China's International Tourism under Economic Transition: National Trends and Regional Disparities

By

Liang, Chyi-lyi (Kathleen), The University of Vermont, Department of Community Development and Applied Economics, 103 C Morrill Hall, Burlington, Vermont 05405.
Phone (802) 656 0754 Fax (802) 656 1423 e-mail: CLIANG@zoo.uvm.edu

Guo, Rong, The University of Vermont, Department of Community Development and Applied Economics, 004 Morrill Hall, Burlington, Vermont 05405.
Phone (802) 656 8289 Fax (802) 656 1423 e-mail: rguo@zoo.uvm.edu

Wang, Qingbin, The University of Vermont, Department of Community Development and Applied Economics, 205 Morrill Hall, Burlington, Vermont 05405.
Phone (802) 656 4564 Fax (802) 656 1423 e-mail: qwang@zoo.uvm.edu

Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Montreal, Canada, July 27-30, 2003

Keyword: China, tourism, Gini coefficient
JEL code: Q000

Contact person - Liang, Chyi-lyi (Kathleen), The University of Vermont, Department of Community Development and Applied Economics, 103 C Morrill Hall, Burlington, Vermont 05405.
Phone (802) 656 0754 Fax (802) 656 1423 e-mail: CLIANG@zoo.uvm.edu

1

China's International Tourism under Economic Transition: National Trends and Regional Disparities

Abstract

China's Tourism industry, especially international tourism, has expanded rapidly since its market-oriented economic reform started in 1978. There has been limited information regarding the trends and regional disparities. This paper examines the national trends of China's international tourism since 1982 and analyzes the changes in regional disparities since 1995. While the trend analysis suggests that China's international tourism is likely to keep growing at a significant rate, the analysis of regional disparities based on Gini coefficient indicates that the regional inequality in the number of international tourists and income has shown a downward trend since 1995. Findings from this study suggest that China's economic reform has stimulated the growth in international tourism and the international tourism has contributed to its economic growth and business development.

Introduction

As a result of China's market-oriented economic reform started in 1978, its tourism industry, especially international tourism, has expanded rapidly since the early 1980s. Significant evidence indicates that China's tourism has evolved into one of the most promising and fastest-developing industries in the national economy. For example, China's total number of international tourists increased by 14.75% and foreign earnings from international tourism increased by 18.72% between 1982 and 2000. China's international tourists reached 83.48 million in 2000, which was 46 times more than the 1.8 million tourists recorded in 1978 (He,

2001). Similarly the foreign earnings from the international tourists reached $16.2 billion in 2000 compared to only $263 million in 1978. The information above suggests that Tourism industry has emerged as a significant economic contributor in the Chinese society.

As a result of the rapid development of China's tourism and its contribution to the national economy, several studies have examined the growth and problems of China's tourism industry. Yu (1992) studied the emerging markets for China's Tourism industry and indicated that international tourist arrivals showed a rebound in 1990 after the loss in 1989 due to political turmoil. Before 1989, Japan, United States, United Kingdom, and Australia were among the top tourist-generating countries to China. However Taiwan became the largest tourist-generating market for China after the 1989 Tiananmen Square incident, followed by Japan, the United States,and the Soviet Union. The change in the travelers' patterns created different impacts on economic development as well as international trade. Tisdell and Wen (1991) provided an overview of tourism investment in China in the period of 1979-1988 and examined the role of the foreign investment in the expansion of China's tourism sector. They also pointed out that the investment tended to be concentrated in the building of hotels and based more on the preconceptions by officials and suppliers rather than on the market studies. Later in another study, Wen and Tisdell (2001) analyzed the trends in regional concentration of international tourism in China from 1986 to 1998. Gini coefficients for major tourist indicators were estimated to examine the characteristics of tourism distribution. Distributional shifts within both inland and coastal areas are discussed separately in order to consider comprehensive forces reinforcing or reducing regional inequalities in China's Tourism industry. Other studies discussed some observations on China's international tourists, the development and organization of travel services in China, trade and advertising campaign in China to promote international tourism, and

the relationship between international tourism development and delivery system in China (Choy and Can, 1988; Del Rosso, 1990; Gaines, 1990; Gerstlacher, Krieg, and Sternfeld, 1991; Hunt, 1990; Lu, 1990; China Travel and Tourism Press, 1990-2001; Zhang, 1989; Zhou, 1990).

