EXPLORING THE EXPENDITURES OF FOREIGN TOURISTS IN TAIWAN ON LOCAL SPECIALTY PRODUCTS AND TEA

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Abstract

In order to understand the expenditures of tourists in Taiwan regarding tea and local famous specialty products, it is essential to examine the demographic nature of the inbound tourists. In this study, information was gathered from the 2015 Annual Survey Report on Visitors' Expenditures and Trends in Taiwan of the Tourism Bureau, Ministry of Transportation and Communications (MOTC), which included 6277 respondents, and analyzed by using ordinary least squares (OLS) regression methods. The analysis shows that gender, age, education, income, country of origin, travel purpose, travel type, and number of days stayed in Taiwan were the most significant factors to forecast the level of purchasing of tea and specialty products. With a greater understanding of these factors, the tourism industry in Taiwan will be able to increase revenue and improve their products and services. Meanwhile, as a reference for Taiwanese

government can re-examine its tourism market to establish new policies and marketing plans to boost local economy.

Keywords

Tea, Specialty Product, Souvenir, Visitor Expenditures, Ordinary Least Square Regression, Taiwan Tourism

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1. Introduction

The development of the tourism industry is a global trend and phenomenon. This growing trend will have an impact on the Taiwanese economy. According to the 2013 World Travel & Tourism Council (WTTC) report, the tourism industry in 2012 contributed $6.6 trillion to the global economy, accounting for 9.3% of global GDP, and the size of the global tourism industry in 2023 is expected to reach 10% of global GDP. Furthermore, about 260 million people were employed in tourism-related industries in 2012, and it is expected to rise to 337 million by 2023 (World Tourism Commission, 2013). Based on the analysis report by the World Tourism Organization (WTO), tourism revenues have become one of the major sources of foreign exchange in many countries, thus creating more internal consumer demand in Taiwan, promoting numerous tourism businesses, and creating jobs.

The World Tourism Organization divides the whole world's sightseeing market into six regions: Europe, America, Asia Pacific, South Asia, Middle East and Africa. At present, Europe is the center of international tourism, accounting for 53% of international tourist arrivals, followed by the Asia-Pacific region, accounting for 20% of international tourist arrivals. Furthermore, international tourists are becoming more and more important in East Asia and the Pacific, while Taiwan is at the center of the East Asia and Pacific region. It is imperative to promote the innovation and development of the tourism industry and the shift in the mainstream of the global tourism market for Taiwan.

UNWTO statistics show that in the year 2015, the largest amount of international tourist arrivals in Asia were in China and the Pacific, followed by Thailand, Hong Kong, Malaysia, Japan, Macau, South Korea, Singapore, Taiwan, and Indonesia. Taiwan ranked seventh in the Asian region. In addition, the World Economic Forum (WEF) conducted a Travel & Tourism Competitiveness Index ranking of 139 countries in 2017 and Taiwan ranked 30th. The countries in Asia that were listed before Taiwan were Japan, Hong Kong, Singapore, China, and Korea. As can be seen from the global tourism survey statistics, Taiwan's tourism industry still has plenty of room for growth.

Although tourism is not necessarily the main source of national economic income for Taiwan, it is an indispensable factor in economic development. This is in part due to the extreme lack of natural resources in Taiwan. In addition to importing, exporting, and trading of economic models, the development of tourism is a very important industry for Taiwan. The number of Taiwan's international tourists in recent years has had a dramatic growth. Since 2009 and for the next six consecutive years, there were millions of people who came to Taiwan as tourists. The number of Taiwan international tourists in 2015 continued to grow, with a growth rate of 5.34%. It also exceeded the threshold of 10.44 million tourists with a US$14.388 billion total annual expenditures. Visitors who spent around US$1,378 stayed about 6.63 nights. In 2015, the average daily expenditures per visitor in Taiwan was US$207.87 with the proportions of consumption of shopping at 34.69%, hotel fees at 32.24%, and meals at 15.76%.

