

A Study on Relationship between Foreign Openness Degree and Inbound Tourism Development in China

Gennian Sun, Yafen Han, Lixin Yu

School of Tourism & Environment Science, Shaanxi Normal University, Shaanxi 710062, China

Tel: 86-29-8530 7521 E-mail: gnsun@snnu.edu.cn

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Abstract

Foreign Opening Degree is an important factor impacts the development of inbound tourism. In this paper, a demonstration analysis is made from the view of time serial, regional difference and case study, the results are follows: with the higher degree of opening door policy from 1985 to 2005, China's inbound tourism has been growing and dependence of 5 key indicators are all over 0.79 and showed very good relevance at several turning points; furthermore, with the statistics of 2002, the relationship between the opening degrees of 31 provinces and their inbound tourism market shares are positive relevance, of which, Guangdong, Beijing, Shanghai, Fujian, Zhejiang, Jiangsu, Shandong and Liaoning are both inbound tourism advanced and economy exotic provinces; finally, a comparison study of 15 years of Shaanxi and Shandong Provinces is made to retell the same result.

Keywords: Inbound tourism, Foreign opening degree, Time serial, Region difference, Case study

Introduction

As the saying goes, "open your door to welcome the guest." China used to be a nation that closed her door to outside world before 1978, had few foreign tourists and thought little of cost or profit, the government took it as a kind of political and foreign affair. Since the implementation of open door policy in 1978, inbound tourism has been developing very quickly, the changes of 28 year's statistics has been seeing the synchronizing growth of China's contemporary inbound tourism and her more opening to the world, which could be indicated from inbound tourists, foreign visitors, the visitors from HK, Macau and Taiwan, the overnight tourists, tourist foreign currency receipts and their orders in the world. What's more, the tourism statistics of 31 provinces shows that from 1978-1995, China was a tourist destination of sightseeing affected more by tourist resources and their accessibility (Sun Gennian, 2003); from 1995 to 2005, China turns its tourism image to a business destination, consequently the inbound tourism strongly affected by foreign trade dependence and openness degree, and showed the phenomenon of "resource curse" (XU Kangning, 2006). Many writers has discussed the relationship between openness degree and Chinese economy growth, XU Helian, GUO Yan noticed Chinese gross economy as time changes (XU Helian, etc. 2003; Guo Yan, 2004), LAN Yisheng studied the regional differences of economic growth among the 31 provinces (Lan Yisheng, 2002), many leaders talked about the importance of open door policy to tourism development (Shao Qiwei, 2006), but the corresponding temporal study was little mentioned. In the fact, inbound tourism is a kind of typical export-oriented industry, restricted not only by resources and tourist service, but openness degree as well. Herein a temporal analysis of timetable and regional difference in China has been made to provide more information.

1. The resource of data and research method

Foreign Openness Degree (FOD) is a complicated system that involves politics, economy, science, education, history and culture and hard to measure. To make it available for research, based on economical openness, the opening degree is calculated by foreign trade dependence and foreign investment dependence as follows (Hu Zhi, Liu Zhixing, 2005):

$$FOD = [\text{Foreign Trade Dependence (FTD)} + \text{Foreign Investment Dependence (FID)}] / 2 \quad (1)$$

Of which,

$$\text{Foreign Trade Dependence (FTD)} = [\text{Gross Foreign Trade} / \text{GDP}] \times 100\% \quad (2)$$

$$\text{Foreign Investment Dependence (FID)} = [\text{Gross Foreign Investment} / \text{GDP}] \times 100\% \quad (3)$$

According to *China Statistics Yearbook 1986-2005*, 3 suites of foreign openness degree have been counted as follows: a. Chinese foreign openness degree 1985-2005; b. Mainland China's 31 provinces' foreign openness degree of 2002; c. Shaanxi and Shandong Provinces' foreign openness degree 1985-2005.

