



Classification and Empirical Study of Producer Service Industry in Beijing

Xiaoqian Zou*

NBS Survey Office in Beijing, Beijing, China – zouxq@bjstats.gov.cn

Zhihong Xing

NBS Survey Office in Beijing, Beijing, China – xzh@bjstats.gov.cn

Guohui Zhang

Beijing Municipal Bureau of Statistics, Beijing, China – zhangguohui@bjstats.gov.cn

Abstract

As the intermediately input services by other products or service productions, producer service industry plays an important role in economy. However, standards of classification for producer service industry in various countries in the world have not come into an agreement yet, we therefore studied and formulated the Beijing Classification Standards for Producer Service Industry for the purpose of specific definition of industrial scope included in producer service industry. Firstly, we conducted specific analysis on development conditions and features of producer service industry in Beijing. Secondly, We thereby collected and sorted data of Beijing, Tianjin, Shanghai, Guangzhou and Shenzhen, and established an evaluation model on comprehensive competitiveness of producer service industry first to analyze relative strengths of producer service industry development in each area, and analyzed industrial connections between producer service industry and other industries by means of input-output table, and analyzed spatial structure conditions by means of GIS analysis and spatial auto-correlation mode. Finally, we studied and analyzed major issues existed in development of producer service industry in Beijing and proposed relevant recommendations to promote development of producer service industry in Beijing.

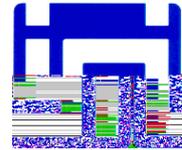
Keywords: development situation; region comparison; correlation analysis; spatial structure analysis.

1. Introduction

As accelerating the development of Service Industry is an important and long-term task, Outline Of the 11th Five-Year Plan makes a major policy decision to develop Producer Service Industry. To develop Producer Service Industry is the requirements of implementing the scientific outlook on development, changing the concept of development, innovating the development model and improving the quality of development. To carry out Several opinions of the State Council concerning accelerating the development of the Service Sector and the spirit which is put forward by the secretary of Beijing Liu Qi at the economic situation analysis meeting of the first half of 2007 to focus on the development of Producer Service Industry, to improve Service Industry statistics system continuously and obtain statistical data of Producer Service Industry accurately, Beijing Municipal Bureau of Statistics and the NBS Survey Office in Beijing organized the research of classification standards for Producer Service Industry and made the classification standards for Producer Service Industry of Beijing.

2. Section 2

Classification standards for producer service industry in various countries in the world have yet not come into an agreement. In order to provide scientific and uniform classification basis for studies, monitoring and evaluation concerning producer service industry, the Beijing Statistical Classification Standards for Producer service industry has been formulated by Beijing Municipal Bureau of Statistics and the NBS Survey Office in Beijing and it was officially released and executed in January 2009 by the municipal government. Beijing Statistical Classification Standards for Producer Service Industry, justified by the basic definition of producer service and guided by the nationally-issued Outline Of the 11th Five-Year Plan for National Economic and Social Development as well as the Development



Planning of Service Industry during “the 11th Five-Year Plan”, on the basis of extensively reference to domestic and foreign theoretical research results, in combination with specific circumstances in Beijing, according to the main functional attributes of services activities, has divided all sectors of the service industry. According to Gruber and Walker’s classification method, we divide service industry into producer service industry, consumer service industry and public service industry. On one hand, we directly judge industries whose characters of service functional attributes are obvious on the basis of service industry categories in “Industry Classification Standards of China”(GB/T4754-2002) and using qualitative and quantitative analysis methods. On the other hand, we classify the industries which provide both producer service and consumer service on the basis of the intermediate demand rate of input-output table. If the intermediate demand rate was more than 50%, it is classified into producer service industry, else it is classified into consumer service industry.

The producer service industry in Beijing includes: 4 industrial fields which are information transmission, computer service and software industry, finance, renting and leasing activities and business services, and scientific research and development, technical service and geological prospecting industry, 1 large industrial class which is wholesale business contained in the field of wholesale and retail industry, as well as communication and transportation, storage, and several subclasses in the field of post industry that contained in the national logistics statistical classification standards; and they are grouped into five major categories including circulation service, information service, financial service, business service ,and scientific research and development, technical services.

