

Disproportionate development of outbound tourism in China: an international comparison

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China's outbound tourism boomed during the several years from the end of 1990s to the beginning of the twenty-first century, with an annual growth of over 20%. In 2002, China's outbound tourists reached 16,600,000, surpassing that of Japan (16,520,000) for the first time, and China thus became the largest source in Asia. This was also the transition stage during which per capita GDP increased from US \$1,000 to US\$ 2,000. Although outbound policies have important impacts on outbound tourism, the final determinant is economic, namely, effective demand. Some scholars believe that China has reached a new phase of tourist consumption. Some even propose that outbound tourism demand increases rapidly when GDP reaches \$1,000, and intercontinental tourism demand surges when per capita GDP reaches \$3,000. However, the authors hold a different view. This paper compares the developments of outbound tourism from Japan, South Korea, and Taiwan, and finds that: (1) the threshold value of outbound tourism explosion occurs when per capita GDP and per capita income approaches \$10,000; (2) surpassing \$10,000 is a prerequisite for the period of steadily increasing outbound tourism. Based on a comparison of the relationship of tourism development and economic background, the paper proposes that China's outbound tourism has outpaced economic growth as the result of income polarization.

Keywords: outbound tourism, precedence over economic growth

1. Introduction

In 2006, we posed the issue of disproportionate tourism development in China (Dai & Wu, 2006), which aroused intense debate. Many scholars said that outbound tourism had not outpaced economic growth (Yang, 2006), nor had outbound expenditures caused domestic demand to “leak out” (Zhang & Yang), so there was no need for restraining policies. Even though scholars hold different opinions on disproportionate growth of outbound tourism, they all agree that economic factors are key to the rapid growth of outbound tourism, despite of the important role of outbound policies. Therefore, analysis of outbound growth should be based on economic context.

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There has always been a widespread saying that outbound tourism increases rapidly when per capita GDP reaches \$1,000 (Zhang & He, 2005). Xiao (2008) even wrote, "According to the World Tourism Organization, outbound tourism should be developed when annual per capita income of a country reaches \$800...and \$1,000 per capita will generate motivation for outbound tourism." The authors traced this saying but found no concrete source. One scholar analyzed the outbound tourism explosion of Japan in the 1960s and South Korea in the 1980s when per capita GDP reached \$1,000, to verify this conclusion (Li, 2006). In 2011, one scholar analyzed the outbound tourism of Japan in the 1960s and drew the conclusion that per capita GDP between \$2,000 and \$4,000 was the threshold value for an explosion of outbound tourism (Zhang & Fang, 2011). But these analyses failed to take the time value of currencies into account, and there is no comparability between China after 2000, Japan in the 1960s, and South Korea in 1980s. In 2011, an analysis of outbound tourism explosion of the US in the 1960s showed that the threshold value amounted to GDP per capita of \$26,000 (in 2008 dollars), taking time value of currency into consideration (Zhang & Tan, 2011). However, the compatibility between China and the United States still needs further research due to the great gap between the two cultures.

Therefore, it's necessary to compare the economic context of outbound tourism explosion in various countries in order to judge whether China's outbound tourism has outpaced economic growth.

2. Selection of comparison targets

This paper compares Japan, South Korea, and Taiwan for the following reasons.

Firstly, these countries and regions have similar cultural backgrounds with China. They have all been deeply influenced by Confucianism and experienced certain stages of high outbound tourism expenditures, even ranking the first in the world at one time. The paper attempts to discover the patterns of China's outbound tourism, especially in the explosion stage. If we were to choose countries and regions with quite different cultural backgrounds, it would be difficult to separate the influence of cultural differences and we could come to an incorrect conclusion.

Secondly, outbound tourism in developed countries has been developing for quite a long time, with the leading role in international markets. Late-developers, such as South Korea and Taiwan, are much different. While Japan developed rapidly early, the country experienced great economic difficulties after World War II and lagged behind many other western countries. Its economic take-off stage was similar with certain period of China.

Thirdly, Japan, South Korea, and Taiwan had restricted outbound tourism of their citizens in order to control foreign exchange reserves before economic take-off stage, and they all witnessed roaring growth when outbound tourism was opened. China has undergone similar situations as well. On the other hand, most developed countries did nothing to restrict outbound tourism.

Finally, there are Hong Kong and Singapore among the Four Asian Tigers, which have similar cultural origins with China, but these two economic bodies are too small with high dependence on foreign trade as well as large flows of exit and entry. They are quite different from China. Therefore, Hong Kong and Singapore are not included in the comparison.

3. International comparisons of outbound tourism

3.1. Comparison of economic growth

Outbound tourism usually goes through several developing stages. This paper focuses on the economic background during the first explosion stage of outbound tourism. It will be meaningful for the development of China's outbound tourism.

3.1.1. Japan

Outbound tourism growth was highly related to economic development in Japan. From 1964 to 2010, the correlation coefficient between per capita GDP and number of Japanese outbound tourists was 0.9571, even considering a series of changes and disturbances such as the appreciation of Japanese yen and fluctuation of global oil prices.

Among these selected comparison objects, Japan was the first to reach the explosion stage of outbound tourism. In 1964, Japan lifted restrictions on overseas travel for its citizens. Outbound tourism increased by 48% annually in 1965 and maintained a high growth rate for the next few years. In 1973, outbound tourism witnessed an annual growth of 61%. Japan's outbound tourists increased by 12.15 times, from 185,000 in 1965 to 2,248,000 in 1973, with an annual rate of 36.6%.