Previous empirical studies had been conducted on China's tourism development, and they either concentrated on the specific region (such as Mt Paekdusan/Changbaishan, a popular international tourist destination located at the border of Korea and China), or simply divided the whole China into two areas: coast and inland (Wen and Tisdell, 2001). Few studies focused on tourism distribution and its impact among different regions in China. One would expect a significant difference between coastal areas and inland areas when dealing with tourists' distribution as well as their economic contributions. Based on this consideration, this paper aims to investigate the spatial distribution of international tourism in China during the period of 1995-2000. The goals of this study are to (1) explore China's international tourism development; (2) examine the changes of the tourists' spatial distribution; and (3) estimate the economic contribution due to the international tourists using the Gini coefficients for various regions.

National Trends of China's International Tourism

Figure 1 and Figure 2 showed that China's total number of international tourists increased from 7.92 million in 1982 to 83.48 million in 2000, and China's annual foreign exchange earnings from international tourism increased from 843 million to 16,224 million U.S. dollars over the same period.
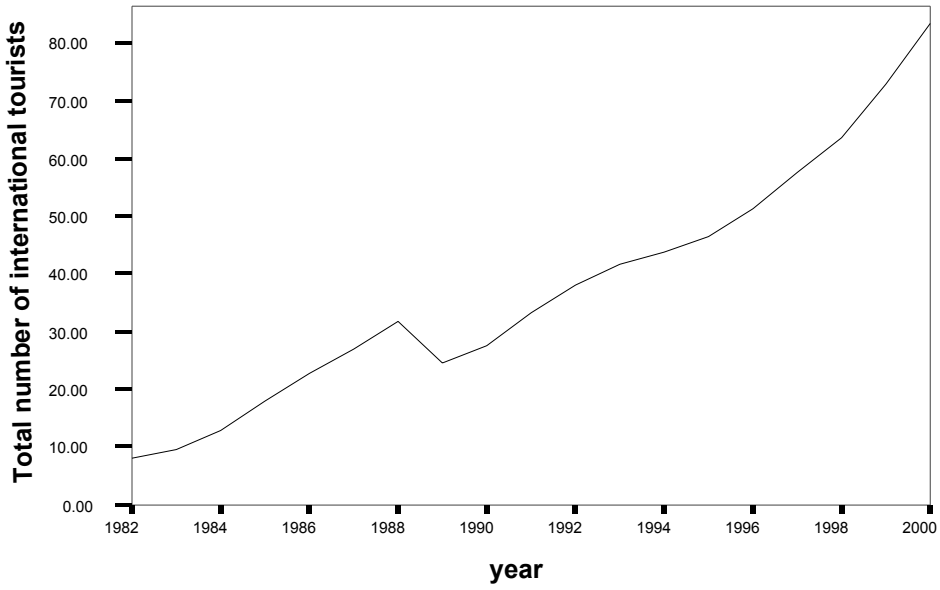
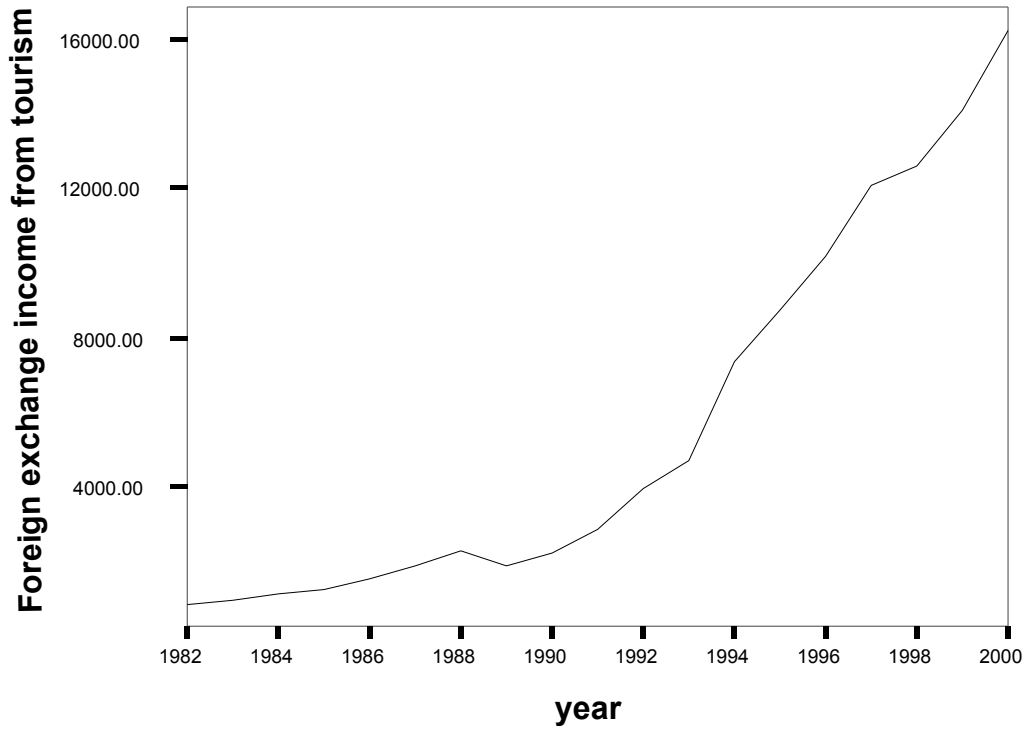**Figure 1 China's Total Number of International Tourists from 1982 to 2000 (million)**

