

CHAPTER 4

Comparison of Economic Effects between China and Other Host Countries

With the eye on the opportunity for earning a great deal of profits, raising national reputation and stimulating social and economic follow-up development, it goes without saying that the Chinese put all their efforts on preparing for Beijing 2008 Olympic Games.

Wang (2002) pointed that The Tenth Five-Year Plan suggested the growth rate of GDP in Beijing city would rise to 11% from 9% due to holding Beijing 2008 Olympic Games. As far as the economic development of Beijing city was concerned, it still expected not only the amount of GDP would boost to 600 billion RMB, but also GDP per capita would increase to 6 thousand US dollars. The plan could be broken into the following steps in detail. Within 2010, Beijing city would be built as perfect basic construction. Then, within 2020, it would be one of the modernized metropolises.

What is more, The Eleventh Five-Year Plan, made by the National People's Congress, emphasized six points on economic reforms from 2006 to 2010. With the holding of Beijing 2008 Olympic Games, advancing economic growth and motivating industrial structure were, especially, the two main points of all. In detail, it suggested the amount of GDP per capita in 2010 would double those in 2000. Besides, shrinking the use of resources by 20% would help control ecological damage and keep environmental protection. Third, percentage of the amount of GDP contributed from service section would be raised by 3% to 4%. As a result, it is no doubt that holding Beijing 2008 Olympic Games will accelerate to achieve these goals.

4.1 Overall Impacts on China's Economy

Beijing Olympic Committee (BOC) announced the expected fiscal budget shown in table 4-1. The expenditure here stands for the direct investment on holding the Olympic Games. It includes, roughly speaking, gymnasiums, athlete's villages, journalist's villages

and communicational facilities, and so on. The amount of total expected expenditure is as many as 1,625 million US dollars. On the other hand, revenue here stands for the earnings due to holding the Olympic Games. It includes sales of TV rights, business sponsors, tickets, and so on. The amount of total expected revenues is as many as 1,609 million US dollars. Still, the amount of profits is estimated to be 16 million US dollars.

Table 4-1: Fiscal Budget of BOC

Unit: million US dollars

Items	Amount	Percentage (%)	Expenditure	Amount	Percentage (%)
Sales of TV rights	709.00	43.63	Basic facility	190.00	11.69
Business sponsors	330.00	20.31	-Physical facility	102.00	6.28
-Plan of TOP	130.00	8.00	-Olympic Games	40.00	2.46
-Sponsor of committees	130.00	8.00	-News center	45.00	2.77
-Certificated revenues	50.00	3.08	-Center of international media	—	—
-Certificated suppliers	20.00	1.23	- Journalist's village	3.00	0.18
Souvenir coins	8.00	0.49	Operational cost	1419.00	88.31
Stamps	12.00	0.74	-Games	275.00	16.92
Lotteries	180.00	11.08	-Olympic village	65.00	4.00
Tickets	140.00	8.62	-News center	360.00	22.15
Donation	20.00	1.23	- Journalist's village	10.00	0.62
Sale of property	80.00	4.92	-Ceremony	100.00	6.15
Subsidy from central government	50.00	3.08	-Medical service	30.00	1.85
Subsidy from city government	50.00	3.08	-Catering and reception	51.00	3.14
Others	46.00	2.83	-Transportation	70.00	4.31
			-Security	50.00	3.08
			-Fee for injure	82.00	5.05
			-Promotion	60.00	3.69
			-Administration	125.00	7.69
			-Coordination	40.00	2.46
			-Others	101.00	6.22
Total	1,625.00	100.00	Total	1,609.00	100.00

Source: Wang (2002).

Table 4-2 indicates comparison of Olympic host committees' revenues from 1984 to 2008. It can be observed that Beijing 2008 Olympic Games are not supposed to bring as

many profits as Seoul 1988 and Sydney 2000 Olympic Games do. Nevertheless, it is still a considerable sum of profits to be earned by holding the Olympic Games.

Table 4-2: Comparison of Olympic Host Committees' Revenues — 1984~2008

Unit: million US dollars

	Los Angeles	Seoul	Barcelona	Atlanta	Sydney	Beijing
Items	1984	1988	1992	1996	2000	2008
Direct revenue	746	1,324	1,699	1,705	2,605	1,625
- TV rights	286	327	471	560	1,318	709
- Ticket	140	40	82	422	356	140
- Sponsora	123	493	505	540	550	530
- Others	197	464	641	183	38	24
Expenditure	531	827	1,696	1,705	1,740	1,609
Profits	215	497	3	0	865	16

Note: The figures of Beijing 2008 Olympic Games are estimated.

Source: Shih and Chen (2005), Wang (2002).

