

Research on the Influence of Urbanization Structure on Farmers' Income Increase—Based on the Perspective of Income Structure

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Abstract

Different from the existing studies that examine the impact of the overall development level of urbanization on farmers' income, this article empirically studies the impact of two aspects of urbanization level structure, "citzilization" and "townization" on farmers' income. Based on the empirical study of 31 provincial panel data from 2007 to 2018, it is found that "citzilization" and "townization" can significantly improve farmers' income, and the role of "townization" is obviously greater than that of "urbanization". In terms of the impact of income components, "citzilization" and "townization" have no obvious impact on wage income and operating income, but promote both property income and transfer income, and "townization" has an even greater effect. The policy implication of the research conclusion is that while using urban "engine" to drive economic growth, we should actively use the pivotal role of small towns to connect urban and rural development to promote rural revitalization and development.

Keywords

Urbanization Structure, Farmers' Total Income, Farmers' Income

1. Introduction

At present, our country is in the decisive stage of building a well-off society in an all-round way. The "three rural issues" is still the key and difficult point, and increasing farmers' income is an important task at this stage. In 2018, the per capita disposable income of Chinese farmers was 14,617.0 yuan, which was only 37.24% of the disposable income of urban residents in the same period. The gap between urban and rural areas still exists. Urbanization is one of the important

ways to increase farmers' income and solve the "three rural issues". The urbanization rate measured by the urban permanent population reached 59.60% in 2018. Therefore, in the context of rapidly advancing urbanization, how to promote the growth of farmers' income has become a difficult problem that the party and the state must solve at the moment.

The academic research on the factors affecting farmers' income is mostly based on economic growth theory, mainly from the following three perspectives: first, from the perspective of capital, some scholars believe that financial support for agriculture can increase farmers' transferable income, then directly and indirectly affect the level of farmers' income. For example, [Xiao & Xu \(2019\)](#) analyzed that fiscal support agriculture policies could not only significantly increase farmers' income, but also effectively guarantee and regulate farmers' income; [Zhu & Lu \(2020\)](#) studied the effects of agricultural subsidy policy on supporting agriculture through the method of income mobility matrix and panel quantile regression, and concluded that financial subsidies could help alleviate absolute poverty in rural areas and increase the income of low-income groups. Second, some scholars study from the perspective of technology. For example, [Wang & Hu \(2019\)](#) constructed a model from a theoretical aspect, and found empirically that agricultural productivity mainly increased farmers' income by increasing farmers' operational income; [Ma & Kong \(2019\)](#) studied the relationship between agricultural technological progress and the income gap of farmers between regions, and concluded that agricultural technological progress had a positive effect on farmers' income. Third, scholars' research from the perspective of labor mainly focuses on the education level of farmers and labor transfer. For example, [Song \(2010\)](#) used the national provincial panel data from 1985 to 2005 to conduct empirical research. He believed that education level has an increasing effect on farmers' income, and the marginal effect of education on income had gradually increased; [Li, Li, & Zhou \(2018\)](#) constructed a dynamic panel data model, and the analysis showed that labor transfer could significantly promote the growth of farmers' total income and non-agricultural income; [Liu & Pan \(2019\)](#) used the PVAR model to empirically showed that the impact of labor transfer on farmers' income would increase with the increase of the number of labor transfers.

In the current research on the relationship between urbanization and farmers' income, most scholars explore the impact of the overall level of urbanization on farmers' income, mainly using the following two methods to demonstrate: first, using time series data models, such as [Fan & Wang \(2007\)](#) using the vector error correction model and pre variance decomposition, the study found that there was a positive long-term and stable co-integration relationship between urbanization development and farmers' income increase in China; [Zhang, Huang,, & Li \(2014\)](#) used vector autoregressive models and other methods to analyze the problem, then found there was a positive interaction between the process of urbanization and the increase in farmers' income. Second, using provincial panel data models, such as [Wang & Peng \(2013\)](#) using 1999-2011 provincial panel data

to build a variable intercept model, the empirical evidence showed that the increase in urbanization could effectively increase farmers' income; Wang & Zhu (2014) used the Panel Data model and found that the promotion of urbanization had a positive correlation with the increase of farmers' income. In addition, some scholars have studied the impact of urbanization development on the components of farmers' income. For example, Ye, Xu, & Hu (2010) used the grey relational theory analysis to find that the impact of urbanization on farmers' income sources was as follows: wage income, transfer income, property income, operating income; Yuan & Zhou (2015) researched that the effect of urbanization on the various components of farmers' income was closely related to the level of regional urbanization development.