Table 1
Economic features of the surging stage of Japanese outbound tourism

Year	Disposable incomes per capita (US Dollars)	Per capita GDP (US Dollars)	US Dollar Index (2009 =1)	Per capita income using 2009 as benchmark (US Dollars)	Per capita GDP using 2009 as benchmark (US Dollars)	Outbound tourists (10,000)	Growth rate (%)
1965	790.49	920.22	6.7940	5370.56	6251.99	18.5	
1966	919.74	1070.60	6.6094	6078.94	7076.058	27.5	48.65
1967	1074.04	1240.08	6.4227	6898.30	7964.741	34.5	25.45
1968	1251.09	1452.20	6.1652	7713.25	8953.133	46.5	34.78
1969	1449.60	1685.83	5.8498	8479.84	9861.732	57.5	23.66
1970	1701.89	1965.44	5.5236	9400.57	10856.34	66.3	15.30
1971	2090.99	2431.51	5.2918	11065.22	12867.17	96.1	44.95
1972	2470.15	2854.20	5.1309	12674.09	14644.62	139.2	44.80
1973	3235.73	3695.88	4.8305	15630.08	17852.84	224.8	61.55

Source: Data of per capita GDP and disposable per capita income is based on National Statistics of Japan (<http://www.stat.go.jp/data/>); data of US Dollar Index based on U.S. Bureau of Labor Statistics (<http://www.bls.gov/cpi/data.htm>). Data of year 2009 is applied as benchmark.

During this period, per capita GDP increased rapidly, from \$920 in 1965 to \$3,696 in 1973, while per capita disposable income increased from \$790 to \$3,236. These data seem to support the point of view that per capita income of \$1,000 led to the first surging stage of outbound tourism. This view might be right with the modifier of “in the 1960s to 1970s.” When the price index is taken into account, results are quite different. Using 2009 prices, per capita GDP grew from \$6,251.99 in 1963 to \$17,852.84 in 1973, while disposable income grew from \$5,370.56 to \$15,630.08 in the same period.

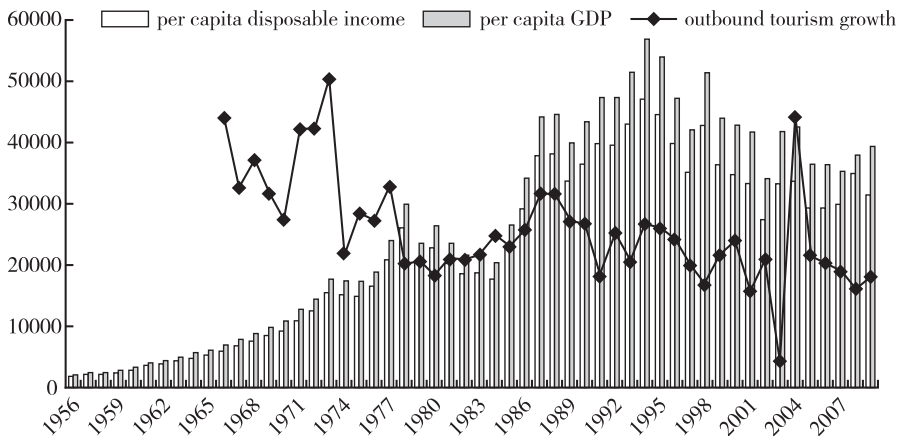


Figure 1. Relationship between outbound tourism and economic development in Japan

3.1.2. South Korea

Outbound tourism growth is also highly related to the economic development in South Korea. From 1984 to 2010, the correlation coefficient between per capita GDP and amount of Korean outbound tourists was 0.9352. In 1989, Korean authorities lifted the ban on outbound tourism, and the number of outbound tourists reached 1,213,000, with an annual increase of 67.3%. However, rapid growth of Korean outbound tourism appeared in 1987. In that year, per capita GDP and per capita disposable income increased by 23% and 24%, respectively, which led to an annual increase of 12.21% in outbound tourists. Under the restrictions of policy barriers, outbound tourism had realized rapid growth. It showed that abrogation of restrictions was important to the growth of outbound tourism, but it could be the threshold only when effective demand of outbound tourism resulting from economic growth was restrained.

The explosion of Korean outbound tourism started from 1987. The amount of outbound tourists grew by 8.12 times from 510,000 in 1987 to 4,650,000 in 1996, with an annual growth of 27.84%. During this period, per capita GDP increased from \$4,785 to \$16,139, while per capita disposable income increased from \$3,089.61 to \$10,994.00 (in current prices). Using 2009 prices, per capita GDP increased from \$9,035.55 in 1987 to \$22,096.01 in 1996, while disposable income increased from \$5,834.46 to \$15,051.88.

Table 2
Economic features of the surging stage of Korean outbound tourism

Year	Disposable income per capita (US Dollars)	Per capita GDP (US Dollars)	US Dollar Index (2009 =1)	Per capita income using 2009 as benchmark (US Dollars)	Per capita GDP using 2009 as benchmark (US Dollars)	Outbound tourists (10,000)	Growth rate (%)
1987	3089.61	4784.73	1.8884	5834.46	9035.55	51.05	12.21
1988	4109.47	6270.45	1.8155	7460.53	11383.70	72.52	42.04
1989	4995.32	7534.04	1.7318	8650.69	13047.15	121.31	67.29
1990	5654.21	8471.98	1.6438	9294.26	13926.04	156.09	28.67
1991	6549.15	9699.89	1.5751	10315.61	15278.36	185.60	18.91
1992	6946.87	10223.98	1.5300	10629.00	15643.12	204.33	10.09
1993	7543.51	11056.04	1.4850	11201.95	16417.98	241.99	18.43
1994	8751.67	12712.55	1.4485	12676.78	18414.11	315.43	30.35
1995	10365.55	15230.73	1.4077	14591.85	21440.69	381.87	21.06
1996	10994.00	16139.09	1.3691	15051.88	22096.01	464.93	21.75

Source: Data for per capita GDP is based on website of The Bank of Korea (<http://www.stat.go.jp/data/>); data for per capita disposable income is based on Korean Statistical Information Center (<http://www.bls.gov/cpi/data.htm>).