Even if the profits of holding Beijing 2008 Olympic Games is not as alluring as those of previous Olympic Games, the impacts on China's economy, however, are worthy of being put much value on. Table 4-3 briefly explains the trend of economic indicators. Li and Duan (2005) pointed that, as for as Beijing city is concerned, the averaged growth rates of GDP, revenue, consumption, import and export are supposed to be the most in 2008. From 2003 to 2007, the averaged growth rate of GDP in Beijing city increases by 2.3%, which is about 4,026 million US dollars.¹⁵ In 2008, the growth rate of GDP is supposed to increase by 4.1%, which is about 6,571 million US dollars.¹⁶ Instead, the growth rate of investment will be the most from 2003 to 2007 and will decrease from 2009 to 2010.

On the other hand, when it comes to the impacts on rest areas, all the economic indicators slightly vary within 0.15%. Specifically, the averaged growth rates of GDP, revenue, consumption, import are supposed to be the most in 2008 as well. To sum up, Games-Year will be considered as the most critical phase of the three. They will be discussed in the following sessions in detail.

¹⁵ The amount of money the author estimated was 31 billion RMB.

¹⁶ The amount of money the author estimated was 50.6 billion RMB.

Table 4-3: Three-Phase Impacts on the Economy of Beijing City and Rest Areas

Unit: %

Averaged growth rate	Beijing city			Rest areas		
	2003~2007	2008	2009-2010	2003~2007	2008	2009-2010
GDP	2.4	4.1	0.6	0.07	0.23	0.06
Investment	5.6	0.2	-0.2	-0.08	0.12	0.03
Revenue	2.3	3.8	0.4	0.03	0.18	0.09
Consumption	2.7	3.7	0.3	0.04	0.17	0.08
Import	2.5	8.7	0.5	0.03	0.13	0.01
Export	1.7	37.6	1.3	-0.04	-0.12	-0.02

Source: Li and Duan (2005).

4.2 Impacts on China's GDP

GDP measures not only the power of a country's economy but also the influence to all over the world. Table 4-4 shows growth rates of GDP in China and Beijing city from 1999 to 2006. The growth rate of GDP in China in 1999 was 6.2%. Then, it climbed to 10.5% in 2001, which is the beginning year of holding Beijing 2008 Olympic Games. Growth rates of GDP even increased to more than 10% after 2003. The averaged growth rate before holding the Olympic Games was 8.4%, while that from 2001 to 2006 was 13.3%. In addition, growth rate of GDP in Beijing city kept highly increasing in this period. Most of them were over 12.0%, especially 20.6% in 2004.

Table 4-4: Growth Rate of GDP in China and Beijing City — 1999~2006

Unit: billion RMB

Items	1999	2000	2001	2002	2003	2004	2005	2006
GDP in China								
Amount	8,968	9,921	10,966	12,033	13,582	15,988	18,308	21,067
Growth rate (%)	6.2	10.6	10.5	9.7	12.8	17.7	14.5	15.1
GDP in Beijing city								
Amount	267.8	316.1	371.1	433.0	502.4	606.0	688.6	—
Growth rate (%)	12.7	18.0	17.4	16.7	16.0	20.6	13.6	—

Source: National Bureau of Statistics of China, *China Statistical Yearbook 2006*,

<http://www.stats.gov.cn/english/>.

In addition, in 2005, the percentage of GDP contributed from Beijing was almost 3.8%.¹⁷ Therefore, the increased averaged growth rates of GDP in the three phases, contributed from Beijing 2008 Olympic Games, can be estimated to be 0.2% in Pre-Games, 0.4% in Games-Year and 0.1% in Post-Games.

Table 4-5 illustrates the comparison of three-phase growth rate of GDP between the Olympic host countries. Growth rates of GDP in Beijing 2008 Olympic Games are as much as those of Tokyo 1964 and Seoul 1988 Olympic Games. On the other hand, growth rates of GDP in the advanced countries such as the United States and Australia are steady and less than 8%. Therefore, holding the Olympic Games is a great opportunity for China to be one of NICs.

Table 4-5: Comparison of Three-Phase Growth Rate of GDP

Unit: %

Olympic Games	Averaged growth rate of GDP		
	Pre-Games	Games-Year	Post-Games
Tokyo 1964	16.2	17.6	13.7
Seoul 1988	15.1	18.8	16.4
Barcelona 1992	11.1	7.7	5.0
Atlanta 1996	5.3	5.7	5.8
Sydney 2000	5.6	7.5	6.6
Athens 2004	8.3	7.7	7.7
Beijing 2008	13.4	13.8	13.9

Note: The figures of averaged growth rate of GDP in Beijing 2008 are estimated.

Source: Same as table 3-1.