The above studies have provided many methods for discussing the impact of the overall development of urbanization on farmers' income. The research results are quite rich, but few scholars have studied the impact of urbanization structure on the increase of farmers' income. At present, the main trend of China's urbanization development is reflected in the "citzilization" and "townization" of population gathering. In the future, the population growth of town areas will exceed the population growth of urban areas. The urbanization of town areas is the main driving force for the rapid development of China's urbanization. Therefore, in the process of urbanization in a region, is "citzilization" having a greater impact on farmers' income, or is "townization" more able to promote farmers' income? Based on this, this article uses 31 provincial-level panel data to deeply explore the impact of urbanization structure on farmers' income and farmers' income components from the two aspects of "citzilization" and "townization", and interpret its impact, so as to broaden the research fields of urbanization and farmers' income.

2. Analysis of the Structure of Urbanization and the Income Structure of Farmers

2.1. Urbanization Structure

According to the usual definition, this article uses the ratio of urban population to total population as the urbanization rate, the ratio of city population to total population as the citzilization rate, and the ratio of town population to total population as the townization rate. Analyze and process the sample survey data in *China Population and Employment Statistical Yearbook* from 2003 to 2018 to obtain the urbanization rate, citzilization rate, and townization rate. The results are shown in Table 1, and the results are drawn into a line chart (Figure 1). Then calculate the proportion of citzilization rate in urbanization rate and the proportion of townization rate in urbanization rate in each year, and draw the change trend of these two indicators into Figure 2.

As can be seen from Figure 1 and Table 1, China's urbanization rate has generally shown a steady upward trend from 2003 to 2018, with an average annual growth rate of 1.24%. The urbanization rate in 2018 was 59.60%, compared with

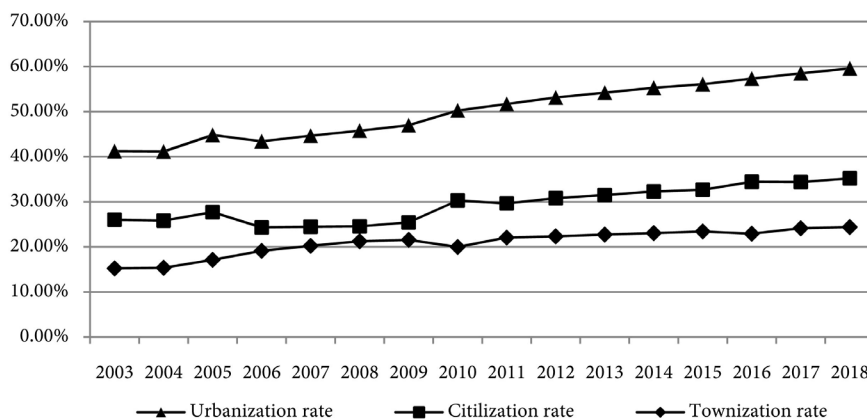


Figure 1. Changes in the rate of “citalization” and “citalization”.



Figure 2. Changes in the proportion of “citalization” and “townization”.

Table 1. National urbanization rate, citalization rate and citalization rate in each year.

Year	Urbanization rate	Citalization rate	Townization rate
2003	41.24%	26.02%	15.22%
2004	41.18%	25.82%	15.36%
2005	44.84%	27.72%	17.13%
2006	43.44%	24.33%	19.11%
2007	44.69%	24.47%	20.22%
2008	45.79%	24.55%	21.24%
2009	46.99%	25.43%	21.56%
2010	50.27%	30.29%	19.98%
2011	51.71%	29.65%	22.06%
2012	53.14%	30.81%	22.33%
2013	54.23%	31.51%	22.73%
2014	55.33%	32.28%	23.05%
2015	56.10%	32.67%	23.43%
2016	57.35%	34.43%	22.92%
2017	58.52%	34.38%	24.14%
2018	59.60%	35.20%	24.40%

