

Research on the Industrial Structure of Ethnic Areas and the Income Gap between Urban and Rural Residents under the Background of Rural Revitalization Strategy

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Abstract: The report of the 19th National Congress pointed out: “The main contradiction in Chinese society has been transformed into a contradiction between the people's growing need for a better life and the uneven development.” The expansion of the income gap between urban and rural residents has become a hot spot at home and abroad. Under the background of implementing the rural revitalization strategy, optimizing the industrial layout of ethnic areas through industrial prosperity, adjusting the industrial structure of ethnic areas, and narrowing the income gap between urban and rural residents in ethnic areas is an urgent problem we need to solve. This article is to revitalize the countryside. The industrial prosperity under the strategic background is the starting point. Firstly, the industrial structure of ethnic areas and the income gap between urban and rural residents in ethnic areas are described. Secondly, the theoretical mechanism and empirical analysis of the role of industrial structure on the income gap between urban and rural residents are analyzed. The results show that the optimization and upgrading of the industrial structure in ethnic areas, the improvement of the level of opening up, the improvement of urbanization rate and the improvement of government intervention have effectively inhibited the expansion of the income gap between urban and rural residents, but the level of regional economic development has intensified the income gap between urban and rural residents the ethnic areas. Finally, put forward targeted suggestions.

1. Introduction

The report of the 19th National Congress pointed out: “The main contradiction in Chinese society has been transformed into the contradiction between the people's growing needs for a better life and the uneven development.” The imbalance in development and the development inadequate is the most evident in urban and rural areas. The rural performance is the most prominent. Since the end of the 1970s, China's rural reform has brought about profound changes in the rural economy and society, and the income level of farmers has continued to grow steadily. However, compared with urban residents, the income of rural residents in China has increased. The speed is still slow, and the imbalance between urban and rural development is still the most prominent. In 1978, the income of rural residents in China was 134 yuan, and the income of urban residents was 343 yuan. By the end of 2018, the income of rural residents was 14,617 yuan, and the income of urban residents was 39,251 yuan. The absolute gap widened from 209 yuan in 1978 to 24,634 yuan in 2018, the relative gap from 2.56 in 1978 to 2.69 in 2018. China's Gini coefficient is 0.474 in 2018, which is an increase from 0.467 in 2017, exceeding the warning line of 0.4. As China's economy enters the “new normal” stage, the economic growth rate shifts from high-speed growth to medium-high-speed growth, and China faces income inequality. The problem is intensified, in which the urban-rural income gap is particularly serious, and the issue of social equity has gradually risen to become a prominent social and economic problem, mainly manifested by regional development disharmony and imbalance between urban and rural economic development. The imbalance between urban and rural economies is the current income gap between urban and rural residents in China. The direct cause of the expansion (Xu Zhiwen et al., 2014), the imbalance between urban and rural development in ethnic areas is more prominent. At the same time, the

negative impact of urban-rural income gap is more prominent, which has become an important obstacle to the high-quality development of China's economy. The rural revitalization strategy is an important means to break the income gap between urban and rural areas. Industrial prosperity is the basis and premise for rural revitalization. Therefore, in the context of implementing the rural revitalization strategy Exploring the relationship between industrial structure and urban-rural income gap will help to solve the mechanism behind the urban-rural income gap and provide useful experience for the government to formulate more rational industrial policies, which will also help promote the convergence of urban-rural income gaps in China. Provide a practical policy reference for promoting full and balanced development in rural areas. Through induction of the literature, founding that the current research on industrial structure and income gap between urban and rural residents has achieved fruitful results, which provides a broad idea for us to continue to study the income-related gaps between urban and rural residents. However, the current urban-rural income gap in ethnic areas under the rural revitalization strategy is studied. There are few articles on the relationship with industrial structure, and the previous studies have not taken into account the special nature of ethnic areas. Therefore, this paper cuts through the perspective of industrial structure optimization and upgrading, and studies the theory of industrial structure optimization to narrow the income gap between urban and rural residents, and studies the theoretical mechanism and empirical test of industrial structure optimization to narrow the income gap between urban and rural residents in ethnic areas, and finally proposes targeted countermeasures.