Figure 2 China's Foreign Earnings from International Tourism from 1982 to 2000 (USD million)

China's tourism industry was very limited until the late 1970s among the developing countries. Since 1980, China's Tourism industry had shown a remarkable expansion and growth (Zhu, 2001). Several policies between 1980s and 1990s had made significant contributions to the rapid changes in China's international Tourism development. The first dramatic change in China's policies came from the continuous support and guidance by government agencies. As the general designer of China's reform and opening door policy, Mr. Deng Xiaoping delivered a total of five speeches from October 1978 to July 1979 urging the development of China's tourism. Mr. Deng pointed out positive functions of tourism to China's politics, economy and reform, which set up the keynote and gave a direction for China to develop its tourism in 20 years time frame. In the period from 1981 to 1985, the Chinese government underlined the principals of making full use of efforts from central government, local government, organizations, collectivities and individuals to build up China's tourism infrastructure and facilities with self-independence and foreign investment. It was in the period from 1986 to 1990 that the government defined the industrial position of tourism for the first time, and the management system in tourism industry was shaped. China's international tourism hit a boom period since 1990, as the central government further pointed out that tourism was a new focal point of China's national economic growth and set tourism as a pillar industry for economic development at national as well as local levels.

The second force pushed the development of China's Tourism industry originated from the contribution of the policy reform and openness. The reform and opening door policy set the milestone to China's economic growth as well as to the tourism development. In the past 20 years, China's tourism industry took a dramatic turn in the pace of its development as China's trade relationship with other countries became more liberal. New trade policies in business

development encouraged all industries to be more opened and to be more market orientated approaching the international level. This newly developed international relationship between China and other countries directly and indirectly promoted the International Tourism activities in all regions in China, which led the China's Tourism industry to a new era based on the market mechanism. In accordance with China's national situation and social character, China's central government gradually strengthened the building of trade civilization while developing tourism and kept the correct development orientation of three markets by determining the policy of 'actively develop inbound tourism, positively develop domestic tourism business, and properly develop outbound tourism business'. It was obvious that China's central government determined the new direction for the Tourism development associated with business activities as well as promoting pleasure trips for domestic/international travelers. These changes created a powerful foundation for the growth and expansion in China's Tourism industry, as well as brought in significant impacts on market activities and economic development.

