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# **Beijing Service Sector and its Demand Structure: Changes and Impact**

A Comparative Analysis Based on Regional Input-Output Table

# SECTEUR DES SERVICES DE BEIJING ET SA STRUCTURE DE DEMANDE: CHANGEMENTS ET IMPACTS

UNE ANALYSE COMPARATIVE FONDÉE SUR LE TABLEAU D'IMPORT-EXPORT RÉGIONAL

### ZHAO Chang-zheng<sup>1</sup>

**Abstract:** The mode of economic growth and industrial structure of Beijing city is an exceptional case in China. By utilizing the regional input-output table, the comparison research reveals that the remarkable transformation of demand structure in service sector contributes greatly to its rapid development in Beijing. The statistics show that the outflow rate of service sectors has increased by 17% in the final demand. It proves that Beijing's radiating capacity to the rest of China has much strengthened and that the service sector gives tremendous impetus to other industries. In comparison with that of Washington State of the United States, the demand structure of Beijing's service sector changes in regular proportion to the usual rule and shows a similar tendency to that of developed countries.

**Key words:** service sector; demand structure; input-output table; output requirement coefficient

Résumé: Le mode de croissance économique et la structure industrielle de la ville de Beijing est un cas exceptionnel en Chine. En utilisant le tableau d'import-export régional, la recherche de comparaison révèle que la transformation remarquable de la structure dedemande dans le secteur des services contribue grandement à son développement rapide à Beijing. Les statistiques montrent que le taux d'exportation du secteur des services a augmenté de 17% dans la demande finale. Cela prouve que la capacité radiatrice de Pékin au reste de la Chine a été renforcé et que le secteur des services donne une impulsion considérable à d'autres industries. En comparaison avec celle de Washington aux États-Unis, la structure de demande du secteur des services de Pékin change en proportion régulière à la règle habituelle et montre une tendance similaire à celle des pays développés.

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**Mots-clés:** secteur des services; structure de demande; tableau d'import-export; indicateurs productifs

### 1. INTRODUCTION

Despite the remarkable achievements of the manufacture industry over the last three decades, the mode of Chinese economic growth suffers from being on the lower end of production chain and the heavy environmental pressure, among many others. Just as Wu Jing-lian points out, these problems are mainly related with the underdevelopment of service sector, especially of productive service sector (Wu, 2006).

As indicated by Figure 1, the period since 1978 has been witnessing the substantial growth of China's service industry, with the rate of annual increase as 11.4%, its proportion in GDP rising from 23.9% in 1978 to 39.4% in 2006. Even so, by comparison with the developed countries, or some low & middle-income developing countries, the service sector of China still much lags behind. This is why it is necessary to accelerate the growth of productive service sector and promote the integration of service industry and manufacture industry for the sustainable economic growth and the transformation of growth mode of China's economy (Wu, 2006). This has been reiterated on terms of national policies. The newly issued Eleventh Five-Year National Program and Proposals On Speeding up the Growth of Service Sector by National Council both make it clear to develop service sector into a strategically important industry of China's national economy.

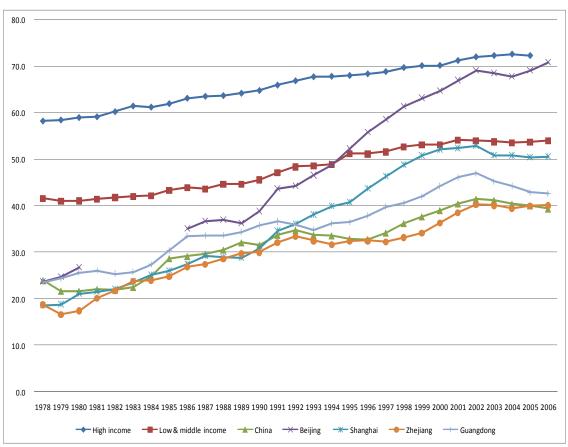


Figure 1: The Changing Tendency of the Proportion of the Added Value of Service Sector to GDP of Several Countries and Regions (1978-2006)

Sources: World Bank, The World Development Indicators, China Statistics Yearbook (2007)

