Journal of Applied Sciences

ISSN 1812-5654
An Empirical Study on the Dynamic Changes in Inbound Tourism Source Markets Based on Familiarity Degree and Competitive State

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Abstract: This study make use of the methods and models including the index of Competitive State and the index of the Familiarity Degree to practice quantitative analysis on the inbound tourism market of Jiangsu Province in 2001-2012. The findings are most inbound tourism source markets are with low unfamiliarity degree or strong unfamiliarity degree. The inter-annual variability of the familiarity degree of inbound tourism source markets shows three concurrent trends of high-position oscillation, middle-position volatility and low-position steady coexistence, with significant disparities among source markets; competitive state of the tourist source markets mainly concentrates in Skinny-Dog Market and Children Market. These indicate there are considerable spatial disparities among the inbound tourism source markets of Jiangsu Province it is necessary to carry out further strengthened development and study on the tourism source markets of the Jiangsu Province in order to further improve the development of inbound tourism and realize its goal to build a competitive tourism in Jiangsu province.

Key words: Study, familiarity degree, competitive state, dynamic, inbound market

INTRODUCTION

Inbound tourism development is an important symbol of the development of the tourism industry of a country or region. Domestic scholars have conducted a lot of researches on the variation patterns of the inbound tourism source market in temporal series and in spatial series. For instance: Chen and Huang (2006) used Theil coefficient to discuss the temporal and spatial variation patterns of intra-regional, inter-regional and inter-provincial tourism source markets of China’s inbound tourism and thus laid a foundation for the study on the disparities of intra-regional, inter-regional and inter-provincial tourism source markets; Yang and Ma (2006) used the competitive state and familiarity degree model to analyze the temporal and spatial variation patterns of various tourism source markets of Xi’an in different periods; Yao (2010) adopted the familiarity degree and competitive state of the inbound tourism source market of Zhangjiagai and explored the temporal and spatial variation patterns of the inbound tourism source markets of Zhangjiagai.

This study used the 15 major inbound tourism source countries of Jiangsu Province as the research objects, based on the inbound tourism statistical data of 2001-2012, used the familiarity degree and competitive state carries out dynamic analysis and research on the temporal and spatial variation patterns of the inbound tourism source markets of Jiangsu. The sources of the Data are the Statistical Yearbook of Jiangsu Province and China Tourism Statistics Yearbook (2002-2013).

BASIC CHARACTERISTICS OF THE INBOUND TOURISM MARKET OF JIANGSU

Inbound tourist arrivals and revenues are constantly rising: Inbound tourist arrivals. As can be seen from Fig. 1, Inbound tourist arrivals of Jiangsu Province have kept a rapid growth trend expect for the steady in year 2003 due to the impact of SARS. The number has increased from 1, 830, 000 people-times in 2001 to 7, 910, 000 people-times in 2012 and a cumulative increase of up to 4.3 times. Obviously, the overall situation of

Fig. 1: Revenues inbound tourism and tourist arrivals from source countries of Jiangsu Province in 2001-2012
inbound tourism development of Jiangsu Province is optimistic and inbound tourism has become an important constituent part of tourism development in Jiangsu and made huge contribution to the development of foreign economy in Jiangsu Province.

Inbound tourism revenues. As can be seen from Fig. 1, inbound tourism revenues showed a growing trend since 2001. Inbound tourism revenue increased from 8.2 hundred million U.S. Dollars in 2001 to 63 hundred million U.S. Dollars in 2012, with a growth rate of 7.7 times during the period. The foreign exchange earnings of Jiangsu from tourism showed an upward trend in all years except for the slight steady in 2003 than the previous year. Due to the impact of SARS in 2003, the foreign exchange earnings of Jiangsu from tourism were hard hit, the same as the situation nationwide. But this also shows that tourism industry is with strong frangibility. The industry recovered in 2004 and has kept sound development status since then.

Volatility of inbound tourist arrivals and growth rate of foreign exchange earnings is significant: As can be seen from Fig. 2, the change rate of inbound tourism of Jiangsu Province is basically identical to that of tourist arrivals. Both experienced a decrease trend in 2003 which indicates that SARs generated a big impact on the development of the inbound tourism in Jiangsu and that the tourism industry with strong frangibility. But with a turnaround, both revenue and tourist arrivals rose considerably in 2004. The growth rate of revenue was 55.8% and that of tourist arrivals was 37.4%. After 2005, the growth rates of revenue and tourist arrivals showed an oscillation of downward trend that lasted to 2012. The growth rate of revenues dropped from 28.1 in 2005 to 3.5% in 2009 and to 11.4% in 2012 and the growth rate of tourist arrivals dropped from 23.4 to 2.3% and to 7.4% in 2012. To sum up, in the latest several years, the inbound tourism industry of Jiangsu has kept sound development trend but the speed of development is still not strong enough and need further accelerating.