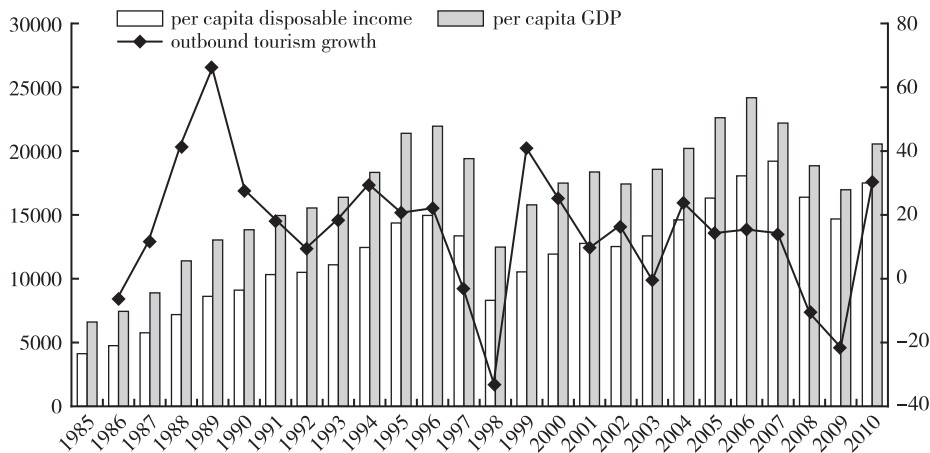


Figure 2. Relationship of Korean outbound tourism and economic development

3.1.3. Taiwan

Outbound tourism growth is highly related to economic development in Taiwan as well. In 1979, Taiwan authorities conditionally allowed outbound tourism, and the number of outbound tourists increased by 11.3% annually from 1979 to 1987. Using 2009 prices, per capita GDP increased from \$5,715.94 in 1979 to \$10,001.16 in 1987, while per capita disposable incomes increased from \$5,096 to \$9,054.17, respectively. During this period, although the growth rates

of per capita GDP and per capita disposable incomes were 42% and 23%, respectively, that of outbound tourism was only 11.3%, which was remarkably lower than economic growth.

However, outbound tourism boomed when Taiwan authorities conditionally allowed visits to relatives in China mainland in 1987. The explosion of outbound tourism from Taiwan started at that time and maintained rapid growth for the next seven years. From 1987 to 1993, total outbound tourists increased by 3.4 times from 1,060,000 in 1987, with an annual growth rate of 27.99%. Calculated at current prices, per capita GDP increased from \$5,296 in 1987 to \$11,034 in 1993, while per capita disposable incomes increased from \$4,808 to \$9,933, respectively. When calculated at 2009 prices, per capita GDP increased from \$10,001 in 1987 to \$16,386 in 1993, while per capita disposable incomes increased from \$9,079 to \$14,751, respectively.

Table 3
Economic features of the surging stage of Taiwan outbound tourism

Year	Disposable income per capita (US Dollars)	Per capita GDP (US Dollars)	US Dollar Index (2009 =1)	Per capita income using 2009 as benchmark (US Dollars)	Per capita GDP using 2009 as benchmark (US Dollars)	Outbound tourists (10,000)	Growth rate (%)
1986	3613.09	3955.23	1.959227468	7078.86	7749.19	812928	-4.03
1987	4808.00	5296.07	1.888412017	9079.49	10001.16	1059040	30.27
1988	5699.21	6321.08	1.815450644	10346.63	11475.62	1601992	51.27
1989	6853.57	7614.59	1.731759657	11868.74	13186.64	2110813	31.76
1990	7357.50	8110.80	1.643776824	12094.09	13332.35	2942316	39.39
1991	8121.31	8947.03	1.575107296	12791.93	14092.53	3366076	14.40
1992	9546.07	10530.96	1.530042918	14605.90	16112.82	4214734	25.21
1993	9933.26	11034.46	1.484978541	14750.68	16385.93	4654436	10.43

Source: Databases of CEIC (<http://www.ceicdata.com/Chinese.htm>), Directorate General of Budget, Accounting and Statistics, Executive Yuan (www.dgbas.gov.tw), Department of Household Registration, Central Bank (Taiwan) and Tourism Bureau of Ministry of Transportation and Communication (<http://admin.taiwan.net.tw/public/public.asp?no=315>).

