A Quantitative Study on the Relationship between Industrial Structure and Employment Structure in Yulin

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Abstract

Reasonable industrial structure can promote the benign development of employment structure, and the coordination of the employment structure but also for industrial restructuring and upgrading to lay a solid foundation. This article take Yulin as an example, uses 1990-2014 year three industrial output value and the employment population statistical data, uses the statistics gauging device that has conducted the quantitative investigation to the Yulin industrial structure and the employment structure relations. First, this paper describes the evolution process of Yulin's industrial structure and employment structure. Secondly, it uses the correlation analysis to confirm the strong correlation between Yulin's industrial structure and employment structure, then, from the industrial structure deviation and employment elasticity, and the second industry, the first industry, labor surplus. Finally, according to the research income, gives the rational distribution of industrial layout to promote employment growth in the third industry and the policy recommendations.

Keywords: Industrial structure; employment structure; correlation analysis; industrial structure deviation; employment elasticity.

1. Introduction

The industrial structure reflects the trend of economic change in a country or a region. It is the distribution pattern and correlation degree of production factors among various departments. It is an important sign to measure the growth speed of a period of time. The corresponding employment structure also reflects National or regional economic development level of the logo. The holoscopic various countries’ development condition, between the industrial structure and the employment structure complements one another, restricts mutually, promotes the state economy development together. At present, our country economy downward pressure and the employment pressure are big, the research industrial structure and the employment structure dynamic relations, to optimize the industrial structure, the maintenance full employment, realizes the industrial structure and the employment structure benign interaction, promotes the national economy stable development to have the vital significance.

Yulin city, located in the north of China, is located in Shaanxi Gansu Ningxia Mongolia Shanxi five province border areas, national energy and chemical industry base that is extremely rich in mineral resources, has been praised as "China Kuwait", "Shaanxi" in 12th

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Five-Year is the engine of economic development. Because it is richly endowed by nature mineral resources, Yulin city’s economy has undergone rapid changes in just a few decades. In the ten years to eight years of economic growth in Shaanxi first, GDP of 1 billion 977 million yuan in 1990, to the end of 2014 rose to 300 billion 574 million yuan, an increase of 152 times, create a world-renowned Shaanxi speed”.

Yulin is also facing many problems. Yulin City, after the adjustment of industrial structure, industrial structure distribution from 1990 to 36.01: 25.39: 38.59 adjusted to 4.83: 68.27: 26.91 in 2014, the industrial structure is still uneven development Problem, the three industries irrational distribution, the proportion of secondary industry output value is high, while the proportion of primary and tertiary industries is too low, Yulin City, a single industrial structure. The employment structure of Yulin City changed from 75.15: 9.76: 15.09 to 54.86: 14.39: 30.74 in 1990. The employment share of the primary industry occupies the first place and the employment proportion of the secondary and tertiary industries that has increased but still low, employment is also very prominent contradictions. It is very important to probe into the relationship between the industrial structure and the employment structure in Yulin city, and to find the problems between the two, so as to provide the reasonable policy suggestion, so that the government can formulate effective industrial development strategy and employment policy.


2.1 A Statistical Description of the Industrial Structure and Employment Structure in Yulin

The proportion of the primary industry decreased from 36.01% in 1990 to 4.84% in 2014; the proportion of secondary industry increased from 25.39% in 1990 to 68.27% in 2014; the proportion of tertiary industry slowed down from 38.59% in 1990 to 26.91% in 2014, the output value of the structure from the form into shown as the follows.
Along with the industrial structure change, the Yulin employment structure has also had the remarkable change, looking from the employment proportion, like figure 2, the primary industry employment proportion drops year by year, the primary industry employment proportion from 75.15% drops to 47.25%; Second industrial and the tertiary industry employment proportion presents the tendency which rises year by year, but the two ascending velocity is different, the second industry from 9.76% rises to 22.8%, the tertiary industry from 15.09% rises to 29.94%, the ascending velocity is higher than the second industry, the form which the employment structure presents.
In summary, from 1990 to 2014, Yulin economic development as a whole showed an upward trend, but the proportion of the first industry declining year by year, the proportion of secondary industry increased year by year, the proportion of tertiary industry changes relatively slowly, and showing down that Yulin city's industrial development focus shifted from the first industry to the second industry, while the tertiary industry's economic development is relatively slow; with the industrial structure adjustment, Yulin city employment structure also changes, the employment population increases, but the first The proportion of employed persons in the second and third industries increased year by year, indicating that under the conditions of agricultural modernization and labor productivity, Yulin labor resources flowed from the primary industry to the secondary and tertiary industries, the proportion of employment in the industry still occupy the first place, the labor force transfer rate is slow.

2.2 A Quantitative Analysis of the Relationship between Industrial Structure and Employment Structure in Yulin

Through the actual statistical data, using SPSS19.0 software to obtain Yulin employment structure and industrial structure correlation coefficient as follows. The weighted average of the three industrial output values over 25 years is taken as the weight.

\[ r = \frac{16.6632 \times 0.882 + 49.6812 \times 0.797 + 33.6856 \times 0.665}{100} = 0.767 \]

Figure 3. Yulin City, the Three Major Industrial Structure Deviation Degree Trend Chart.

(1) The deviation degree of the structure of the first industry shows a long-term negative deviation, and the absolute value of the whole industry rises. This shows that the primary
industry structure and the employment structure are not balanced in Yulin city, the proportion of industrial output value is lower than employment proportion. The proportion of output value decreases fast, resulting in practitioners beyond the labor force required for the industry, the first industry, labor surplus, there is hidden unemployment phenomenon, but at the same time can predict the future labor will be transferred to the secondary and tertiary industries, which Yulin City employment structure have a certain impact.