41.24% in 2003, an increase of 18.36%. The citilization rate shows a trend of rising volatility as a whole, and the fluctuation is obvious from 2005 to 2010. From 2005 to 2006, the citilization rate decreased by 3.39%. From 2006 to 2009, the citilization rate increased slowly, rising by 1.1%. From 2009 to 2010, the citilization rate fluctuated significantly, and the citilization rate increased by 4.86%. The overall townization rate showed a fluctuating growth. From 2009 to 2010, the townization rate fell by 1.58%, and from 2010 to 2011, the townization rate increased by 2.08%. From 2011 to 2018, both the citilization rate and the townization rate showed a steady growth trend.

Correspondingly, it can be seen from **Figure 2** that from 2003 to 2018, the proportion of citilization rate and the proportion of townization rate have shown volatility changes, and the proportion of citilization rate has always been in the leading position. Corresponding to the changes in the citilization rate from 2005 to 2010, the proportion of the citilization rate showed a trend of first decline and then rise, while the townization rate showed a trend of first rise and then decline. The main reason is that the household registration system reform in 2004 abolished the distinction between agricultural and non-agricultural household registrations, allowing farmers to settle in cities and towns. However, compared with large cities with strict settlement thresholds, small towns without household registration restrictions are more attractive to rural residents.

2.2. Farmers' Income Structure

Obtain the national total income of farmers from 2003 to 2018 from the National Bureau of Statistics and the wage income, operating income, property income, and transfer income by source of income. After the data are unified, the annual growth rate of the total income of farmers and its components is calculated by taking 2003 as the base period. Excluding the abnormal value in 2014 caused by the change of statistical caliber after 2013, that is, from the per capita net income of farmers to the per capita disposable income of farmers. According to the characteristics of the growth rate of the annual growth rate of farmers' total income, 2003-2018 is divided into four stages. Then the average annual growth rate is calculated, and the results are shown in **Table 2**.

It can be seen from **Table 1** that the annual growth rate of the total income of farmers and its components at each stage is more than 6%, and the income of

Table 2. Changes in the average annual growth rate of farmers' income and its components.

year	total income	wage income	operating income	property income	transfer income
2004-2006	11.01%	14.47%	7.87%	15.17%	23.20%
2007-2010	13.38%	15.34%	10.12%	19.23%	26.32%
2011-2013	14.57%	18.33%	10.25%	13.22%	20.17%
2015-2018	8.65%	9.62%	6.04%	11.42%	11.69%

farmers is increasing year by year. From 2004 to 2013, the average annual growth rate of farmers' total income was relatively fast, and reached the maximum value of 14.57% from 2011 to 2013; from 2015 to 2018, the average annual growth rate of farmers' total income decreased rapidly to 8.65%. The reason is that the subprime mortgage crisis broke out in the United States in 2007, and emerging economies such as China ushered in great opportunities for leapfrog development, becoming the main driving force for world economic development. In 2010, China became the second largest economy in the world. The prosperity and development of China's economy has promoted the increase of farmers' income. At the same time, in terms of the policy of benefiting farmers, the "No. 1 Document" issued by the Central Committee of the Communist Party of China every year has promoted the rapid growth of farmers' income. In 2015, China's economy entered a new normal. The economic operation showed a development trend of structural optimization and power conversion. Farmers' income entered a period of steady growth, and the growth rate slowed down.

The average annual growth rate of farmers' income components is sorted by size: transfer income, property income, wage income, and operating income. Specifically, the average annual growth rate of farmers' wage income and the average annual growth rate of operating income have basically the same trend. Both showed an upward trend during 2004-2013, and the growth rate declined during 2015-2018. The possible reason is that between 2004 and 2013, the household registration system was gradually liberalized, and rural surplus labor was transferred from the agricultural sector to the non-agricultural sector on a large scale. The farmers' wage income had increased rapidly, and gradually became the main driving force to increase the income of farmers. Meanwhile, the rapid economic development in this period had also led to the increase of farmers' operating income. From 2015 to 2018, the adjustment of the real economy under the new normal of the economy had reduced the employment rate of rural migrant labor and reduced wage income. Since the farmers' operating income still mainly depends on agriculture for a long time, with the rapid decline in the number of rural employment and the continuous decrease of the proportion of agricultural added value in GDP, resulting in slow growth in farmers' operating income. From 2004 to 2010, the average annual growth rate of farmers' property income and the average annual growth rate of transfer income rose steadily; from 2011 to 2018, there was a downward trend, but both were above 11%.