Analysis on the familiarity degree of scenic destination of tourism source countries: The Familiarity Degree of Scenic Destination is analysis model to study the preference degree of the inbound tourism source market to a scenic destination. It is represented by the ratio of the proportion of tourists from a certain tourism source country in the market of a certain scenic destination against the proportion of tourists from the source in the market nationwide (Gao, 2011). The formula is as follows:

\[ P(\text{familiarity degree of the scenic}) = \frac{S_{\text{tourism}}}{S_{\text{tourism}} + S_{\text{other}}} \]

Where \( P \) is the familiarity degree; \( S_{\text{tourism}} \) is the total number of foreign tourists to the scenic destination; \( S_{\text{other}} \) is the number of tourists from a tourism source country to the scenic destination; \( S_{\text{tourism}} \) is the total number of foreign tourists to China nationwide and \( S_{\text{other}} \) is the number of tourists from the source country to China nationwide. If the familiarity level \( p<1 \), the country is an unfamiliar country to the scenic destination. If \( P = 0 \) it indicates the country is not a source country; if \( p<1 \), the source country is a familiar source country to the scenic destination. Besides, among the familiar countries, those with \( 0.5 = p<1 \) are subdivided as low-unfamiliar countries and those with \( 0 = p<0.5 \) are strongly unfamiliar source countries. And among the unfamiliar countries, those with \( p = 2 \) are further subdivided as strongly familiar source countries; and those with \( 1 = p=2 \) are source countries with low familiarity (Gao, 2011). Meanwhile, the familiarity degree is relevant to the total number of tourists to China and not necessarily has a positive correlation with the number of inbound tourist arrivals from the source country (Gao, 2011). This study carries out analysis on the 15 major inbound tourism source markets based on the data of the Tourism Statistic Yearbook of Jiangsu and comes up with the following analysis results as shown in Fig. 3.

Temporal and spatial disparities of familiarity degrees are significant: As can be seen from Fig. 3, among the inbound tourism source countries of Jiangsu during 2001-2012, 2/3 of the source markets have familiarity degrees less than 1. While 1/3 of the countries have familiarity degrees greater than 1. Disparities are
significant among the source countries. Judging from the average familiarity degrees of various source countries in the 12 years, America and Korea is as a source country with strong familiarity degree which is greater than 2. The familiarity degrees of Germany, France and Japan are all between 1 and 2 so these source countries are with low familiarity degrees; The familiarity degrees of Singapore, Indonesia Thailand, Malaysia and Britain are between 0.5 and 1 and therefore these are slightly unfamiliar source countries; The familiarity degrees of the Australia, Philippines, Russia, Canada and Italy are less than 0.5, so these are strongly unfamiliar source countries. These indicate that Japan, Korea, Germany, America and France are major source countries for inbound tourism in Jiangsu and the tourism industry of Jiangsu Province is relatively more attractive to them; while the Australia, Philippines, Russia, Canada and Italy are strongly unfamiliar source countries and the tourism industry of Jiangsu Province is less attractive to them. In the overall, the tourism industry of Jiangsu Province is not quite attractive to foreign tourists; it is necessary to continuously strengthen the development of tourism resources in Jiangsu, to improve tourism products and enhance external marketing so as to constantly raise the competitiveness of the inbound tourism in the Jiangsu province.

INTER-ANNUAL CHANGES IN FAMILIARITY DEGREES ARE SIGNIFICANT

As shown in Fig. 3, the inter-annual changes in the familiarity degrees of source markets of inbound tourism of Jiangsu Province are significant and show the three trends of high-position oscillation, middle-position volatility and low-position steady coexistence (Liu and Wang, 2008). Specifically, the familiarity degrees of slightly familiar source countries show significant fluctuations, that of slightly unfamiliar source countries show modest fluctuations while that of the strongly unfamiliar countries almost stay unchanged. These indicate that the tourism industry of Jiangsu Province has inadequate competitiveness even toward source countries with relatively high familiarity degrees; whereas the inter-annual changes in familiarity degrees of strongly unfamiliar countries such as Australia, Philippines, Russia, Canada and Italy are relatively stable with fluctuation magnitudes between 0.08-0.43, indicating the attractiveness of the tourism of Jiangsu Province is further smaller to them and need to be constantly strengthened in the future.

