely on Internet information technology. Increase the income of rural residents.

(2) In terms of research methods

First of all, the existing related research focuses on theoretical research, lack of data support, quantitative empirical analysis of the effect of reducing poverty and increasing income under the background of the rural revitalization strategy, improving the persuasiveness of the article, and strengthening the objectivity of the conclusions. Next, whether the time series analysis based on the OLS estimation procedure or the MLS estimation procedure, it is necessary to assume that the rural industrial integration measures have the effect of homogenization boundaries between different time points and different regions. The panel fraction regression used in this paper The model is a good way to avoid the problems that arise in the above model.

3. Theoretical Overview

On the basis of summarizing and sorting out the relevant research results at home and abroad, this paper puts forward the countermeasures to solve the problems of agricultural development in our country. First, the integrated development of agriculture can effectively solve the problem of poverty in rural areas, thereby increasing the economic income of farmers. For a long time, it has been generally recognized that the shortage of labor resources is an important internal cause of labor shortage in rural areas. Compared with poor farmers, the educational level and physical condition of rural families are relatively poor. Therefore, the economic development of rural residents is undoubtedly the most basic guarantee. The integrated development of rural industries can fully reflect the multi-functionality of the agricultural industry chain, thereby increasing the value-added of agriculture. Expand rural sales channels, increase employment, expand rural residents' sources of income, and improve farmers' income. With the development of rural economy, rural residents' needs for basic survival and development will increase, and residents' consumption will also increase accordingly. Only in this way can we continuously improve and enhance the human resources of the enterprise and meet the development needs of the enterprise. In particular: First, to better integrate with various social groups in order to achieve their own ideals and aspirations. In order to change their concepts and improve their professional skills and spiritual quality, poor farmers tend to increase their investment in education; on the other hand, poor farmers often spend more on improving their nutrition and hygiene in order to achieve a better level of development ,Enhance physical fitness. From this, it can be seen that on the basis of improving the labor resources of poor farmers, they can get rid of the vicious circle of "shortage of human resources - low income - poverty - shortage of human resources", and then promote their sound development and bring them closer to the non-poor. distance, making it a real improvement[5-6].

Second, the overall development of agriculture can effectively alleviate rural poverty, thereby promoting rural development. Poor natural conditions, backward infrastructure, insufficient social security, and dual urban-rural structure are the external causes of rural poverty. To change this external environment, the rural economy must be developed. The integrated development of rural industries is an advanced agricultural and rural development method. It can realize the integration of technology, function and value, thereby forming new industries and new economic growth points, and continuously bringing new impetus to rural development. It has strong vitality and promotes the continuous development and efficient development of the rural economy. The development of the countryside will play a greater role in promoting the state's financial investment, thereby strengthening the public goods and services in the countryside, thereby causing a major impact on rural poverty. In particular: in rural areas, government-provided services (education), medical care (sanitation), hygiene (sanitation), etc., can promote the development of education, medical care, and culture in rural areas; capital construction, support for rural production, etc. can promote The improvement of

rural production, living and market conditions has created more jobs for the poor; the transferable public expenditures such as financial subsidies and social security are "redistributed" to help them reduce the distance between them and non-poor farmers. income difference. Therefore, in the process of development, the development status of the countryside can be fundamentally changed, and good conditions are provided for the income increase of poor farmers.

Finally, this paper gives the following research ideas.

Assumption 1: The overall development of agriculture can help reduce rural poverty.

China's poverty alleviation work in recent years has begun to take shape, and the proportion of the poor population has shown a dynamic change from high to low. According to the "China Rural Poverty Monitoring Report", my country's current poverty rate has dropped from 17.20% at the end of 2011 to 0.6% at the end of 2020, an average decrease of 2.97 percentage points, while the cumulative actual increase from the 18th National Congress to the 18th National Congress is 71.8%, with an annual average of 71.8%. The actual growth rate was 7.0%. At the same time, the level and quality of the integrated development of rural industries showed an upward trend of development. Currently, there is a lot of flexibility in the income growth of comprehensive agricultural development due to the development of rural industries. However, how to better promote the improvement of farmers' income needs further discussion.

In summary, this paper proposes the following research hypotheses.

Hypothesis 2: The integrated development of rural industries has a nonlinear driving effect on rural poverty alleviation with significantly diminishing marginal effects.