According to the Tourism Bureau in 2016, the detailed shopping expenses from Japan's tour groups of local famous or specialty products was 52.72%; followed by clothes or related accessories (22.57%); and thirdly tea (9.99%). Tourists from Chinese sightseeing groups purchased clothes or related accessories the most, accounting for 30.22%. This was followed by local famous or specialty products (22.10%); jewelry or jade (19.53%); cosmetics or perfume (10.53%) and tea (5.19%). Since local famous specialty products and tea are mostly agricultural products, we combined these two terms together as tea & specialty products in the following research. Tea and specialty local products together make up the majority of tourist expenditures.

It is clear that Taiwan has been gradually demonstrating its efforts to promote the development of its tourism industry. A focus on more sightseeing groups has also formed. In 2009, the growth trend and the percentage of visitors from Asian countries significantly increased and Taiwan became a major tourist destination (Tourism Bureau, 2016). Therefore, this study's purpose will focus on the purchases of tea & specialty products as souvenirs. This study can help Taiwan's tourism industry by developing a better understanding of the types of products that are purchased by tourists, and learning to cater to their demands.

2. Literature Review

2.1 Tourism Shopping

Shopping tourism is a unique form of tourism where shopping is the primary purpose for taking a journey (Coles, 2004; Timothy, 2005; Choi et al., 2016). According to Rosenbaum & Spears (2005), the choices for tourists' shopping are related to their gender, age, and income. Studies have also stated that personal characteristics, cultural background, and social class

influence the tourists' expectations, activities, product preferences, behavior, and places where they shop (Mok & Lam, 1997; Prideaux & Kim, 1999; Wong & Law, 2003).

There are several significant explanations for tourists' shopping around, besides economic necessity. Firstly, Bellenger & Korgaonkar (1980) mentioned that shopping could be seen as a leisure pursuit, motivated by enjoyment and pleasure. Murphy and Moscardo (2011) also treated tourist shopping as a contemporary recreational activity that involved looking, touching, browsing and buying; and a tourist's satisfaction can be related to their perception of their shopping experiences during their stay at a destination (Wong & Wan, 2013).

Secondly, since tourist shopping is a highly social and psychological undertaking, tourists are motivated to shop by a desire to create tangible memories of an enjoyable holiday experience (Timothy, 2005). Souvenirs are treated as material objects connecting people with places and memories, which do not function only as a reminder of how the destination visited looked like, but may also symbolize tourists' traveling experiences, representing a particular memorable moment (Morgan & Pritchard, 2005). On the other hand, there is also a symbolic value for tourists buying souvenirs - a means to transmit the culture and history of a destination (Litirell et al., 1994). Therefore, a tourist's purchase at their destination becomes the evidence and reminder of their travel experience.

Apart from storing memories for tourists themselves, tourism shopping aims to maintain social networks and to maintain reciprocal obligations by buying gifts for family and friends (Moscardo, 2004; Wilkins, 2011). It is regarded as a sign of prestige and identity, as well as representing a certain societal status. According to Kim and Littrell (2001), tourists look for products that were portable and not easily damaged when buying for others. Moreover, Kwek and Lee (2015) introduced the concept of 'face' regarding tourism shopping, observed in particular with Chinese corporate travelers. Souvenir gifts carry symbolic values, such as achievement, empowerment, and socially well-off status, especially gifts that are brandname (Zhou & Hui, 2003).

3. Data and Methods

3.1 Data

The data in this study comes from the Taiwan Tourism Bureau's "2015 Annual Survey Report on Visitors' Expenditures and Trends in Taiwan". The Tourism Bureau of Ministry of Transportation and Communications (MOTC), analyzed the motives, viewpoints, tendencies, and consumption of inbound visitors in Taiwan in 2015 to supply reference material to tourist-related

organizations in order to improve sightseeing facilities in Taiwan and to plan international tourism advertisements and marketing strategies. The survey can be used as a source of information to estimate the amount of visitors' expenditures, as inbound visitors had been interviewed as they were about to leave Taiwan at the following airports where the source of data collection: Taiwan Taoyuan International Airport, Kaohsiung International Airport, Taipei Sonshan Airport, and Taichung Airport.

This survey still adopted the method of "Quota Sampling," which conformed best to the control of working standards and the characteristics of the samples to achieve random and sample representatives. The subjects of this survey were foreign visitors and overseas Chinese inbound visitors from January 1 to December 31, 2015 (excluding foreign and overseas Chinese transit visitors). Proficient in English, Japanese, Korean and other languages, the interviewers conducted face-to-face interviews with outbound travelers at multiple airports. Before the interview, the interviewee was informed of the purpose of the investigation. The number of valid samples was 7,239 persons in total.