COMPETITIVE STATE OF INBOUND TOURISM SOURCE MARKET

Analysis of competitive state: Competitive state refers to the basic state of the entire tourism market which is shown under the influence of the two different indicators, i.e. its share in all markets (\(a_i\)) and its growth rate (\(\beta_i\)), expressed as \(\Omega(a_i, \beta_i)\) (Yin, 2013) its model is as follows:

\[
a_i = \frac{Xi}{\sum X_i} \times 100\% \tag{1}
\]

\[
\beta_i = \frac{X_{i+1} - X_i}{X_i} \times 100\% \tag{2}
\]

In the equation, \(Xi\) is the number of tourists of the i-th source market in a year. The corresponding point of the competitive state \(\Omega(a_i, \beta_i)\) in the two-dimensional coordinate system will represent the competitiveness of the market which indicates the status of the market among similar markets as well as its future development trend. In the coordinate system, when the lines \(\alpha - m\) and \(\beta - n\) are taken as borders to divide the source markets into the four categories of Star Market, Golden-OX Market, Children Market and Skinny-Dog Market (Yin, 2013).

Analysis on the competitive state of inbound tourism source markets: The study takes the 15 major source
markets of inbound tourism in Jiangsu Province as the research subjects, based on the relevant data in China Tourism Statistics Yearbook 2002-2013, takes 2006 year as the demarcation point, respectively calculates the average market growth rate and market share in the 2001-2006 period and those of the 2007-2012 period, as well as the temporal and spatial variation patterns of these average values over the 12 years (Yin, 2013). It is obtained through analysis with the Spss software that the market share and growth rate of inbound tourism of Jiangsu Province during 2001-2006 were, respectively $M_1 = 4.17$, $N_1 = 51.45$; The market share and growth rate during 2007-2012 were, respectively $M_3 = 4.49$, $N_1 = 49.17$; The market share and growth rate during 2001-2012 were, respectively $M_3 = 4.43$, $N_3 = 49.78$, as shown in Table 1.

As can be seen from Table 1, Indonesia, Philippines, Australia Italy Russia and Canada were Skinny-Dog markets during 2001-2006 as the market share they accounted for and the corresponding growth rates were both very low; Singapore, Thailand, Malaysia and Britain were children markets during this period, as their market shares were small but the growth rates were considerable, indicating that these markets have great development potential and Jiangsu should continuously analyze their resources and market conditions, make full use of its advantages and create favorable market environment, so as to improve its market attractiveness and competitiveness; Germany, Japan, Korea and France were Golden-OX Markets during this period as their market shares were considerable but the growth rates were low, indicating that these markets were stabilizing and therefore Jiangsu should continuously excavate new products, increase market growth rate and maintain the market share; Germany were Star Markets during this period, as their market shares and growth rates were both very high, representing the major state and mature markets of Jiangsu Province. Therefore Jiangsu Province should continuously stabilize the attractiveness of these markets.

As shown in Table 1, Italy, Philippines, Australia Russia and Canada were still Skinny-Dog Markets during 2007-2012 but the Indonesia rise from Skinny-Dog Markets to formerly Children Markets during this period, indicating that the competitiveness of overseas tourism source markets of Jiangsu were continuously raise but very weak, therefore Jiangsu should constantly strengthen marketing of their demand, raise attractiveness and expand the inbound tourism markets; Singapore rise from Children Market to Golden-OX Market; France and Germany were still Golden-OX Markets; while Korea go up from Golden-OX Market to Star Market during 2007-2012. These were all high-position markets to be developed by the inbound tourism industry of the province. Jiangsu Province should seize this profitable opportunities, continuously strengthen promotional and investment efforts, so as to promote the development of inbound tourism in Jiangsu and enhance benefits from foreign exchanges.

As shown in Table 1, the competitive state of the tourism source markets of Jiangsu Province experienced significant temporal and spatial changes during 2001-2012, reflected by the constantly expanding Star Markets and Children Markets, moderately shrinking Golden-OX markets and Relatively stable of the proportion of Skinny-Dog Markets; Especially, the growth rates of Korea and Japan both showed a gradually rise trend (Yin, 2013). The constant expansion of the size of Skinny-Dog Markets indicate the monopoly in the development of inbound tourism of Jiangsu, the lack of emphasis on the Skinny-Dog Markets, the lack of specialty products and effective marketing instruments and the low attractiveness and competitiveness. Therefore, Jiangsu Province should continuously attach more importance on these markets, launch corresponding development policies, maintain the high-position growing source markets and enhance low-position fluctuating source markets, so as to revitalize the inbound tourism industry (Yin, 2013).