Regional Disparities

Since China is such a large country covering a wide variety of the regions and geological characteristics, one would wonder (1) where tourists have visited in China, and (2) what economic contribution tourists have made to different regions. According to the Yearbook of China's Tourism Statistics, there were thirty-one major Provinces in China that had recorded international tourist numbers as well as foreign exchange earnings associated with the international tourists. Table 1 and Table 2 summarized the number of the international tourists by regions, foreign exchange earning by regions, and the capital investment by sector related to the tourism activities.

Table 1. Number of International Tourists by Regions (10,000 persons)

	Middle	Northeast	Southeast	Southwest	Northwest	Total
1995	414.04	58.22	1020.86	152.87	82.16	1728.15
1996	473.25	74.52	1134.35	184.30	87.13	1953.55
1997	552.92	64.31	1243.69	206.12	92.70	2159.74
1998	515.30	82.54	1299.92	188.95	92.39	2179.10
1999	572.49	105.79	1452.22	253.60	112.60	2496.70
2000	658.30	138.66	1863.89	314.22	137.24	3112.31

Note: Middle – Beijing, Tianjin, inner Mongolia, Herbei, Shanxi, Shandong, Henan, Anhui, Hubei, Hunan, Jiangxi
Northeast – Liaoning, Jilin, Heilonjiang
Southeast – Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, Hainan
Southwest – Sichuan, Chongqing, Guizhou, Yunnan, Guangxi
Northwest – Xinjiang, Tibet, Gansu, Qinghai, Ningxia, Shannxi

Table 2. Capital Investment in Construction by Sector Relates to The Foreign Exchange Earnings

	Earning from International Tourism ($100 millions USD)	Investment in Capital Construction in Transportation (100 million yuan)	Investment in Capital Construction in Retail (100 million yuan)	Investment in Capital Construction in Food (100 million yuan)	Investment in Capital Construction in Hotel (100 million yuan)	Investment in Capital Construction in Tourism (100 million yuan)	Investment in Capital Construction in Recreation (100 million yuan)
1995	87.33	1587.53	106.97	11.70	99.44	10.60	20.82
1996	102.00	1847.12	112.39	14.73	120.59	10.18	27.34
1997	120.74	2197.45	125.42	15.21	120.90	18.88	32.58
1998	126.02	3252.19	120.93	13.80	98.08	24.92	27.30
1999	140.99	3429.28	103.70	12.12	78.46	21.81	33.75
2000	162.24	3641.94	118.65	14.88	82.92	29.01	32.73

Note: Transportation, retail, food, hotel, tourism, and recreation are directly and indirectly related to the Tourism industry.

Table 3. Foreign Exchange Earnings From International Tourists by Provinces (million of US Dollars)

	1990	1995	1996	1997	1998	1999	2000
Middle Area							
Beijing	658	2182	2252	2248	2384	2496	2768
Tianjin	23	133	152	180	202	209	232
Inner Mongolia	1	91	94	107	126	120	126
Herbei	5	42	74	97	100	124	142
Shanxi	5	21	27	37	38	43	50
Shandong	36	154	196	204	220	265	315
Henan	6	60	73	95	101	114	124
Anhui	5	31	42	64	51	67	86
Hubei	22	73	125	170	88	105	146
Hunan	10	65	101	140	156	185	221
Jiangxi	3	25	34	45	43	50	62
total	**774**	**2877**	**3170**	**3387**	**3509**	**3778**	**4272**
Northeast							
Liaoning	69	189	224	260	262	304	383
Jilin	6	41	53	59	38	45	58
Heilongjiang	7	61	78	105	121	148	189
total	**82**	**291**	**355**	**424**	**421**	**497**	**630**
Southeast							
Jiangsu	71	260	317	408	529	620	724
Shanghai	230	939	1171	1317	1218	1364	1613
Zhejiang	54	236	292	345	361	410	514
Fujian	101	484	555	614	651	725	894
Guangdong	713	2393	2638	2801	2942	3272	4112
Hainan	27	81	85	102	96	105	109
total	**1196**	**4393**	**5058**	**5587**	**5797**	**6496**	**7966**
Southwest							
Sichuan	36	125	162	79	84	97	122
Chongqing				105	88	97	138
Guizhou	1	29	38	44	48	55	61
Yunnan	16	165	221	264	261	350	339
Guangxi	76	121	154	178	156	202	307
total	**129**	**440**	**575**	**670**	**637**	**801**	**967**
Northwest							
Tibet		11	30	32	33	36	52
Shaanxi	41	139	198	225	247	272	280
Gansu	6	21	19	28	30	37	55
Qinghai		2	2	3	3	4	7
Ningxia		1	1	1	1	2	3
Xinjiang	12	74	68	71	82	86	95
total	**59**	**248**	**318**	**360**	**396**	**437**	**492**

