

Study of Shanghai Residents Tourism Consumption Structure Based on the Tourism Engel Coefficient

Xiang Yan¹ & Mingyuan Wu²

¹ Management school, Shanghai University of Engineering Science, Shanghai, China

² Professor, Cruise Economy and Management, Shanghai University of Engineering Science, Shanghai, China

Correspondence: Xiang Yan, Management school, Shanghai University of Engineering Science, Shanghai, China.
E-mail: xiang.xiang1990@hotmail.com

Received: November 13, 2013

Accepted: December 11, 2013

Online Published: December 16, 2013

doi:10.5430/bmr.v2n4p136

URL: <http://dx.doi.org/10.5430/bmr.v2n4p136>

Abstract

At present, China's tourism industry has been an unprecedented development, and the state also takes the development of tourism industry as a strategic pillar industry of the national economy. In contrast, data index evaluation system which reflects the development of tourism is not clear. As a high level of consumption, tourism has a specific relationship with residents' income and the change of Tourism Engel coefficient. Therefore, studying on Tourism Engel coefficient and finding out the intrinsic link between them, you can more accurately predict tourism demand trends, and further promote the healthy development of the tourism industry. This article will introduce Tourism Engel coefficient into tourism statistical indicators in the form of questionnaire, by studying the Shanghai residents' income levels and the relationship between tourism consumption, determining people's consumption concept, the consumption structure changes, the Shanghai people's consumption decisions theoretical and empirical analysis, provide the basis for the development of tourism-related policies.

Keywords: Shanghai residents, Tourism Engel coefficient, Tourism consumption structure

1. The introduction to the theory and the research significance

Tourism Engel coefficient means the total tourism expenditure proportion of total personal consumption expenditures. In 2010, Simin Liu, China's tourism scholar, firstly proposed the concept of "Tourism Engel coefficient" and its theory, inspired by engel's law and the engel's coefficient.

$$\text{Tourism Engel coefficient} = \frac{\text{Tourism Consumption Expenditures}}{\text{Total Personal Consumption Expenditures}} \times 100\%$$

Simin Liu believes that, in accordance with the principles of Engel's law, along with economic prosperity and growth, the Engel coefficient will decrease, and the proportion of people who tend to enjoy the type of developmental and consumption will increase. As an enjoyment of consumption, Tourism has both material and spiritual dual consumer features, which have an inverse relationship with the Engel coefficient naturally. That is, as the Engel coefficient decreased, tourism consumption proportion of total consumer spending will increase, and in theory there is a huge space. Then, the proportion of tourism consumer spending in total expenditure is defined as "Tourism Engel coefficient". To the contrary from the Engel coefficient, Tourism Engel coefficient utilizes another perspective to determine the degree of social civilization.

On the low level of social and economic development, the majority of families are in poverty or hunger state, the residents mainly solve the physiological needs, food consumption demand is opposite bigger, engel coefficient is relatively high. Meanwhile, residents in tourism consumption expenditure is relatively small, even less to negligible, tourism consumption accounts for the proportion of consumer spending is relatively low. As the income of the residents gradually improve, which have met the needs of low level consumption, people will pursue a high level of demand. Increased consumer spending can be used to non-food consumption, such as improve housing conditions,

increase the cost of education, buy luxury goods, also can be used to travel and so on. Housing, cars and some other consumptions belong to the middle level of demand, after reaching a certain level, its consumer spending is in a state of stagnation or decline, in contrast, there is no doubt that traveling, as a residents' high level consumption item, becomes a better choice. On the one hand, tourism as a high level of consumer goods, to some extent, is the symbol of social status and wealth, Chinese people have a face complex, tourism can meet the needs of their respected; On the other hand, in tourism, residents can be better understanding of the world, increase knowledge, widen their sight and it also to some extent, meet the needs of their self-realization. Therefore, in some extent, Tourism Engel coefficient can determine the standard of residents' living.

Usually, many people believe that the more developed economy, tourism demand will certainly be more exuberant. In the following argumentation, this paper verifies that for different stages of people's living standards, the level of demand for travel is not the same. Only a correct understanding of the movements of tourism demand trends, we can be more targeted to provide tourism products. The Engel coefficient is an important indicator of living and the consumption structure, therefore, a correct understanding of the Tourism Engel coefficient indicative effect can make tourism marketing more effective.