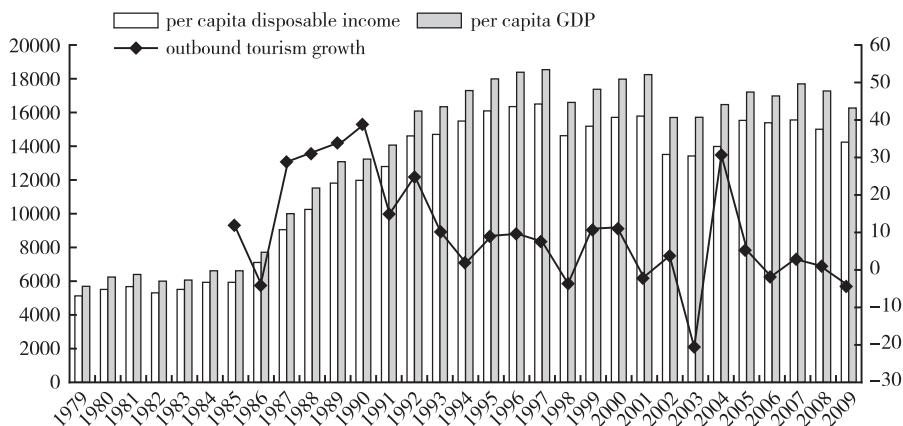


Figure 3. Relationship of outbound tourism and economic development of Taiwan

3.1.4. Mainland China

In July 1, 1997, *Measures for Administration of Outbound Tours by Chinese Citizens* were implemented. The explosion stage of China's outbound tourism began the next year. Total outbound tourists increased 3.43 times from 8,420,000 in 1998 to 28,850,000 in 2004, with an annual rate of 22.78% (reaching 42.68% in 2004). During this period, the growth rate of exit for private purposes for Chinese citizens was particularly rapid, with an annual rate of 38.97% (as high as 55.15% in 2004).

Table 4
Total number of outbound tourists (10,000 persons)

Year	Outbound tourists	Growth rate (%)	Outbound on private purposes	Growth rate (%)
1992	298.87		119.3	
1993	374	25.14	146.62	22.9
1994	373.36	-0.17	164.23	12.01
1995	452.05	21.08	205.39	25.06
1996	506.07	11.95	241.39	17.53
1997	532.39	5.20	243.96	1.06
1998	842.56	— ¹	319.02	30.77
1999	923.24	9.58	426.61	33.73
2000	1047.26	13.43	563.09	31.99
2001	1213.31	15.86	694.54	23.34
2002	1660.23	36.83	1006.14	44.86
2003	2020.19	21.68	1481.09	47.21
2004	2886.16	42.87	2297.9	55.15
2005	3102.63	7.50	2514.00	9.40
2006	3452.36	11.27	2879.91	14.55
2007	4095.40	18.63	3492.40	21.30
2008	4584.44	11.94	4013.12	14.90
2009	4765.63	3.95	4220.97	5.18
2010	5738.65	20.42	5150.90	22.03

Source: *Yearbook of China Tourism Statistics* for relevant years.

From the above figures, China seems to have reached the economic level to trigger a surge in outbound tourism, but in fact, it had had totally different situation in comparison with other

¹ The number of outbound tourists in 1998 is incomparable with that of 1997 due to changes to statistical standards.

countries. Calculated in current prices, China's per capita GDP increased from \$817 in 1998 to \$1,486 in 2004; annual per capita income (weighted mean of urban disposable income and rural net income by proportion of population) increased from \$393 to \$682, respectively. Using 2009 prices, per capita GDP increased from \$1,075 in 1998 to \$1,687 in 2004, while per capita disposable income was only \$5,096 in 1998 and \$774 in 2004. It was the stage when per capita GDP of China had just passed \$1,000, and per capital income was less than that.

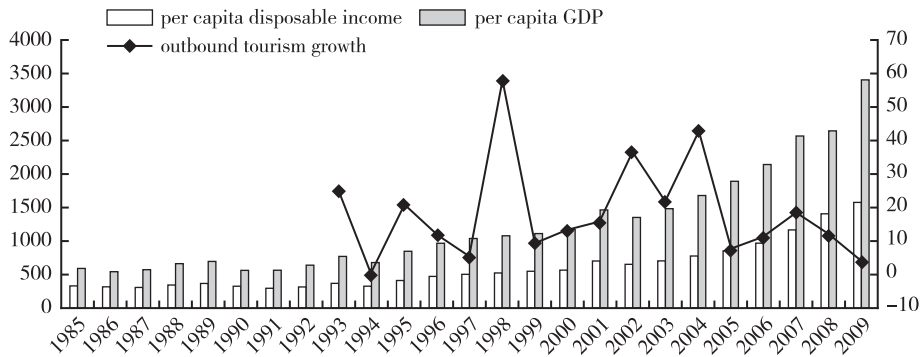


Figure 4. Relationship between outbound tourism and economic development in Mainland China

Table 5
Economic features of the surging stage of Mainland China's outbound tourism

	Using current prices		Using 2009 prices		Outbound tourists (10,000)	Growth rate (%)
	Per capita disposable income (US Dollars)	Per capita GDP (US Dollars)	Per capita disposable income (US Dollars)	Per capita GDP (US Dollars)		
1998	392.58	817.14	516.43	1074.90	842.56	3.07
1999	420.08	861.18	540.88	1108.82	923.24	9.58
2000	448.38	945.62	559.03	1178.98	1047.26	13.43
2001	490.34	1038.06	690.26	1461.30	1213.31	15.86
2002	545.96	1131.79	651.40	1350.38	1660.23	36.83
2003	603.26	1269.78	702.95	1479.59	2020.19	21.68
2004	681.98	1486.01	774.18	1686.91	2886.16	42.87

Source: *Yearbook of China Statistics* for relevant years (<http://www.stats.gov.cn/tjsj/ndsj/>), *Yearbook of China Tourism Statistics* for the relevant years.

3.2. Comparison of outbound tourist spending

3.2.1. Japan

Since 1979, per capita outbound tourist spending for Japan has ranged from \$1,000 to \$2,500,

with an average of \$1,780. The lowest was \$972 in 1985, while the highest was \$2,563 in 2003. The ratio of outbound tourist spending to per capita disposable income never surpassed 20%, with the highest being 17.07% in 1979. The average ratio was 7.71%.