3. Models, Variables and Data

3.1. Model Setting

In this paper, 31 provincial-level panel data are selected, pass Hausman's test, then use a two-way fixed-effects model to perform regression. The specific form is as follows:

$$\ln \text{income}_{it} = C + \alpha \text{city}_{it} + \beta \text{town}_{it} + \sigma V_{it} + \varepsilon_{it}$$

In the Equation, income_{it} represents the income of farmers in the i -th prov-

ince in the t -th year, including total farmers' income (income 0), wage income (income 1), operating income (income 2), property income (income 3), and transfer income (income 4); The core explanatory variables are the citilization rate $city_{it}$ and the townization rate $town_{it}$ of the i -th province in year t ; V_{it} is the control variable; ε_{it} is the random error term; C , α , β , and σ are the parameter to be estimated.

3.2. Variable Selection and Data Sources

3.2.1. Explained Variables

The total income of farmers and its components (income). Select total farmers' income (income 0), farmers' wage income (income 1), farmers' operating income (income 2), farmers' property income (income 3), and farmers' transfer income (income 4) as variables reflecting the income status of farmers.

3.2.2. Core Explanatory Variables

Citilization rate (city) and townization rate (town). The ratio of city population to the total population is used to express the citilization rate, and the ratio of town population to the total population is used to express the townization rate.

3.2.3. Control Variables

According to the existing research results, this article selects corresponding indicators as control variables from three aspects: policy environment, human capital and factor input. In terms of the policy environment, the indicator of financial support for agriculture (fin) is selected, which is expressed by the intensity of the provincial financial support for agriculture, that is, the ratio of agricultural, forestry, and water expenditure to general financial expenditure. In terms of human capital, the educational level (edu) of rural residents and the labor transfer level (trans) are selected. The educational level of rural residents is expressed by the ratio of the number of people with a high school education and above to the total rural population over 6 years old; the labor transfer level is expressed by the ratio of employees in the primary industry to the total number of employees. In terms of factor input, the level of agricultural mechanization (pmac) and the per capita arable land area (pcla) are selected. The level of agricultural mechanization is expressed by the total power of agricultural machinery per capita; the per capita arable land area is expressed by the ratio of the total arable land area to the total rural population.

3.2.4. Data Source Description

The data used are mainly 31 province-level panel data in China from 2007 to 2018, which are from various statistical yearbooks. Specifically: the data of farmers' income and its components come from the *China Rural Statistical Yearbook*; the data of citilization rate and townization rate are calculated based on the sample survey data in the *China Population and Employment Statistics Yearbook*; the control variables data are obtained from the eps database. In order to eliminate the impact of price changes, this article takes 2007 as the base pe-

riod, and uses the consumer price index to de-inflate farmers' income data. In addition, in order to eliminate heteroscedasticity as much as possible and ensure the stability of the data, this paper has performed natural logarithm processing on the explained variables in the actual regression. The results of descriptive statistics on each variable are as follow **Table 3**.

4. Empirical Results and Analysis

4.1. The Regression Results of the Overall Level of Farmers' Income

This paper uses a two-way fixed effect model to conduct empirical regression to examine the impact of citilization rate and townization rate on the farmers' total income (income 0). The regression results are shown in the following table (**Table 4**). Model (1) is the result of not adding control variables, and models (2)-(6) are the results of adding control variables one by one.

Table 3. Descriptive statistics of variables.