Table 4. Number of International Tourists by Provinces (10000 person times)

	1995	2000
Middle Area		
Beijing	206.87	282.09
Tianjin	20.06	35.62
Inner Mongolia	30.09	39.19
Herbei	16.5	41.43
Shanxi	7.12	16.53
Shandong	45.09	72.31
Henan	21.84	32.5
Anhui	14.29	31.84
Hubei	27.09	45.08
Hunan	17.73	45.4
Jiangxi	7.36	16.31
total	**414.04**	**658.3**
Northeast		
Liaoning	26.38	61.22
Jilin	15.61	22.27
Heilongjiang	16.23	55.17
total	**58.22**	**138.66**
South East		
Jiangsu	76.77	160.95
Shanghai	136.79	181.4
Zhejiang	67.27	112.59
Fujian	90.64	161.33
Guangdong	620.68	1198.94
Hainan	28.71	48.68
total	**1020.86**	**1863.89**
Southwest		
Sichuan	37.67	46.2
Chongqing		26.61
Guizhou	13.66	18.39
Yunnan	59.69	100.11
Guangxi	41.85	122.91
total	**152.87**	**314.22**
Northwest		
Tibet	6.78	15
Shaanxi	44.23	71.28
Gansu	9.09	21.31
Qinghai	1.33	3.26
Ningxia	0.37	0.78
Xinjiang	20.36	25.61
total	**82.16**	**137.24**

Southeast region in China had the highest amount of the international tourists between 1995 and 2000, which was consistent with the increasing international trade activities in that area. Northeast and Northwest regions had the lowest amount of the international tourists over the same time period, yet they had the highest growth rate of the international tourist numbers. Chinese government obviously invested heavily on transportation sector in the past decade. While capital investment increased moderately in retail sector, food sector, tourism sector, and recreation sector, the capital investment on hotel sector actually declined a little. The foreign exchange earnings from the international tourists showed an impressive growth between 1995 and 2000 in all thirty-one Provinces. The Middle region and the Southeast region traditionally attracted more tourists and businesses compared to other regions. The Northeast region and Northwest region had the lowest foreign exchange earnings but their growth rates were actually higher than other regions.

How about the economic impact of the foreign earnings on economic development among all thirty-one Provinces? Are there significant differences in terms of the economic distribution created by the increasing tourism activities among regions? It might be possible that the development of the Tourism industry could reduce the economic gap among regions. The changing but increasing economic inequality between coastal and inland regions since 1978 had been more and more significant, since this inequality might jeopardize the future interests of China associated with business development. The potential social and economic inequality issues would also affect social stability as well as the decentralization of the economic power in China (Wen, 1998). Tourism industry might be one the more appropriate solutions to improve the market situation among all regions, to create new business opportunities for local communities, and to promote economic growth in some of the least noticed regions in China. Wen (2001) conducted a research to show that convergence in the economic activities were

observed in China's Tourism industry over the recent years in contrast to divergence in the general economy (Wen, 2001). However more specific evaluations and comparisons are needed to analyze the relationship between foreign exchange earnings by international tourists, number of international tourists, and other tourism related indicators.