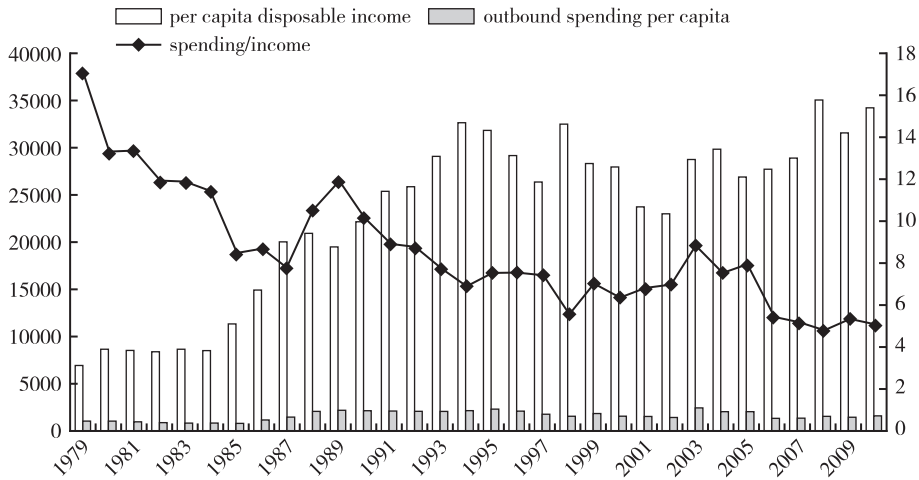


Figure 5. Comparison of outbound tourist spending and per capita disposable income for Japan

3.2.2. South Korea

Since 1989, per capita outbound tourist spending ranged from \$860 (1998) to \$2,144 (1989), with an average of \$1,500. The ratio of outbound tourist spending to per capita disposable income reached the highest level of 58% in 1989 and then fell gradually. After 1993, it never surpassed 20%, and after 2003, it usually kept under 10%. The average ratio was 7.71% after 1989.

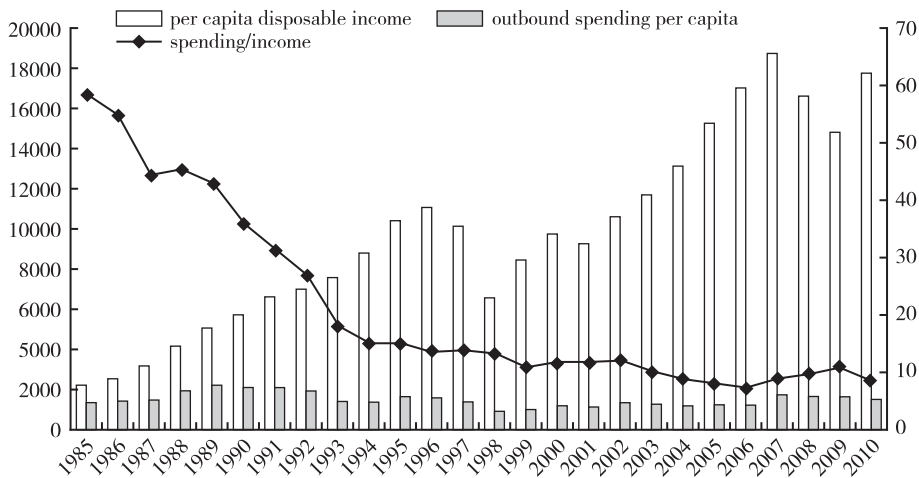


Figure 6. Comparison of outbound tourist spending and per capita disposable income in South Korea

3.2.3. Taiwan

Since 1979, per capita outbound tourist spending for Taiwan has decreased stably from the highest record of \$2,681 in 1984. The lowest outbound spending was \$926 in 2002. The average spending was \$1,523. The ratio of outbound tourist spending to per capita disposable income had once been remarkably high. In 1984, the ratio was 93.66%, which meant that outbound spending almost equaled per capita disposable income. Since then, the ratio has kept going down. Since 1999, it has never surpassed 10%. The average ratio was 14.72%.

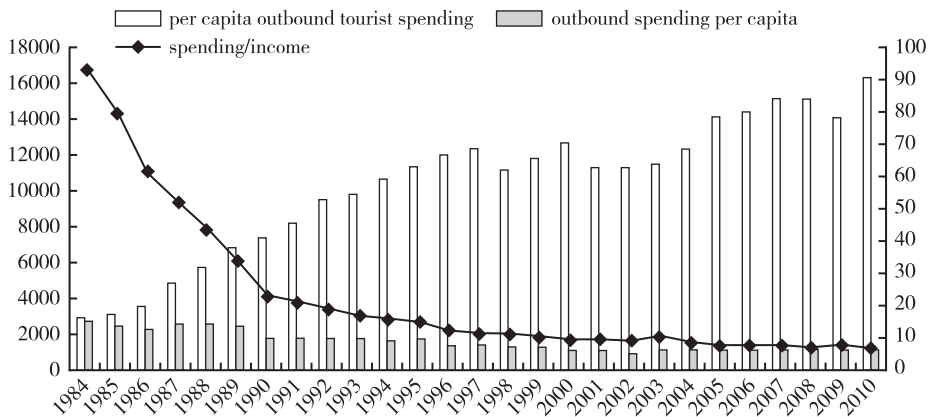


Figure 7. Comparison of outbound tourist spending and per capita disposable income for Taiwan

3.2.4. Mainland China

Based on officially published data of outbound tourist spending for China, per capita outbound spending does not seem high. However, outbound tourist spending was estimated by the State Administration of Foreign Exchange, rather than through sampling surveys by the China National Tourism Administration. Under the strict control of foreign exchange, outbound tourist spending calculated by the State Administration of Foreign Exchange used to be quite precise, but has been remarkably underestimated since the opening of outbound tourism, especially after 1997 (Dai, 2005). For example, in China balance of payment for 2007, total outbound spending was 29.8 billion dollars, thus per capita outbound spending was only \$727. But according to Dai (2008), outbound tourist spending per capita should be around \$1,775¹, therefore, average outbound tourist spending for Chinese citizens was similar to that of the above countries. Compared with officially published data, outbound tourist spending per capita was underestimated by 60%. According to surveys of some international organizations, outbound tourist spending was higher,

¹ The conclusion is the result of the survey carried out by outbound tourism research program of CASS and Central Viewer Survey & Consulting Center. For details please see Dai & Deng (2008).

or even ranked No.1 in the world¹.