Variable names	Sample size	Mean	Standard deviation	Minimum	Maximum	Data Sources
citilization rate (city)	372	0.324	0.174	0.0771	0.825	<i>China Population and Employment Statistics Yearbook</i>
townization rate (town)	372	0.210	0.0639	0.0339	0.340	<i>China Population and Employment Statistics Yearbook</i>
total income (income 0)	372	9107	4902	2329	29,896	<i>China Rural Statistical Yearbook</i>
wage income (income 1)	372	3977	3472	330.8	19,950	<i>China Rural Statistical Yearbook</i>
operating income (income 2)	372	3539	1491	572.0	7746	<i>China Rural Statistical Yearbook</i>
property income (income 3)	372	291.0	300.1	18.02	1959	<i>China Rural Statistical Yearbook</i>
transfer income (income 4)	372	1300	1091	92.80	7987	<i>China Rural Statistical Yearbook</i>
financial support for agriculture (fin)	372	0.111	0.0318	0.0287	0.190	eps database
labor transfer level (trans)	372	0.363	0.151	0.0297	0.741	eps database
education level of farmers (edu)	372	0.119	0.0488	0.0245	0.359	eps database
agricultural mechanization level (pmac)	372	1.528	0.731	0.326	4.043	eps database
cultivated land area per capita (pcla)	372	0.231	0.184	0.0411	1.068	eps database

Table 4. Overall level regression results.

	Explained variable: farmers' total income					
	(1)	(2)	(3)	(4)	(5)	(6)
city	0.975** (2.43)	0.962** (2.40)	0.744** (2.21)	0.740** (2.18)	0.751** (2.39)	0.737** (2.34)
town	1.253*** (3.50)	1.248*** (3.49)	0.996*** (3.18)	0.990*** (3.14)	0.994*** (3.30)	0.980*** (3.26)
fin		-0.283 (-0.92)	-0.087 (-0.34)	-0.065 (-0.25)	-0.245 (-0.79)	-0.114 (-0.34)
trans			-0.763*** (-2.86)	-0.774*** (-2.93)	-0.642** (-2.32)	-0.634** (-2.37)
edu				0.167 (1.16)	0.200 (1.47)	0.176 (1.29)
pmac					0.029 (1.69)	0.037* (1.97)
pcla						-0.108 (-0.98)
Constant term	7.817*** (44.99)	7.847*** (41.88)	8.254*** (36.10)	8.244*** (35.80)	8.166*** (34.23)	8.173*** (34.80)
Sample size	372	372	372	372	372	372

*** **, and * indicate rejection of the null hypothesis at the 1%, 5%, and 10% significance levels, respectively.

It can be seen from the above table that when the control variables are not added, the regression coefficient of the citilization rate to the farmers' total income is 0.975. Through the 5% significance test, it shows that every 1% increase in the citilization rate, the farmers' total income will increase by 0.975%. The regression coefficient of the townization rate to the farmers' total income is 1.253, and through the 1% significance test. It shows that every 1% increase in the townization rate, the farmers' total income will increase by 1.253%. "Townization" is more effective than "citilization". The reason is that in recent years, the state has continuously improved relevant policies for the construction of small towns, accelerated the establishment of a high-quality development mechanism for characteristic towns and characteristic small towns, and promoted the development of local urbanization, so that farmers do not have to move to big cities blindly. Relying on the economic benefits brought by the development of local urbanization, it can also promote farmers' income.

After adding the control variables one by one, the regression coefficient of the citilization rate changed from 0.975 to 0.737, and the regression coefficient of the townization rate changed from 1.253 to 0.980. The significance of the regression results of the two remains unchanged, the coefficients changes little, and the

empirical results are more steady. From the perspective of control variables, the degree of labor transfer and the level of agricultural mechanization have a positive effect on the total income of farmers, and both are conducive to increasing farmers' income. However, the regression coefficient of the level of agricultural mechanization is relatively small. The possible reason is that certain regions are restricted by geographical environment and economic conditions, which cannot carry out large-scale mechanized production. In most areas, agricultural production adopts cross regional operation, agricultural machinery cooperatives, and other agricultural mechanization modes, which leads to the low level of per capita mechanization and has little impact on the total income of farmers.

4.2. The Regression Results of Farmers' Income Structure

In order to examine the impact of the urbanization structure on the income structure of farmers in more detail, this paper examines the relationship between "citzilization" and "townization" and the different income components of farmers. The estimated results are shown in **Table 5**.

It can be seen from **Table 5** that "citzilization" and "townization" have a

Table 5. Regression results of different income components.

