Analysis and thoughts on China's 2010 tourism statistics

Li Jiajia[1, a], Zhang Peng[1, b, *],

[1]Shanghai Strawman Travel Agency Co., Ltd., Room 401, Building 1, No. 738 Guang ji Road, Hong Kou District, Shanghai 200437, China
a.jiajia_off2017@126.com, b.zhangp_940918@gmail.com
*Corresponding Author

Abstract: In China, tourism data is affected by factors such as the accountability and attitude of statisticians, government intervention and falsification, and statistical methods, leading to inconsistencies, inaccuracies, and contradictions in the data. Taking the tourism data published on official websites in 2010 as an example, the total data from local areas is much greater than the data released by the National Tourism Administration, indicating a serious issue of "watering down" in local tourism statistics. Therefore, the use of China's tourism data should be approached with greater prudence and scientific rigor.

Keywords: Tourism statistical data, Analysis, Reflection

1. Introduction

The inauthenticity and inaccuracy of China's tourism statistical data are well known to insiders, but how far is it from the truth? This article attempts to analyze the tourism data published on official websites in 2010 as an example, hoping to provide some assistance for the development of China's tourism industry.

2. Analysis of the current status of tourism statistical data in China

2.1. Compilation and analysis of inbound tourism data for 2010

On November 1, 2011, the Policy and Law Department of the National Tourism Administration released the "2010 China Tourism Statistics Bulletin" [1] (hereinafter referred to as the "Bulletin") on the official website of the National Tourism Administration. The Bulletin stated that "the total number of inbound tourists received throughout the year was 134 million person-times, achieving an international tourism (foreign exchange) income of 45.814 billion US dollars." The Bulletin also ranked the international tourism (foreign exchange) income of 31 provinces, autonomous regions, and municipalities directly under the Central Government (see Table 1). The author summed up the international tourism (foreign exchange) income and the number of inbound tourists received by the 31 provinces, autonomous regions, and municipalities in Table 1, and the results were 51.973 billion US dollars and 96.589 million person-times, respectively. The former's total data from local areas are significantly higher than the 45.814 billion US dollars claimed by the Bulletin, with an excess of 6.159 billion US dollars; the latter's total data are less than the 134 million person-times of the Bulletin, with a shortage of 3.741 million person-times. Why is the total data of local areas less than the data of the Bulletin? Does the data of the Bulletin include the number of inbound tourists received by the Hong Kong and Macao regions, or other reasons? However, through sorting and analysis, we can at least draw one conclusion that there is a phenomenon of inconsistency and contradiction in tourism statistical data.

Table 1: Ranking of International Tourism (Foreign Exchange) Income of 31 Provinces, Autonomous Regions, and Municipalities (2010)

No.	Region	International Tourism (Foreign Exchange) Income (Billion USD)	Number of Inbound Tourists (Ten Thousand)	No.	Region	International Tourism (Foreign Exchange) Income (Billion USD)	Number of Inbound Tourists (Ten Thousand)
1	Guangdong	123.83	3140.93	2	Shanghai	63.41	733.72
3	Beijing	50.45	490.07	4	Jiangsu	47.83	653.55
5	Zhejiang	39.30	684.71	6	Fujian	29.78	368.14
7	Liaoning	22.59	361.80	8	Shandong	21.52	366.79
9	Tianjin	14.20	166.07	10	Yunnan	13.24	329.15
11	Shaanxi	10.16	212.17	12	Hunan	9.06	189.87
13	Guangxi	8.06	250.24	14	Heilongjiang	7.63	172.42
15	Hebei	7.51	181.74	16	Anhui	7.09	198.42
17	Chongqing	7.03	137.02	18	Inner Mongolia	6.02	142.80
19	Henan	4.99	146.84	20	Shaanxi	4.65	130.29
21	Sichuan	3.54	104.93	22	Hebei	3.51	97.74
23	Jiangxi	3.46	113.97	24	Hainan	3.22	66.33
25	Jilin	3.05	82.01	26	Xinjiang	1.85	50.94
27	Guizhou	1.30	50.01	28	Tibet	1.04	22.83
29	Qinghai	0.20	4.67	30	Gansu	0.15	7.02
31	Ningxia	0.06	1.80				