For the development level of inbound tourism, 5 most important performance indicators would be collected as total inbound visitors (TV), foreign visitors (FV), visitors from HK, Macau and Taiwan (HMTV) and overnight visitors

(OV). Then, time serial analysis is done based on the 5 indicators to work out the relationship between foreign openness degree and inbound tourism, cross-section analysis is made based on the market share of visitors (or tourist receipt) of 31 provinces to find out the relationship between foreign openness degree and inbound tourism, of which, market share of visitors (MSV)=[Provincial market share of visitors / National total visitors]×100%, market share of tourist receipt (MSTR)=[Provincial market share of tourist receipt / National total tourist receipt]×100%, finally, a case study of Shaanxi and Shandong provinces is to confirm the result. All the inbound tourism statistics are collected from *China Tourism Yearbook 1986-2005*.

2. The relationship between foreign openness degree and inbound tourism in the past 20 years

Table 1 is the statistics figures of Chinese foreign openness degree and inbound tourism 1985-2004 where shows that China's foreign trade dependence degree and foreign openness degree have been turning higher, consequently the same trend of inbound tourism as inbound visitors, foreign visitors, visitors from HK, Macau and Taiwan, overnight visitors and tourist receipt, thus pushing the order of China's inbound tourism in the world forward.

Foreign trade dependence degree and foreign openness degree are explaining variables to discover the relevance to inbound tourism as shown in table 2. It's easy to find that inbound tourism goes very close with foreign trade dependence degree, as seen from the correlation coefficient of 5 indicators being over 0.916, that of overnight visitors even over 0.944; well, it's not that high with foreign openness degree (including foreign investment dependence degree), that of 5 indicators being over 0.796, that of overnight visitors over 0.831, indicating that foreign trade is an important inducing factor.

2.1 The Relationship between Foreign Trade Dependence Degree and Overnight Visitors

Overnight visitors are those who stay in China at least 24 hours, besides sightseeing, they do eating, staying, traveling, shopping and pleasuring, thus spending more and bringing about more tourist receipt and reflecting more of the development level of inbound tourism. Figure 1 is the changes of time serial between overnight visitors and foreign trade dependence degree where we could see that the latter advanced wave upon wave since 1985, from 1985 to 1994 is the 1st pull-up period, from 1998 to 2005 is the 2nd, correspondingly, overnight visitors also advanced significantly at the same time: from 7.13 Million person-time to 21.07 Million person-time at the 1st period and 25.07 Million person-time to 46.81 Million person-time at the 2nd.

Besides the long-term trend, good corresponding relationship could be found at several turning points: there was a "downward valley" in 1989 due to "6.4 Incident" (Sun Gennian, 1998), another valley in 1998 due to Asian Finance Crisis and the 3rd valley in 2003 because of SARS Crisis.

2.2 The Relationship between Foreign Trade Dependence Degree and Tourist Receipt

Tourist receipt is the most direct accountant indicator for tourism development. For most developing countries, tourist foreign currency is the main driving force of inbound tourism. Figure 2 shows the changes of time serial between tourist receipt and foreign trade dependence degree. As tourist foreign currency is a complicated system and hard to count, so the correlation is not that high as seen above, but the phases were still easily found: 1985-1994 is the 1st pull-up period of FTD, and that of tourist receipt appeared in 1989-1997, the dislocation of time lies in two reasons: the even tourist spending was pretty low before 1989 and the statistic caliber changed a lot in 1994; well the 2nd pull-up period for both existed between 1998-2004. As we see the turning points, the downward points of both appeared in 1989, 1993, 1998 and 2003; well the upward points of them are 1994, 2000 and 2004.

3. The Analysis of Spatial Differences of Inbound Tourism Market Share and Openness Degree among the 31 Provinces

Time and space is an interacted unity and the spatial differences would eventually reflect the time changes. Herein based on the inbound tourism market share and foreign openness degree among the 31 provinces to discuss the effect of foreign openness degree on spatial differences of inbound tourism as shown in Table 3.