One way to capture the essence of the economic distribution is by using the Gini coefficient. The Gini coefficient, as proposed by Gini in 1912 in French, was developed to measure the degree of concentration (inequality) of a variable in a distribution of its elements. It compares the Lorenz curve of a ranked empirical distribution with the line of perfect equality. This line assumes that each element has the same contribution to the total summation of the values of a variable. The Gini coefficient ranges between 0 (where there is no concentration and implies perfect equality) and 1 (where there is total concentration and implies perfect inequality). The greater the degree of inequality, the larger is the Gini coefficient.

The Gini coefficient can be used to measure the degree of inequality among thirty-one Provinces given different indicators associated with the international tourists in China. The degrees of the concentration for various tourism indicators can be measured and compared between thirty-one Provinces, such as foreign exchange earning, number of tourists, and number of hotels. In order to define mathematically the Lorenz curve and Gini coefficient, the formulation of elements can be either discrete or continuous. The discrete form was chosen for this study, and the distribution of international tourism across the thirty-one Provinces could be represented as

$$y_1 \leq y_2 \leq y_3 \leq ... \leq y_N$$

where y represents the tourism indicators (the number of international tourists, the foreign exchange earning, and the number of hotels) and N equals 31 (the number of the Provinces in

$$G = 1 + \frac{1}{N} - \frac{2(y_1 + 2y_2 + 3y_3 + ... + Ny_N)}{N^2 \mu}$$

China not including Taiwan). The Gini coefficients were calculated using the formula provided

by the MIT Dictionary of Modern Economics (Pearce, 1986):

This equation involves the rank-weighted sum of different tourism indicators levels,

where G represents the Gini coefficient, N is the number of elements (31 Provinces). The

sequence of y_1, y_2,… to y_N represents individual values in decreasing order of the size of the

relevant variable, y (either the number of international tourists, the foreign exchange earning, or

the number of hotels). Finally μ is the mean value of y_1 to y_N.

Table 5. Gini coefficients for major tourism indicators in china, 1995-2000

Year	Foreign Exchange Earnings by International Tourists	Number of International Tourist	Number of Tourist Hotel
1995	0.75	0.67	0.51
1996	0.72	0.66	0.49
1997	0.69	0.62	0.47
1998	0.70	0.64	0.44
1999	0.69	0.63	0.45
2000	0.69	0.64	0.41

The results in Table 5 suggested that there was a general reduction in the value of the

Gini coefficients for three major tourism indicators in China from 1995 to 2000. The degree of

the inequality in terms of the distribution of the international tourism in China for the period of

1995 to 2000 seemed to decrease. The differences for the foreign exchange earnings among

thirty-one Provinces declined from 0.75 in 1995 to 0.69 in 2000. This result is consistent with

the information in Table 3 where some of the historically least visited regions in China showed

higher growth rate in the foreign exchange earnings between 1995 and 2000. The variation for

the total number of the international tourists reduced from 0.67 in 1995 to 0.64 in 2000. Although this does not seem to be a dramatic change, it implies that more international tourists start visiting places that are not popular destinations before. The dispersion in the number of the tourist hotels among thirty-one Provinces seemed to reduce between 1995 and 2000. This change corresponds to the increasing number of the international tourists.

Conclusion and Implications

Over the past 20 years, China's international tourism expanded rapidly and brought changes to China's various industries with strong functional characteristics. The Tourism industry in China absorbs foreign currency with low cost, increases demand, increases economic vitality, and improves regional economic development. The various industries relate to tourism range from traditional to modern, such as transportation, commerce, finance, telecommunication, and insurance. These industries create jobs as well as business opportunities more significantly in rural China. At present, staff working directly within China's Tourism industry reached a total of 5 million. According to international standard calculation, twenty-five million of employees work in China's Tourism industry directly and indirectly (Zhu, 2001).