4. Establishment and Analysis of the Model

4.1. Variable Selection and Data Description

4.1.1. Explained Variable

The explained variable in this paper is the level of rural poverty. At present, the poverty guidelines published by the World Bank are internationally accepted poverty standards. With reference to the poverty alleviation assessment indicators of the World Bank, and according to my country's national conditions and development differences, China has used the household survey method to construct a mathematical model of food demand. Poverty levels in China have been established. Due to the influence of external conditions such as purchasing power level, price level and urban-rural gap, the level of poverty is also changing. The most recent Chinese poverty line (also called the 2010 poverty line) is based on the 2010 price level. Therefore, it is difficult to carry out continuous statistics. Because these materials are authoritative, scientific, and persistent, the poverty level is included in the scope of the "poverty level" in my country's current "Poverty Standards". The higher the poverty rate in rural areas, the higher the poverty level.

4.1.2. Core Explanatory Variables

The development of agricultural industrialization is the central content of this thesis. At present, there are two kinds of evaluation indicators for the development of agricultural industrialization in my country. One of them is the coordinated development index method. Taking Tan Mingjiao as an example, the method of "harmonious development factor" is used to compare the real value of my country's rural industry with its desired goal. The comprehensive agricultural development index of China from 2005 to 2014 was calculated. The second is to use the comprehensive index method. Bruce Lee, Ran Guang and Li Yun discussed issues such as the extension of the agricultural industry chain, the development of multi-functional agriculture, and the integrated development of the agricultural service industry, and established a comprehensive evaluation index for comprehensive development. On this basis,

this paper uses the comprehensive index method to calculate the national agricultural industrialization development from 2015 to 2020.

4.1.3. Other Variables

There are two main variables used to test the internal mechanism of the impact of the integrated development of rural industries on rural poverty alleviation. The second is the rural economic growth, which is measured by the added value of agriculture, forestry, animal husbandry and fishery/employees in the primary industry, and is treated by logarithm. In addition to the above variables, this paper further controls variables such as rural human capital (HUM), fiscal agricultural expenditure (GOV), rural financial development (FIN), and agricultural disaster rate (DIS). Referring to the common practice in academia, rural human capital is measured by the per capita years of education of rural residents, of which per capita years of education in rural areas = 0 × illiterate and semi-literate population ratio + 6 × primary education population ratio + 9 × secondary education population ratio + 12×proportion of population with high school education + 16×proportion of population with university education. Fiscal support for agriculture is expressed as government fiscal support for agriculture/total expenditure, of which fiscal support for agriculture is measured by total expenditure on agriculture, forestry and water affairs; rural financial development is expressed as the balance of agriculture-related loans of financial institutions, measured by the proportion of total output value of the primary industry; The disaster rate is measured by the proportion of the affected area of agriculture.

This paper selects the relevant statistical data of 30 provinces and cities in China in 2015-2020. "China Rural Poverty Monitoring Report" provides statistical data on the rural poor population in my country; from "China Agricultural Products Processing Industry Yearbook", "China Leisure Agriculture Yearbook", "China Industry and Commerce Administration Yearbook", National Greenhouse Data System, leisure agriculture in various regions Statistical analysis of missing data was carried out in development reports, government reports, and related news reports. "Employment Statistical Yearbook" and "China Statistical Yearbook" include farmers' per capita net income, financial expenditures for agriculture, and total output value of agriculture, forestry, animal husbandry and fishery. Based on the "China Rural Financial Services Report" and "China Financial Services Yearbook", this paper makes a statistical analysis of agricultural credit; according to the "China Rural Statistical Yearbook", the annual agricultural land data is compiled. On this basis, 2010 is selected as the benchmark to adjust the variables related to finance to ensure the operability of its statistical data.

4.2. Build Panel Quantile Regression Model

By constructing a panel quantitative regression model based on the new economic growth model, this paper studies the impact of tax cuts and expenditure reductions on residents in my country's new round of economic growth. At the same time, improvements have been made to the regular linear panel mode to minimize residual errors. Its regression estimation takes the form of the sum of absolute numbers.

$$Y_{it}(_T | X_{it}, D_{it}) = \alpha_i + \beta_T X_{it} + \theta_T D_{it} + \varepsilon_{T,it} \ . \tag{1}$$

Among them: Y_{it} is the explained variable, X_{it} is the explanatory variable, D_{it} is the control variable, β_T and θ_T are the marginal effect parameters at the Tth quantile, and $\varepsilon_{T,it}$ is the unobserved random item.