3.1 The Analysis of Spatial Differences of Tourism Market Share of Inbound Visitors and Foreign Trade Dependence Degree

Tourism market share of inbound visitors involves many factors as tourist resources abundances, traffic accessibility, visitors' priority, besides, the provincial differences of foreign trade dependence degree (including foreign openness degree) due to economic contact and business tourism works the most. Let's look at figure 3, except for Guangdong and Tianjin, foreign trade dependence degree and tourism market share of inbound visitors of other 29 provinces has a fairly close relationship as the formula implies:

$$MSV = -0.7311 + 0.1524 \times FTD \quad r = 0.9348 \quad (4)$$

As Guangdong province locates by HK and Macau, also serves as visitors from Taiwan's main entrance to Mainland

China, so its FTD is as high as 150% and shares 35.6% of inbound visitors' market, thus running the No. 1 in China; Beijing and Shanghai are the most prosperous metropolitan in China and their FTD are over 80% thus occupying over 6.9% of the market where foreign visitors take the lion's share, they are the 2nd array of China's inbound tourism market; Fujian, Jiangsu, Zhejinag, Liaoning and Shandong are all seaside developed provinces whose FTD are between 47-27% and take 2.4-5.6% of the market, obviously they are the 3rd array. The above 8 provinces have 71% of the whole market, over 2/3 of all. Tianjin City, on the other hand, although its FTD is 86.7%, she lies under the shadow of Beijing tourism (Yang Zhenzhi, 2003) and takes only 1.29% of the inbound visitors' market.

For other 22 provinces, FTD and MSIV are both low and could see two types: Guangxi, Yun'nan, Hubei, Shaanxi, Helongjiang and Hu'nan are abundant in tourist resources whose MSIV are between 3.48-1.4%; well others have fewer resources and MSIV are less 1.0%.

3.2 The Analysis of Spatial Differences of Tourism Market Share of Tourist Receipt and Foreign Trade Dependence Degree

As the average staying nights and tourist expenses differ, the market share of tourist receipt and visitors are not always the same. Based on the market share of tourist receipt and FTD of 2002, figure 4 implies that there exists a very close relationship as OLS formula tells:

$$\text{MSTR} = 0.51529 + 0.07987 \times \text{FTD}, r = 0.88407 \quad (5)$$

Of which, Guangdong shares 27% of China's inbound receipt market; Beijing and Shanghai takes 6.96% and 7.93% of the inbound visitors' market and 16.8% and 12.2% of the receipt's respectively; Fujian, Jiangsu, Zhejinag, Liaoning and Shandong takes 2.4-5.6% of the inbound visitors' market and 2.5-5.9% of the receipt's. The above 8 provinces have 78% of the total receipt market, over 3/4 of all. The tourism of Tianjin, still under the shadow of Beijing and takes only 1.84% of the inbound receipt's market, it is exception.

The other 22 provinces' FTD is lower than 17.5% and shares less than 2.3% of China's inbound receipt's market. Of which, Yun'nan, Shaaxi, Guangxi, Hu'nan, Helongjiang, Hubei, Chongqing and Sichuang's FTD are between 6.7-11.9% and they take more than 1% of receipt's market; well, other 14 provinces like Hebei, Inner Mongolia, He'nan, Anhui, Xinjiang takes less than 1% of the market.

4. A comparison analysis of Shaanxi and Shandong

Shaanxi and Shandong have the similar quantity of population and area. Shaanxi lies in the middle of Mainland China, far from the ocean, with the major tourist resources of cultural relics, and its capital, Xi'an, is a famous historical and cultural city with world fame who's Terracotta Warriors and Horses Museum is regarded as the 8th Wonder of the World. Shaanxi is a typical big tourism province with a long history of inbound tourism but develops pretty slow; Shandong, on the contrary, stands by the sea with both cultural and natural tourist resources, Mount. Taishan is the No. 1 of "5 Holy Mounts" and Confucius' Temple in Qufu is the sacred land of Confucianism. Shandong is a newly developed big tourism province with a shorter history of inbound tourism but develops fairly fast. Now a case study to reveal more details is in Table 4.

