DIFFERENCES IN TOURISM IMAGE AMONG CRUISE PASSENGERS ACROSS THE TAIWAN STRAITS

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ABSTRACT

This study conducts an investigation of cruise passengers across the Taiwan Straits in an attempt to compare travel destination features among the three major port cities of Shanghai, Hong Kong, and Taipei (Keelung), and to obtain findings regarding passengers profiles. Data were collected in two phases, 2006 and 2010; 163 statistically valid samples were obtained. The results show that up to 66% of cruise passengers have distinct impressions of these three cities. In addition, the cross table of indicators in this study shows that the 10 indicators of destination attractions are evaluated positively. However, differences exist. Cruise passengers put more emphasis on 'reasonable expenses', 'convenient transportation', 'sufficient fundamental facilities', and 'abundant cultural and historical landscapes' than on other impression indicators. 'Passionate and friendly residents', for example, is evaluated as relatively less important. The results of this study provide research findings for the shipping and tourism industries in both China and Taiwan. This study also hopes that some new directions be established for future studies of cruise passengers.

JEL: M31

KEYWORDS: Cruise Port, Cruise Passengers, Tourism Image

INTRODUCTION

This paper investigates the experiences of cruise passengers across the Taiwan Straits to provide research findings for the shipping and tourism industries in both Taiwan and China. Currently, Taiwan and China are in the process of negotiating policies on Asian cruise lines. Thus, studies of cruise lines across the Taiwan straits are still in development, and official statistics documenting the consumption and contribution of passengers from various countries of the world are difficult to obtain. This study systematically lists the data of the major cruise ports in Asian countries. Table 1 shows that China, Japan, Malaysia, and Singapore have finished establishing wharfs exclusively for cruise ships. From the statistics of all the international cruises that go through these ports, it is apparent that there is a tremendous gap of supply and demand between cruises anchoring and the tourists who visit these destinations.

Table 1: Asia Main Cruise Ports

Caters				_		
Ports	Berth	Depth; m	LOA; m	Tonnage	Walkway	Terminal
Yokohama, Japan	4	12	900	70,000	yes	yes
Yangshan, China	4	15	880	110,000	yes	yes
Xiamen, China	2	17	460	110,000	yes	yes
Hong Kong, China	2	10	700	50,000	yes	yes
Port Klang, Malaysia	3	12	660	50,000	yes	yes
Singapore	2	12	580	110,000	yes	yes

Source: adopt from port's websites (Kelang, 2009; Singapore, 2008)

According to a study by Douglas & Douglas (2004), the Asia-Pacific region has experienced strong growth in the cruise markets, mainly because of its investments in Malaysia's Star Cruise Company. Star Cruises used to be a small and regional company. In 1993 they were able to afford to buy a Scandinavian

casino ship, and since 2004 they have ranked as the world's third largest cruise group. In Shanghai Port on November 2002, Star Cruises held a maiden voyage ceremony for their two super-star cruises. In fact, for several years Star Cruises has been planning the itineraries for cruises departing from Shanghai that originate in various regional areas, including Vietnam's Ho Chi Minh City, Thailand's Bangkok, and Phuket Island. Thus, the Star Cruise Company is gradually opening the market share in Asia, which it began to do in 2003. The study also points out that after Star Cruises acquired the Norwegian Cruise Line and the Orient Line in 2000, it became an influential large cruise group company in the world's cruise markets, with 26,000 beds and 20 cruises. Over the past decade, cruise traveling in the Asia-Pacific region has experienced a growth rate of 123% on the basis of very few markets. Douglas & Douglas (2004) suggests that the cruise markets in Asia will improve year after year and that Star Cruises will soon occupy a significant market number in the cruise traveling markets in Asia-Pacific countries. Among Taiwan's cruise markets, Star Cruises already serves as the major company, offering a regular itinerary for sailing from Taiwan to Japan since 1993 (Star Cruises, 2007).