In addition, the study on residents' Tourism Engel coefficient is conducive to promoting own consumption structure optimization. Tourism is a kind of consumer behavior meeting the modern spiritual to optimize the structure of consumption, material consumption and spiritual balance consumption is of great significance. If we can properly grasp the tourism Engel coefficient and the intrinsic relationship between tourism demand, it can be used to understand the needs of local tourism, and even entire consumption structure trends. For us this is more conducive to make different incentives on different stages of development of tourism, to optimizing the residents' consumption structure.

2. Shanghai tourism consumption development overview

2.1 Shanghai tourism development status

According to the Shanghai Statistical Yearbook of China Tourism Statistics Yearbook and data, the following data:

Table 1. Comparison between Shanghai and the national tourism consumption

Years	Total consumption of the national tourism (100million yuan)	National tourism consumption per capita (yuan)	Shanghai tourism consumption per capita (yuan)
2003	3442.3	395.7	1465
2004	4710.7	427.5	1430
2005	5285.9	436.1	1452
2006	6229.7	446.9	1466
2007	7770.6	482.6	1578
2008	8749.3	511	1465
2009	10183.7	535.4	1548
2010	12579.8	598.2	1575
2011	19305.4	731	1607
2012	—	—	1685

Data source: China Statistical Yearbook, 2003 -2011 tourism. Shanghai Statistical Yearbook, 2003-2012

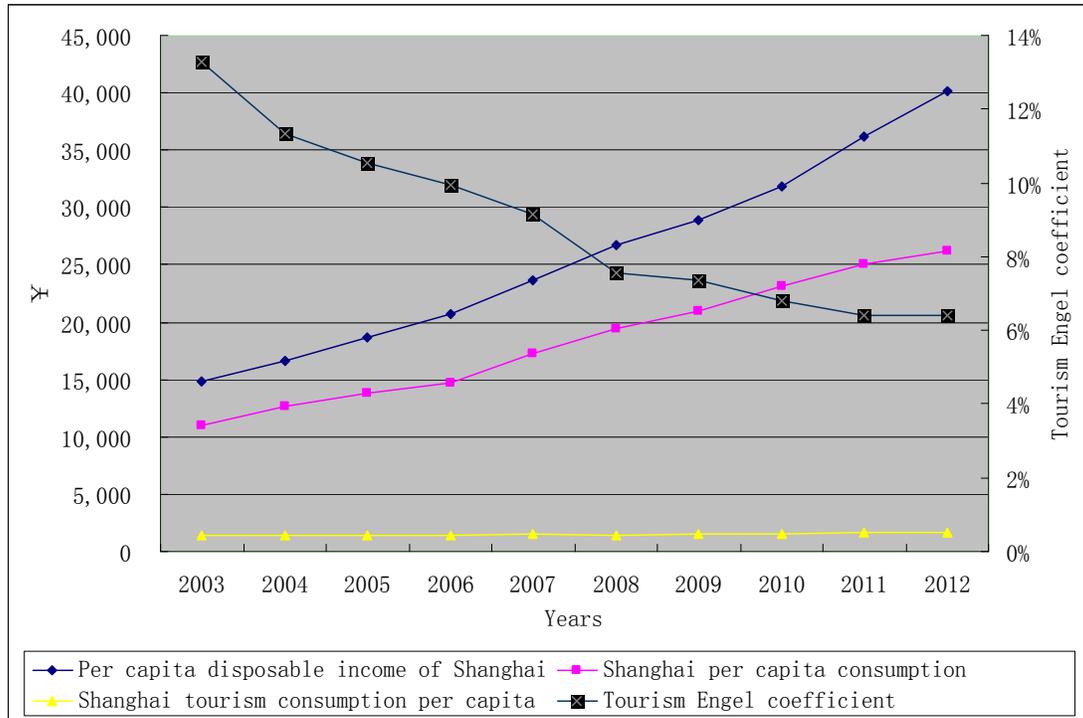


Chart 1. Nearly 10 years Shanghai Tourism Engel coefficient Tendency Chart

Source: Shanghai Statistical Yearbook 2003 – 2012

2.2 The variation of Shanghai tourism consumption in different periods

2.2.1 The scale of Individual tourism consumption and tourism economies do not match

Seen from Table 1, the data from the national statistics show that China's overall average tourist spending and personal consumption has been steadily improving. In 2011, total national tourism spending was 1.93054 trillion yuan, compared with 2003, residents in the country's total tourism consumption reached to 344.23 billion yuan, a net increase of 460.82 percent. In 2011, national per capita tourist spending was 731 yuan per person, national per capita consumption of 395.7 yuan per person compared with the 2003, a net increase of 84.74%. 2012 Shanghai residents tourism consumption reached 1,685 yuan, and compared with 2003 Shanghai residents 1465 yuan per capita consumption have a net increase of 15.02%. Although Shanghai residents' consumer spending shows some growth, but compared with the national tourism consumption, its marginal tourism consumption declined.

