Evidence from the Urban-Rural Income Gap on Whether the Regional Multi Center Structure Can Alleviate Urban-Rural Imbalance

Changjuan Zhao
Anhui University of Finance and Economics
Bengbu, Anhui, 233030, China

Abstract: The integration of industry and education is the driving force and goal of the development of vocational colleges, the key to solving the structural contradiction of talent demand, and the objective requirement to improve the quality of talent cultivation. At present, there are still problems in the talent cultivation of art and design majors, such as low matching between talent supply and enterprise demand, insufficient close cooperation between schools and enterprises, and a single form of integration between industry and education. Exploring the construction of an applied art and design talent cultivation model, specific measures include establishing a composite teaching team, deepening the construction of professional connotation, highlighting the combination of "Taoism and technology" and "three equal emphasis" in talent cultivation, and achieving "four changes" in teaching reform and curriculum system construction.

Keywords: Urban-Rural, Income Gap, Regional Multi Center, Urban-Rural Imbalance

1. INTRODUCTION

Improving farmers' income is the fundamental solution to China's "three rural" problems. In fact, since 2004, seven consecutive No. 1 central document have been closely related to the "three rural" work, especially the income of farmers. At present, the problem of farmers' income in China is manifested in two aspects: on the one hand, farmers' income continues to grow at a low speed. At the beginning of the reform and opening, the household contract responsibility system greatly promoted the increase in production and income of farmers, and their income grew rapidly. For example, from 1978 to 1996, the per capita annual income of farmers increased by 25.9%. However, in the process of rapid economic development in China, the urban-rural income gap has not shown a clear trend of narrowing but has shown a continuous trend of expansion.

According to data from the National Bureau of Statistics, the urban-rural income ratio was 2.57 in 1978 and has shown a trend of increasing year by year. Especially since 2000, the urban-rural income ratio has reached more than three times, reaching a peak of 3.33 in 2009, and has since started to shrink. In 2015, the urban-rural income ratio was 2.73, and the urban-rural income gap is still significant. The reason for this phenomenon in the economic structure is that, from the perspective of China's economic development stage, China is in a stage where the industrial structure and income gap are in a positive relationship. That is, the expansion of income gap is conducive to the adjustment of industrial structure. However, in the long run, if the income gap continues to expand, it will inevitably inhibit the optimization and upgrading of industrial structure. From the perspective of regional correlation and differences, there are differences in the speed, quality, level, and scale of economic development among regions, leading to differences in income inequality and industrial structure development levels among different regions.

However, regions are interdependent, and income inequality not only affects the adjustment of local industrial structure, but also inevitably affects surrounding areas. Changes in income inequality have a spatial spillover effect on industrial structure adjustment. Therefore, it is increasingly important to conduct in-depth research on the dynamic distribution and changing characteristics of industrial structure and analyze the spatial correlation and differences between industrial structure adjustment and income gap changes. Changes in industrial structure will cause changes in the income of urban and rural residents, and the improvement of urbanization level will also affect the income of urban and rural residents. This article selects the upgrading of industrial structure and urbanization rate as independent variables, and the income gap between urban and rural residents as the dependent variable. Among them, the advanced industrial structure (IS) is calculated using the formula borrowed from Gan Chunhui's method: measured by the ratio of the output value of the tertiary and secondary industries, the higher the IS value, the higher the degree of structural upgrading.

The level of urbanization is reflected by the commonly used classic indicator of urbanization rate (UR), which means urbanization rate=urban population/total population. The larger the percentage ratio, the higher the level of urbanization. The income gap between urban and rural residents is reflected by the urban-rural income ratio (URIR), which is calculated as the ratio of per capita disposable income of urban residents to per capita disposable income of rural residents. The larger the value, the greater the gap. Yu Weiping pointed out that the important way to increase farmers' income is to strengthen the construction of rural infrastructure, establish and improve the direct subsidy system for farmers' income, the social security system, the land circulation system, the equal employment system, and the registered residence management system, accelerate the process of rural urbanization and urban-rural integration, and promote the transfer of rural labor to the secondary and tertiary industries.

2. THE PROPOSED METHODOLOGY

2.1 Comparison of urban-rural income gap

The above research provides valuable clues for understanding the relationship between changes in China's industrial structure and the urban-rural income gap and provides ideas for how China can narrow the income gap in the process of optimizing and upgrading its industrial structure. However, current research only considers the impact of the local industrial structure on the urban-rural income gap, neglecting the spatial correlation between regions and the resulting interdependence and mutual constraints. The existence of spatial correlation makes it necessary to include spatial factors in the analysis framework of economic activities.

Based on the above considerations, this article incorporates the study of the impact of industrial structure adjustment on urban-rural income gap into the framework of spatial economics and uses spatial panel econometric tools to analyze the spatial effects of industrial structure changes on urban-rural income gap. The location locking effect of spatial economics and the emphasis on industrial correlation in new economic geography provide us with reference for analyzing the phenomenon of industrial structure correlation and differentiation between regions.

He Yiming et al. (2011) found that there are certain differences in industrial structure among different regions. At the same time, due to trade exchanges, knowledge, and technology spillovers, as well as labor mobility between different regions, and the guidance and adjustment of macro policies, the industrial structure of a region is often influenced and constrained by surrounding regions. To explain the dynamic characteristics of VAR model and the impact of independent variables on dependent variables, Usually, a pulse response function is used. The impulse response function analyzes the dynamic impact of an error term on a system when it undergoes a certain impact or change, that is, a standard impact on an endogenous variable.