Chao (2005) points out that a decisive influence on the development of the cruise industry in Taiwan will be whether it carries out the plan to have three direct links of cruises across the Taiwan Straits. According to the related empirical findings of Cruise Line International Association (CLIA), the cruise industry has been frequently accompanied by economic benefits (CLIA, 2006). Furthermore, Taiwan belongs to an island country and all the ports have the potential for developing cruise tourism. Thus, exploring the trends of development in cruise markets has already become a top priority.

This study takes as a premise that Taiwan is promoting its cruise industry internationally. Accordingly, the study focuses on the differences in tourism images among the Sino-Asian cruise passengers in the major cities across the Taiwan straits, including Taipei, Hong Kong, and Shanghai. It also considers the differences between Sino-Asian cruise passengers and international passengers. By analyzing these differences, this study hopes to provide future researchers with a reference for instituting product marketing and market positioning.

LITERATURE REVIEW

Cruise Passengers

The UNWTO (2009) Statistics Journal shows that the number of international tourists in Taiwan during the 2008 financial crisis was the lowest among the countries in the Asia-Pacific region, although Taiwan still had a growth of 11.6% (Table 2).

Table 2: International Tourists Arrivals in the Asia Pacific Region (thousands)

Regions	2007	2008	Growth (%)
China	54,720	53,049	-5.8
Hong Kong	17,154	17,320	-5.6
Japan	8,347	8,351	-25.3
South Korea	6,448	6,891	14.9
Macau	12,942	10,605	-7.9
Taiwan	3,716	3,845	11.6

Source: UNWTO World Tourism Barometar, Interim September 2009

This figure indicates that there are much room for growth in the number of Taiwan's international tourists. At present, however, the environment across the Taiwan Straits and the trend of economic boom are most suitable for developing local tourism industries. In the short term, the industry most likely to be associated with tourism will be the transportation industries. While there has been little discussion of marine tourism and passenger transporting, this can partly be attributed to the very small number of international tourists entering customs through ocean shipping. Another difficulty in promoting marine tourism has been the problem of tension across the Taiwan Straits, which has persisted for years. In addition, according to the

2008 annual statistics of the Tourism Bureau in the Ministry of Transportation and Communications, Taiwan, the overall number of tourists who travel by ships has been a mere 1.5% on average in recent years. However, according to the data of UNWTO collated by Perucic (2007) as Table 3 shows, the growth rate of cruise tourists has been higher than that of general tourists over the past twenty five years.

Table 3: 1980-2005 World Cruise Passenger Growth

Year	Tourist arrivals in mil.	Annual growth rate(%)	Cruise passengers in	Annual growth rate(%)
			mil.	
1980-1985	285,9-327,2	2.3	1,8-2,8	7.7
1986-1990	338,9-458,2	6.2	3,3-4,5	6.4
1991-1995	463,9-565,5	4.0	4,92-5,67	2.9
1996-2000	596,5-681,3	2.7	6,5-9,72	8.5
2001-2005	680,3-802,0	3.3	9,92-14,47	7.8
1980-2005	285,9-802,0	6.6	1,8-14,47	13.9

Source: Perucic (2007)

For American tourists, who are the major existing consumers of cruises, the market in the Asia-Pacific region is still an undeveloped territory. According to an annual report of industrial surveys based on samples of American cruise passengers, Southeast Asia and China together with Japan occupy 12% and 6% respectively of the potential market for tourism consumption worldwide (Table 4). Compared with the Caribbean and the Mediterranean region, this is certainly negligible (CLIA, 2008).

Table 4: Appealing Places to Cruise (2008)

	Rep.		Cruise I	Passengers (Cruiser	s)
Cruise Types	Sample	Destination	Luxury	Premium	Contemporary
Southeast Asia	1%	12%	8%	3%	2%
China/Japan	1%	6%	10%	3%	2%

Source: CLIA (2008)

On the basis of consumer responses, the CLIA (2006) predicts that the number of tourists taking cruises will probably be up to 31,028,000 within the next three years. 79% of cruise tourists show their interest in cruise traveling once again in the future. 71% of cruise tourists look forward to cruise traveling once again within the next three years. Non-cruise vacationers also express their interest in cruise traveling. Among 56% of non-cruise tourists, more than half are interested in cruise traveling and 53% look forward to cruse traveling within the next three years.