	Explained variables			
	(1)	(2)	(3)	(4)
	wage income	operating income	property income	transfer income
city	-0.379	-0.005	5.393***	6.700***
	(-0.55)	(-0.01)	(3.81)	(4.77)
town	0.125	-0.021	6.546***	6.862***
	(0.17)	(-0.03)	(4.71)	(5.01)
fin	-0.105	0.002	2.057	-3.548* ^{>}
	(-0.13)	(0.00)	(0.78)	(-2.00)
trans	-1.490	-0.787	-0.007	1.137
	(-1.62)	(-1.42)	(-0.00)	(1.00)
edu	1.123	-1.163***	1.472	0.055
	(1.69)	(-2.88)	(1.25)	(0.07)
pmac	-0.008	0.179***	-0.141	0.173
	(-0.16)	(3.28)	(-1.27)	(1.50)
pcla	0.392**	-0.492**	1.500**	-0.555
	(2.13)	(-2.15)	(2.37)	(-0.91)
Constant term	7.783***	7.979***	1.525	2.063**
	(12.92)	(14.93)	(1.35)	(2.40)
Sample size	372	372	372	372

*** **, and * indicate rejection of the null hypothesis at the 1%, 5%, and 10% significance levels, respectively.

certain correlation to the different income components of farmers. Both the citilization rate and the townization rate have a significant positive effect on property income and transfer income. The regression coefficients of citilization rate and townization rate on farmers' property income are 5.393 and 6.546 respectively, and the regression coefficients on farmers' transfer income are 6.700 and 6.862 respectively, and both pass the 1% significance test. It shows that the development of "citilization" and "townization" can promote the increase of farmers' property income and transfer income, and the promotion of "townization" is greater than that of "citilization". With the development of urbanization, farmers can not only obtain transfer income from various national policies of supporting agriculture and benefiting agriculture, but the rapid development of rural public welfare undertakings has reduced farmers' consumption expenditure on public products and indirectly increased their transfer income. At the same time, the development of urbanization has allowed the circulation of rural land. Farmers can transfer land contractual management rights through various methods such as sublease and share contracts, and then obtain property lease income. In addition, property income and transfer income only account for a relatively small share of farmers' income, and a series of impacts brought by the development of urbanization will be more obvious in these two types of income.

From the regression results of wage income and operating income, the regression coefficients of citilization rate and townization rate to wage income are -0.379 and 0.125 , respectively, and the regression coefficients of operating income are -0.005 and -0.021 , respectively. And the test results are not significant, it shows the effects of "citilization" and "townization" on the two are not obvious. In terms of wage income, with the continuous progress and application of modern science and technology, the difficulty of non-agricultural employment for migrant workers with low education levels has continued to increase, and the growth of wage income has slowed down. The inflow of high-quality rural labor to cities and towns has reduced the input of labor factors in agricultural production. In addition, the long-term and extensive agricultural business model has been squeezed by the continuous downward pressure of the "price ceiling" and the rising "cost floor", as well as the continuous approach of the "yellow line" of agricultural production price subsidies and the continuous lighting of the "red light" of the resource environment. The dual constraints have slowed the growth of farmer households' operating income and reduced the room for growth. In addition, the citilization rate and townization rate obtained in this article according to the usual definitions are only the "citilization" and "townization" of the population, while population urbanization is only a necessary condition for increasing farmers' wage income and operating income, not a necessary and sufficient condition.

5. Conclusions and Policy Recommendations

Based on the provincial panel data from 2007 to 2018, this paper empirically

examines the impact of the development of “citzilization” and “townization” in China on farmers’ income, and draws the following main conclusions: first, both “citzilization” and “townization” can significantly promote the growth of farmers’ income, no matter from the perspective of farmers’ total income or the components of total income, “townization” has a greater impact than “citzilization”. Second, “citzilization” and “townization” have an obvious positive effect on farmers’ property income and transfer income, especially on transfer income. Third, “citzilization” and “townization” have a negative effect on farmers’ wage income and operating income, but this effect is not significant.