The situation of Beijing's service sector, however, is an exception to the overall sluggishness. Just as Figure 1 shows, Guangdong, Shanghai, Zhejiang and Beijing all had the similar proportion of service sector by the beginning of reform and opening-up period. The gap between Beijing and other regions has been

widened since the 1990s. By the year 2006 the proportion of service sector of Beijing reached 70.9%, about 30% higher than the national average, being close to the level of the developed countries. Only Shanghai in the figure reached 50%, while the rest regions 40%. If Guangdong in Pearl River Delta, Shanghai and Zhejiang in Yangtze River Delta demonstrate the typical mode of Chinese economic growth, the case of Beijing shows what China's productive restructuring heads for in the future. From this perspective the research on Beijing's service sector, its evolution and influence, is not only of assistance to related local problems but also of significance to national strategic transformation of economic structure.

By drawing on the regional input-output table, the paper explores the development of service sector of Beijing city from the perspective of demands. A fraction of the total output of service sector is used to meet the intermediate demand generated by other commodity and services making process, while the rest is to meet the final demand. Clark (1940) from the perspective of final demands points out that the demands of service sector are highly elastic with incomes, its proportion rising with economic growth.

Recent studies tend to concentrate more on the role of service sector as intermediate demand, or the growth of productive service industry. The productive service industry involves the interaction among various industries, the interplay with manufacture industry in particular. The input-output table can indicate clearly the source of productive materials and flow of products of national economy in the given period of time, thus becoming the main research means. With the input-output table, researchers such as Park(1989), Uno(1989), Francois(1990) and Pilat and Wölfl(2005) find that the increase of service sector which meets the intermediate demand is the chief reason of the rise of service sector in proportion. Triplett and Bosworth (2004) further illustrate that the growth of productive service sector is beneficial to economic growth. Chinese academicians now tend to focus more on productive service sector and the relevance of international experience to ours. For instance, Lv et al (2006) elucidates the inner mechanism which works through productive service sector and manufacture industry; and analyzes the bottleneck of China's service sector in light of international practices. Wei and Hu(2005) and Gao and Li(2008) examine the fluctuation between intermediate demand and final demand in proportion in the service sectors of the developed countries; and the resulting comparison is of use to the policy proposals of service sector of China.

With regard to the service sector of Beijing as a cosmopolitan city, the research involves two special issues. First, given the high concentration of service sector in major cities, the radiating impact of Beijing on other regions deserves special attention (Lv et al, 2006). Second, just as Jiang(2008) puts it, whether a nation is able to occupy a dominant position in the outsourcing of global service is very important in the era of globalized economy. The research by Lu(2007) shows that China still lags much behind in this regard. How Beijing as an economically service-oriented city should respond to the situation requires further study. The national input-output table contains the indexes of international trade of diverse industries; and it is of relevance to the second question. The paper resorts to regional input-output table which contains the import and export among cities and provinces and can be used to analyze the trading relation between local service sector and other regions.

The paper chooses to focus on the secondary industry and service sector in terms of intermediate demand and on residential and governmental consumption, China import and export, foreign import and export in terms of final demand, so as to analyze the structural shifting of Beijing's service sector and evaluate the effect on service sector with output requirement coefficient. My data are primarily from Beijing's input-output table in 1992, 1997 and 2002, Shanghai, Zhejiang and Guangdong input-output table in 2002, as well as the input-output table of Washington State of the United States in 1997. From the vertical perspective and regional comparison, Section II discusses the change of demand structure of Beijing service sector from 1992 to 2002 and the positive effect on service sector of diverse industries. Section III draws the comparison of demand structure between Beijing's service sector and those of Shanghai, Zhejiang, Guangdong and Washington State. Section IV summarizes the research findings and makes related policy proposals.

<sup>&</sup>lt;sup>2</sup> The intermediate usage of the input-output table also includes the use in agricultural sectors. The final usage also contains the part of capital formation. But the proportion of these elements in various regions to the service sector is very slight, next to zero. Following the rule of importance, the paper does not take these into consideration.

### 2. THE CHANGES OF DEMAND STRUCTURE OF BEIJING SERVICE SECTOR AND ITS EFFECT FROM 1992 TO 2002.

Table 1 reflects the changes of demand structure of Beijing service sector with reference to annual input-output tables. The input-output tables reflect the distribution of total output of service sector for diverse horizontal utilities, namely used by secondary industry, service industry, consumption and export and the resulting proportion to the total output of service sector.