2.2.2 Shanghai residents' Tourism Engel coefficient is declining

As can be seen from Chart 1, Shanghai residents' disposable income and consumption levels have a greater degree of improvement, in 2012, Shanghai residents per capita disposable income was 40,188 yuan, and in 2003 Shanghai residents per capita disposable income was 14,867 yuan, a net increase of 170.31%. In 2012, Shanghai residents per capita consumption was 26,253 yuan, and compared with 2003 Shanghai residents per capita consumption was 11,040, a net increase of 130.80%. Although Shanghai residents per capita disposable income and per capita consumption was rising year after year, but can be seen in Figure 2, the Shanghai people's consumption propensity was falling year by year. The proportion of Shanghai people's consumption in disposable income fell from 74.26% in 2003 to 65.33 percent in 2012, while Shanghai residents Tourism Engel coefficient dropped from the highest of 13.27% in 2003 to the lowest of 6.40 percent in 2011.

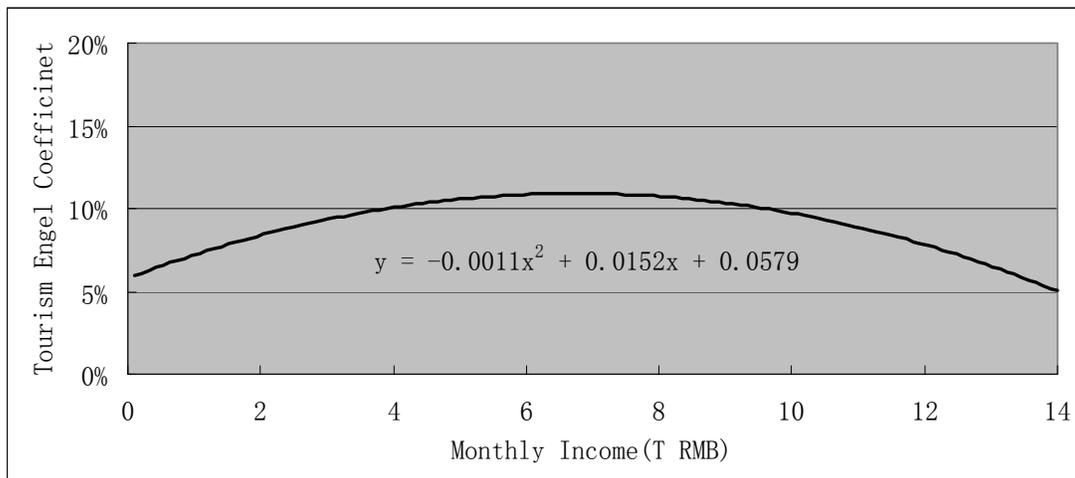


Chart 2. Difference Income Groups' Tourism Engel Coefficient Tendency Chart

2.3 Shanghai different income groups Tourism Engel coefficient Trend Analysis

This study investigated a total of 500 questionnaires, 482 were recovered, the recovery rate was 96.4%. Through the inspection, removing invalid questionnaires, the resulting total 455 valid questionnaires, the effective rate was 94.3%. The survey population income is mainly concentrated in 2000 to 14000 yuan. In order to ensure the accuracy of the data, the groups of income is too high removed out of the crowd. In addition, the group of students in China's current tourism consumption is an important part, and therefore the student is regarded as an important survey.