Before 1994, both the quantity of inbound visitors and tourist receipt of Shaanxi are higher than that of Shandong, in middle 1980s, the order that of Shaanxi was No. 5-6 in China and that of Shandong was only No. 13-14, well in early 1990s, that of Shaanxi turned No. 8-9 and that of Shandong became No. 12-13. After 1994, Shandong runs much faster on the two factors thus in later 1990s, she caught up with Shaanxi; in the early years of new century, that of Shaanxi back fell to No. 12-13 and that of Shandong went up to No. 8-9.

On the background of fast-developing inbound tourism in China, the comparison of Figure 5 and Figure 6 would reveal the reason of the changes of the two provinces. Since 1995, the FOD of Shaanxi has been gradually going down and pushing her market share of inbound tourism and its order going downward; on the contrary, since 1991, the FOD of Shandong has been gradually going up and pushing her market share of inbound tourism and its order going upward. Although FOD does not synchronize with market share of inbound visitors, the impression is still strong enough to tell that the difference of FOD is the most important factor to differentiate the development of inbound tourism of the two provinces.

To quantitatively measure the above relationship, based on the statistics of 1991-2005, the formulas are shown as follows, due to the lagged time, the FOD of one year earlier was used to explain the market share of inbound tourism of one year later:

$$\text{Shaanxi: MSV}(t) = 0.4871 + 0.27326 \times \text{FOD}(t-1), r = 0.6956 \quad (6)$$

$$\text{MSTR}(t) = 0.5361 + 0.21816 \times \text{FOD}(t-1), r = 0.7379 \quad (7)$$

$$\text{Shandong: MSV}(t) = 0.9816 + 0.10696 \times \text{FOD}(t-1), r = 0.7951 \quad (8)$$

$$\text{MSTR}(t) = 0.6316 + 0.11116 \times \text{FOD}(t-1), r = 0.8430 \quad (9)$$

Formula 6-9 reveals that FOD necessarily bound up with inbound tourism. Since 1995, the FOD of Shaanxi has been gradually going down and pushing her market share of inbound tourism and its order going downward; on the contrary, since 1991, the FOD of Shandong has been gradually going up and pushing her market share of inbound tourism and its order going upward.

Conclusion

Welcome guests sincerely, friends are all over the world. Inbound tourism is an extro-oriented industry, although the tourist resources, accessibility, tourists' priority, etc affect it; the foreign openness degree is always one of the key driving factors. Chinese modern inbound tourism started her history from the implementation of open door policy since 1978 and as China opens wider to the outside world, the competitiveness of her inbound tourism in the world goes stronger. Herein from the perspectives of time changes, regional differences and case study, the relationship was discussed to reveal the fact. During 1985-2005, China's inbound tourism is closely related to foreign openness degree, the correlation coefficient of major key factors are over 0.79, that of foreign trade dependence degree are over 0.91; the regional differences of inbound tourism of 31 provinces tell the same, 8 coastal provinces own the largest FOD and take 71% of inbound visitors and 78% of inbound tourist receipt; a comparison study of Shaanxi and Shandong provinces may reveal more details of the same conclusion. In short, FOD is always a basic presupposition for Chinese tourism to go in for international or regional competitiveness.

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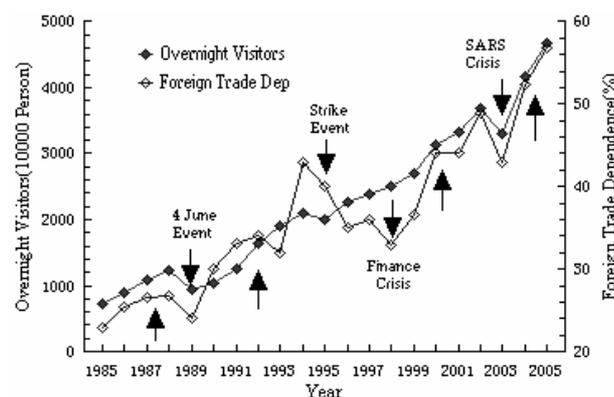


Figure 1. Changes of overnight visitors and FTD for 20 years.

