An Analysis on the Evolution of Industrial Restructuring and the Factors Affecting the Quality of Development in China's Yangtze River Delta Region

Topic: (2.3) Structural Change and Dynamics (1)
Author: Jin FAN
Co-Authors: Cheng LUO, Xiaohui YUAN

The Yangtze River Delta of China is listed as one of the six biggest urban agglomeration in the world, which includes Jiangsu province, Zhejiang province, and Shanghai metropolis. It has been becoming more and more important leading area in Chinese beautiful economic performance. Therefore, there exists great realistic significance and theoretical value to explore the region's industrial transformation and upgrading process, and the factors affecting the quality of development. This paper uses input-output coefficient changes of industrial structure transformation, and the error between the actual and gold value added rate to show the quality of economic development and the influence factors of the Yangtze River Delta region. By comparing the Chinese Yangtze River Delta region of Jiangsu province, Zhejiang province, Shanghai metropolis in 1997 and 2012 input-output table, the comparison and analysis of the change from 1997 to 2012 during the period of technological progress and industrial structure impacts on the Yangtze River Delta region. The results show that: Firstly, economic development is still dominated by the secondary industry in Yangtze River Delta region. However, as the central of the region, Shanghai’s service function has gradually become prominent. Secondly, the joint action of technological progress and economic structure changes makes the Yangtze River Delta region to reduce its intermediate demand on the primary industry, and to increase on the secondary industry, but on the tertiary industry, Jiangsu province and Zhejiang province is reduced, and Shanghai metropolis on the contrary. Thirdly, although the fact that technical factors and changes in the industrial structure have negative influences on the comprehensive effect of the Yangtze River Delta region, Structural changement has more impact on Jiangsu province than that of technological progress, while has less impact on Zhejiang province than that of technical factors. However, the factors of technology and the change of industrial structure did not contribute to the reduction of the consumption level of Shanghai economy. Fourthly, on the point of view of the manufacturing industry, and Jiangsu province and Zhejiang province have competitive advantages on heavy industry at the same time. Jiangsu province pays more attention to the development of high-tech industry, and Zhejiang province will pay more attention to the development of light industry, and the development of Shanghai manufacturing industry is within knowledge intensive manufacturing advantages. Finally, technological progress does not play a role in the secondary sector of the Yangtze River Delta region, but the upgrading of the industrial structure has improved the Zhejiang and Shanghai economy by changing the intermediate demand on the secondary industry. Based on the index raised by Fan et al.2016, 2017a, 2017b and Jiang et al.2017 which reflects the economic growth quality by the deviation change rate that is calculated by using the actual value added rate and golden value added rate, and through the establishment of GMM panel data model, the paper has drawn the following conclusions: Firstly, the development of the overall quality of the Yangtze River Delta region has been showing a trend of increase gradually, and Shanghai metropolis is more pronounced, and while Jiangsu province and Zhejiang province have relatively stable performance. Secondly, changes in the quality of economic development level of the Yangtze River Delta region are related to the population policy, the financial policy and industrial policy. Thirdly, the quality of economic development in the Yangtze River Delta region is directly related to the level of innovation accumulation, R&D investment, human capital investment in science and technology, export have a positive impact on improving the quality of development, and while the proportion of state-owned economy to improve the quality of development has positively affects the improvement of quality of development and other policies without being influenced by other policies, which is not the same as the existing mainstream research. Finally, it is more obvious that the population policy improves the
development of the Yangtze River Delta region quality, such as improving the city rate, increasing education. Among them, the existing HUKOU registration system, the Family Planning policy significantly enhances the quality of economic growth, which should be paid much more attention to by the policy-makers.