The Eleventh Five-Year Plan pointed that the amount of GDP per capita in 2010 expected to be twice as many as that in 2000, in order to achieve the goal of motivating economic growth and advancing social development. As a result, holding Beijing 2008 Olympic Games is supposed to be a perfect opportunity to achieve this plan. Table 4-6 is GDP per capita in China and Beijing city from 1999 to 2005. The averaged growth rates of GDP per capita in China and Beijing city before 2001 were 7.6% and 13.2% respectively, while those were 12.3% and 15.2% afterwards. It is obviously observed that GDP per capita indeed boost since preparing for the Olympic Games. As a result, with

¹⁷ See National Bureau of Statistics of China, *China Statistical Yearbook 2006*. In 2005, the amount of GDP contributed from Beijing was 688.6 billion RMB. Also, the total amount of GDP in China was 18,308 billion RMB.

such a high speed of growth rate, the goal for doubling GDP per capita in China will be achieved within 2006.

Table 4-6: GDP Per Capita in China and Beijing City — 1999~2005

Unit: RMB							
Items	1999	2000	2001	2002	2003	2004	2005
GDP per capita in China							
Amount	7,159	7,858	8,622	9,398	10,542	12,336	14,040
Growth rate (%)	5.3	9.8	9.7	9.0	12.1	17.0	13.8
GDP per capita in Beijing city							
Amount	19,846	22,460	25,523	28,449	32,061	37,058	45,444
Growth rate (%)	—	13.2	13.6	11.5	12.7	15.6	22.6

Source: Same as table 4-4.

4.3 Impacts on China's Investment

Chang, Chou and Chang (2001) said that Ching-Min Liu, the vice chairman of BOC, estimated the total amount of direct and indirect investment was as many as 36.2 billion US dollars.¹⁸ The investment will be put on operational cost, physical facilities, gymnasiums, communication facilities, and environmental protection. In detail, the direct investment is 3,635 million US dollars, while the indirect investment is surprisingly as many as 32,557 million US dollars.

As far as the direct investment is concerned, it belongs to the expenditure of BOC and includes basic construction, operational costs, physical facilities and gymnasiums. On the other hand, the indirect investment, the budget of Central and Beijing government, will be spent on basic construction, communication facilities, environmental protection, and so on.

Table 4-7 illustrates the direct and indirect investment on holding Beijing 2008 Olympic Games. The investment consists of three major constructions. First, 3,635 million US dollars will be invested on gymnasiums and relative facilities. In order to succeeding in holding the Olympic Games, the highest level of athletic competition over the world, Central and Beijing government are supposed to put all their efforts on building the best gymnasiums and facilities. The total of new world-class gymnasiums would be as many as 19 and cost 1,236 million US dollars. Besides, some of the existed

¹⁸ The amount of money he estimated was 278.8 billion RMB.

gymnasiums were supposed to be renovated. The renovating cost 313 million US dollars.

Secondly, 24,998 million US dollars will be invested on basic construction and transportation. To meet the demand of a great many visitors attracted by Beijing 2008 Olympic Games, well and convenient transportation will be needed.

The projects of transportation improvement are such as road circularity, radiate freeway, subway system and light rail. In detail, 100 kilometers of rail road, 200 kilometers of new or reconstructed road and 700 kilometers of new freeway are all needed from 2001 to 2008. The amount of freeways in Beijing city is expected from 500 kilometers to 718 kilometers in 2008. The total kilometers of road will amount to 14,700 and 87.3 per square kilometers. The total length of rail road is expected from 114 kilometers to 300 kilometers as well. With the construction project, transportation in Beijing city is supposed to be greatly improved. Besides, the basic facilities such as electricity, water supply, heat supply, air supply and communication are prerequisites for succeeding in holding the Olympic Games.

Thirdly, 7,559 million US dollars will be invested on environmental protection in case that the seriously polluted environment will become worse and worse. This part of investment is funded by government, civil organization and The World Bank. The fee of environmental protection is almost 20% of all the budgets.

Table 4-7: Direct and Indirect Investment on Holding Beijing 2008 Olympic Games

Unit: million US dollars

Items	Amount	Items	Amount
Direct Investment	17,506	Indirect Investment	18,675
1. Gymnasiums and facilities	3,635	1. Environmental protection	7,559
- New gymnasiums	1,236	- Energy resources	4,142
- Extended gymnasiums	313	- Water cleansing	2,380
- New facilities	1,986	- Garbage disposal	187
- Gymnasiums for practicing	51	- Landscape engineering	850
- Facilities for Paralympic Olympia	49	2. Transportation	11,117
2. Basic construction	13,870	- Railroad	5,181
- Railroad construction	2,584	- Road construction	5,390
- Electricity	3,093	- Others	546
- Telecommunication	8,201		

Source: Wang (2002).

Table 4-8 is the direct and indirect investment of Olympic host countries. The total amount of investment on holding Beijing 2008 Olympic Games can be observed as the most of all. It is almost four times as much as that on holding Barcelona 1992 Olympic Games. Furthermore, the proportion of indirect investment to direct investment is 1:1, which is similar to that of Seoul 1988 Olympic Games. With the enormous amount of indirect investment, China's follow-up economic development is supposed to be strongly motivated by the Olympic Games.