According to their consumption and tourism consumption, different income groups are classified, and the authors draw respondents' Tourism Engel coefficient derived and make scatterplot. Then, using mathematical statistics derived Tourism Engel coefficient of Shanghai residents trends shown in Chart 2. The regression equation basically meets

$$Y = -0.0011X^2 + 0.0152X + 0.0579$$

Explanatory note: Where X represents the monthly income of Shanghai residents, Y represents Shanghai residents Tourism Engel coefficient

As can be seen from Chart 2, when Shanghai residents' income rise from 0 yuan to 7,000 yuan, the Tourism Engel coefficient shows a gradual upward trend, with incomes increasing, tourism Engel coefficient gradually decreasing. When income is between 4000-10000 yuan, residents Tourism Engel coefficient is above 10% and less than 12%, it shows that middle-income and upper-middle income people are more interested in tourist consumption. When income is between 0-4000 yuan, residents Tourism Engel coefficient ranges from 5% to 10%, originated in the low income. Therefore, the income levels of the population have a low consumer enthusiasm to tourism. When income is between 10000-14000 yuan, consumers Tourist Engel coefficient gradually declines from 10% to 5%. This Group have a higher income level, so consumption is relatively high, but the proportion of its total tourism consumption gradually reduces compared with the proportion of consumption which indicating that this group does not consume the tourism as an key consumer.

3. Shanghai Tourism Consumption Structure Analysis

3.1 The scale of tourism consumption analysis

First, the total tourism consumption growth is accelerating recently, but, in the long-term, marginal consumption is diminishing. Absolute Income Theory hypothesis that the actual consumption expenditure and actual income have a stable relationship. As income increases, consumption also increases. However, the rate of increase in consumption is less than the increase in income, ie diminishing marginal propensity to consume. Secondly, residents Tourism Engel coefficient is gradually leveling off. According to the law of diminishing marginal propensity to consume, residents tourism consumption will be accompanied with an increase in consumer spending decreases and flatten, Eventually stabilize. Chart 1 shows that Shanghai residents Tourism Engel coefficient gradually stabilized at around 6%.

3.2 Tourist Consumption Structure analysis

Different income groups have different consumption patterns, which decide their different tourism consumer characteristics. Shanghai residents tourism consumption in general is still in the development stage. By the level of

economic development, social and cultural factors, there are also some differences in stratification. Specific characteristics embodied in the following two aspects.

First, the Shanghai residents internal tourism consumption have hierarchical tendency. The Shanghai resident market have both consumer convergence tendency and hierarchical trend, due to lacking of disaggregated statistical data, the research is mainly based on the residents' income and career. The China Tourism Yearbook in 2012 Statistics data shows, in accordance with the proportion of cases, shows the Shanghai residents travel rate and spend their occupation that: the Civil Servants is 6.18% and 1482.6 yuan, the Enterprises Management Personnel is 14.27% and 2126.8 yuan, the Professional and Technical Personnel is 14.32% and 1176 yuan, the Services Sale Person is 6.23% and 819.6 yuan, the Workers is 15.23% and 759.4 yuan, the Retirees is 20.38% and 538.1 yuan, the Students is 14.12% and 591.9 yuan and others is 9.18% and 670 yuan.

On the date above we can see that income is positively related to travel and spend. From the hierarchical classification it shows that the highest income levels are private entrepreneurs. They have money, but lack of leisure time. Their and they loved ones' average tourist spending are high, belonging to a high-end tourism products consumers. But the proportion of the population in the general population is very low. It is difficult to expect that they will have a greater growth in the number. Secondly, according to the law of diminishing propensity to consume, there are obvious high-income, high savings and low propensity consumers, most of the revenues tend to translate into savings and investment; despite low-income have a higher propensity to consume, limited by the appropriate purchasing power. The consumption pattern is easy to form consumer fault phenomenon, which lead to the relative lack of consumer demand. Urban middle class is the main tourism consumption crowd. Shanghai is facing a new middle class grows, most of them aged 25 to 30 years old, generally have a higher education, worked finance, securities, information and high-tech industries. There is a higher income, a strong high propensity to consume. Houses, cars and tourism are the hot spots of their consumption. They are the major consumers of mass tourism market. In addition, there are two groups can not be ignored: retired personnel and students. The Retirees income is relatively stable, more leisure time, and the relative price advantage because of avoiding peak travel period. The Students group is related with Chinese modern family structure and educational tradition. Urban low-income urban population in China also accounts for a large share that their income level can only maintain their basic living needs, and their tourism expenditure is limited intensely. Which needs to be noted that, as the Chinese hierarchy further division, the existing tourism statistics index system should be adjusted accordingly, thereby accurately reflect the status of tourism consumption.