3.2 Variables Definition and Distribution

The survey is to understand factors that influence inbound visitors' purchases of tea and specialty products and total expenditures in Taiwan. Based on the 2015 Annual Survey Report on Visitors' Expenditures and Trends in Taiwan, the respondents' demographics of gender, age, education, and income will be the control variables. Their country of origin will be categorized into 5 different regions: western countries such as USA, Canada, Britain, France, Germany, other European countries, Australia & New Zealand; Southeast Asia such as Singapore, Malaysia and other Asia countries; Northeast Asia such as Japan and Korea. Tourists' travel purposes as sightseeing, shopping, and cuisine & fruit are set to be dummy variables since they were multiple choice in the survey. Travel type as group travel, packages, and independent travel are the independent variables. The results of this survey are shown in Table 1.

3.3 Data Analysis Method

A descriptive statistical analysis of the respondents' characteristics is shown in Table 1. The analysis of the ordinary least squares (OLS) regression model explores the purchases of tea and specialty products by inbound visitors in Taiwan and total expenditures in Taiwan as relevant influencing factors. In the analysis model, personal characteristics of the tourist (total consumption, tea & specialty product purchases, gender, age, education, income,) are the control variables and country of origin, travel purposes, and travel type are independent variables.

The Model：

Tea & Specialty Products Consumption = β_0 + β_1 Person Characteristics + β_2 Country + β_3

Travel Purpose + β_4 Travel Type + β_5 # of Day Stay + ε (1)

Table 1: *Descriptive Analysis (n = 6,277)*

Variable	Mean	Std. Dev.
Total Consumption	1167.64	1726.49
Tea & Specialty Products Consumption	230.73	373.31
Gender	0.42	0.49
Age		
Under year 29	0.30	0.46
Year 30-39	0.22	0.41
Year 40-49	0.17	0.38
Year 50-59	0.17	0.37
Over year 60	0.14	0.35
Income		
Income under US$9,999	0.41	0.49
Income US$10,000-$29,999	0.30	0.46
Income above US$30,000	0.29	0.45
Education		
Elementary School	0.13	0.33
High School	0.22	0.42
College	0.65	0.42
Country of Origin		
Western countries	0.07	0.25
Southeast Asia	0.12	0.33
Northeast Asia	0.21	0.41
China	0.44	0.50
Hong Kong and Macau	0.16	0.36
Travel Purpose		
Sightseeing	0.61	0.49

Shopping	0.25	0.43
Eating (Cuisine & Fruit)	0.44	0.50
Travel Type		
Group Travel	0.33	0.47
Packages (Flights & Hotels)	0.35	0.48
Independent Travel	0.35	0.48
# of days stay in Taiwan	6.56	6.88
# of time visited Taiwan	1.84	2.42

Source: Research organized

Among the collected questionnaires, males accounted for 42% while the females accounted for 58%. As for age, most of them were under age 29 (30%), followed by those aged 30-39 (22%) and 40-49 (17%). Meanwhile, most of them had an income of under US$ 9999 (41%), followed by US$10,000-$29,999 (30%). Most of the interviewees were college-educated or above (65%). Most of them were from China (41%), followed by Northeast Asia (21%), and Hong Kong and Macau (16%). The travel purpose of visitors was mostly sightseeing (61%), then eating (44%), and lastly shopping (25%). Most of the visitors' travel type was independent travel, followed by package tours of flights & hotels, then group travel. Normally, tourists stayed in Taiwan for 6.56 days with 1.84 having visited Taiwan before.