Table 4-8: Comparison of Direct and Indirect Investment

Unit: million US dollars

Items	Tokyo 1964	Seoul 1988	Barcelona 1992	Atlanta 1996	Sydney 2000	Beijing 2008
Direct investment						
Amount	452	1,534	2,460	1,182	3,724	17,506
Percentage (%)	(2.7%)	(46.5%)	(26.2%)		(63.8%)	(48.0%)
Indirect investment						
Amount	6,373	1,763	6,915	—	2,112	18,675
Percentage (%)	(97.3%)	(53.5%)	(73.8%)		(36.2%)	(52.0%)
Amount of total investment	6,825 (100%)	3,296 (100%)	9,376 (100%)	—	5,836 (100%)	36,171 (100%)

Source: Same as table 3-12.

Table 4-9 illustrates direct investment during the holding of Beijing 2008 Olympic Games. The closer the holding of the Olympic Games is, the more the amount of investment will be. It is 2007 that the investment is expected to amount to 5,365 million US dollars, the most during the Olympic Games.

Table 4-10 illustrates growth rate of investment in China from 2000 to 2006. Growth rate of investment in China kept increasing from 1999 and boosted to the summit of 27.7% in 2003. The averaged growth rate of investment in 1999 and 2000 was 7.6%, while that was 22.1% when preparing for holding the Olympic Games. Moreover, growth rates of investment in Beijing city were over 18% from 2001 to 2003. Then, it dramatically dropped from 17.2% in 2004 to 11.8% in 2005. That could be attributed to the inefficient investment. Therefore, holding Beijing 2008 Olympic Games, indeed, stimulated domestic investment in China and Beijing city.

Table 4-9: Direct Investment during the Holding of Beijing 2008 Olympic Games

Unit: million US dollars

Year	Amount	%
Total	17,506	100.0
2003	298	1.7
2004	926	5.3
2005	4,233	24.2
2006	4,512	25.8
2007	5,365	30.6
2008	2,178	12.4

Source: "Input on the Olympic Games and development of Beijing city,"
http://www.bjstats.gov.cn/ldcxxt/tjfx/tjbg/200510/t20051013_32344.htm.

Table 4-10: Growth Rate of Investment in China and Beijing City — 2000~2006

Unit: billion RMB

Items	2000	2001	2002	2003	2004	2005	2006
Investment in China							
Amount	3,292	3,721	4,350	5,557	7,048	8,877	10,987
Growth rate (%)	10.2	13.0	17.0	27.7	26.8	26.0	23.7
Investment in Beijing city							
Amount	129.7	153.1	181.4	215.7	252.8	282.7	—
Growth rate (%)	10.8	18.0	18.5	18.9	17.2	11.8	—

Source: Same as table 4-4, and China Economic Databases, *China Economic Analysis Monthly*,
<http://ics.nccu.edu.tw/ced/paper/CEAM-07-02.pdf>.

Table 4-11 is the estimated growth rate of investment in Beijing city from 2001 to 2008. The growth rate of investment in Beijing city is estimated to be from 11.0% to 12.3%. What is more, estimated growth rate of investment contributed from holding the Olympic Games will summit at 270% in 2003 and then decrease. The deficient amount of investment will seriously drop to - 4.3% in 2007. As a result, holding the Olympic Games stimulates a considerable sum of investment in Beijing city.

It is afraid that the enormous amount of investment on holding the Olympic Games such as Tokyo 1964 and Sydney 2000 Olympic Games will lead to bubbling growth rate of GDP after the Games. However, Yi- Li Yen said a great many investment projects such as Western Developing, North-East reconstructing, Central Rising, and Eastern modernizing as well will keep pushing up the efficient investment and get out of the risk of economic bubbling even after Beijing 2008 Olympic Games.¹⁹

Table 4-11: Estimated Growth Rate of Investment in Beijing City — 2001~2008

Unit: billion RMB								
Items	2001	2002	2003	2004	2005	2006	2007	2008
Domestic investment								
Amount	151	170	189	209	232	258	286	318
Growth rate (%)	12.0	12.0	11.0	11.0	11.0	11.0	11.0	11.0
Investment on Olympics								
Amount	—	2	10	22	33	35	33	—
Growth rate (%)	—	—	270	116	51	6	-4	—
Investment on Olympics/ Domestic investment (%)								
	—	2	5	10	14	14	12	—

Source: Wang (2002).

4.4 Impacts on China's Household Consumption

Holding the Olympic Games stimulates the demand of a great many visitors for tourism and consumption. Therefore, tourism, lodging, transportation and catering are four of the main beneficiaries.