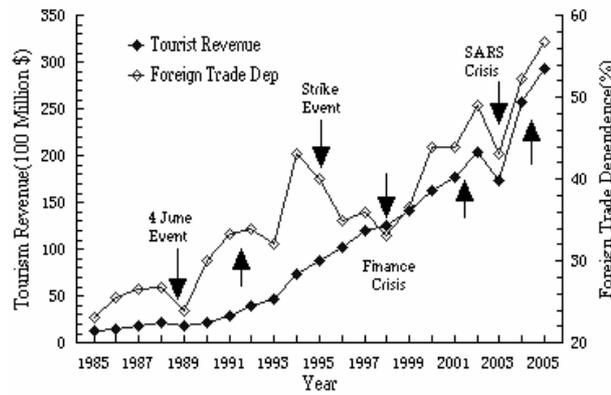


Figure 2. Changes of tourism receipt of inbound and FTD for 20 years.

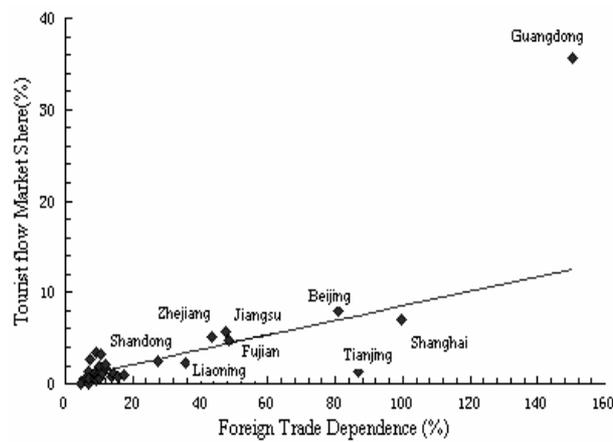


Figure 3. Relation between market share of visitors and FTD

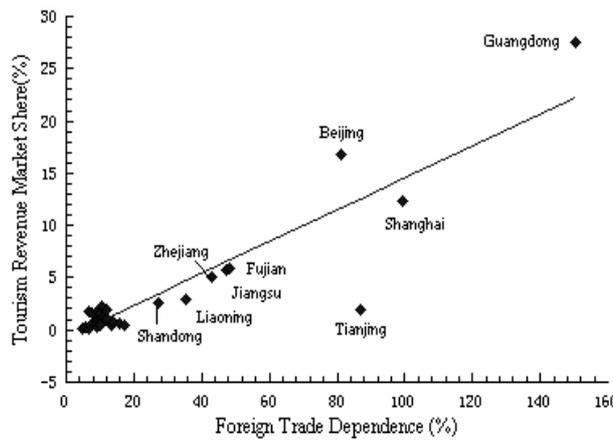


Figure 4. Relation between market share of receipt and FTD

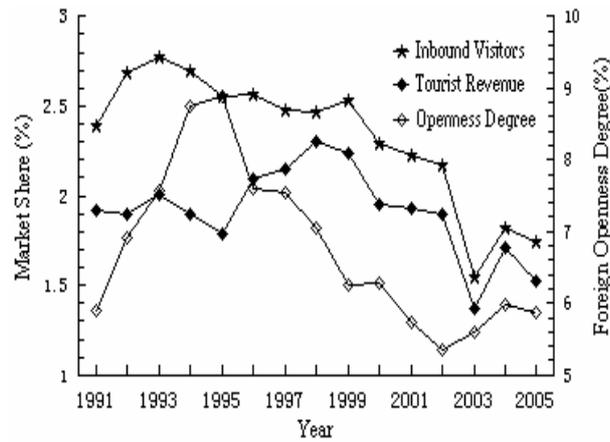


Figure 5. Change of inbound tourism and openness degree in Shaanxi

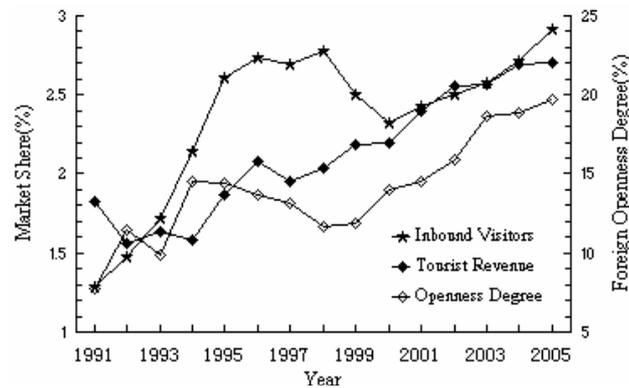


Figure 6. Change of inbound tourism and openness degree in Shandong

Table 1. Statistics of Chinese foreign openness degree and inbound tourism 1985-2004

Year	Inbound visitors /10,000	Foreign visitors /10,000	HMT Visitors /10,000	Overnight visitors /10,000	Order of Inbound Visitors	In. Tourist Receipt /100M. US \$	Order of Tourist Receipt	Foreign trade dependence Degree /%	Openness degree /%
1985	1783.3	137.1	1646.3	713.3	13	12.50	21	23.0	11.4
1986	2282.0	148.2	2133.7	900.1	12	15.31	22	25.5	12.5
1987	2690.2	172.8	2517.4	1076.0	12	18.62	26	26.5	18.4
1988	3169.5	184.2	2985.3	1236.1	10	22.47	26	26.7	18.8