On the whole the period from 1992 to 2002 saw the gradual decrease of the proportion of intermediate use in the total output of service sector of Beijing, dropping from 59.4% in 1992 to 48% in 2002. The proportion of service sector used by secondary industry dropped from 23.8% in 1992 to 14.7% in 2002, while the proportion of self-consumption within service sector keeps at the same level, 32.8% to 34.6%. In terms of total value, though the proportion of intermediate use of service sector used by the secondary industry keeps dropping, the total value of 2002 is two and half times as much as that of 1992, while the total value within the service sector is 2.8 times higher in 2002 than in 1992. It follows that the decrease of intermediate use in secondary industry leads to the reduction within the service sector though its total value rises sharply.

Correspondingly the ultimate use of service sector within the total output rose from 44.4% in 1992 to 62.1% in 2002, increasing by 17.7%. It is crucial to note that the China export of service sector increases substantially, rising from 9.9% in 1992 to 26.8% in 2002. The proportion of use in consumption only has a slight rise from 21.9% to 24.3% while the figure in foreign export dropped from 9.7% in 1997 to 5.4% in 2002. In terms of total value, by 2002 the absolute value of service China export has increased by 9.8 times, while the value of residential and governmental consumption rose by 3.4 times, the foreign export by 1.5 times. These figures show that though the ultimate use by each part all has certain increase in total value, the rise of the ultimate use of service sector mainly results from the China export of service industry. Corresponding to the local outflow (China export) and foreign export, the local influx and foreign import in the total output of Beijing's service sector have been rising steadily, increasing from 3.6% in 1992 to 8% in 2002 for local influx, from 0.3% to 2% for foreign export.

Table 1: The Demand Structure of Beijing's Service Sector over Years and the Survey of China Import and Foreign Import<sup>a</sup>

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Demand Structure	Secondary Industry		Service Sector		Total Intermediate Demand	Consumption	
Years	$\mathbf{P}^{\mathbf{b}}$	$V^{c}$	P	V	P	P	V
1992	23.8	327	34.6	476	59.4	21.9	302
1997	18.1	540	32.8	978	51.7	24.1	717
2002	14.7	806	32.9	1804	48.0	24.3	1330
Average	18.5	832	33.2	1588	52.4	23.3	1129

Table 1-2							
Demand Structure	China	export	Foreign export		Total Final Demand	China Import	Foreign Import
Years	P	V	P	V	P	P	P
1992	9.9	137	9.7	134	44.4	-3.6	-0.3
1997	22.0	656	8.4	251	57.5	-7.7	-1.6
2002	26.8	1471	5.4	294	62.1	-8.0	-2.0
Average	20.4	1102	9.2	226	57.8	-7.0	-3.2

a). Sources: the writer makes the calculation with reference to Beijing's input-output table in 1992, 1997 and 2002. b). The proportion (P, %) refers to the ratio between the usage by diverse sectors, China import and foreign import of the service sector and the total output of service sector. c). With 2000 as a base, the absolute value (V, RMB billion) of 1992, 1997 and 2002 have been deflated to be the comparable price value.

To sum up, since the 1990s, the total value of intermediate demand and final demand of Beijing's service sector all has substantial increase in diverse aspects; but the intermediate demand decreased while

the final demand rose in proportion. The substantial increase of the China export of final demand makes the largest contribution to the rapid growth of Beijing's service sector. The substantial increase in the China export and the resulting China import demonstrate the intertwining trading relation of service sector between Beijing and other regions. In view of net turnover the outflow of Beijing's service sector rose from 6.3% in 1992 to 18.8% in 2002; and this means Beijing as the concentration site of national service industry has increasingly intense radiating effect on other regions of China.

Though the outflow and foreign import of service sector group under the department of final demand, they are by nature productive service sector being involved with the production activities of other regions and countries. In this light though the intermediate demand of Beijing's service sector drops, this does not mean that the growth of Beijing's service sector is mainly the increase of consumptive service sector. In terms of statistics, the proportion of Beijing's service sector related with residential and governmental consumption is relatively lower, ranging from 21.9% to 24.3% and being on the similar level during the ten years. From 1992 to 2002 the consumptive service sector grows simultaneously with productive service sector in Beijing though the increased part of productive service sector is used in the production process outside Beijing.