Li and Duan (2005) claimed that as far as Sydney 2000 Olympic Games were concerned, 85% of tourism revenues were contributed from the host city, while 15% were contributed from rest areas. Therefore, it is estimated that 4.25 billion US dollars will be contributed from Beijing city, while 0.75 billion US dollars will be contributed from rest areas. In detail, the impacts of Beijing 2008 Olympic Games on tourism from 2003 to 2010 will be shown in table 4-12.

¹⁹ See "Free from Shrink of Economy in Post-Games," <http://big5.bjoe.gov.cn/qwgd/200701/t149005.htm>.

Table 4-12: Estimated Impacts on Tourism in Beijing City — 2003~2010

Unit: billion US dollars

Items	2003	2004	2005	2006	2007	2008	2009	2010
Foreign visitors (thousand people)	3,210	3,400	3,610	3,900	4,210	4,630	4,630	4,630
Domestic visitors (thousand people)	8.2	8.6	9.1	9.5	10.0	10.3	10.8	11.3
Revenues from foreign trade	3.3	3.5	3.7	4.0	4.3	4.8	4.8	4.8
Expenditure from abroad sight-seeing	7.4	7.8	8.3	9.0	9.7	10.7	10.7	10.7
Amount of sight-seeing revenues	92	96	101	106	112	115	121	127
Expenditure from domestic sight-seeing	18.3	19.3	20.2	21.2	22.3	23.0	24.1	25.3
Increased amount of sales	1.5	1.6	1.7	1.9	2.0	1.8	1.5	1.5

Source: Wang (2002).

Table 4-13 shows composition of estimated tourism revenues of Beijing city in 2008. The revenues from tickets are expected to be 382 million US dollars, and those of transportation and lodging are 152 and 142 million US dollars, respectively. The above composed the major part of tourism revenues in 2008. The total expected revenues in 2008 are supposed to be 1,001 million US dollars.

Table 4-14 illustrates the growth rate of consumption in China and Beijing city from 2001 to 2006. Growth rates of consumption in China boost from 2.7% in 2004 to 24.5% in 2005. Besides, growth rates of consumption in Beijing city are around 9%. Both of averaged growth rates of consumption in China and Beijing city were 9.0%. Growth rates of consumption in Beijing city are steady in this period and have no significant correlation with holding Beijing 2008 Olympic Games.

Table 4-13: Estimated Tourism Revenues of Beijing City in 2008

Unit: million US dollars

Items	Estimated tourism revenues
Tickets	382
Transportation	152
Lodging	142
Catering service	96
Shopping	96
Communication	8
Sightseeing	44
Recreation	30
Others	50
Total	1,001

Source: Same as table 4-9.

Table 4-14: Growth Rate of Consumption in China and Beijing City — 2001~2006

Unit: billion RMB

Items	2001	2002	2003	2004	2005	2006
Consumption in China						
Amount	4,306	4,814	5,252	5,395	6,718	7,641
Growth rate (%)	—	11.8	9.1	2.7	24.5	13.7
Consumption in Beijing city						
Amount	183	200	219	239	260	—
Growth rate (%)	—	9.2	9.5	8.9	8.7	—

Source: Same as table 4-10.

It is well known that China's tourism develops rapidly. In 2005, total amount of tourists was up to 120 million people, and the sum of tourism revenues boosted to 29.3 billion US dollars. Each of growth rates was 10.3% and 13.8, respectively. Therefore, with the splendid performance of tourism, the numbers of tourists and amount of revenues in Beijing 2008 Olympic Games are supposed to be more than those of the previous host countries.

Table 4-15 illustrates the comparison of Olympic host countries. The number of visitors and the amount of revenues keep increasing from 1984 to 2008. Holding Sydney 2000 Olympic Games brought in as many as 4,270 million US dollars and 500 thousand visitors. The estimated number of visitors and amount of revenues from holding Beijing 2008 Olympic Games will be estimated to be 1,900 thousand and 5,000 million US dollars respectively.

Table 4-15: Comparison of Olympic Host Countries — 1984~2008

Olympic Games	Increased number of visitors (thousand people)	Increased amount of revenues (million US dollars)
Los Angeles 1984 Olympic Games	225	—
Seoul 1988 Olympic Games	220	1,400
Barcelona 1992 Olympic Games	300	3,000
Atlanta 1996 Olympic Games	350	3,500
Sydney 2000 Olympic Games	1,500	4,270
Beijing 2008 Olympic Games	1,900	5,000

Note: 1. Visitors here only includes those who go sightseeing from foreign countries.

2. The figures in Beijing 2008 Olympic Games are estimated.

Source: Wang and Miao (2001).

4.5 Impacts on China's Employment

With the eye on the enormous amount of investment on holding Beijing 2008 Olympic Games, Chinese workers are supposed to benefit from the increased amount of employment. Chang and Li (2002) mentioned that per 100 thousand RMB on investment can increase the employment of a worker, so that 278.8 billion RMB, the total amount of investment on holding Beijing 2008 Olympic Games, is expected to create about the employment of 2,788 thousand workers. Such an enormous amount of employment exact stimulates China's economic and industrial development.