Second, the non-fee-based, supplemented by their own expense dualistic market structure. Travel at their own expense includes non-official travel and incentive travel, etc., these forms of tourism have a considerable degree of development in China as early as the rise of China, constituting the main body of the domestic tourism market, which is closely related to the distribution of income in the form of people's time and overall income levels. However, with the economic restructuring and institutional transition, state-owned institutions and enterprises welfare tourism spending and consumption will decline. At the same time, the corporation and institutional autonomy motivate behavior caused by tourism consumption will show a growth trend. Since all of the various non-expense tourism and economic development has a certain degree of positive correlation, with Shanghai's rapid economic development, they also have greater development. But in the long term, compared with the proportion of citizens' tourism at their own expense, their share will decline. The market structure will be from the main public expense, at their own expense supplement into their own expense-based, supplemented by public funds.

Third, the middle class leading market contribute to the average propensity consumption increasing. In general, the high-income class' average propensity to consume is low, and the low income stratum with high average propensity to consume. Therefore, when the income is established, the more equal distribution, the higher total average propensity to consume, and the greater total consumption there is. Since China's reform and opening up over the years, Shanghai's economy have a rapid development, the income level of residents are greatly improved, the rapid development of the income distribution pattern, serious polarization lead to the Gini coefficient increases rapidly. So far, although China has tens of millions of poor people, but also the existence of a large middle class, they are pushing forward the development of China's tourism industry. With the mature form and domestic tourism consumption of the middle class, reduce with the income budget constraint and alternative consumption such as housing, automobile and other content, middle-class future domestic tourism average propensity to consume will further enhance.

4. Shanghai Tourism Consumption optimized path

There is a high degree of positive correlation between economic development and the level of residents consumer spending. In order to improve the level of tourism consumption, Shanghai residents should do something as the following:

First, efforts to increase people's income. Income is the basis of consumption, by adjusting the industrial structure, vigorously develop the tertiary industry and private economy, create more employment and re-employment opportunities to increasing income. At the same time, pay attention to the development of vocational education and re-employment training and education, increase the educated human capital, can increase employment opportunities for the educated, thereby increasing its future lifetime earnings.

Second, in an effort to improve residents' tourism consumption levels. First, strengthen the tourism product development and innovation efforts. Actively develop ecological tourism products to meet the people back to nature and enjoy it; development of cultural tourism, to meet the high level of consumption of tourists, promote tourism product structure upgrading. The second is to strengthen the shopping tourism resources development efforts to develop both a traditional cultural identity and national characteristics, to adapt to consumer demand for spiritual tourists travel products, travel goods increased attractiveness for tourists and improve the level of consumption. Third, strengthening the entertainment infrastructure, improve the entertainment quality of tourism services, efforts to develop national characteristics cultural and recreational activities, and expand the scope of tourists entertaining, to meet the growing tourist demand for personalized consumption.

Third, narrow the income distribution gap. Overall, China's income have a general increase in the level of consumption, but the income gap continues to expand, the low-income groups declining marginal propensity to consume, insufficient effective demand, inhibiting the growth of tourism consumption. Therefore, the Government should increase the overall income levels and improve income distribution structure measures simultaneously, a narrow income distribution gap and increase consumer demand.

References

- Chao Lijun, Ganqiao Lin. (2007). Engel coefficient of urban residents in tourism demand relationship - in Zhongshan, Shunde City as an example. *Guilin Tourism Higher Diploma University*, 2007 (18):341-344.
- Hao Jun, Liu Jie. (2011). Engel limitations analysis - for example in rural areas of Hebei. *Anhui Agricultural Sciences*, 2011 (20):123-137.
- Jia Ying, (2008). China 6 large hot inbound tourism consumption structure of urban comparative study. *Tourism Sciences*, 2008 (03):13-18.
- John Gibson. (2002). Why Does the Engle Method Work? Food Demand, Economies of Size and Household Survey Methods. *Department of Economics Working Paper in Economics*, 2002,(2):31-59.
- Liu Feng. (2011). From the happiness index to see the need for the creation of tourism Engel coefficient. *China Tourism News*, 2011 -06-24 (5).
- Liu SM. (2010). Flow, the creation of "Tourism Engel coefficient". *China Tourism News*, 2010 -12-13 (2).
- Sun Yuanxin. (2009). Shanghai tourism consumption structure and the contribution of macro-analysis. *East China Economic Management*, 2009 (02) :01-03.
- Zhang Lifeng. (2010). Chinese urban residents in tourist spending Empirical Analysis. *Financial Analysis*, 2010 (02):47-50.
- Zu base. (2011). Engel coefficient to travel from the Engel coefficient: Review and Application. *China Soft Science Supplement*, 2011 (12):100-114.