With reference to input-output table, we not only observe the change of demand structure of Beijing's service sector during ten years, but also observe the effect of diverse final demand on the service sector. This is chiefly realized through the calculation of diverse final demand of service sector towards the productive inducing output (output induced value) and output requirement coefficient of the diverse productive departments. The paper adopts Leontief Inverse Matrix to work out the increase of ultimate increase in certain item and the productive inducing turnover to various industries and then add the figures together, thus producing the inducing turnover to all industries as well to service sector. The output requirement coefficient can be generated by the proportion of the productive inducing turnover to relevant service sector. The higher the index is, the greater productive wave and effect of final demand of the service item are.

The pulling effect of the consumption of service sector on its growth can fall into several kinds: 1) the direct consumption of service sector; 2) the direct input into service sector needed by consumptive service and all indirect input into service sector; 3) the input from the primary and secondary industry into consumptive service sector and the inducing direct and indirect productive input. Take Beijing's input-output table in 2002 as an example. The direct residential and governmental consumption of service sector amounts to RMB133billion, the inducing output of the service sector being RMB 213.5billion, in which the resulting output of service sector reaches RMB80.5billion. Thus the output requirement coefficient of the service sector is 1.61. The inducing output of all industries amounts to RMB 310.5 billion and the output requirement coefficient towards all industries is 2.33.

Table 2: Output Induced Value and Coefficient of Beijing's Service Sector over Years

	Industries	Output Induce	d Value (RN	MB billion)	Output Requirement Coefficient			
Years		Consumption	China export	Foreign export	Consumption	China export	Foreign export	
1992	All Industries	78.88	36.60	32.43	2.61	2.67	2.42	
1992	Service Sector	50.17	24.43	20.50	1.66	1.79	1.53	
1997	All Industries	160.10	152.44	63.21	2.23	2.32	2.52	
1997	Service Sector	115.63	110.36	43.11	1.61	1.68	1.72	
2002	All Industries	310.46	326.40	67.78	2.33	2.22	2.31	
2002	Service Sector	213.51	240.52	47.62	1.61	1.64	1.62	

Source: the same as Table 1.

All output induced values in Table 2, being modified to the price of 2000, are the comparable value of prices. From 1992 to 2002 the output requirement coefficient generated by consumptive service sector and outflow and foreign export to service sector and output requirement coefficient are relatively stable, ranging from 2.2 to 2.7. There is no big difference among three kinds of final demand.

In comparison the output requirement coefficient of the outflow of service sector was relatively higher in 1992, but in 2002 it was slightly lower than the other two final demand. The output requirement

coefficient to service sector ranges from 1.5 to 1.8, being similar among three kinds of final demand. The output requirement coefficient of the outflow of the service sector in the decade is slightly higher than the other two items. If one subtracts the coefficient towards service sector from the coefficient towards all industries, one may find that the pulling effect of diverse final demand of service sector on other industries is not quite different from its indirect impact on service sector. Take the outflow of service sector in 2002 as an example. The increase of outflow of service sector per unit will lead to the increase of 1.64 units for the output of service sector while the intermediate increase of the service output is 0.64 units. The resulting increase of the primary and secondary industries is 0.58 units.

Though the output requirement coefficient remains largely the same from year to year, from item to item, the induced value from the increase of final demand of various branches of service sector may have much variation. The largest variation of induced value is the outflow of the service sector. In 1992 the induced value of the outflow of the service sector towards all industries and all branches of service sector respectively reached RMB36.6billion and RMB24.4billion, the figure reaching RMB326.4billion and 240.5billion in 2002, rising by ten times within a decade. This is the largest induced value of final demand. In comparison the induced value of the consumption of service has increased by five times, being the smallest one of the foreign export of service sector. These figures show that the outflow and consumption of service sector both have tremendous effect on the growth of economy and service sector with an accelerating tendency. The reason is of course the rapid growth of Beijing's service sector and the huge change of demand structure of service sector.