2. Analysis of the Current Situation of Industrial Structure and Income Gap between Urban and Rural Residents in Ethnic Areas

2.1 Overview of the Income Gap between Urban and Rural Residents in Ethnic Areas

Table 1 Statistics on The Absolute Income Gap between Urban and Rural Residents in Ethnic Areas

(Unit: Yuan)

Year	Inner Mongolia	Guangxi	Yunnan	Guizhou	Tibet	Qinghai	Ningxia	Xinjiang	Mean	National
2000	3094	3970	4846	3747	5117	3679	3188	4027	3959	4027
2001	3600	4721	5264	4040	5715	4243	3721	4505	4476	4493
2002	3965	5303	5632	4454	6241	4489	4150	4691	4866	5227
2003	4745	5690	5946	5004	6367	4915	4487	4900	5257	5850
2004	5517	5872	7007	5600	6339	5315	4898	5258	5726	6485
2005	6177	6422	7224	6270	6333	5893	5585	5508	6176	7238
2006	7016	7128	7819	7132	6506	6642	6357	6134	6842	8172
2007	8425	8976	8853	8304	8343	7592	7678	7130	8163	9645
2008	9777	10456	10148	8962	9306	8587	9250	7929	9302	11020
2009	10911	11471	11055	9857	10012	9346	9977	8375	10125	12022
2010	12270	12521	12113	10671	10844	9992	10669	9001	11010	13190
2011	13766	13623	13854	12350	11292	10995	12169	10072	12265	14833
2012	15539	15235	15658	13948	12303	12202	13651	11527	13758	14069
2013	16901	16514	17095	15233	13445	13302	13884	13244	14952	17037
2014	18374	15986	16843	15877	14661	15024	14875	14490	15766	18355
2015	19818	16949	18131	17193	17213	16609	16067	16850	17354	19773
2016	21366	17965	19591	18653	18708	18093	17301	18280	18745	21253
2017	23086	19177	21134	20211	20341	19707	18734	19730	20265	22964
2018	24502	20001	22720	21876	22347	21122	20187	20789	21693	24634

Source of data: 2018 provincial statistical yearbooks and 2018 statistical bulletins.

Table 1 shows the absolute gap between the income of urban and rural residents in ethnic areas and the average income gap between urban and rural residents in ethnic areas and the urban and rural income of urban and rural residents. Overall, the income gap between urban and rural residents in ethnic areas shows a trend of increasing year by year, 2000 The average income gap between urban and rural residents in ethnic areas is 3,959 yuan. By the end of 2018, the absolute income gap between urban and rural residents in ethnic areas has increased to 21,693 yuan, an

increase of 5.48 times, and the average annual growth rate is 9.95% during the period 2000-2018. The income gap between urban and rural residents in ethnic areas is lower than the national average, indicating that the more the areas with relatively slow development, the smaller the absolute gap between urban and rural residents' income. From the perspective of ethnic areas, the income gap between urban and rural residents in various ethnic areas has expanded year by year. However, the degree of expansion in different regions is different. In 2000, only the income gap between urban and rural residents of Yunnan and Tibet was higher than the national average, which was 819 yuan and 1090 yuan respectively. By the end of 2018, The income gap of residents is lower than the national average, but Inner Mongolia, Yunnan, Tibet and Guizhou are higher than the national level. The level is 2809 yuan, 1027 yuan, 654 yuan and 183 yuan respectively.