To measure the impact of advanced industrial structure and urbanization on the urban-rural income gap of the dependent variable, a two variable VAR pulse response model is constructed as follows. In China, the current "household average system" of equal distribution of agricultural land according to the proportion of people's heads separates land ownership and use rights, resulting in incomplete or ambiguous land ownership rights for farmers. In recent years, although the Chinese government has adopted a series of macroeconomic policies to promote agricultural land transfer, the procedures for agricultural land transfer are not standardized, the transfer level is low, the scope is narrow, and the scale is small. In practical operation, the rights and responsibilities are not clear, the sense of integrity is not strong, and the breach of contract behavior cannot be dealt with in a timely and fair manner. As a result, the land transfer of farmers or large grain farmers is not guaranteed, the land benefits are lack of protection, and even land disputes arise.

2.2 Regional multi center structure to alleviate income gap.

With the development of the economic level, the economic activities between different regions are more and more closely linked, and the change of the registered residence system, the labor force in some regions will not only flow between different industrial sectors in the region, but also flow across regions. In the process of cross regional flow, it will inevitably be affected by the industrial structure of the labor

inflow region. Therefore, the industrial structure not only has an intra-regional effect on the income of urban and rural residents, but also has an inter-regional spillover effect. Changes in industrial structure not only affect the income of urban and rural residents in this region, but also affect the income level of urban and rural residents in other regions.

In the traditional empirical analysis process, if only time series data is considered, regional spatial differences will be masked. If panel data is used to analyze individual effects to reflect differences between different regions, but the horizontal spatial impact between different regions is still not analyzed. In recent years, spatial econometric analysis methods have gradually matured, allowing us to consider the role of spatial factors when analyzing the impact between economic variables.

Spatial panel measurement compensates for the shortcomings of traditional measurement that cannot comprehensively consider horizontal and vertical differences and can more accurately determine the relationship between variables. Therefore, this topic uses spatial panel measurement tools to analyze the direct and indirect effects of urban-rural income gap changes on industrial structure adjustment from the perspective of spatial correlation and spatial heterogeneity. To calculate the critical values of three period variables, in Eviews6.0, input $URI=C(1)*(IS)^3+C(2)*IS^2+C(3)*IS+C(3)$, simulate the cubic curve, and calculate the two critical values of IS as 1.045 and 1.588 by taking the second derivative of the model; According to the previous IS statistical data, the ratio of China's tertiary to secondary industries in 2013 was 1.074, and in 2016 it was 1.297

China passed the "pain period" of industrial structure adjustment in 2013 and entered the "benefit period". When the ratio of the tertiary industry to the secondary industry reached 1.588, it entered the "stable period". On the other hand, the decentralized small-scale business model has led to a lack of professional division of labor among farmers in production. In addition, the natural conditions of "seven mountains, one water, and two fields" in the southern Hunan region have led to large input, small output, and low efficiency in agricultural production. As a result, the economic entities of individual farmers are unable to bear market risks, resulting in most farmers being self-sufficient in agricultural products and increasing production without increasing income. The backward farmer management system has led to low agricultural production efficiency and low commodity yield of agricultural products, thereby restricting the improvement of farmers' operational income.

Due to the typical urban-rural dual structure in China, some literature uses the urban-rural income ratio as an indicator to measure the level of income gap between urban and rural residents. Since the income ratio of urban and rural residents does not consider the different proportions of urban and rural residents in the total population, using the income ratio of urban and rural residents as an indicator to measure the income gap between urban and rural residents may have certain drawbacks. Therefore, this article uses the modified weighted coefficient of variation algorithm to calculate the income gap between urban and rural residents. The Gini coefficient is the most used indicator to measure the income distribution gap among residents.

When calculating residents' income distribution, the current household income and expenditure statistics are conducted separately for urban and rural areas. According to this statistical standard value, the Gini coefficient of urban and

rural residents' income can be calculated separately, but the Gini coefficient of national residents' income cannot be directly calculated. In addition, Chinese residents exhibit a typical urban-rural dual structure, and some scholars use the urban-rural income ratio as an indicator to measure the income distribution gap in China. If we only use the income ratio of urban and rural residents to measure the income distribution gap, there is a drawback of not considering the different proportions of urban and rural residents in the total population. Therefore, this article adopts a modified weighted coefficient of variation algorithm.

3. CONCLUSION

Promoting urbanization is an important way to promote the upgrading of industrial structure and narrow the income gap between urban and rural areas. Urbanization is the strongest potential for expanding domestic demand and an important part of industrial structure upgrading. Promote regional coordinated development through urbanization, open new spaces for economic growth and industrial upgrading, gradually transform eligible agricultural populations into urban residents, and narrow the income gap between urban and rural areas. Promoting the marketization of the agricultural industry to increase the operational income of large-scale homeowners is an effective way to increase farmers' income; Secondly, creating conditions for local or nearby transfer of rural labor to increase nonagricultural labor income is an important way to increase farmers' income; Thirdly, increasing fiscal and financial support to increase farmers' policy income is a necessary way to increase farmers' income.

4. ACKNOWLEDGEMENT

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