Cruise Port Cities

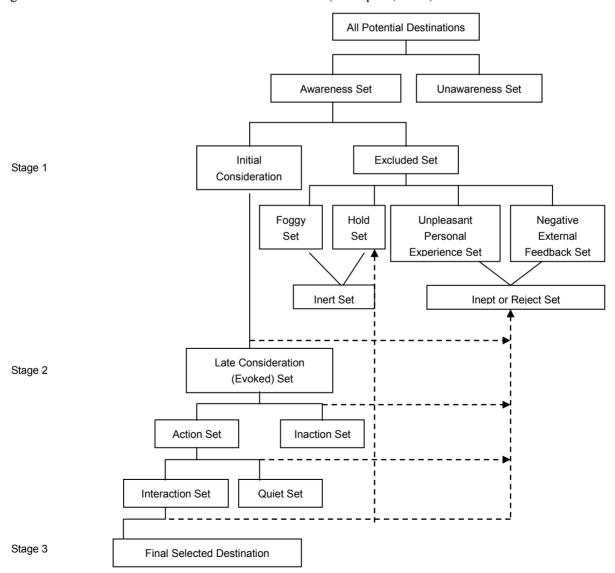
Depending on its attributes, a cruise port city can be a home port, port of call, destination port, repositioning port, or other type of port. Regardless of port type, studies investigating the cruise industry, along with the responses of tourists, indicate that a cruise port city satisfying to tourists has to rank high on various local features. These include, among others, attractiveness, culture, safety, accessibility, and user friendliness (Gibson, 2006). Fogg (2001) divided cruise ports into two categories: Origination Port and Destination Port. He also defined a homeport as adjacent to cruise markets and equipped with the support of air and land transportation. A homeport can carry out its own maintenance and supply to meet visitors' needs for accommodation and tourism. The main purpose of the so-called "port of call" with regard to tourism is to accommodate a voyage with a cruise itinerary of three-to-seven days (Chao, 2005). The peripheral facilities of all port cities must include shopping facilities, beaches, water sports, eco-tourism, historical preservation, international conference accommodations, and other peripheral facilities. In addition, the presence of local tourist attractions will be, for many tourists, a determining factor in whether they will visit the port again (Chao, 2005). However, this may not be as significant

among cruise tourists as among others, since cruises generally insist on a "Total Inclusive Package," which makes the price of cruise tourism products higher than that of general tourism products. For example, the roundtrip air-sea or flight-cruise package, to-and-fro pick-up of the whole journey, accommodation on cruises and lands, full-day meals, onboard activities, entertainments, even port taxes and tips are all included in the cost of the package (Lu & Liu, 2002).

Cruise Product Choice Sets

Crompton (1992), the American scholar, introduced the theory of choice set, which has been verified by the decision-making model of cruise tourists proposed by Petrick, Li & Park (2007). His study adopted the method of focus groups to investigate the tourists on ABC Cruises sailing in the Caribbean. The study discovered that cruise tourists began to make their travel decisions an average of 5.7 months before their departure date. However, they made their final decisions less than one week (5.5 months) later. When they began to make their decisions, most of them decided to take cruises for vacation purposes and to take ABC Cruises. Tourists selected the cruise products that appealed to them from the itinerary they were shown, and from the ship itself. For a few of the respondents who had not considered taking ABC Cruises initially, they finally went with them because the cruise line had its own brand value.

Figure 1: Structure of Vacation Destination Choice Sets (Crompton, 1992)



Among the pattern of destination choice sets that Crompton (1992) proposed, the decision-making pattern is shown as Fig. 1. All brands of a certain product are included in the total set. However, consumers do not necessarily know all the existing brands. The "awareness set" refers to brands that consumers know, and the "unawareness set" refers to brands that they do not know. When consumers consider the purchase of certain brands, those that retain their interest are referred to as the "evoked set" and these are considered positive. Among the brands that are excluded from consideration, those that consumers cannot evaluate due to insufficient information become the "inert set." They are considered neither positive nor negative. The brands that are refused by consumers become the "inept set." One reason consumers might refuse a certain brand is that their experiences with it have been unpleasant. Negative second-hand information can also influence consumers to refuse certain brands. Of course, a brand can change its name, advertise itself differently, and improve its quality, all of which will make consumers believe that it is a new or improved brand.