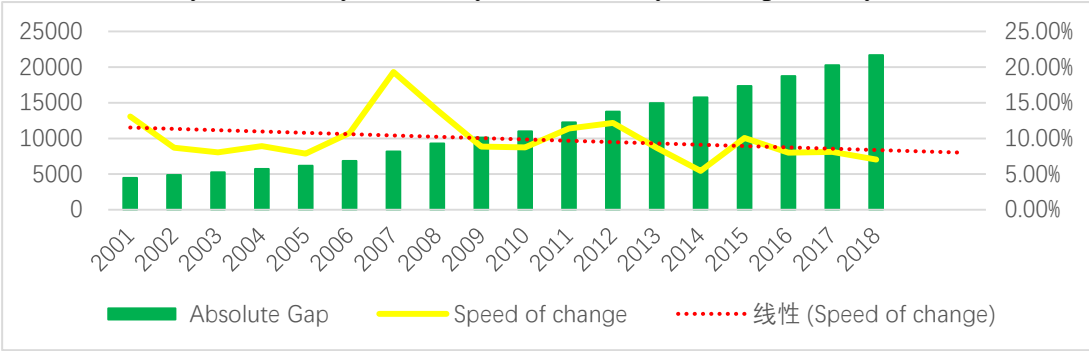


Fig.1 The Speed of Change in the Absolute Income Gap between Urban and Rural Residents in Ethnic Area

Source of data: 2018 provincial statistical yearbooks and 2018 provincial statistical bulletins compiled and calculated.

Although the income gap between urban and rural residents in ethnic areas is expanding, the speed of urban-rural income gap is expanding as the trend of volatility declines. The gap was at a growth rate of 13.08%, and it fell to 8.70% in 2001. In 2007, the income gap between urban and rural residents in ethnic areas increased the most, at 19.31%. As of 2018, the income gap between urban and rural residents in ethnic areas fell to 7.05%. (See Figure 1 for details).

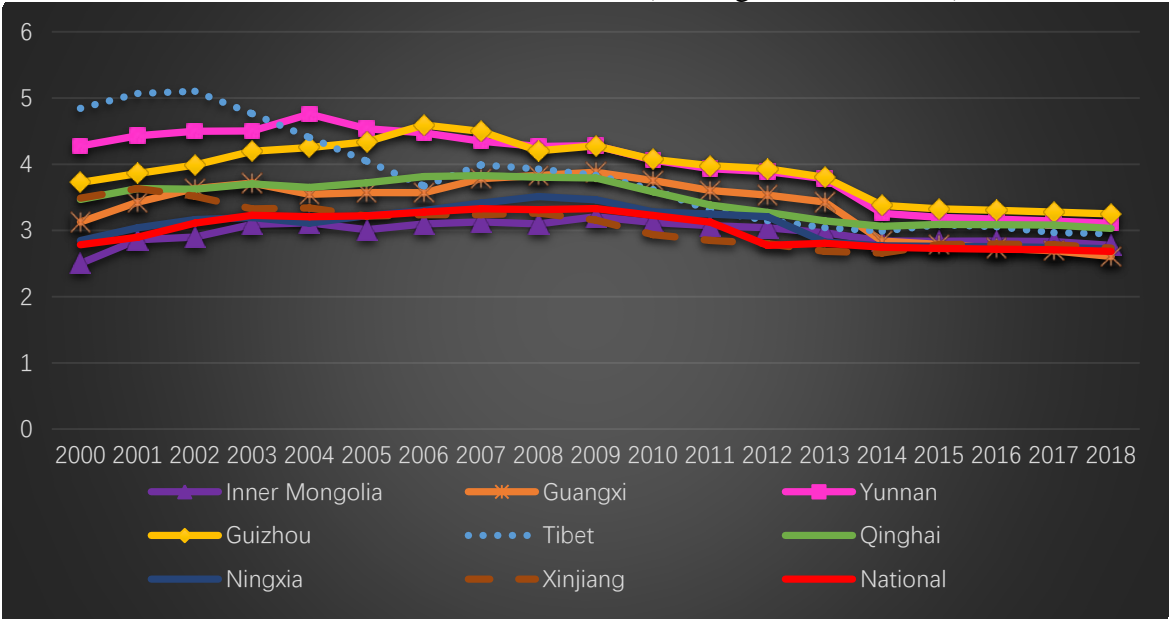


Fig.2 : Relative Income Gap between Urban and Rural Residents in Ethnic Areas

Source of data: 2018 provincial statistical yearbooks and 2018 statistical bulletins compiled and calculated.

