Comparative Analysis of S&T Service Industry and Related Policy Impact in Bejing and Shanghai

Topic:
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The role of science and technology (S&T) service industry has become more and more important for an economy. This paper comparatively analyzes the size, development environment, and influencing factors of S&T service industry in both Beijing and Shanghai. The key question is whether the development of S&T Service industry can effectively promote the upgrading of other industries? First of all, this paper will select data from 2012 to 2022 Chinese Provincial statistical Yearbooks, combine different related industries for a whole S&T service industry in both two cities. Then, it analyzes the basic situation of S&T service industry from the perspective of the whole and sub sectors by using PEST method. Moreover, it uses the measurement model to analyze the influence of factors for the development of S&T service industry from a static and dynamic perspective. The current results show that five factors, including S&T activities personnel, fixed asset investment in scientific and technological services, the number of employees in S&T services, the amount of patents, and the amount of foreign capital used, have a significant impact on the development of S&T services industry in Beijing. Third, in order to measure the impact of S&T Service Industry on other industries, and the structure change in the whole regional economies, by using the data from Input-output Tables of China and two cities for the period 2002-2020, this paper will also do some input-output analysis and some policy simulation. Finally, based on these comparative analysis and policy simulation results, this paper will summarize the different influencing factors for the two cities, and give some recommendation for Beijing to promote the S&T Service Industry.
Key Words: S&T Service Industry, PEST method, Input-output Analysis