According to the above research conclusions, the following policy recommendations are put forward: accelerate the pace of new urbanization, focus on breaking the urban-rural dual structure, promote the development of small towns, further narrow the urban-rural income gap, and accelerate the process of urban-rural integration. Promote the integration of urban and rural industries, construction, public services, and systems through the development of agriculture and rural areas with priority, and the two-way opening up of urban and rural areas. Strengthen policy inclination in rural areas, gradually narrow the gap between urban and rural areas, and promote the integrated development of urban and rural areas. While vigorously developing large cities, we must actively accelerate the development of small and medium cities and small towns. Small and medium-sized cities with better locational resource endowments should rely on large cities to develop supporting advantageous industries with the aid of industrial agglomeration and radiation effects. Local governments should start from the center-periphery perspective and encourage high-quality resources to develop small and medium-sized cities and even central villages. At the same time, we should attract surplus rural labor force to small and medium-sized cities and towns through wage attraction, and promote “local urbanization”.

Due to the complex mechanism of the impact of urbanization on farmers’ income and the various paths, the long-term effect of urbanization on farmers’ income needs to be further studied. Due to the different economic development conditions and geographical locations of various regions, whether there are differences in the effects of regional urbanization development on farmers’ incomes still needs to be discussed in depth. In addition, how to use the dividends brought by urbanization to improve the living standards of farmers, improve the current situation of excessive income gap between urban and rural residents, and promote high-quality economic development, and many other issues require further in-depth research.

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Conflicts of Interest

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

References

- Fan, A. J., & Wang, L. L. (2007). An Empirical Analysis of My Country's Urbanization Development and Farmers' Income Growth. *Shandong Social Sciences*, No. 3, 79-83.
- Li, G. C., Li, Y. Y., & Zhou, X. S. (2018). Agricultural Mechanization, Labor Transfer and Farmers' Income Growth-Which Cause and Effect. *China Rural Economy*, No. 11, 112-127.
- Liu, X. L., & Pan, F. H. (2019). Agricultural Product Prices, Rural Labor Transfer and Farmers' Income: An Empirical Analysis Based on the PVAR Model. *Economic Issues*, No. 1, 99-107.
- Ma, Y. Q., & Kong, T. T. (2019). Agricultural Technology Progress, Labor Transfer and Farmers' Income Gap. *Journal of South China Agricultural University (Social Science Edition)*, No. 6, 35-44.
- Song, Y. J. (2010). An Empirical Study on the Relationship between Education Level and Farmers' Income Increase-Based on the Analysis of Provincial Panel Data. *Agricultural Technology Economy*, No. 10, 50-57.
- Wang, J., & Hu, M. L. (2019). An Empirical Test of the Impact of Rural Investment and Agricultural Productivity on Farmers' Income. *Statistics and Decision*, No. 17, 100-104.
- Wang, P. F., & Peng, H. F. (2013). Analysis of the Transmission Path and Regional Difference of the Impact of Urbanization Development on Farmers' Income-Based on the Co-Integration Panel Model. *Agricultural Technology Economy*, No. 10, 73-79.
- Wang, T., & Zhu, M. (2014). New-Type Urbanization and Farmers' Income Growth: Mechanism, Methods and Countermeasures. *Fujian Tribune (Humanities and Social Sciences Edition)*, No. 11, 30-37.
- Xiao, B. Y., & Xu, X. R. (2019). Analysis of the Impact of Financial Support for Agriculture on Farmers' Income Increase. *Agricultural Economics*, No. 9, 116-117.
- Ye, C. X., Xu, X., & Hu, Z. L. (2010). Analysis of the Impact of Urbanization Process on Farmers' Income Structure. *Urban Development Research*, No. 10, 26-30.
- Yuan, W. Y., & Zhou, X. K. (2015). Urbanization and Income Growth of Rural Residents in China—An Empirical Study Based on Provincial Panel Data. *Journal of Guizhou University of Finance and Economics*, No. 1, 89-98.
- Zhang, W. L., Huang, H., & Li, T. (2014). The Dynamic Correlation between the Process of Urbanization and the Increase of Farmers' Income: Analysis and Consideration Based on Shanxi Data. *Economic Issues*, No. 10, 113-116.
- Zhu, Q., & Lu, C. (2020). An Empirical Study on Financial Supporting Agriculture Policy and Farmers' Income-Based on the Perspective of Agricultural Subsidies. *Journal of Jinan (Philosophy and Social Science Edition)*, No. 3, 67-83.