## 3. THE COMPARATIVE ANALYSIS BETWEEN BEIJING AND OTHER REGIONS

In addition to the vertical comparison of the demand structure of Beijing's service sector from 1992 to 2002, the paper chooses Shanghai, Zhejiang, Guangdong and the Washington State for comparison with Beijing. These four regions all are economically developed; but the developing level of their service sector is much lower than that of Beijing. The Pearl River Delta and Yangtze River Delta where Shanghai and Zhejiang are located represent the typical mode of China's economic growth. The added value of the service sector of the Washington State of the United States reached 80.7% in 1997, being typical of advanced regions of the developed countries. Its compilation of input-output table has certain international renown. Through the comparison with these regions it is possible to further observe the traits of demand structure of service sector in Beijing.

From Table 3 the proportion of intermediate use of Beijing's service sector to the total output is lower than that in Shanghai, Zhejiang and Guangdong, but higher than the Washington State. This figure in Shanghai, Zhejiang and Guangdong in 2002 was more than 50%, in Beijing 48%, Washington State in 1997 being 33%. The ultimate use of the service sector to the output is to the contrary. Further analysis shows that the secondary industry of the Washington State only uses 7.4% of output of the service sector, Beijing 14.7%, Zhejiang 34%, Shanghai and Guangdong about 25% respectively. The ration of the self-consumption of the service sector in Beijing is highest, being 32.9%, Shanghai being 30.7%, Zhejiang being the lowest 23.0%. With regard to the ultimate consumption of service sector, the ratio of Beijing is only 24.3%, Zhejiang and Guangdong being 34.7% and 38.3% respectively, while in the Washington State being 42.2%. Beijing and Washington State, having the most advanced service sector, have fairly high proportion of the outflow of service sector, being 26.8% and 25.2% respectively, much higher than Shanghai (16.1%), Zhejiang (12.8%) and Guangdong (3.1%).

The foreign export of the service sector remains largely the same in five cities, Shanghai and Guangdong being 9.4% and 9.1% respectively. In Beijing, Zhejiang and Washington State the export is slightly lower, showing the inadequacy to carry the outsourcing duties of service sector. In terms of the influx of service sector Beijing, Zhejiang and Washington State have relatively higher ratio. The ratio of the outflow of service sector in Beijing amounts to 18.8%, followed by Washington's 15.2%, Shanghai's 12%, while Guangdong's being net influx. In terms of net foreign export, regional variation remains relatively stable.

Table 3: The Demand Structure of Service Sector and Influx of Various Regions

	Intermediate demand (%)			Fi	Influx	Foreign			
	Secondary Industry	Service Sector	Total	Consumption	Outflow	Foreign export	Total	(%)	import (%)
Beijing	14.7	32.9	48.0	24.3	26.8	5.4	62.1	-8.0	-2.0
Shanghai	25.2	30.7	56.3	24.6	16.1	9.4	56.3	-4.2	-8.4
Zhejiang	33.9	22.1	56.9	34.7	12.8	4.9	55.4	-10.7	-1.6
Guangdong	24.2	26.2	51.6	38.3	3.1	9.1	53.7	-5.2	-0.1
Washington State	7.4	24.7	32.9	44.5	25.2	7.3	79.3	-10.0	-2.1

Sources: The input-output tables of Beijing, Shanghai, Zhejiang and Guangdong in 2002; 1997 Washington Input-Output Model; the writer's calculation. The proportion refers to the ratio between the usage by diverse sectors, influx and import of the service sector and the total output of service sector.

To sum up the differences of the demand structure of service sector of diverse regions is basically related with the developing level of its service sector. Taking the Washington State as the benchmark of the service sector in the advanced regions, one can discover the following traits. First, more parts of the service sector are put into final demand than to meet the local intermediate demand. Second, due to the high proportion of service sector in advanced regions, within the intermediate demand more parts of service sector are put into the process of self-production than into the production process of the secondary industry. Thirdly within the final demand, the service sector has been more used for consumption and outflow, with a high proportion of usage in ultimate consumption. It is easy to observe that, with regard to the first and second traits, Beijing should be placed between Washington State and three other regions of China, being closer to the former.