Figure 2 shows the changes in the relative gaps between the eight provinces and the nation and the income of urban and rural residents. During the period 2000-2018, the relative gap between the

income of urban and rural residents and the national urban and rural residents showed a trend of “first increase and then decrease”. The income ratio of urban and rural residents fluctuates between 2.5 and 3.5. The income ratio of urban and rural residents in ethnic areas fluctuates between 2.8 and 3.8, indicating that the income ratio of urban and rural residents in ethnic areas is greater than the income ratio of urban and rural residents. During the period 2001-2003 The relative gap in income has widened. During the period of 2003-2018, with the implementation of a series of policy measures, the income gap between urban and rural residents has gradually narrowed, and the income ratio of urban and rural residents in ethnic areas has also become closer to the income ratio of urban and rural residents.

Overall, the absolute gap between urban and rural residents' incomes in ethnic areas is increasing year by year, but the relative gap between urban and rural residents' income is gradually narrowing.

2.2 Optimization of Industrial Structure in Ethnic Areas

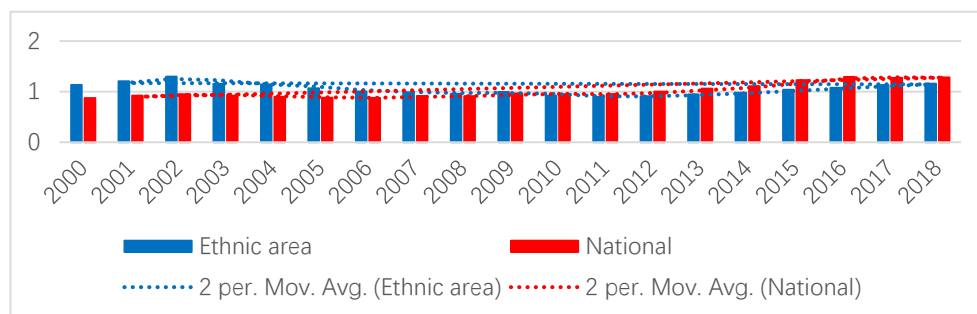


Fig.3 Optimization of Industrial Structure in Ethnic Regions and the Country

Source of data: 2018 provincial statistical yearbooks and 2018 statistical bulletins compiled and calculated.

The industrial structure of ethnic areas is gradually optimized. The optimization of industrial structure mainly includes two aspects: the rationalization of industrial structure and the advanced structure of industrial structure. The rationalization of industrial structure means that resources are rationally allocated among various industries and the level of effective use of resources is high. The advanced structure of industrial structure generally appears in the stage of high industrial level in the region because of industrial development. It can promote the rapid development of the service industry by improving the scale and efficiency of the service industry and providing a good foundation for the development of the service industry. The rationalization of the industrial structure is the basis for the advanced industrial structure, and the high polarization of the industrial structure is the necessary result of the rationalization of the industrial structure. The optimization and upgrading has provided a new impetus for the economic development of ethnic areas. The optimization and upgrading of the industrial structure in ethnic areas is conducive to the coordinated development of the region, to the satisfaction of the growing needs of the society, and ultimately to the adaptation of industrial development to regional economic development. The growth rate of the third industry in the process of economic service is faster than the growth rate of the secondary industry, so the optimization of industrial structure is measured by the service index (Gan Chunhui, 2011), which is the ratio of the output value of the thirdly industry to the output value of the secondary industry. The higher the service index, the economy is advancing to service. The industrial structure is upgrading. Figure 3 shows the optimization of industrial structure in ethnic areas and the whole country. Overall, the economic service index of ethnic areas is in a downward trend, and the national economic service index is on the rise. Before 2010, the level of economic service in ethnic areas was higher than the national average. After 2010, the level of economic service in the country was higher than that in ethnic areas. This was mainly due to the natural environment, geographical conditions and limited technical level of ethnic areas. After 2009, with the improvement of infrastructure, traffic conditions and technical level in ethnic areas. The level of industrialization has increased, and the growth rate of the output value of the secondary industry is faster than that of the thirdly industry. The speed has led to a decline in the level of economic service

in ethnic areas. Relatively speaking, China's third industry has increased more than the secondary industry, and China's industrial structure is gradually being optimized. In general, the industrial structure of China and ethnic regions is in the process of optimization, but the degree of optimization of industrial structure in ethnic areas is lower than that of the whole country.