### Analysis on the correlation between the familiarity degree and the competitive state of the inbound tourism source markets

It can deduced from Fig. 3, Table 2 that America Korea is a strong familiarity Star Markets; Germany, Japan and France are low familiarity source markets, among these, Germany, Japan are Golden-OX Market, France are a Children Market, Malaysia, Britain, Thailand and Indonesia are all low unfamiliarity source

| Table 1: The market share and growth rate of tourism source countries of Jiangsu Province |
|-------------------------------------|-----------------|-----------------|-----------------|
| Star Market $a>M, b<N$              | America         | Korea, America  | Korea, America  |
| Golden-OX Market $a>M, b=N$        | Germany, Japan, Korea, France | France, Singapore, Germany | Germany, France, Japan |
| Children Market $a>M, b=N$         | Singapore, Thailand, Malaysia, Britain | Thailand, Indonesia | Thailand, Indonesia |
| Skinny-Dog Market $a<M, b=N$       | Indonesia, Philippines, Australia Italy, Russia, Canada | Italy, Philippines, Australia Russia, Canada | Italy, Philippines, Canada, Australia, Russia |

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markets, among these, Malaysia is a Golden-OX Market while Britain, Thailand and Indonesia are Children Markets. The other countries are strong unfamiliarity source markets, among these, Singapore are Children Markets and Philippines, Italy, Canada Australia and Russia are Skinny-Dog Market; To sum up, during 2001-2012 a total of 9/10 (90%) of the strong unfamiliarity and low unfamiliarity source markets are Children Markets/ Skinny-Dog Markets, accounting for 9/10 (90%) of the total number of Children Markets/Skinny-Dog Markets; and a total of 4/5 (80%) of the strong familiarity and low familiarity source markets of Jiangsu Province are Star Markets/Golden-OX Markets, accounting for 4/5 (80%) of the total number of Star Markets and Golden-OX Markets. The analysis results show there is correlativity to a certain extent between the familiarity degree and the competitive state. Markets with familiarity degrees above 1 are mostly Star Markets or Golden-OX Markets while those with familiarity degrees below 1 are mostly Skinny-Dog Markets or Children Markets.

**CONCLUSIONS AND COUNTERMEASURES**

Japan, Korea, the United States and Germany are the most important inbound tourism source markets of Jiangsu. The four countries have familiarity degrees greater than 1 and have strong tourism preferences for Jiangsu Province. The competitive states of these countries are Star Market/Golden-OX Market, indicating they are tourism source countries contributing the strong competitiveness of Jiangsu and hold a very important position in the structure of the entire inbound tourism market of the province. In the future, Jiangsu Province needs to further enhance the quality of tourism services, constantly improve and develop new tourism products, enhance marketing efforts, upgrade product features and quality, improve tourist satisfaction and strengthen the attractiveness of tourism products of Jiangsu Province to foreign tourism source markets (Huang, 2013).

The France is a major source market for the inbound tourism market of Jiangsu Province. Its familiarity degree was always above 1 but its competitive state is Children Markets which indicates it still occupies moderate share in Jiangsu market. Meanwhile, the France is an economically developed country with strong outbound tourism capacity, strong contrast to Chinese culture and high willingness for inbound tourism to China. Therefore, France is the major market for inbound tourism of Jiangsu Province. In the future, Jiangsu should continue to speed up the upgrading of the tourism products, further develop a number of featured products with international attractiveness and influence, increase tourism promotion efforts, meet the demand of different source markets and ensure high market share and continued growth (Su, 2013).

Malaysia, Britain, Thailand and Indonesia are potential source markets for inbound tourism in Jiangsu Province. These four countries are slight unfamiliarity tourism source markets and their competitive states are Children Market which indicates these four countries have moderate preference for tourism in Jiangsu Province but the attractiveness is inadequate. Therefore, Jiangsu Province must continue to develop targeted tourism products, carry out targeted travel advertising and promotion activities, improve the attractiveness to them and inspire their potential in the tourism market (Qian, 2013).

Philippines, Italy, Canada, Australia, Russia and Singapore are markets presenting opportunities for further development of inbound tourism of Jiangsu Province. These countries all fall in the strong unfamiliarity category and their competitive states are children market and skinny-dog market, indicating low preference degree for tourism in Jiangsu Province. Therefore, Jiangsu Province should continue to strengthen the cultivation of these markets, adopt effective means of publicity, constantly improve the attractiveness of Jiangsu Province Tourism to them and increase their preference degree for Jiangsu tourism, so as to continuously explore the inbound tourism market and improve the competitiveness of international tourism in Jiangsu Province (Yan, 2013).

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