Table 4-16 illustrates growth rate of employment in China and Beijing city from 2000 to 2005. The growth rate of employment in China increased by 0.3% in 2001, the beginning year of Pre-Games, and it amounted to 1.2%. Then, it kept steady afterward. Besides, growth rate of employment in Beijing city boosted to 7.9% in 2002 and 21.4% in 2004 respectively. That could be attributed to the enormously increased amount of

investment on holding the Olympic Games.

Table 4-16: Growth Rate of Employment in China and Beijing City — 2000~2005

Items	2000	2001	2002	2003	2004	2005
Employment in China						
Amount (million workers)	721	730	737	744	752	758
Growth rate (%)	0.9	1.2	0.9	0.9	1.1	0.8
Employment in Beijing city						
Amount (million workers)	6.2	6.3	6.8	7.0	8.5	8.8
Growth rate (%)	0.0	1.6	7.9	2.9	21.4	3.5

Source: Same as table 4-4.

Table 4-17 compares the increased amount of employment between Olympic host countries from 2000 to 2005. Sydney 2000 Olympic Games created as many as 1,577 thousand workers, while Beijing 2008 Olympic Games are expected to create more than 2,788 thousand workers.

Table 4- 17: Comparison of Increased Employment — 2000~2005

Unit: thousand workers

Items	Los Angeles 1984	Seoul 1988	Barcelona 1992	Atlanta 1996	Sydney 2000	Beijing 2008
Amount of increased employment	25	336	120	90	1,577	2,788

Note: The employment of Beijing 2008 Olympic Games is estimated.

Source: Tao (2003).

4.6 Impacts on China's Industrial Structure

As mentioned in the third session, the enormous demands of visitors for the Olympic Games stimulate development of tourism, lodging real estate, and catering. During the period as long as seven years, domestic and foreign visitors will go sight-seeing in the host city and country. Athletes' needs for food and drink greatly benefit catering. Next, the great amount of investment on gymnasiums and athletic facilities motivates development of design, construction, building and adornment.

Furthermore, in order to build a much more convenient environment, transportation, postal industry, and telecommunication are beneficiaries as well. In addition, holding the Olympic Games creates a lot of business opportunities for information technological industry and manufacturing. The alluring revenues for Olympic souvenirs such as Olympic logos, Olympic flags, T-shirts, handicrafts and so on will benefit manufacturing. Chang, Chou and Chang (2001) pointed that the revenues of Olympic souvenir in Sydney 2000 Olympic Games were as many as 213 million US dollars. Therefore, it supposed to be an alluring profit in Beijing 2008 Olympic Games. Meanwhile, the need for modern computer science will bring in a great deal of money for manufacturing. Finally, the three themes of holding Beijing 2008 Olympic Games, which are Green Olympics, Humanistic Olympics and High-tech Olympics, stimulate development of educational industry, cultural industry and environmental protection.

Wang (2002) stated that the splendid amount of investment and consumption will benefit the third industry the most. And the impacts on the third industry can break into direct and indirect influence. To begin with, the direct influence means the need for constructing gymnasiums, athletic facilities and operational fees. Secondly, as far as indirect influence is concerned, holding Beijing 2008 Olympic Games not only improves basic facilities and environment, but also raises China's international reputation. As a result, indirect influence will be much more significant than direct one.

Table 4-18 explains the three-phase impacts on industrial structures in China. Li and Duan (2005) thought that the second and third industries in Beijing city will be the most beneficiaries. Especially, GDP of the third industry is supposed to increase by 0.4% in 2010. Besides, from 2003 to 2007, the employment of the second and third industry will increase the employment of 140 thousand and 90 thousand workers.

Then, in 2008, the employment contributed from the third industry will increase to 263 thousand workers. On the other hand, the increased employment and GDP in rest areas will be far fewer than that of Beijing city. Roughly speaking, GDP of rest areas is supposed to increase by 0.07% from 2003 to 2007 and by 0.23% in 2008. During the holding of Beijing 2008 Olympic Games, most of the economic indicators in rest areas are expected to be less than 0.15%. It can attribute to Beijing city's minor percentage. Therefore, hardly can the Olympic Games stimulate economic development of rest areas.

Table 4-18: Three-Phase Impacts on Industrial Structures

Unit: %

Items	Beijing city			Rest areas		
	2002	2005	2010	2002	2005	2010
Proportion of production						
The first industry	3.1	2.4	2.8	15.70	15.68	15.68
The second industry	34.7	35.1	34.6	51.60	51.63	51.61
The third industry	62.2	62.5	62.6	32.60	32.59	32.62
Total	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of employment						
The first industry	8.5	7.5	6.8	50.50	50.48	50.46
The second industry	30.8	32.6	28.5	21.30	21.33	21.31
The third industry	60.7	59.9	64.8	28.20	28.19	28.23
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Li and Duan (2005).