Even based on remarkably underestimated outbound spending of Chinese tourists, the ratio of outbound travel spending and per capita disposable income is rather high. The highest ratio was 515% in 1997 when Chinese citizens were allowed outbound tourism. The average ratio since 1997 has been 117%, which means that Chinese will spend 1.17 times the average single-person income on one outbound trip.

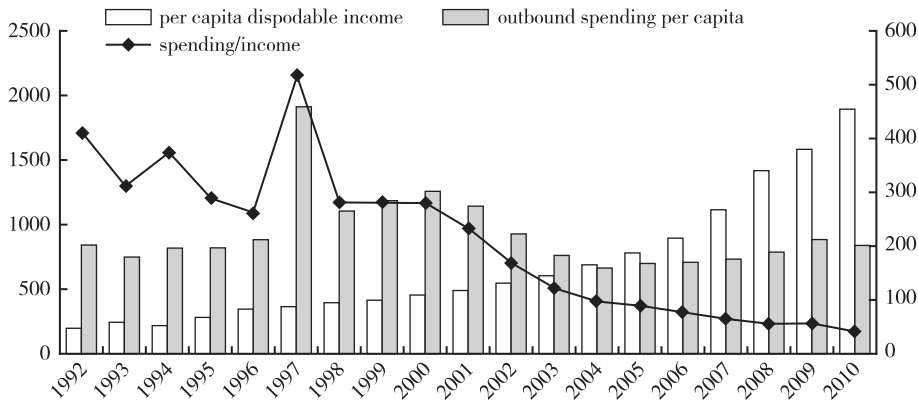


Figure 8. Comparison of outbound tourist spending and per capita disposable income for Mainland China

4. China's disproportional outbound tourism

The explosion of outbound tourism has been influenced by policy relaxation, but the economic background has been the crucial factor. With strong economic support, outbound tourism still increased even under policy restrictions (e.g. South Korea in 1987). On the other hand, without economic support, outbound tourism development was quite slow although outbound tourism was opened up (e.g. Taiwan in 1979). When economic development remains at certain stage, outbound tourism will not realize explosive growth even with greater stimulation policies. For example, Japan implemented the “Ten Million Program” as well as other policies to promote outbound tourism, but never realized a growth of over 20% for 10 years. From evidence of the above countries, the number of outbound tourists was highly correlated with per capita GDP with a correlation coefficient of over 0.95.

Based on comparative analyses, the authors put forward the conclusion that China's outbound tourism has outpaced economic development.

4.1. Outbound tourism has outpaced the level of per capita GDP and income

The above analyses can lead to the conclusion that per capita GDP and disposable income

¹ Based on a survey carried out by AC Nielsen and Tax Free World Association (TFWA), per capita shopping expenditure of Chinese outbound tourists was as high as \$928 in 2006. However, the level was overestimated due to the focus on shoppers of this survey.

from approaching \$5,000~\$8,000 to over \$15,000~\$20,000 is the threshold for the explosion of outbound tourism. If the eight-year period of the outbound explosion stage of Japan, Korea and Taiwan is adjusted to the same starting time, and per capita GDP and disposable income are adjusted to 2009 prices, then Figure 9 can be obtained. It shows the similarity of economic contexts of the explosion stage of outbound tourism.

However, when data for Mainland China is added to the Figure 9, great differences emerge. Per capita disposable income of the comparison objects is more than 10 times (even 18.82 times) that of Mainland China, while per capita GDP is more than 5 times (even 11.31 times) that of Mainland China.

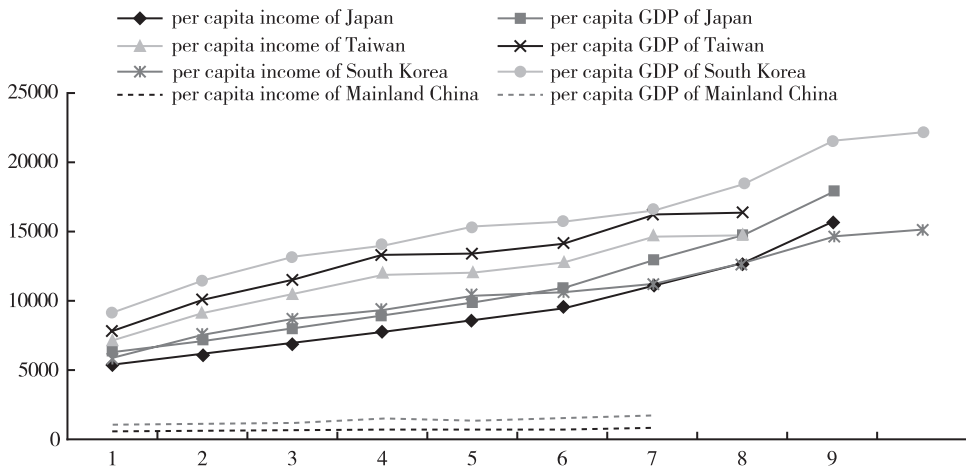


Figure 9. Economic features of the surging stage of outbound tourism for Mainland China, Japan, South Korea, and Taiwan

4.2. Outbound tourism has outpaced economic growth

During the eight to ten years of the explosion stages of outbound tourism in Japan, Korea, and Taiwan, the annual growth rates of per capita GDP were 19.52%, 14.46%, and 15.97%, respectively, while the growth rate of per capita disposable incomes were 19.26%, 15.14%, and 15.52%, respectively. However, during the seven years of rapid growth of China's outbound tourism, the average annual growth of per capita GDP was 10.48% and that of per capita disposable income was 9.64%, which was by no means the lowest among these countries. Therefore, the view that high-speed economic growth led to the disproportionate growth of China's outbound tourism mainland does not hold water.