2.2. Compilation and analysis of domestic tourism statistics data for 2010

The "2010 China Tourism Statistics Bulletin" states that "the number of domestic tourists was 2.103 billion person-times, with a revenue of 1,257.977 billion yuan." However, data released by provinces, autonomous regions, and municipalities (see Table 2) show that the total numbers reached 4.655 billion person-times and 4,172.59 billion yuan, respectively, which are 2.2 times and 3.3 times the data published by the National Tourism Administration. The inauthenticity and inaccuracy of China's tourism data can be seen here. Wang Xing bin believes that "for many years, it has been a common phenomenon for the sum of data published by various regions to be greater than the national data."[2] As pointed out in the article "A Brief Analysis of Grass-roots Tourism Statistics Issues": tourism statistics data is "not additive vertically, not comparable horizontally, and related data cannot be mutually verified," which points out the essence of the problem.

Table 2: Ranking of Domestic Tourism Revenue of 31 Provinces, Autonomous Regions, and Municipalities (2010)

No.	Region	Domestic Tourism Revenue (Billion Yuan)	Domestic Tourism Numbers (Billion Person-Times)	No.	Region	Domestic Tourism Revenue (Billion Yuan)	Domestic Tourism Numbers (Billion Person-Times)
1	Jiangsu	4287.9	3.55	2	Zhejiang	3045.5	2.95
3	Guangdong	2962.1	1.82	4	Shanghai	2930	1.8
5	Shandong	2915.9	3.49	6	Liaoning	2533.4	2.83
7	Beijing	2425.1	1.79	8	Henan	2260	2.57
9	Sichuan	1644.7	2.71	10	Hubei	1409.3	2.09
11	Hunan	1364	1.94	12	Tianjin	1151.9	0.92
13	Fujian	1135.1	1.14	14	Anhui	1094.8	1.53
15	Guizhou	1052.4	1.285	16	Shanxi	1052.3	1.25
17	Yunnan	916.8	1.38	18	Shaanxi	914.7	1.43
19	Guangxi	898	1.41	20	Hebei	890.8	1.49
21	Chongqing	870.1	1.61	22	Heilongjiang	831.6	1.57
23	Jiangxi	794.8	1.07	24	Jilin	712.4	0.64
25	Inner Mongolia	692.9	0.45	26	Xinjiang	268.4	0.305
27	Gansu	236	0.4284	28	Hainan	235.7	0.25
29	Qinghai	69.7	0.1216	30	Ningxia	67.4	0.102
31	Tibet	62.2	0.626				

From the analysis above, it is known that the National Tourism Administration announced 2.103 billion domestic tourism trips in 2010, but when it came to local areas, the number became 4.655 billion. The author is not yet clear about the source of the data from the National Tourism Administration, but the author thinks that the data of each province (autonomous region, municipality directly under the Central Government) should come from the data reported by each city (prefecture-level city) under the jurisdiction of the province. Let's take a certain province in the central region as an example to look at its city-level tourism statistics data.

2.3. 2010 Central China province & municipal tourism data comp. & anal

Data from the statistical bulletin of national economic and social development of a certain province in central China for the year 2010 shows: the province received 10,705.1 million domestic tourism trips and a domestic tourism revenue of 79.48 billion yuan; it received 1.141 million inbound tourism trips and earned 346 million US dollars in tourism foreign exchange. The author, after summing up the tourism statistics data published by its municipalities, found that the number of domestic tourism trips was 12,834.6 million, and the domestic tourism revenue was 83.82 billion yuan, which was 2,129.5 million trips and 4.34 billion yuan more than the data published by the province; the number of inbound tourism trips and tourism foreign exchange earnings were 610,000 trips and 17 million US dollars more, respectively. If this province is in this situation, I think other provinces are also the same. If we use the "water" ratio of this province to speculate, by adding up the tourism data published by all municipal governments in the country, it is feared that the number of domestic tourism trips in China for 2010 would reach 6 billion trips.