Table 4-19 is the expected impacts on the switch of industrial structures in Beijing city from 2000 to 2008. The percentages of the first and second industries are supposed to decrease with the holding of Beijing 2008 Olympic Games, while that of the third industry will increase instead. The averaged growth rate of the third industry is about 0.65%.

Table 4-19: Impacts on the Switch of Industrial Structures in Beijing City—2000~2008

Unit: %

Industries	2000	2001	2002	2003	2004	2005	2006	2007	2008
The first industry	3.0	3.3	3.0	2.8	2.5	2.4	2.2	2.1	2.0
The second industry	38.0	36.2	35.6	35.6	36.1	36.0	35.0	33.4	32.3
The third industry	59.0	60.5	61.4	61.6	61.4	61.6	62.8	64.5	65.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Wang (2002).

Wang (2002) mentioned that holding the Olympic Games will stimulate the percentage of the third industry to 0.65% before 2008. It means that holding the Olympic

Games will achieve the goal earlier than the circumstance without holding the Olympic Games. Meanwhile, such an industrial structure symbolizes that Beijing city will achieve the standard of the modernized metropolis.

In addition, table 4-20 illustrates the expected impacts on the switch of industrial structures in China from 2000 to 2005. The percentages of the first and third industries kept steady in this period. However, in contrast to the percentage of the third industry in Beijing city, that in China decreased from 41.7% in 2002 to 39.9% in 2005 instead. As far as the percentage of the second industry was concerned, it increased to 47.5% in 2005 from 45.9% in 2000. The averaged growth rate was 0.26% each year.

Table 4-20: Impacts on the Switch of Industrial Structures in China — 2000~2005

	Unit: %					
Industries	2000	2001	2002	2003	2004	2005
The first industry	13.4	14.1	13.5	12.6	13.1	12.6
The second industry	45.9	45.2	44.8	46.0	46.2	47.5
The third industry	40.7	40.7	41.7	41.4	40.7	39.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Same as table 4-4.

4.7 Impacts on China's Capital Market

The holding of Beijing 2008 Olympic Game appeals such an enormous amount of investment that capital market will benefit a lot from it. Wang and Miao (2001) observed that the investment on Olympic construction such as basic facilities and gymnasiums would benefit the stocks of building industry. In addition, the three themes of Beijing 2008 Olympic Game would benefit the following stocks. The first one was that Green Olympics would lead to the demand for Initial Public Offerings (IPO) of environmental protection. Secondly, stocks of tourism and culture industry would benefit from Humanistic Olympics. Thirdly, High-tech Olympics profited the stocks of technology. Besides, China's sports industry was supposed to be the beneficiary. Therefore, the development of stocks of sports industry would accelerate due to holding the Olympic Games.

Table 4-21 indicates the stock index in China from 2000 to 2006. Growth rates of both composite indices kept dropping from 2001 to 2005. Then, they boosted to the

summit of 9.7% and 130% in 2006, respectively.

Table 4-22 is the comparison of stock index of the host countries. Growth rate of GDP in Korea boosted more than that in the United States in Pre-Games and Games-Year. In addition, Growth rate of GDP increased more than that in the United States in Games-Year and Post-Games. Although there are lots of factors to affect economic development, holding the Olympic Games can have its own effect to boost the growth rate of GDP.

Table 4-21: Stock Index in China — 2000~2006

Items	2000	2001	2002	2003	2004	2005	2006
Shenzhen Composite							
Index							
Price	636	476	389	379	316	279	551
Growth rate (%)	—	-25.0	-18.2	-2.6	-16.6	-11.7	9.7
Shanghai Composite							
Index							
Price	1,744	1,880	1,544	1,479	1,521	1,164	2,675
Growth rate (%)	—	7.8	-17.9	-4.2	2.9	-23.5	130.0

Source: Same as table 4-4.

Table 4-22: Comparison of Stock Index

Country	Unit: %		
	Pre-Games 1982-1987	Games-Year 1988	Post-Games 1989-1990
Korea	25.6	52.8	3.7
United States	-10.2	16.1	10.2
Country	Unit: %		
	Pre-Games 2000-2003	Games-Year 2004	Post-Games 2005-2006
Greece	-19.7	17.9	26.2
United States	1.4	3.5	7.0

Note: Index value of the United States is collected by Dow Jones Industrial Index.

Source: Datastream.

Beijing 2008 Olympic Games attracts a great demand for real property. Table 4-23 shows the price of real property in China and Beijing city from 1999 to 2005. The price of real property in China kept increasing since 1999. The price of real property for living

increased more significantly than that for business. In addition, the price of real property in Beijing city fluctuated from 4,737 RMB per square meter in 2003 to 6,788 RMB per square meter in 2005. High price of real property in 2005 could be attributed to the approach of the Olympic Games.