Crompton (1992) suggested that the concept of choice sets is applicable only to complex decision-making behavior, namely, non-procedure decision-making combined with consumer participation in high involvement products. The other three main types of consumer behavior may not be suitable for this model. These other types are: brand loyalty behavior, which refers to consumer participation in high involvement products coupled with low complexity of information; limited decision-making behavior, defined as participation in low involvement products coupled with high complexity of information; and habitual behavior, understood as participation in low involvement products coupled with low complexity of information (Assael, 2004). In addition, Crompton specifies that choice sets are a tool for analysis, not an explanatory pattern because it cannot explain the internal and external functions of the model. Crompton (1992) and his colleagues proposed a pattern of tourist choice sets. The pattern shows that tourists will go through three stages of decision-making in the process of determining their final tourist destination spot. This means that their decisions can be classified in terms of sets, with three sets in total: the Initial Consideration Set, Late Consideration (Evoked) Set and Final Selected Destination Set.

Economic Contribution via Ports and Cruisers

In recent years, rigorous study has been conducted on the economic contributions of ships calling at ports. Douglas & Douglas (2004) and Dwyer & Forsyth (1996) studied cruises' economic contribution to ports, they proposed four related forms of expenditure: (1) Passenger expenditure, (2) Crew expenditure, (3) Port expenditure, and (4) Operator expenditure (Table 5). Douglas (2004), the Australian scholar, analyzed the contribution of cruise expenditure to one of the Pacific Islands, Vanuatu, which obtains 7.6 Australian Dollars in foreign exchange income in one year. However, Dwyer et al. (2003) indicate that it is extremely difficult to figure out the economic contribution of ships calling at local ports. In 1999, Dwyer analyzed the contribution of cruise tourists in Queensland and Cairns, Australia and found that the economic contribution of a single cruise to the port of call is 108,000 Australian dollars. However, the economic contribution to the homeport can be up to 680,000 Australian dollars. The statistics of Queensland, Australia show that cruise passengers made a contribution of 1 billion Australian dollars to Australia's foreign income when Melbourne Port served as a port of call during the period of 1998 to 2000 (Cruising Victoria, 1999). Also, New Zealand's recent study discovered that every port of call ship makes a contribution of 107,000 Australian dollars, on average (McDermott, 2001).

When Hritz & Cecil (2008) discussed the influence and investment behavior of cruise traveling on the sustainable use of local land in Key West, Miami, Florida, USA, the basis for their study was the Land Use Model (LUM) proposed by Vera Rebollo and Ivars Baidal (2003) and developed for major tourist destinations. According to UNWTO, LUM is the standard indicator for sustainable tourism development. It includes five items: (1) current and potential passenger resources, (2) structure of land use, (3) structure of demography, (4) structure of economy, and (5) tourist demand-supply relationships. This indicator had a major and representative influence on Spain's development of tourist spots in coastal, urban and rural areas. As a result, researchers such as Hritz & Cecil (2008) have adapted the model to determine the indicators of influence in terms of cruise traveling. These are shown in Table 6, the indicators related to ports cover almost all the potential parameter factors of tourist cruise markets, as well as regional ports.