In summary, the "water" in tourism statistics data is quite large, and the more it goes down, the more water there is. However, when the data is reported, each level of government department has carried out corresponding technical processing to reduce the total data. As a result, the statistics of China's tourism data

have fallen into a strange circle of "watering" and "squeezing water". Each level of department squeezes a bit of "water" from the data reported by the next level. Whether all the "water" has been squeezed out by the National Tourism Administration is unknown.

3. Analysis of the causes of the current status of tourism statistics in China

Through the analysis of the current state of China's tourism statistics, it is evident that there are contradictions, unreality, and lack of uniformity in the data. This may seem ridiculous, but there are reasons for its existence. By analyzing the causes, we can easily resolve the issue.3.1 The sense of responsibility and attitude of statisticians themselves.

The factors related to statisticians can introduce errors into tourism statistical data, but this is not the root cause; it is merely a symptom of the problem. The sense of responsibility and attitude of statisticians only contribute to the inaccuracy and unreality of the tourism data itself, rather than causing inconsistencies and contradictions in the longitudinal comparison of tourism data.

3.1. There are issues with the statistical methods

In the statistical process of tourism data in many places, there is a phenomenon of double counting of tourists. Wang Xing bin believes: "At present, there are mainly three channels for the domestic tourist statistics in various regions: one is the number of guests staying in various types of tourist accommodation facilities; the second is the number of tourists in various tourist attractions; the third is the number of tourists received by travel agencies. When the three are combined for statistics, it is inevitable that one tourist will be counted as multiple tourists. For example, if one tourist participates in a 5-day travel group, the travel agency counts as one person, stays in two hotels and is counted as two people, visits four scenic spots and is counted as four people. When this data is returned to the tourism bureau, one tourist is counted as seven person-times."

This reason also belongs to the technical level and only causes errors in the local tourism data statistics, without causing inconsistencies between the central and local governments, and between localities.

3.2. The intervention of government departments in the reporting of data, that is, false reporting and fraud

This is the most fundamental reason and the "chief culprit" of the current situation of tourism statistics in China. Wang Xing bin pointed out: The widespread "water" problem in domestic tourism statistics, in addition to factors in statistical techniques, also has systemic factors. Higher authorities issue "development targets" to lower-level departments, and regions compete with each other to be "number one". Tourism statistics institutions are affiliated with the same level of administrative authorities and lack an independent monitoring system. The statistical data is ultimately "reviewed" by leaders at all levels, especially the top person in charge. Under this system, the authenticity and reliability of statistical data cannot be fundamentally resolved by technical means.[4]

People's Daily Hainan Window reported on August 22, 2012: "In order to further standardize and strengthen tourism statistics work, ensure the authenticity, timeliness, accuracy, and completeness of tourism statistics, and provide a solid basis for decision-making for governments at all levels and tourism administrative authorities, on August 17, the Qiong Hai Tourism Commission and the Municipal Bureau of Statistics jointly organized a tourism statistics work training class, organizing nearly 100 people in charge and statisticians from 47 hotels that have been included in tourism statistics in the city for tourism statistics business training." From the dispatch, we can obtain the following information: First, technical issues in tourism data statistics need to be resolved; second, there are issues of inauthenticity and inaccuracy in the local tourism statistics in Qiong Hai, which have attracted the high attention of the local government. If it is like this in Qiong Hai, I think it is the same in most places in China. However, solving the authenticity and accuracy of China's tourism data statistics is far from that, because even if the statisticians have collected accurate data, what is reported or announced to the public may not necessarily be the original data. This may also be a "Chinese characteristic", and the problem of "Chinese characteristics" is not resolved, and it is difficult to solve the authenticity problem of tourism statistics data. [5]

4. Some reflections on the tourism statistics data in China

4.1. The significance of authentic and accurate tourism statistics data

The development status of the tourism industry in a region, its proportion in the national economy, and its contribution to local economic development require authentic, accurate, and comprehensive data. As industry insiders have pointed out: "Strengthening tourism statistics work, scientifically and dynamically various tourism indicators, and reflecting the development status of the tourism industry in a timely, objective, and accurate manner is of great significance for promoting the healthy development of the tourism industry."