4. Results and Discussion

4.1 The OLS Regression Analysis of Tea & Specialty Product Factors

The results of the OLS regression test show most of the variables are significant, as shown in Table 2. In the control variables, there is a very significant correlation between gender and specialty products consumption (β= -0.58), with males being 58% less likely to purchase tea & specialty products than females. Age has a significant positive predictive effect on purchasing tea & specialty products. Using respondents under 29 as the reference group, respondents aged 40-49 ($\beta = 0.73$), aged 60 and above ($\beta = 0.58$), aged 50- 59 ($\beta = 0.52$) and aged 30-39 ($\beta = 0.43$) had positive β values, indicating that the older the age, the higher the probability of purchasing tea & specialty products. The respondents who are college-educated are 61% more likely to buy tea & specialty products than elementary school-educated respondents, but high school-educated respondents are 36% more likely than college respondents to buy them. This suggests that visitors who have at least a high school degree will be more likely to buy tea & specialty

products as souvenirs. Regarding income level, visitors' with an income between US$10,000-
$29,999 are 41% more likely than those with an income under US$9999 to purchase tea &
specialty products.

Table 2: *Tea & Specialty Products Consumption (%)*

Variable	Coefficient		S.E
Control Variable			
Gender			
Reference Group: Female			
Male	-0.58	**	0.22
Age			
Reference Group: Under age 29			
Age 30-39	0.43	***	0.12
Age 40-49	0.73	***	0.18
Age 50-59	0.52	***	0.17
Above age 60	0.58	**	0.21
Education			
Reference Group: College			
Elementary school	-0.61	*	0.31
High school	0.36	**	0.12
Income			
Reference Group: Income under US$9,999			
Income between US$10,000-$29,999	0.41	***	0.10
Income above US$30,000	0.10		0.21
Independent Variable			
Country of Origin			
Reference Group: Western Countries			
Southeast Asia	4.13	***	1.07
Northeast Asia	5.68	***	0.32
China	6.36	***	0.36
Hong Kong and Macau	5.53	***	0.32
Travel Purpose			

Sightseeing	0.29	*	0.15
Shopping	0.51	**	0.17
Cuisine & fruit	0.41		0.27
Travel Type			
Reference Group: Packages			
Group travel	1.25	***	0.21
Independent travel	-0.53	***	0.16
# of days stay in Taiwan	0		0.01
# of time visited Taiwan	-0.14	***	0.02
***, **,* indicates level of significance in 1%, 5%, 10% respectively			

Of the independent variables, the visitors' country of origin, travel purpose, travel type, and number of times having visited Taiwan are significant positive predictors. Compared with visitors from Western countries, visitors from China (β = 6.36) are 6.36% more willing to purchase tea & specialty products, followed by Northeast Asian visitors (β = 5.68) at 5.68%, then Hong Kong & Macau visitors (β = 5.53) at 5.53% and lastly Southeast Asian visitors at (β = 4.13) of 4.13%. This shows that in recent years, Asian tourists have played an important role in Taiwan's tourism economy. For the travel purpose section, visitors' purpose of shopping (β = 0.51) and sightseeing (β = 0.29) are significant, indicating that those who traveled for shopping will be 0.51% more likely to purchase tea & specialty products, and those who traveled for sightseeing will be 0.29% more likely to buy them. As for travel type, independent travel visitors are 0.53% less likely than package visitors to purchase tea & specialty products. However, group travel (β = 1.25) visitors are 1.25% more likely than package visitors to buy tea & specialty products as souvenirs. The number of times having visited Taiwan makes a visitor 0.14% less likely to buy tea & specialty products. The number of days stayed in Taiwan does not affect whether visitors want to buy tea & specialty products.

4.2 OLS Regression Analysis of Total Consumptions Factors

The total consumption of personal characteristics of inbound visitors in the study (gender, age, education, income) are control variables. Country of origin, travel purpose, and travel type are the independent variables. Age has a significant positive predictive effect on total consumption. Using respondents under 29 as the reference group, respondents aged 50-59 (β = 0.26), aged 60 and above (β = 0.24), aged 40-49 (β = 0.21) and aged 30-39 (β = 0.16) had positive β values, showing that the older the age, the higher the probability of shopping during

the trip. As for income level, using respondents earning less than US$9999 as the reference group, visitors with an income above $30,000 ($\beta = 0.15$) and those with an income between US$10,000-$29,999 ($\beta = 0.13$) had positive β values, making them more likely to go shopping.