Table 5: Cruise Related Expenditures

Passenger expenditure	Operator expenditure	Crew expenditure
Airfares to and from base	Port expenditures	Local crew
country	government charges	Port expenditure by foreign crew
Internal travel	port charges (including terminal)	Ship maintenance
Add-on expenditure:	towage	Marketing in base country
Accommodation	Provedoring:	Taxes:
meals	stores and provedoring	income tax
shopping	bunkering	customs duties
excursions	service(waster disposal, water)	departure taxes
Port expenditure:		
meals		
excursions and travel		
shopping		

Source: Dwyer & Forsyth (1996)

Table 6: Land Use Model Indicators and Parameters of Cruise Tourism in Key West Florida

Indicator	Parameters
Current resources	Three docking facilities, Mallory Square dock, Pier B and the Outer Mole Pier
	Old Town and New Town
	Perceived increase in arrivals from shorter cruise itineraries
	Steady and unprecedented growth in passenger arrivals
Potential resources	Can accommodate additional berths in the harbor
	Have the physical means to make another dock
	Development plan for Truman Waterfront
	Ferry boats viewed as alternative growth
Demographics of residents	Low unemployment rate
	High living costs
	Transient community due to high cost of living
Demographics of passengers	Upper scale passengers on smaller cruise lines
	Perceptions of passengers on 3-5 day cruises of lower socioeconomic status, who cannot
	afford to return to destination
Economic structure	Rely on an economy based on tourism
	Disembarkation fees: have to be used directly in relation to serving cruise ship passengers
	How much money can a passenger spend in a short period of time?
Changes in land use and structure	Shift in retail, serving only the cruise ship passengers
	Hotels converting to condominiums
Tourist demand – supply relationship	Crowding
	More ships and more passengers affecting the image of destination as laid back

Source: Hritz, N., & Cecil, A. (2008); Vera Rebollo and Ivars Baidal (2003).

Based on the above literature, this study analyzes the attractiveness of port cities in terms of various tourism options, which the study lists as impression indicators. These indicators are primarily based on tourism images of Taiwan that have been developed by Taiwan's Tourism Bureau (2009). Table 7 shows that in terms of shipping, port management practices, and tourist impressions, long hours are needed in cruises for tourists to experience "natural and ecological landscapes" and "original natural features." However, a consideration of these and other factors that contribute to the impressions of cruise tourists is not commonly found in the literature. Therefore, this study is conducted by interviewing cruise passengers, and analyzing to verify the indicators used in this exploratory research area.

Table 7: The Indicators of Harbor Image Development Dimensions

Evaluation Dimensions	Detailing Indicators	Authors
	Climate	Crouch and Ritchie (1999)
Natural & Ecological Landscapes	Scenery	Swart et al.(1974)
	Landscape	
	History	Swart et al.(1974)
Cultural and historical landscapes	Music	Gibson (2006)
	Attractive and Cultural	
Modern City Landscapes	Cities Planning	Hritz, N., & Cecil, A. (2008)
Original Natural Features	Minerals	Ritchie (1975)
Sufficient Fundamental Facilities	Harbor Facilities	Hritz, N., & Cecil, A. (2008)
	Population	Hritz, N., & Cecil, A. (2008)
	Low unemployment rate	
Reasonable Consumption level	High Living Environment	
	Temporary Residents	
	Community	
	Accessibility	Gibson (2006)
Convenient Transportation	User Friendly	
	Transportation systems	Gallarza et al. (2002)
Passionate & Friendly Residents	Safe	Gibson (2006)
	Creative activities	Poon & Eliot (1993)
Various Tour Selections	Harbor Store Consumption:	Douglas & Douglas(2004)
various four Selections	Food and Shopping	
	Shore Excursions	
Features different from tourist's Home	Cruise Port Image	Petrick, Li & Park(2007)
Town	City Image	

Source: adopt from the above literatures

METHODOLOGY

This study conducted an investigation of tourism image by distributing a questionnaire survey to cruise tourists in the Sino-Asian region in 2006 and 2010. The 2006 samples were taken from the route of Singapore to the Straits of Malacca and the 2010 samples were taken from the direct route across the Taiwan Strait of RCI and Costa Cruises. 150 copies of the questionnaire were distributed to cruise tourists in the 2006 survey, and 116 valid samples were returned. For the 2010 survey, 60 copies of the questionnaire were distributed and 47 valid samples were returned. Afterwards, some changes were made to the questionnaire due to a re-arrangement and re-analysis of the sample structure for the development of future studies.