1989	2450.1	146.1	2304.0	936.1	12	18.60	27	24.0	18.8
1990	2746.2	174.7	2571.5	1048.4	11	22.18	25	30.0	22.3
1991	3335.0	271.0	3064.0	1246.4	12	28.45	21	33.2	22.9
1992	3811.5	400.6	3410.9	1651.2	9	39.47	17	34.0	23.5
1993	4152.7	465.6	3687.1	1898.2	7	46.83	15	32.0	22.5
1994	4368.5	518.2	3850.2	2107.0	6	73.23	10	43.0	24.9
1995	4638.7	588.7	4050.0	2003.4	8	87.33	10	40.0	23.4
1996	5112.8	674.4	4438.3	2276.5	6	102.00	9	35.0	20.9
1997	5758.8	742.8	5016.0	2377.0	6	120.74	8	36.0	21.6

1998	6347.8	710.8	5637.1	2507.3	6	126.02	7	33.0	19.6
1999	7279.7	1112.6	6167.1	2704.7	5	140.99	7	36.5	20.9
2000	8344.4	1334.5	7009.9	3122.9	5	162.24	7	44.0	24.7
2001	8910.3	1131.6	7778.7	3316.7	5	177.92	5	44.0	24.1
2002	9790.8	1344.0	8446.9	3680.3	5	203.85	5	49.0	26.7
2003	9166.2	1140.3	8025.9	3297.1	5	174.06	5	43.0*	24.0*
2004	10903.8	1693.3	9210.6	4176.1	5	257.39	5	52.3	36.9
2005	12029.2	2025.5	10003.7	4680.9	5	292.90	5	56.8	39.8

Note: Statistics from *China Tourism Yearbook* and *China Statistics Yearbook*. Of which, the figures of 2003 are only from Jan.-Oct due to SARS impact.