Table 3: *Total Consumptions (%)*

Variable	Coefficient		S.E
Control Variable			
Gender			
Reference Group: Female			
Male	-0.01		0.05
Age			
Reference Group: Under age 29			
Age 30-39	0.16	***	0.02
Age 40-49	0.21	***	0.04
Age 50-59	0.26	***	0.03
Above age 60	0.24	***	0.05
Education			
Reference Group: College			
Elementary school	-0.05		0.06
High school	-0.02		0.04
Income			
Reference Group: Income under US$9,999			
Income between US$10,000-$29,999	0.13	***	0.03
Income above US$30,000	0.15	*	0.07
Independent Variable			
Country of Origin			
Reference Group: Western Countries			
Southeast Asia	0.28	*	0.15
Northeast Asia	-0.13	*	0.07
China	1.05	***	0.06
Hong Kong and Macau	0.34	***	0.05
Travel Purpose			

Sightseeing	-0.01	0.02
Shopping	0.18 ***	0.03
Cuisine & fruit	0.02	0.04
Travel Type		
Reference Group: Packages		
Group travel	-0.18 ***	0.02
Independent travel	0.13	0.11
# of days stay in Taiwan	0.03 ***	0
# of time visited Taiwan	-0.01	0.01
***, **,* indicates level of significance in 1%, 5%, 10% respectively		

Of the independent variables, the visitors' country of origin, travel purpose, travel type, and number of days stayed in Taiwan are significant positive predictors. Compared with visitors from Western countries, visitors from China ($\beta = 1.05$) are 1.05% higher on total consumption, followed by Hong Kong & Macau visitors ($\beta = 0.34$) at 0.34%, Southeast Asian visitors ($\beta = 0.28$) at 0.28% and Northeast Asian visitors ($\beta = -0.13$) at -0.13%. This indicates that Asian tourists play an important role in Taiwan's tourism economy. For the travel purpose section, only visitors' purpose of shopping ($\beta = 0.51$) is significant. As for travel type, group travellers ($\beta = -0.18$) are -0.18% lower than package visitors on total consumption. The number of days stayed in Taiwan does not affect their total consumption.

5. Conclusion

In recent years, under the trend of globalization, there has been a growing value in the tourism industry. The tourism industry is of particular importance to the development of countries. It is also a major factor in promoting economic growth. Taiwan is no exception. Looking back at the development of Taiwan's tourism industry, the opening up of Taiwan to Chinese tourists in the past seven years has induced rapid and vigorous development and outstanding contributions to Taiwan's economic growth. After the Chinese tourists' free travel was officially launched, it set this development in motion.

The positive effects of opening up Taiwan to Chinese tourists on the Taiwanese economy are quite obvious. Four indicators of economic growth can be concluded from this. Firstly, it has exponentially increased Taiwan's foreign exchange. Secondly, it has stimulated the

development of related industries. Thirdly, it has expanded the external economy of Taiwan, and fourthly, it has increased employment opportunities.

Since Taiwan opened itself up to Chinese tourists, Taiwan's tourism looked promising. Originally, Taiwan was of high interest to Chinese tourists due to it being new and exotic to them. However, over time the novelty of Taiwan wore off, and there has been less of a demand for Taiwanese goods. The quality and price of the items in Taiwan's specialty gift shops are often not in line with the desires of Chinese tourists. Gradually, the desire of Chinese tourists to purchase goods has also fallen dramatically. This has seriously affected the income of tour operators' shopping commissions and has led to a negative impact on Chinese tourism visiting Taiwan.

Like other studies, this research has its limitations; first, the related research of this field is limited due to none of topic about expenditures of foreign tourists in Taiwan local specialty products and tea has been done in Taiwan or even worldwide. The most related research is only about tourism shopping in souvenirs and not even related to shopping the agricultural products. Second, the dataset is released once every year from the Taiwanese tourism bureau. However, it has to wait for almost one year to actually get previous year dataset. The rapidly change of truism trend might not be able to adapt in the current year.

For the further studies, we would likely to seek for newer or upcoming dataset for further research. Subsequent research suggests that in the future, a cumulative study of recent studies on visitor spending and movement surveys in Taiwan should be conducted to observe the long-term stability of consumer spending behaviors and trends. Due to the complexity of the variables required to process data, different statistical methods are required to determine target markets. Research on consumer behavior should be further utilized in constructing more effective marketing strategies.

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