In the similar manner the service sector of Beijing is more put into final demand. The usage by the secondary industry of the service industry is far lower than the service sector. Thus one is able to arrive at the conclusion that the intermediate use of the service sector decreases with the rising level of the service sector and that the ultimate use rises while the intermediate use by the secondary industry decreases. The observation accords with the changing tendency of the demand structure of Beijing's service sector from 1992 to 2002. While the style of Washington State exemplifies the growth mode in the advanced regions where the service sector is the dominant industry, Shanghai, Zhejiang and Guangdong represents the growth mode in the regions where manufacture industry dominates, then Beijing's mode is in transition to new alternatives. Beijing and the Washington State, two most advanced regions of service sector, share the relatively ratio of the service influx and outflow. The vertical comparison above shows that the outflow of Beijing's service sector has greatly improved over the ten years, with the increasing influx. This shows that the quality improvement of regional service sector should be related with the rapid growth of internal service and trade and that systematic closure is of no help to service sector. The comparison of the local outflow of the service sector, together with the changing tendency of Beijing's service sector, shows that the regions with advanced service industry have intense radiating effect.

With regard to the use of the service sector by government and consumption, Beijing is closer to Shanghai, but being 20% lower than the Washington State, even nearly 10% lower than Zhejiang and Guangdong. It is possible that the central position of Beijing and Shanghai in regional economies causes the relatively higher proportion of final demand of the service sector to be the outflow of the service sector. 44% of the total output of the service sector of the Washington State has been used for local consumption. In comparison, in Beijing, Shanghai, Zhejiang, and Guangdong more of the service outflow has been used in local or outer productive process. The added value of the service sector of Beijing is closer to that of the Washington State; but the ratio of the final consumption of the service turnover is much lower. From 1992 to 2002 the proportion of consumptive service sector of Beijing has improved by 2.5%. These show that the consumptive service sector in Beijing has made certain progress but has fallen much behind developed countries.

Table 4: The Induced Value and Output Requirement Coefficient of the Final Demand of Service Sector of the Various Regions

Regions		Induced V	alue (RMB l	oillion)	Output Requirement Coefficient			
	Industries	Consumption	Outflow	Foreign import	Consumption	Outflow	Foreign export	
Beijing	All Industries	310.46	326.40	67.78	2.33	2.22	2.31	
	Service Sector	213.51	240.52	47.62	1.61	1.64	1.62	
Shanghai	All Industries	323.54	231.54	146.05	2.38	2.60	2.82	
	Service Sector	205.97	152.44	91.41	1.51	1.71	1.76	
Zhejiang	All Industries	481.0	151.4	53.5	2.40	2.05	1.88	
	Service Sector	280.0	99.6	38.2	1.40	1.35	1.34	
Guangdong	All Industries	918.0	64.6	191.9	2.26	1.94	1.99	
	Service Sector	585.8	48.4	140.8	1.44	1.45	1.46	
Washington State	All Industries	-	-	-	1.40	1.38	1.32	
	Service Sector	-	-	-	1.31	1.29	1.24	

Source: the same as Table 3.

The input-output model can also been used to compare the consumption, outflow and foreign export of diverse regions and evaluate the effect on all industries and industries. It can be seen from Table 4 that on the whole the output requirement coefficient of Beijing, Shanghai and Zhejiang and Guangdong are relatively closer, all being higher than Washington State. The coefficient of the final demand of the Washington State service sector to other industries ranges from 1.2 to 1.4 with slight variation. The pulling effect is slight because the ratio of added value of the service industry is relatively higher. The inducing index of the service sector to other industries can be generated by the subtraction of inducing indexes of other industries. In Washington State when the diverse final demand of service sector increase by one unit, the induced output of other industries is no more than 0.1 unit, far below than 0.24-0.31 units increased by the indirect pulling. This shows that in the Washington State of the advanced countries, the final demand of its service sector have relatively weak effect on other industries.

The comparison of the four regions of China shows that the output requirement coefficient of the final demand of the service sector of Shanghai is relatively higher, Guangdong relatively lower, Zhejiang and Beijing being much the same. The consumption, outflow and foreign export for the same region have no visible difference and no marked rules. If one subtracts one kind of inducing index of the final demand from the other kind, one can judge the effect of the service sector on other industries.