(2) The deviation degree of the structure of the second industry is positive deviation, the absolute value is larger than that of the secondary and tertiary industry, and the fluctuation is big, and the decline rate is the fastest in 2008-2010. Yulin City, the second industrial structure and employment structure is not coordinated, the proportion of employment than the proportion of industrial output value, the proportion of employment than the proportion of output value decreased faster, resulting in a serious shortage of secondary industry employment, must absorb more labor.

(3) The structural deviations of the tertiary industry show a positive deviation from 1990 to 2006, negative deviations from 2006 to 2014, the absolute value is smaller than the secondary industry, the overall decline, and since 2004 the structural deviation are close. This indicates that the development of the tertiary industry structure in Yulin has gradually entered a stable state since 2004 and absorbs the labor force transferred from other industries. It can be predicted that the tertiary industry of Yulin City will gradually become the main industry to absorb labor force.

Employment elasticity refers to the economic structure, labor costs and other factors, so that the employment structure changes, the degree of change with employment elasticity coefficient to represent. A percentage of the corresponding employment growth rate changes each economic growth, reflecting the employment elasticity with the degree of economic growth to absorb labor force, a positive coefficient, as the economic growth rate increased, the number of absorbing labor force also increased, with "suction" effect; the elastic coefficient is negative, as to increase the rate of economic growth, labor quantity decreased and the "crowding out" effect; the elastic coefficient is zero, as the number of the constant growth of labor economy. Calculate the employment elasticity of three industries in Yulin City, Yulin City, the total employment elasticity showed relatively low, and the range of variation is small, showing a steady trend, indicating that Yulin's economic growth is not big to stimulate employment, from the industrial point of view, we can get the following ideas.

(1) The first industry in Yulin city, the employment elasticity of overall performance for the decline - smooth - rising trend. 1992-2013, change is more stable, the average elastic coefficient is negative and the first industry during this period of employment with weaker economic growth "crowd out" effect, there is labor outflow phenomenon.

(2) The second industry in Yulin city, the employment elasticity of the movement is large, but the average elastic coefficient is positive, that economic growth and employment growth.
(3) The third industry in Yulin city, the employment elasticity of gradual change from the first, second industry, basic positive employment elasticity coefficient, suggests that the development of the tertiary industry in the initial stage of yulin city, in the long run, pull function on the employment of the third industry has a larger development space.

3. Conclusion

3.1 Conclusion and Summary

By studying the 1990-2014 in Yulin city, the relationship between industry structure and employment structure, found that the industry structure and employment structure, the deflection of Yulin city employment structure lags behind the development of industrial structure, development uncoordinated, specific include:

(1) From the trend of industrial structure and employment structure, the proportion of primary industry output and employment decreased, the proportion of secondary industry output and employment increased, the proportion of tertiary industry decreased, the proportion of employment increased , The development structure is unreasonable; the proportion of secondary industry is still in the first place for a long time, showing that the current second industry is the focus of Yulin economic development, which may be due to Yulin city, a single development of chemical energy.

(2) From the correlation, the first and second industrial structure and employment structure are positively related to economic growth on the role of employment, while the tertiary industry structure and employment structure was negatively related to the development of uncoordinated labor resources shortage.

(3) From the industrial structure deviation degree, the primary industry labor surplus, the second and tertiary industries to absorb the labor force is strong. In order to solve the employment contradiction, may focus on the development of secondary and tertiary industries.

(4) From the perspective of employment elasticity, the employment elasticity of the primary industry is generally negative, indicating the possibility of the labor force being transferred out. The employment elasticity of the secondary and tertiary industries is positive, indicating that the number of employed persons is also increasing and there is the possibility of labor inflows.

3.2 Policy Suggestions

This conclusion cause thinking, as driven by the energy of Yulin economic development, speed up the economic transformation and industrial structure optimization, to achieve full employment, it is necessary to establish the long-term pattern according to the special case of Yulin, this paper gives the following policy suggestions.
(1) aims at the primary industry development, should in the deference industrial structure evolution rule foundation, speed up the urbanized advancement, cancels the tradition lateral economic ties, the reform economic system, causes the rural labor force to change the city not to receive limits, guaranteed the countryside inhabitant and the cities inhabitant gets employed fairly. Simultaneously adjusts the agrarian policy, establishes the characteristic agriculture model district and develops the rural enterprise vigorously that improves the rural labor force employment difficult question.

(2) To develop the secondary industry, improve the ability to attract labor force. Yulin city mainly to mining coal, oil and other heavy industry, and light industry development, therefore, the government should build a perfect market system that reduce the medium and small enterprises to enter the market The industrial chain and the utilization ratio of resources will be improved so as to balance the proportion of light and heavy industries, increase the economic efficiency and expand the scale of employment; meanwhile, it is necessary to improve the energy.

(3) Develop the third industry, improve the level of industry and expand employment space that must speed up the development of service industry, increase the traffic transportation, tourism, logistics, finance, such as investment, at the same time, attaches great importance to the cultural industry development, the urban cultural brand, improve residents' cultural quality, to enhance the cultural soft power of Yulin.

(4) To promote the development of human resources and technological innovation, focusing on the cultivation of professionals. To identify the corresponding human resource development policies, focusing on support for innovation and the continuation of private enterprises and the application of new technologies such as conversion areas, especially in the promotion of energy-saving environmental protection technology, enterprise technology innovation and promotion of local characteristics of industrial technology research and development, and strive to achieve significant breakthrough.

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