3. Section 3

It is shown based on analysis on data since 2005 according to classification standards of producer service industry that, the leading position of producer service industry in Beijing is established inside the service industry; employment creation is evident and employees have higher personal qualities; organization concerned have larger scales and enterprises have stronger profitability; efficiency of energy utilization is higher and energy conservation and emission reduction effect are significant. Major features presented in the operation of industry are as follows:

(1) Optimization of internal industry structure

In recent years, the internal structure of producer service industry has been optimized progressively and knowledge and technology intensive service industry obtains better development. What embodied are: financial service, business service, and scientific research and development, technical services present strong development momentum, information service development is steady, and circulation service’s proportion declines year by year.

(2) Service modes show a trend of outsourcing

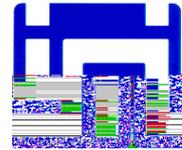
Service outsourcing scale grows rapidly and its industrial development level is in the lead throughout the country. In 2007, the total value of service trade in Beijing reached USD 50.31 billion, rising 27.9% compared with 2006. Currently, there are a total of over 400 enterprises involved in service outsourcing with more than 100,000 employees; in 2008, the revenue of service outsourcing reached USD 635 million accounting 13.6% of the country. Fields mainly concerned with service outsourcing include communication, IT, finance, consultancy and insurance, etc. Beijing stands in the front of China in these fields.

(3) Non-public economy performs well and marketization process is enhanced

Non-public economy proportion is progressively increased in terms of registered organizations of various types in producer service industry. The marketization level of the industry is enhanced continuously. In 2008, non-public and mixed-ownership organizations above designated scale of producer service industry realized revenues of RMB 2.70903 trillion, rising 29.3% compared with 2007, where its proportion was up to 74.6%, 1.5 percentage points more than that in 2007.

(4) The economic advantages in Beijing gradually highlighting

Beijing as the Capital provides unique geographical advantage and resource advantage for the development of the producer service industry. First, fully concentrating the high-quality central resource. Second, attracting a large number of multi-national corporations, national and regional headquarters. In 2008, there were 121 companies settled in Beijing among the world’s top 500 multi-



national corporations, and among them there were 82 companies in the producer service industry which achieved revenue of RMB 254.26 billion.

4. Section 4

To evaluate the development of producer service industry quantitatively in some central cities, we constructed the “mode of competitiveness evaluation in the city producer service industry”, the research objects were Beijing, Tianjin, Shanghai, Guangzhou and Shenzhen, and the evaluation and analysis of comprehensive competitiveness in city producer service industry was based on the statistical classification standard of the city producer service industry. The comprehensive competitiveness in the industry was the comprehensive embodiment of scale, structure, efficiency, benefit, growth potential and the external environment. The indicator system of the comprehensive competitiveness in the city producer service industry composed of 1 target layer, 4 standard layers and 35 indicator layers.

The target layer was comprehensive competitiveness in the city producer service industry. The standard layers included Competitiveness of industry development (weight 0.425), Competitiveness of talent capital (0.275), Competitiveness of business environment (0.175), Competitiveness of living environment (0.125). The Competitiveness of industry development included 9 indicators (Amount of value-added in the producer service industry, Value-added per capita in the producer service industry, etc). The Competitiveness of talent capital included 7 indicators (The proportion of junior college and above education level, The students number of institutions of colleges and universities, etc). The Competitiveness of business environment included 10 indicators (The road network density, Telephone penetration rate, etc). The Competitiveness of living environment included 9 indicators (Engel coefficient of urban residents, Public green area per capita, etc).

The competitiveness statistics of the producer service industry in Beijing, Tianjin, Shanghai, Guangzhou and Shenzhen were calculated according to the evaluation system. The results showed that no matter comprehensive competitiveness in the city producer service industry, or competitiveness of industry development, business environment and living environment, Beijing had obvious advantage. All in all, Beijing had Capital advantage, industry advantage, research advantage and market advantage. However, the horizontal comparison of these five cities showed that the technology innovation ability and ecological environment needed to be enhanced.