In the conventional average linear mode, the weighting of each sampling point is consistent, so the correlation degree of the sampling point is not related to the distribution of sampling points

in the sequence; while in the quantitative mode expressed by equation (1), the sampling point's The relative importance depends on the weight of the number of sample points in the sequence. Sample points within a certain interquartile range receive greater weighting.

Therefore, the parameters $\beta T, \theta T$ and $\varepsilon T, it$ are actually conditional estimates under the conditions of a given quantile and a sample set {Yit,Xit,Dit}. In the estimation procedure, the panel quantile model described by equation (1) is estimated by minimizing the conditional loss function in equation (2):

$$\min_{\alpha_{T,i}\beta_T} \sum_{T=1}^{T=M}\sum_{i=1}^{i=N}\sum_{t=1}^{t=T}\left|W_T L_T\right| . \tag{2}$$

Among them: WT is the weight of the quantile of $T \in (1,2,...,M-1,M)$; LT is the loss function of the panel quantile model parameter estimation, LT is expressed by equation (3):

$$L_T = Y_{it}(_T \mid X, D_{it}) - \left(\alpha_i + \beta_T X_{it} + \theta_T D_{it}\right) + \lambda\left(\sum_{i=1}^{i=N}\left|\alpha_{T,i}\right|\right) . \tag{3}$$

This method can better solve the problem of minimum residual variance of non-observed residual items and normal distribution in plate mode, and the heterogeneity of parameters of each point in the sampling area is studied and corrected. Therefore, this paper selects a panel model that can better reflect the rich information in the sample data. This paper selects a quantitative panel model for empirical analysis to improve the effectiveness and correctness of this paper.

4.3. Descriptive Statistical Analysis

Empirical analysis found that the mixed model, fixed effect model and two-way fixed effect model all showed that the integrated development of rural industries has a significant positive effect on farmers' expansion of domestic demand. Relying on the breadth and depth of development, it promotes consumption by easing liquidity constraints, facilitating transaction mechanisms, income mechanisms, growth mechanisms, diminishing marginal costs, and inclusive networks, thereby stimulating farmers' demand and stimulating domestic demand. From the conclusion of empirical analysis, my country's rural industrial integration has the effect of promoting economic growth, and it is of great significance. The direct effect of rural industrial integration on China's agricultural development is similar to its indirect effect on consumption growth (estimated by two-way fixed effects, the estimated values are about 0.0738 and 0.0836), and the indirect effect of consumption empowerment is small. In fact, the pulling effect of rural industrial integration on farmers is reflected in the indirect empowerment effect on consumption and the direct promotion effect on investment. Investment is an important role of enterprise financial resources in the production and operation of enterprises. Consumption is an important factor for farmers to use rural industrial integration to achieve domestic demand. According to the calculation of various control variables, the economic situation of Chinese farmers and network information technology have the greatest effect on expanding rural demand, and their effect is greater than agricultural development. This also shows its role in the growth of China's domestic demand. The main reasons that affect my country's economic development are farmers' economic conditions and network information technology.

In order to carry out a panel regression analysis on the effect of the integrated development of rural industries in rural areas, five indicators with typical significance of 90%, 75%, 50%, 25%

and 10% were selected to reflect the highest, middle and high levels in rural areas. Moderate, low-moderate, and low poverty levels to explore differences in rural industrial development. In the regression of quartiles, we also consider the correctness of the method. 400 samples were sampled voluntarily and repeatedly. According to the estimation of each control factor, the quartile regression factors of my country's rural population quartiles all show extremely significant negative values (only 50% of the quartiles), and the quartile regression factors are closely related to the overall development of rural industry. Trends match. The results show that, on the basis of quantitative analysis, the poverty reduction effect of rural labor on rural poverty will continue to decline. The quaternary regression factor of government subsidies for agriculture in the quartile is only 10%, which shows that the impact of government financial support to agriculture on rural poverty is only significant when the poverty level is low, but it decreases significantly at high poverty levels. . The prediction of rural financial development is similar to the prediction of government-supported agriculture. The quaternary regression factor only has obvious negative values between 10% and 25%, which shows the impact of rural financial development on rural poverty alleviation when the poverty level is small. degree. Within the range of 50%, 75% and 90%, the quantitative regression coefficient of the loss rate of agricultural disasters shows an obvious positive, and decreases with the decline of the incidence of rural poverty, indicating that the positive effect of agricultural disasters on rural poverty will continue decline[7].