2.3 Coordination Analysis of Industrial Structure and Income Gap between Urban and Rural Residents

Figure 4 shows the changes in the industrial structure of ethnic areas and the relative income gap between urban and rural residents. Through observation, we find that the adjustment of industrial structure and the general trend of the relative income gap between urban and rural residents are the same. In 2001-2003, China joined the World Trade Organization. Bringing new opportunities for China's economic development, in order to adapt to the needs of the world market, China's industrial layout has been rapidly adjusted, and the thirdly industry in ethnic areas has developed rapidly. However, due to the labor culture quality and institutional constraints in rural areas, the labor force cannot move freely to the city. In the case of urban labor shortage, the income of urban residents increases, and the income gap between urban and rural residents increases. During the period of 2004-2007, with the increase of industrialization level in ethnic areas, the proportion of secondary industry in GDP has gradually increased, resulting in a slowdown in the economic service of ethnic areas. The slower development of the thirdly industry resulted in a decline in the demand for labor, bringing a decline in the income of urban labor, and a narrowing of the income gap between urban and rural residents. In 2008-2010 year, the level of industrial structure service has declined, and the income gap between urban and rural residents has increased. After 2011, the pace of increase in the thirdly industry was significantly faster than that in the secondary industry. The level of industrial service in ethnic areas continued to increase, providing a large number of jobs for rural surplus labor in ethnic areas and improving rural labor income level, narrowing the income gap between urban and rural areas.

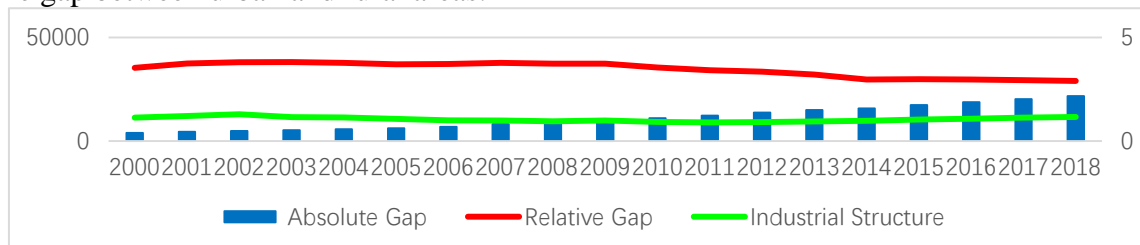


Fig.4 Trends in the Industrial Structure of Ethnic Regions and the Relative Income Gap between Urban and Rural Residents

Source of data: 2018 provincial statistical yearbooks and 2018 statistical bulletins compiled and calculated.

3. Analysis of the Theoretical Mechanism of Industrial Structure on the Income Gap between Urban and Rural Residents in Ethnic Areas

The mechanism of the industrial structure's effect on the income gap between urban and rural residents is mainly divided into two aspects: direct and indirect.

(1) The direct effect mechanism of industrial structure on the income of urban and rural residents

With the rapid development of the economy, The proportion of the primary industry in the regional GDP has declined, and the proportion of the secondary and thirdly industries in the regional GDP has gradually increased. The proportion of an industry is higher than that of urban areas. The employment of people in rural areas is mainly based on the primary industry; the employment of people in urban areas is mainly secondary and tertiary industries. The wage level of the primary industry is lower than that of the secondary and thirdly industries. Therefore, the net income of rural residents is relatively low, and the disposable income of urban residents will be relatively high, leading to an increase in the income gap between urban and rural residents in ethnic

areas.

(2) The Indirect Mechanism of Industrial Structure on the Income of Urban and Rural Residents

Through the summarization and summary of relevant literatures, it is found that the industrial structure can also have an indirect impact on the income gap between urban and rural residents through the level of urbanization and economic development.