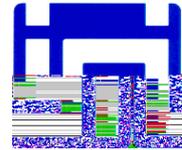
5. Section 5

We used the input and output statistics of Beijing in 2002 and 2007 and applied input and output mode to analysis the industry correlation effect in the producer service industry, to calculate the statistics of the intermediate demand rate, intermediate input rate and the degree of dependence in the producer service industry. The conclusions were:

(1) The external output function of producer service industry in Beijing continuously enhanced, and radiation ability of serving the national and even global was growing daily. In the meanwhile, the ability of pushing the city economy development was growing daily, and the intermediate use function abated.

(2) The tertiary industry had the highest degree of dependence on the producer service industry. From the comparison of 2002 and 2007, the dependence of the primary industry on the producer service industry was steady and increased slightly, and the dependence of the secondary and tertiary industry decreased significantly. The dependence of each sector in the manufacturing industry on the entire producer service industry, information service, financial services, business services, and scientific research and development, technical services decreased generally, and the dependence on the circulation service rose significantly.

(3) The dependence of the producer service industry on the tertiary industry was the highest, followed by the secondary and primary industry. The dependence of the entire producer service industry, information service, financial services, business services, and scientific research and development, technical services on the tertiary industry decreased, and the dependence on the secondary industry



increased. The dependence of the circulation service on the secondary industry decreased and the dependence on the tertiary industry increased.

6. Section 6

As the core power to promote the economic development of Beijing, the producer service industry played a key role in shaping of the city internal spatial structure. This part used the two economic census statistics in 2004 and 2008 in Beijing, used the geographic information system to simulate spatial distribution of the producer service industry, and used the spatial auto-correlation mode to identify spatial agglomeration of urban producer service industry, and to explore the characteristics of spatial structure and changing pattern in Beijing producer service industry. The conclusions were:

(1) The characteristics of spatial agglomeration were obvious in Beijing producer service industry and five categories, agglomeration region was concentrated in the downtown and inner suburbs, core zone around the peak center showed circle decreasing distribution characteristics, and the peak center existed industry heterogeneity.

(2) Spatial structure of Beijing producer service industry and five categories had the coexistence of multiple modes such as “multi center”, “double center” and “single center”, core region had strengthened agglomeration trend, agglomeration level declined in overall space, and only the space agglomeration level of business services enhanced.

(3) The high concentration hot region of Beijing city producer service industry was the outer edge of central mainly Dongcheng District and Xicheng District, and the inner edge of inner suburbs mainly Haidian District and Chaoyang District. Blocks of heterogeneous “from low to high” were mostly around “hot region” and outer suburb areas sporadically, and “cold block” mainly distributed in outer suburb.

7. Section 7

(1) Major existing problems

Through analysis and research, several problems in the producer service industry in our city were found: first, demand of the producer service industry remains to be further excavated; second, quality and level of producer service supply remains to be further improved; third, there was no service standard and market mechanism was not perfect; fourth, corporate business environment and living environment had weak links.

(2) Suggestions for the development of Beijing producer service industry

To develop better Beijing producer service industry, to solve the prominent problems restricting the development of the producer service industry, to complete the target of “11th Five-Year Plan” smoothly, and to promote stable and rapid economic development in Beijing, the suggestions are:

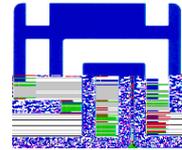
① To pull demand of producer service industry are mainly from the realization of the interaction development between producer services and manufacturing industry, development of economy in Beijing, explanation of market needs, develop regional economy, and expand market space.

② To promote supply capacity of producer service can be achieved from cluster development promotion of productive service industry, cultivation of domestic enterprises and make own brand.

③ The optimization of the market environment can be achieved from sounding policies and regulations, standardizing the order of competition, the transformation of government functions, cultivation associations, strengthening the training of qualified personnel and introduction efforts.

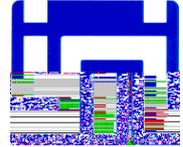
8. Conclusions

All in all, development of producer service industry is an important strategy deployment established by Beijing Municipal Government. In the overall layout of national and regional economy, the producer service industry in Beijing is facing unprecedented opportunities for development, and also challenges and problems could not be ignored. There is need to take more targeted policies and measures in the area of pulling the service demand, improving service levels, and optimizing the environment development to make producer service industry truly become the driving economic growth in Beijing and the strategy “engine” of development.



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