With the coming of Beijing 2008 Olympic Games, the price of real property in Beijing city is supposed to boost. According to the analysis in Chapter 3, the price of real estates will be pushed up before and after the Olympic Games. As far as the price of real estates in China was concerned, it boosted in 2004 and then fall down a little bit in 2005. Such a trend was supposed to keep off bubbling. However, as for the price of real estates in Beijing city, the excessive growth rate in 2005 might end up with overheating.

Table 4-23: Price of Real Estates in China and Beijing City — 1999~2005

Unit: RMB per square meter							
Items	1999	2000	2001	2002	2003	2004	2005
Real estates in China							
Price	2,053	2,112	2,170	2,250	2,359	2,778	3,168
Growth rate (%)	—	2.9	2.7	3.7	4.8	17.8	14.0
Real estates in Beijing city							
Price	5,647	4,919	5,062	4,764	4,737	5,053	6,788
Growth rate (%)	—	-12.9	2.9	-5.9	0.5	6.7	34.3

Source: Same as table 4-4.

Due to the alluring opportunity of investment, foreign investors are supposed to be attracted by Beijing 2008 Olympic Games. Table 4-24 shows foreign direct investment (FDI) in China and Beijing city from 1999 to 2005. The amount of FDI kept increasing since 1999. Growth rate of FDI boosted to the summit of 39% in 2003 and then slightly decreases afterwards. The trend shows no significance with the holding of Beijing 2008 Olympic Games. However, the amount of FDI in Beijing city fluctuated much more fiercely than that in China. Growth rate of FDI summated at 257.9% in 2004, while it bottomed to -54.4% in 2005. Such a phenomenon reflected the insufficient investment on the Olympic Games.

Table 4-24: Foreign Direct Investment in China and Beijing City — 1999~2005

Unit: billion RMB

Items	1999	2000	2001	2002	2003	2004	2005
FDI in China							
Amount	41.2	62.4	69.2	82.8	115.1	153.5	189.1
Growth rate (%)	—	51.4	10.9	19.7	39.0	33.4	23.2
FDI in Beijing city							
Amount	3.5	1.4	1.5	2.4	1.9	6.8	3.1
Growth rate (%)	-14.6	-0.6	7.1	60	-20.8	257.9	-54.4

Source: Same as table 4-4.

4.8 Summary

Beijing 2008 Olympic Games are supposed to result in far more indirect revenues than direct one. Although direct revenues and profit from holding the Olympic Games are not marvelous at all, the impacts on GDP, investment, tourist's revenues, employment, industrial structure and capital market of China's economy, however, are extremely significant. The overall impacts of holding Beijing 2008 Olympic Games on China can be concluded as the followings:

1. The alluring revenues and profits. The profit of holding Beijing 2008 Olympic Games is expected to be as many as 16 million US dollars. The expected revenue is 1,625 million US dollars, while the expected expenditure is 1,609 million US dollars. Although such a profit is not as much as those of Los Angeles 1984, Seoul 1988 and Sydney 2000 Olympic Games, it is, however, still a considerable sum of money to earn.

2. Splendid Growth Rate of GDP. The averaged growth rate of GDP during the holding of Beijing 2008 Olympic Games is expected to be above 13%. Such a high growth rate closes to those of Tokyo 1964 and Seoul 1988 Olympic Games.

3. The enormous amount of investment. The amount of investment on holding Beijing 2008 Olympic Games is far more than those of previous Olympic Games. It is supposed to be around 36,171 million US dollars. Specifically, the amount of indirect investment is as many as 18,675 million US dollars, while that of direct one is about 17,506 million US dollars. The proportion of indirect investment to direct one is 1:1. Such a proportion equals to that in Seoul 1988 Olympic Games. Growth rates of investment are expected to be 19% and 11% respectively in China and Beijing city. Also,

the three-phase growth rates of investment in Beijing city contributed from Beijing 2008 Olympic Games are estimated as 5.6% in Pre-Games, 0.2% in Games-Year and - 0.2% in Post-Games.

4. Excellent achievement on attracting tourists and creating employment. The increased tourism revenues, visitors and employment are expected to be more than those of previous Olympic Games. They are 5,000 million US dollars and 1,900 thousand people respectively. Specifically, 4.25 billion US dollars will be contributed from Beijing city, while 0.75 billion US dollars will be contributed from rest areas.

5. Rapid development of the third industry. Holding Beijing 2008 Olympic Games benefits the third industry the most, so that the swift of industrial structures in Beijing city raises percentage of the third industry to 65% step by step. In contrast, as for the industries in China, the Olympic Games benefit the second industry the most instead. From 2000 to 2005, the averaged growth rate of the second industry is 0.26%.

6. The risk of bubbling capital market. High demand for renting will lead to over-heated price of real property. Especially, boosted price of real property in Beijing city will encounter the risk of bubbling.