1). The level of urbanization

Industrial restructuring has a dual role in influencing the impact of urbanization on the income gap between urban and rural residents. On the one hand, it narrowed the income gap between urban and rural residents. Due to the adjustment of industrial structure and the rapid development of the tertiary industry, some industries in the tertiary industry are in the stage of increasing returns to scale. The marginal output and scale returns of the agricultural sector are declining, resulting in a decline in the unit cost of products in the tertiary industry. The profits of the three industries are higher than that of the primary industry. The rapid expansion of the tertiary industry requires a large inflow of labor. At the same time, higher labor compensation attracts the surplus labor of rural areas to the city. The flow of a large number of rural populations to cities has increased the level of urbanization. Farmers working in cities will bring the wages of working and the advanced technology learned in the city back to the countryside, injecting fresh blood into the development of rural areas and improving the hematopoietic function in rural areas. Secondly, the transfer of rural labor to cities increases the supply of labor. According to the supply and demand theorem, when the demand is constant, when the supply increases, the wage level of the labor force will decrease, thereby reducing the per capita disposable income of urban residents and narrowing the income gap between urban and rural areas. Third, the transfer of rural surplus labor to cities will increase the per capita arable land of rural labor, increase the per capita income of rural labor, and narrow the income gap between urban and rural residents. On the other hand, the adjustment of industrial structure has intensified the income gap between urban and rural residents by affecting the level of urbanization. First, in the case of the same total labor supply, the backward labor level in rural areas and the strict household registration system restrict the free transfer of labor, the shortage of labor supply in urban areas, and the excessive supply of labor in rural areas, resulting in higher incomes of urban residents. The income of residents has decreased, and the income gap between urban and rural residents has widened. The rapid expansion of cities requires a large amount of fiscal expenditures to build urban infrastructure, and to ensure the convenience of urban residents' food, clothing, housing and transportation. This will reduce support for rural areas, reduce the transfer income of rural residents, and expand the income gap between urban and rural residents.

2). Economic Development

In consumption theory, we know that consumption and income are related, and consumption drives demand. According to Maslow's hierarchy of needs, after meeting the basic consumer spending requirements, residents with higher incomes will pay more attention to the needs of the spiritual level, increase the demand for the service industry, promote the development of the service industry, and promote the tertiary industry. The growth has become the main driving force for economic growth. In order to meet the consumption needs of residents, the tertiary industry is growing rapidly and requires a large amount of labor and social resources. However, most of the rural labor force and its own level of education, physical quality, technical level and system are difficult to flow to the tertiary industry. As a result, the income gap between urban and rural residents has increased. That is, where the economy is more developed, the income gap between urban and rural areas is greater.

4. Empirical Analysis of the Industrial Structure's Income Gap between Urban and Rural Residents

(1) Data source and variable selection

The data in this paper are from the statistical yearbooks of the provinces of ethnic regions in 2001-2018 and the statistical bulletins of the national provinces in 2018. The income gap between urban and rural residents is used as an explanatory variable, the industrial structure is the

explanatory variable, the degree of regional openness, and the degree of government intervention. And the level of urbanization is a control variable to verify whether the adjustment of the industrial structure of the current ethnic areas has alleviated the income gap between urban and rural residents, and whether the effect is obvious. The income gap between urban and rural residents (Gap) uses the disposable income of urban residents and the net income of rural residents. The ratio between them can reflect the living standard of urban and rural residents and also reflect the income gap between urban and rural residents. The industrial structure is expressed by the ratio of the output value of the tertiary industry to the output value of the secondary industry. The proportion of the total value indicates that the degree of government intervention is expressed by the ratio of the government's general fiscal expenditure to the regional GDP. The urbanization level is expressed as the ratio of the urban resident population to the regional resident population. The regional economic development level is the per capita of the provinces in the ethnic regions. The level of regional economic development is expressed in terms of the per capita GDP of the provinces in the ethnic regions. In the data pre-processing process, in order to eliminate the impact of heteroscedasticity, the regional production economic development level and industrial structure are logarithmically processed. All indicators and corresponding basic statistical descriptions are shown in Table 2.