4.3. Outbound tourist spending outpaced per capita income for Mainland China

Outbound tourist spending for Japan, South Korea, and Taiwan was quite different in the respective years, but was generally around \$1,400 to \$1,800 (Japan \$1,780, South Korea \$1,430,

Taiwan \$1,523). The ratio of outbound tourist spending to per capita disposable income was between 10% and 30% (Japan 7.71%, South Korea 14.72%, Taiwan 14.72%). That is, outbound spending was lower than 1/6 of per capita disposable income. Even in the explosion stage of outbound tourism, the ratio was generally lower than per capita income. The ratio for Taiwan reached 94% at the beginning of outbound surge but soon fell. The average ratio during the eight years of the explosion was 34%.

In the starting year of outbound explosion for Mainland China in 1997, even average outbound spending underestimated by 60% was still five times of per capita disposable income. The ratio of outbound tourist spending to per capita disposable income of the same year was 18 times, 12 times and 14 times of that of Japan, South Korea, and Taiwan, respectively.

Table 6
Ratio of outbound tourist spending to per capita disposable income (%)

Year	China	Japan	South Korea	Taiwan
1992	411.94	8.776831	26.7315	18.13573
1993	311.08	7.751622	17.85236	16.47751
1994	374.85	6.935762	14.80887	15.03158
1995	288.26	7.578936	14.91207	14.28306
1996	261.20	7.601693	13.62226	11.92605
1997	515.68	7.465465	13.73065	10.7876
1998	278.30	5.607968	13.21854	11.15017
1999	280.13	7.099624	10.76824	9.525538
2000	279.27	6.415894	11.50622	8.764166
2001	233.79	6.872649	11.72048	9.05203
2002	169.88	6.992231	12.08136	8.185659
2003	124.62	8.92808	9.987686	9.489357
2004	97.29	7.610489	8.545993	8.523178
2005	90.24	8.046403	7.862608	7.440067
2006	78.28	5.5251	6.980862	7.480184
2007	65.29	5.237563	8.809514	7.191078
2008	55.99	4.847382	9.590793	6.632687
2009	56.11	5.369225	10.7004	6.76624
2010	44.27	5.182366	8.500761	6.078835

Therefore, from an international comparison perspective, China's outbound tourism has remarkably outpaced current economic development.

5. Economic causes of the disproportionate growth of China's outbound tourism

Despite a significant gap in economic context with Japan, South Korea, and Taiwan, China's outbound tourism still exhibited a similar roaring increase. Outbound spending of Chinese citizens has shocked the world. The above analyses show that economic development per capita has not reached a level that would lead to outbound explosion. Then what were the underlying causes of the disproportionate growth of China's outbound tourism?

In the above context, economic background was analyzed by an index of per capita income, with no consideration of income differences. In fact, the Gini coefficients of Japan, South Korea, and Taiwan were about 0.3. That means that these countries had relatively low polarization of income and could be compared with each other. When an index of income differences is introduced, China cannot be compared simply with those countries or region due to its high Gini coefficient.

The Gini coefficient of South Korea has remained between 0.28 and 0.32 since 1985 and stabilized at around 0.31 in recent years(Lin, 2005). Taiwan economy entered a stage of rapid growth in the 1950s, and the Gini coefficient decreased sharply rather than increasing. It was 0.558 in 1953, 0.461 in 1961 and 0.301 in 1972. Since then, the Gini coefficient of Taiwan remained below 0.3. In 1989, the World Development Report by World Bank ranked Taiwan among the countries with the most equal distribution of incomes(Chen, 2005). Being one the developed countries, Japan has maintained a relatively low polarization of incomes, with a Gini coefficient of below 0.3. For these economies, income differences were relatively small, so the average is meaningful and the income structure had relatively small impact on outbound tourism. Therefore, economic background of outbound explosion could be analyzed by simple index such as per capita income.

But the situation for Mainland China is quite the opposite. Along with economic growth, the gap between the rich and the poor has grown at the same time. China was once the most equal country in the world with Gini a coefficient of 0.18 in 1978. The Gini coefficient was 0.23 in 1980 and 0.348 in 1990. The proposal of "allowing some people to get rich first" resulted in the sharp increase of the Gini coefficient. The period from 1997 to 2004 witnessed the explosion of outbound tourism, it was also the period when the Gini coefficient increased from below the warning level of 0.4 to 0.5. In the context of income polarization, important indices such as per capita GDP and disposable income can no longer explain the unconventional development of economic growth in China. Analysis of income structure should be introduced.

In summary, income polarization and a massive population have led to large rich population, which has resulted in the disproportionate growth of Mainland China's outbound tourism.