4.2. The harm of fake tourism data to society

The fact of tourism data fraud is undeniable, and in some places, it has reached a point where it is impossible to justify. However, the fraudsters continue to hold office, and the tourism work continues as usual, seemingly without any adverse effects on individuals or society. But if fraud continues unchecked, it will bring great harm to society. First, it will reduce the credibility of the government. Although the government needs data to boost the confidence of the public, what truly inspires the people is the government's truthful attitude and the enhancement of credibility, not the fabrication of false data to deceive the public. Second, it affects the tourism decisions of government departments. To illustrate with a simple example: if a place overstates its tourism data, it will inevitably create an illusion of false prosperity in tourism. If government departments do not discern this and thus increase investment in tourism and encourage the public to develop tourism, the result will be a waste of government investment and widespread unemployment among the public. Lastly, it impacts other industries. The tourism industry is highly interrelated, and once the "bubble" in the tourism industry continues to grow and then bursts, it will not only deal a devastating blow to the tourism industry itself but also pose a significant threat to other industries.

4.3. TSA establishment boosts tourism data accuracy

The establishment of a Tourism Satellite Account (TSA) is a new statistical tool that helps countries measure tourism and related goods and services according to a common accounting framework. This allows for a credible comparison of the tourism industry with other traditional industries and further facilitates the comparison of tourism economic activities between nations and regions. In 2001, China initiated a pilot project for the compilation of the Tourism Satellite Account in Jiangsu Province. After three years of effort, in September 2004, the pilot was successful and passed the acceptance review organized by the National Tourism Administration and the National Bureau of Statistics, among other departments. The comprehensive implementation of the Tourism Satellite Account will create favorable conditions for the accuracy of tourism statistics. However, there is a concern about whether the accuracy in statistical work can ensure the authenticity of the published data.

4.4. The use of China's tourism statistics data should be approached with caution

There is skepticism among experts, scholars, and industry insiders about the authenticity of China's tourism statistics. The earliest public doubt came from an article by Xinhua News Agency on May 8, 2005, questioning the tourism statistics data for the "May Day" Golden Week that year. Although on May 16, the National Tourism Administration explained the accuracy of the information it released from three aspects on its official website, the doubts from industry insiders did not cease. Whether China's tourism statistics data can be used and how to use it is a problem worth studying carefully. Shi Shou Xiang and Guo Wei believe that, "Under the current situation where statistical and tourism management departments cannot provide high-quality tourism data in the short term, researchers should use data cautiously." As mentioned earlier, the higher the level of China's tourism statistics data, the smaller the data and the less likely it is to be inflated, but whether all the water has been squeezed out, perhaps no one can answer. However, if you have to use tourism data, it is best to use the data published by the National Tourism Administration, which is relatively credible and closer to the truth. Try to avoid using tourism data published by local government departments.

5. Conclusion

In the future, to ensure the authenticity and accuracy of tourism statistics, reforms and improvements need to be made at multiple levels, including technology, systems, and laws. This will not only enhance the government's credibility but also provide solid data support for the sustainable development of the tourism industry. We look forward to the concerted efforts of all sectors to steer China's tourism statistics work towards a more scientific and standardized path, contributing to the prosperity of the tourism industry and the healthy development of the social economy.

6. References

[1]　National Tourism Administration Policy and Law Department. 2010 China Tourism Industry Statistical Bulletin [EB/OL]. http: //www.cnta.gov.cn/html/2011-11/2011-11-1-9-50-68041.html.

[2]　[2][3][4] Wang Xing Bin. Domestic tourism statistics should remove the "water" [N]. China Youth Daily,2012-02-10(11).

[3]　People's Daily Hainan Window. Qiong Hai comprehensively standardizes tourism statistics work to ensure the authenticity and accuracy of data [N]. China Youth Daily [EB/OL]. http: //www.chinadaily.com.cn/hqgj/jryw/2012-08-22/content_6797245.html.

[4]　Shi Shou Xiang, Guo Wei. A Study on the Evaluation and Development Application of China's Tourism Statistics Data [J]. Tourism Tribune,2010(2):19-23.