5. Research Conclusions and Policy Implications

The development of agricultural industrialization is one of the main ways of "three rural" problems in our country, and it plays an important role in the development of agriculture. On this basis, this paper makes a detailed analysis of the role of my country's agricultural industrialization development on poverty-stricken areas, and gives relevant empirical analysis. Based on the above theory, using the methods of LSDV and panel quantile regression, and using the panel data between provincial regions in China from 2015 to 2020, an empirical study on the industrial development status of rural areas in my country is carried out. The analysis shows that there is an obvious negative relationship between the development level of agricultural industrialization in my country and the level of agricultural development. The quantitative regression factor of the integrated development of rural industries shows a low trend in absolute level, which indicates that the integrated development of agriculture has the effect of reducing rural poverty.

That is to say, in the dynamic change from high to low level of rural poverty in China, the impact of overall agricultural development on reducing rural poverty presents a nonlinear, marginal, and obvious downward trend. In addition, rural human capital, the level of financial support for agriculture, and rural financial development have a positive effect on rural poverty alleviation, while rural disasters restrict the effective resolution of rural poverty. On this basis, this paper puts forward some countermeasures and suggestions to solve the problem of rural poverty in our country. It is not only necessary to further improve the level of agricultural industrialization development, but also to implement differentiated policies according to local conditions in combination with its mechanism of action in poverty and the characteristics of marginalization. We can study from the following angles. First, highlight the advantages and characteristics, and speed up the reform of the development mode. The promotion of comprehensive agricultural development and poverty alleviation work will be combined organically. The integration of rural industries should combine the local nature, resources, regional characteristics, industrial characteristics and humanistic characteristics, integrate and actively explore the characteristic industries that have good benefits, quick results, and can drive the poor people out of poverty and become rich. Poverty alleviation methods include ecological poverty alleviation, tourism

poverty alleviation, efficient agricultural poverty alleviation, e-commerce poverty alleviation, photovoltaic poverty alleviation, etc. At the same time, we are constantly trying various forms of cooperation such as "agricultural park + poor households", "leading enterprises + farmers + poor households", "cooperative organization + base + poor households" to encourage poor households to develop through multiple channels. Let them share in the huge benefits of industrial integration. The second is to attach importance to the marginalization of rural industrial development in poor areas, so as to optimize its spatial structure in the integrated development of urban and rural areas[8].

In view of the severely impoverished areas in the central and western regions of China, it is necessary to further promote the integrated development of industries to improve the quality of economic development. To effectively address rural poverty, the region's rural economy and farmers' income must increase rapidly. However, in areas with low poverty levels in the western region, agricultural integration development has shown a certain downward trend in its poverty alleviation effect, so it is necessary to strengthen its benefits. so as to achieve better poverty reduction benefits. At the same time, all localities should continuously strengthen the construction of rural human resources and strengthen rural financial support. The focus is to strive to improve the level of agricultural production and ensure that the goal of reducing rural poverty is achieved.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

Acknowledgments

References

[1] Clancy D, Cussen M, Lydon R. Housing Market Activity and Consumption: Macro and Micro Evidence [J]. Reamonn Lydon, 2014,20(1).

[2] Bhatia K, Mitchell C. Household-specific housing capital gains and consumption: Evidence from Canadian microdata[J]. Regional Science & Urban Economics,2016,56(5).

[3] Aladangady, Aditya. Housing Wealth and Consump tion: Evidence from Geographically Linked Microdata [J]. American Economic Review,2017(11).

[4] S. C He, L. H Liu. Regional Differences in the Wealth Effect of Chinese Residents' Assets Differential analysis [J]. Statistics and decision-making, 2015 (8).

[5] C. Zheng, H. G. Gao. The impact of house price fluctuations on household consumption from the perspective of urbanization.

[6] Andre C, Gupta R, Kanda P T. Do House Prices Impact Consumption and Interest Rate?: Evidence from OECD Countries Using an Agnostic Identification Procedure[J].Applied Economics Quarterly, 2012, 58(1).

[7] Ritashree, Chakrabarti, Junfu, et al. Unaffordable housing and local employment growth: Evidence from California municipalities[J]. Urban Studies,2015,52(6).

[8] Stockhammar P, sterholm P. Macroeconomic Effects of a Decline in Housing prices in Sweden[J]. Journal of Policy Modeling, 2015, 38(2).