Table 2. Correlation between inbound tourism development and foreign openness degree in China

Items	Total Visitors	Foreign Visitors	HMT Visitors	Overnight Visitors	Tourist Receipt
FTD	0.9215	0.9263	0.9167	0.9446	0.9232
FOD	0.8036	0.8233	0.7960	0.8316	0.8134

Table 3. Statistics of inbound tourism market share of TV, TR and FOD of 31 provinces in 2002

Province	MSV /%	MSTR /%	FTD /%	FOD /%	Province	MSV /%	MSTR /%	FTD /%	FOD /%
Beijing	7.927	16.804	81.0	43.3	Hubei	2.616	1.532	7.5	4.7
Tianjin	1.292	1.847	86.7	46.3	Hu'nan	1.446	1.678	6.7	4.1
Hebei	1.210	0.901	8.9	5.0	Guangdong	35.616	27.467	150.4	80.1
Shanxi	0.633	0.404	14.1	7.6	Guangxi	3.482	1.734	9.2	5.7
Inner M.	1.122	0.806	14.1	7.4	Hainan	0.995	0.496	17.4	12.2
Liaoning	2.374	2.969	35.6	19.6	Chongqing	1.179	1.176	10.8	6.2
Jilin	0.751	0.466	13.5	7.5	Sichuan	1.704	1.08	11.8	6.4
Heilongjiang	1.832	1.603	10.2	5.5	Guizhou	0.583	0.429	7.1	3.7
Shanghai	6.961	12.277	99.5	52.6	Yun'nan	3.329	2.262	8.7	4.3
Jiangsu	5.686	5.676	47.5	26.9	Xizang	0.363	0.279	9.2	4.6
Zhejiang	5.213	5.005	43.2	22.7	Shaanxi	2.171	1.894	11.9	6.7
Anhui	1.173	0.668	10.0	5.4	Gansu	0.633	0.293	5.8	3.2
Fujian	4.720	5.936	48.5	27.9	Qinghai	0.111	0.054	6.9	3.5
Jiangxi	0.615	0.386	8.6	4.8	Ningxia	0.015	0.009	11.6	6.1
Shandong	2.495	2.549	27.4	15.2	Xinjiang	0.703	0.536	15.7	7.9
He'nan	1.047	0.785	5.0	3.0					

Table 4. Comparison of inbound tourism development and FOD of Shaanxi and Shandong during 1991-2005

Year	Shandong Province					Shaanxi Province				
	Inbound Visitors /10,000	Market Share ratio /%	Tourist Receipt /Million US \$	Market Share ratio /%	Foreign Openness /%	Inbound Visitors /10,000	Market Share ratio/%	Tourist Receipt /Million US \$	Market Share ratio /%	Foreign Openness /%
1991	17.2	1.29	51.9	1.59	7.79	32.0	2.39	54.8	1.92	5.89
1992	24.1	1.47	62.0	1.56	11.50	43.8	2.68	75.4	2.18	6.91
1993	28.4	1.72	72.3	1.63	9.90	45.8	2.78	89.0	2.26	7.56
1994	34.9	2.15	112.3	1.58	14.50	43.9	2.70	113.0	2.16	8.17
1995	45.1	2.61	153.8	1.86	14.37	44.2	2.56	139.4	2.17	8.24
1996	53.2	2.73	196.5	2.07	13.64	50.0	2.56	198.2	2.20	7.60
1997	58.5	2.69	203.8	1.95	13.16	53.9	2.48	224.6	2.15	7.53
1998	60.8	2.77	219.5	2.04	11.69	54.0	2.46	247.2	2.30	7.05
1999	62.2	2.50	265.3	2.18	11.89	63.0	2.53	271.8	2.24	6.26
2000	72.3	2.32	315.1	2.20	13.95	71.3	2.29	280.3	1.96	8.28
2001	82.9	2.43	382.4	2.39	14.56	75.9	2.22	308.7	1.93	5.42
2002	97.7	2.50	472.5	2.55	15.87	85.0	2.17	351.0	1.89	5.36
2003	77.7	2.58	370.0	2.57	18.62	46.6	1.54	198.0	1.37	5.61
2004	119.3	2.72	567.0	2.69	18.86	80.0	1.82	361.0	1.71	5.98
2005	155.1	2.91	780.0	2.70	19.69	92.8	1.74	446.0	1.52	5.86