This paper presented the changes between 1995 and 2000 in (1) the number of international tourists by Provinces, and (2) economic distribution among different Provinces associated with the international tourists. The overall number of the international tourists increased between 1995 and 2000, however some regions (Northeast and Northwest) seemed to attract more attention from the international tourists compared to others. The Gini coefficients based on different tourism indicators showed a continuous decrease in the degree of inequality among thirty-one Provinces, given the distribution of the foreign exchange earnings and the number of tourist hotels changed more than the total number of the international tourists.

Although these results implied that the problem of unequal regional distribution of international tourism in China had been improving since 1995, the capital investments of various tourism related sectors still showed discrepancies over time.

Some serious inequality still exists if comparing Western China to the rest of China. Western China has abundant and unique tourism resources, which are appealing attractions to international tourists. However, Western China has weak infrastructure, poor facilities, and limited development funds. There has been a new strategy to develop Western China, which pays great attention to the development of tourism. Under this strategy, twelve Provinces and regions in West China have listed developing tourism with unique feature as the priority for economic and social activities (CNTA, 2001). This new strategy follows similar policies established in 1980s and 1990s to further improve the environment for new investment, promote the opening in China's western area, and aggressively market attractive destinations to more international tourists. Hopefully this new strategy along with other set of trade policies would reduce the degree of inequality in regional distribution of international tourism in the long run, and finally accelerate the overall economic development in Western China and upgrade the quality of people's life in China.

Reference:

China National Tourism Administration (CNTA) website:

http://www.cnta.com/lyen/index.asp

Choy, Dexter J, L, and Yao Yue Can (1988). "The Development and Organization of Travel Services in China." Journal of Travel Research, 27 (Summer), pp. 28-34.

Del Rosso, Laura (1990). "China's First National Travel Fair Attracts Few U.S. Operators." Travel Weekly, 49, pp. 1-4.

Gaines, Lisa (1990). "China-Orient Tourism Council Launches Trade Ad Campaign to Lure Travelers to China." Travel Weekly, 49, p. 22.

Gerstlacher, Anna, Renate Krieg, and Eva Sternfeld (1991). Tourism in the People's Republic of China: A Case Study. Bangkok: Ecumenical Coalition on Third World Tourism.

He, G.W. (2002) China's Tourism Industry is Flourishing, Leaders, Vol. 24 No. 3.

Hunt, Jill (1990). "China." International Tourism Reports, 3, pp. 23-48.

Lambert, P.J. (1989) The Distribution and Redistribution of Income: A Mathematical Analysis, Basil Blackwell Inc. Cambrige.

Lu, Niangao (199). "1990: A Crucial Year for China's Tourism." Arizona Hospitality Trends, 4 (Summer), pp. 10-11.

Pearce, D.W. (1986) The MIT Dictionary of Modern Economics, third edition, Cambridge, MIT press.

Tisdell, C. and Wen J. (1991) Investment in China's Tourism Industry: Its Scale, Nature, and Policy Issues, China Economic Review, Vol 2, No. 2, pp. 175-193.

Wang, Q.B., Shi, G.M. and Zheng, Y. (2000) Changes in Income Inequality and Welfare under Economic Transition: Evidence from Urban China.

Wen, J. (1998) Evaluation of Tourism and Tourist Resources in China: Existing Methods and Their limitations, *International Journal of Social Economics*, Vol. 25 No. 2/3/4, pp. 467-485.

Wen, J.J and Tisdell C. (2001) Trends in the Regional Distribution of International Tourism in china and the Implications, 2001 CAUTHE National Research Conference.

Zhu, S.Z. (2001) China's Flourishing Tourism Industry: A New Point of China's National Economic Growth, Seminar on Tourism Policy and Economic Growth, Berlin, 6-7 March 2001.

China Travel and Tourism Press (1990-2001), Yearbook of China Tourism Statistics, Beijing. Chang, Guangrui (1989). "Ten Years of Chinese Tourism – Profile and Assessment." Tourism Management, 10(1), pp. 51-62.

Zhou, Yanjun (1990). "Fine Tuning China's Tourism Delivery Systems." Arizona Hospitality Trends, 4(Summer), pp. 8-9.

Source: http://people.hofstra.edu/geotrans/eng/ch4en/meth4en/ch4m1en.html