What is remarkably different from Washington State is that the pulling effect of the final demand of the regions on other industries is basically the same. In Shanghai the service sector has more marked pulling effect; and one unit increase of the service outflow will cause the indirect increase of 0.71 units and 0.89 units for other industries. In terms of the induced value the outflow of the service sector in Beijing has largest effect on other industries and service sector. Take the input-output table as an example. The outflow of Beijing's service sector increased RMB 240.5 billion to the service sector, RMB 85.9 billion to other industries, and RMB 326.4 billion in total. The pulling effect is tremendous. Guangdong has the largest total economic volume; so the consumption of its service sector and the induced value of the export are the largest among four internal parts.

#### 4. CONCLUSION AND POLICY PROPOSALS

The paper, through vertical and horizontal comparison, focuses on the changing demand structure and analyzes the developing rule of Beijing's service sector which is an exception to China's economic growth mode. The study concludes that the tremendous changes occurring to the demand structure of Beijing's service sector since 1992 mainly lie in the drop of the intermediate demand of the local service sector and the rise of the final demand.

To be specific, the intermediate demand from the secondary industry drops considerably while those from the service sector remain basically the same. The consumption of the service sector of the final demand has slight increase, the export dropping slightly, but the outflow of the service out of the city increased from 9.9% in 1992 to 26.8% in 2002. With the rapid growth of Beijing's service sector, its radiating effect has been greatly intensified. The calculation of the requirement coefficient and induced value shows that the outflow of the service sector has rather visible effect on local service sector and other industries. The outflow of the service sector is mainly the productive service sector; so the intermediate demand of Beijing's service sector drops considerably. This does not mean the development of the productive service sector is insufficient; but that its productive service sector has been more put into the productive process of other regions.

Do the changes of the demand structure of the service sector accord with the growing rules of the service sector? By comparing Beijing's case with that of Shanghai, Zhejiang and Guangdong, Washington State typical of the developed regions in particular, the paper finds that the demand structure of a region is highly related with its economic level and its industrial structure. More advanced the service sector is, higher the proportion of the final demand of the service sector is, so is the outflow and consumption of service sector and outflow. The evolution of the demand structure of Beijing's service sector is typical of the rule. The demand structure of the service sector in Beijing is between the growth mode of China's other regions and closer to the situation of Washington State which boasts of the advanced service sector. The current situation of demand structure of Beijing's service sector accords with the level of its service sector. What is more different from Washington State is the relatively low percentage of consumption in Beijing's service sector, chiefly for productive purposes.

The paper examines the developing rules of Beijing's service sector from the perspective of the changes of the demand structure in the hope that it can be of benefit to the future of Beijing's service sector as well as the development of other regions. These can be listed as follows:

Firstly, the development of productive service sector in advanced regions should not be limited for the sake of local production but for the radiation nationwide. The growth of Beijing's service sector shows that the rapid growth of the outflow of the service sector is distinct in the changes of its demand structure and that it has significant effect on local service sector and other industries. Because of the high concentration of the productive service sector in cities, the economically advanced regions in transition to new economic mode should promote the regional trade and service exchange and intensify its economic radiation. The increase of the outflow and influx of the service sector can not only promote local service sector and the overall economic growth but also be of significance to the transformation of national economic structure and the improvement of economic efficiency.

Secondly it is of special meaning for Beijing to develop the consumptive service sector. The growth of service sector shares the same purpose as economic development, namely, to meet the human demands. International practice shows that the outflow of the developed countries is mainly for consumption purpose; but in Beijing and other regions of China the consumption of service sector is still minor in the overall output, being discrepant with China's current developing stage. Such issue is rather prominent in Beijing. Therefore in the transition to the restructuring of economic mode the consumptive service sector should be given more emphasis.

Thirdly, the ability of Beijing and even China to take on the global outsourcing projects should be further enhanced in order to occupy an important place in the globalized market. With the coming of globalized service, there is an increasing tendency of the outsourcing of global services. The above analysis shows that despite the high speed at which the export and import of the service sector develops in several of most developed regions in China, they all have potential due to the relatively low proportion. Regions like Beijing with advanced service sector should play their advantages to the full and take on more global outsourcing projects.

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