Table 2 Descriptive Statistics of the Variables

variable	name	Maximum	Minimum value	average value	Standard deviation
GAP	Relative income gap between urban and rural residents	5.1	2.5	3.46	0.57
LNINDUSTRY	Industrial structure	1.01	-0.57	0.01	0.29
LNPGDP	Regional economic development level	11.19	7.92	9.76	0.82
OPEN	Opening level	0.62	0.01	0.14	0.12
GOV	Degree of government intervention	1.41	0.12	0.39	0.28
URB	Urbanization	0.63	0.19	0.39	0.11

(2) Empirical Analysis and Conclusion

This paper uses the fixed panel regression model to regress the relationship between the income gap between urban and rural residents and the industrial structure. The regression results are shown in Table 3.

Table 3 Regression Results of Industrial Structure and Income Gap

Explained variable		Explanatory variables	Control variable				
gap		lnindustry	open	lnpgdp	gov	urb	_cons
	Mr. Coef.	-0.28323	-1.19162	0.247547	-2.12624	-4.77402	3.910971
	Std. Err.	0.160708	0.436771	0.149506	0.274267	1.499993	0.856532
	t	-1.76	-2.73	1.66	-7.75	-3.18	4.57
	P>t	0.08	0.007	0.10	0.00	0.002	0.00

According to the regression results, we can draw the following conclusions:

First, under the confidence level of 1%, the optimization and upgrading of the industrial structure of ethnic areas narrows the income gap between urban and rural residents in ethnic areas. For every one percentage point increase in the level of industrial structure service, the income gap between urban and rural residents will be reduced by 0.28 percentage points. Under the 1% confidence level, the degree of openness, regional economic development level, government intervention level and urbanization level have narrowed the income gap of urban residents. For every one percentage point increase in the level of opening up, the urban-rural income gap in ethnic areas has narrowed by 1.19 percentage points. For every 1% increase in government expenditure levels, the income gap between urban and rural residents will shrink by 2.13 percentage points, and for every one percentage point increase in urbanization, the income gap between urban and rural residents will shrink by 4.77 percentage points. Second, the level of regional economic development has widened the income gap between urban and rural residents. The 10% confidence level is significant, indicating in areas with rapid development, the income gap between urban and rural residents is greater.

5. Countermeasures and Suggestions

Through the theoretical mechanism and empirical analysis of the industrial structure of ethnic areas and the income gap between urban and rural residents, this paper finds that the industrial structure of ethnic areas has narrowed the income gap between urban and rural residents to a certain extent, but the contribution is lower than other factors, then the ethnic areas How to grasp the prosperity of the industry and realize the optimization and upgrading of the industrial structure in the ethnic regions, and then narrow the income gap between urban and rural residents in ethnic areas is the focus and difficulty of our future work in the context of rural revitalization.

First, adjust and optimize the industrial structure and promote the development of new industries. From the current point of view, the rural areas in ethnic areas are still dominated by the primary industry, and the development of the secondary and tertiary industries is insufficient. Most of the rural labor force is engaged in the primary industry with poor economic returns and high risks, and the income level of farmers is low. We should speed up the development of the secondary and tertiary industries and increase their share of the regional GDP. The development of the secondary and tertiary industries will release a large number of jobs, provide jobs for the rural surplus labor, and raise the income level of rural residents. thereby narrowing the income gap between urban and rural residents.

Second, vigorously develop characteristic industries in ethnic and rural areas and increase farmers' ability to increase their income. Ethnic areas have rich tourism resources and national characteristics. Each region should combine its own characteristics to build a characteristic industrial system and create industries. On the one hand, for areas with geographical indications of crops and handicrafts, the special agricultural products are reprocessed and packaged to increase the output value of agricultural products, thereby increasing the income of rural residents. On the other hand, ethnic areas can rely on unique ecological environment and unique ethnic characteristics to establish minority villages and develop rural tourism. The promotion of rural tourism requires infrastructure construction. Infrastructure construction requires a large amount of labor, which will increase the wage income of rural surplus labor, and thus narrow the income gap between urban and rural residents.

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