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the effects of each factor on the location of FDI (1994–2010)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
FDI/GDP	-0.0003 (-9.07)***	-0.0003 (-7.94)***	-0.0003 (-7.43)***	-0.0002 (-6.20)***	0.00002 (0.84)	0.000003 (0.29)	0.00001 (0.39)	0.00001 (0.39)
Corporate Income Taxation	-1.190 (-9.45)***	-1.059 (-9.53)***					-0.902 (-4.96)***	-0.902 (-4.96)***
FDI/GDP			-0.179 (-8.83)***	-0.156 (-9.24)***	-0.060 (-1.12)	-0.121 (-4.80)***		
FDI Total Public Expenditure	0.0015 (9.43)***	0.0013 (8.86)***	0.0013 (7.67)***	0.001 (6.75)***				
FDI Public Expenditure/GDP					15.69 (3.99)***	8.391 (5.10)	13.067 (7.08)***	13.067 (7.08)***
FDI Infrastructure Level	0.366 (3.64)***	0.233 (2.35)**	0.370 (4.02)***	0.236 (2.74)***	0.471 (2.49)**	0.313 (3.07)***	0.259 (1.66)*	0.259 (1.66)*
FDI Infrastructure	2.274 (5.59)***	1.87 (3.71)***	1.803 (4.77)***	1.200 (2.64)***	1.10 (1.73)*	2.05 (3.83)***	1.14 (2.14)**	1.14 (2.14)**
FDI Cost	-0.458 (-2.22)**	-0.249 (-1.09)	-0.447 (-2.19)**	-0.083 (-0.45)	-2.39 (-2.88)***	0.433 (1.97)**	-1.401 (-3.46)***	-1.401 (-3.46)***
FDI Export/GDP	0.018 (0.06)	0.279 (0.73)	0.123 (0.44)	0.106 (0.31)	-0.252 (-0.45)	-0.909 (2.43)**	0.200 (0.35)	0.200 (0.35)
FDI Attendance	17.56 (2.92)***	15.25 (2.48)**	15.385 (2.83)***	11.65 (2.27)**	3.83 (0.36)	11.98 (2.03)**	0.521 (0.06)	0.521 (0.06)
FDI Attendance	7.305 (9.49)***	6.418 (6.53)***	7.24 (9.46)***	5.809 (7.42)***	12.221 (4.75)***	2.96 (3.55)***	8.841 (6.84)***	8.841 (6.84)***
Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dummies	No	Yes	No	Yes	No	Yes	No	No
Observations	464	464	464	464	464	464	464	464
Adjusted R-squared	0.454	0.365	0.48	0.385	0.396	0.461	0.342	0.342

absolute value of t-statistic in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%

with disaggregated public expenditure and corruption (1994-2006)

	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
a GDP	-0.0007 (-4.79)***	-0.0007 (-4.81)***	-0.0007 (-3.16)***	-0.0007 (-3.18)***	-0.0003 (-4.52)***	-0.001 (-3.84)***	-0.001 (-3.28)***	-0.001 (-2.51)**	0.00003 (0.80)
tion	-0.101 (-3.58)***	-0.124 (-5.27)***	0.016 (0.22)	-0.022 (-0.35)	-0.026 (-0.58)	0.031 (0.45)	-0.030 (-0.41)	-0.043 (-0.54)	-0.139 (-4.42)***
a Total Public ure	0.003 (4.76)***	0.002 (4.87)***							
a Expenditure for onstruction			0.004 (3.22)***	0.004 (3.23)***					
a Administrative ure					0.0098 (5.52)***	0.013 (4.17)***			
a Expenditure for cy in Public Security							0.038 (3.27)***	0.038 (2.52)**	
a Expenditure for re									0.011 (6.19)***
tion	-0.00001 (-0.00)	-0.021 (-1.56)	-0.005 (-0.15)	-0.035 (-1.35)	-0.014 (-0.65)	-0.051 (-1.63)	-0.065 (-1.61)	-0.067 (-1.49)	-0.049 (-2.38)**
cture Level	0.236 (1.49)	0.105 (0.66)	0.464 (1.40)*	0.434 (1.42)	0.560 (2.21)**	1.260 (2.81)***	1.063 (2.15)**	1.541 (2.09)**	0.644 (2.79)***
tion	1.875 (3.14)***	3.395 (4.42)***	3.49 (2.45)**	6.592 (3.17)***	1.149 (1.60)	4.242 (3.06)***	-3.23 (-2.02)**	-4.45 (-1.84)*	-2.72 (-3.40)***
st	-0.474 (-1.70)*	-0.073 (-0.31)	-0.785 (-1.41)	-0.296 (-0.67)	-1.824 (-3.61)***	-0.515 (-0.99)	-0.811 (-1.29)	-0.512 (-0.74)	-0.703 (-2.15)**
xport/GDP	3.396 (3.69)***	2.357 (3.36)***	3.061 (1.86)*	1.331 (1.34)	1.412 (1.72)*	1.589 (1.38)	7.077 (2.89)**	8.48 (2.32)**	-1.681 (-2.15)**
Attendance	40.203 (3.00)***	51.73 (3.10)***	69.01 (2.24)**	125.94 (2.77)***	-16.36 (-0.84)	68.89 (2.14)**	-30.97 (-0.92)	14.26 (0.40)	-28.33 (-1.58)*
	7.376 (7.12)***	5.93 (6.62)***	8.53 (4.13)***	6.659 (4.02)***	12.139 (6.50)***	6.69 (3.43)***	9.36 (3.71)***	8.22 (2.94)***	8.26 (6.62)***
ions	319	319	319	319	319	319	319	319	319
d	0.262	0.217	0.251	0.220	0.234	0.221	0.158	0.097	0.167

absolute value of t-statistic in parentheses; *** significant at 1%; ** significant at 5%; * significant at 10%