This study adopted various tools to analyze the tourism images of Taipei, Hong Kong, and Shanghai, and also to determine whether cross-regional differences exist in the demography of cruise tourists to these three port cities. The tools included SPSS to conduct the descriptive statistics, percentage, and the Chi-Square Test (homogenous test).

RESULTS

Description of Cruise Passengers

A total of 116 valid questionnaire copies were returned in the 2006 survey, and these were mainly from the multi-national Asian tourists. Tourists from 17 countries were interviewed in the original questionnaire. Singaporeans occupied the major respondents, accounting for 20%. Malaysian was in the second place, accounting for 15 %. The Chinese in both China and Taiwan also accounted for 20%. The

statistics indicated that the Chinese tourists occupied the majority in Star Cruise. The Australian and Indian tourists were in the third place, accounting for less than 10%. These figures show a high degree of internationalization in cruise traveling.

A total of 47 cruise tourists were interviewed in the 2010 survey. These were mainly tourists who took the direct links across the Taiwan Strait. All visitors were from Shanghai, Beijing, Guangzhou or other China cities. Their social and economic status and their consumption power were equivalent to international tourists. Therefore, this study attempted to integrate this sample with the 2006 sample and conduct an in-depth discussion of issues that affected them both.

Table 8 shows that the proportion of male cruise tourists is slightly higher than that of female cruise tourists. With respect to age level, tourists aged 25 to 44 years old occupy the majority, accounting for 40% of all cruise tourists. Tourists 45 to 64 years old are in the second place, accounting for 36%, and tourists under the age of 24 account for 14%. According to previous research, the average age of cruise passengers is 65 years old (WTO, 2003). Perucic(2007) indicated that the percentage of older 60+ passengers dropped from 31% to 22% during 1996 to 2006, while the percentage of younger passengers increased. Elderly tourists over 65 years old account for merely 10 % of respondents in this survey. With respect to education level, tourists with a bachelor's and master's degree account for over 65 %. Tourists with senior high school diploma account for merely 34.8 %. Therefore, it would seem that cruise tourists are more highly educated than general tourists.

The sample of investigation in this study required the respondents to answer questions related to their income. Approximately 14% of the respondents were reluctant to respond to these questions, which is similar to the findings of previous research. Those tourists who answered and had a monthly income of less than 40 thousand New Taiwan dollars or 10 thousand China RMB dollars accounted for 70%, which indicates an enormous misconception about the high consumption level of cruise traveling. Evidently, failing to obtain information about tourist income will lead to potential errors.

To conduct the analysis of the cross table, this study re-collated the findings with the 2006 sample of tourists from 17 different countries. The combined sample was then separated out into different categories based on the resident status of tourists. The sample of tourists who were not residents of Taiwan, China, and Hong Kong accounted for 53.4% of the total. Due to a reclassification of residency, China, the largest source of tourists in Taiwan, currently occupies one-third of Taiwan's tourist population (34.8%). In addition, tourists from Malaysia and Singapore occupied an extremely large percentage in this study, probably because the samples were taken from Star Cruise' Singapore route. The major global source of cruise tourists was the USA, Canada, New Zealand, and Australia, with passengers from these countries occupying 11.8% of the tourists to the Sino-Asian region. As a result of these findings, this study distinguished between tourists from Taiwan, China and Hong Kong, and international tourists, and verified the cross table of tourism indicators with respect to the three port cities of Taipei, Hong Kong, and Shanghai.

Tourism Images of the Port Cities

A total of 131 valid samples of cruise tourists were adopted to analyze whether the residents of Taiwan, China, and Hong Kong think that different images exist in the port cities across the Taiwan Straits, as compared to residents of other countries. Table 9 shows the result of Pearson's Chi-square test, there is a significant difference between these two groups ($X^2=23.669$, p=0.000<.001). 84% port cities residents indicated that the differences of tourism image do exist, 7% perceived there is no difference among these port cities. Among the tourists who were residents of other countries, 60% perceived that different images exist in the port cities across the Taiwan Strait, and 40% thought no difference exists. It is obvious that residents of Taipei, Shanghai, and Hong Kong think that these cities differ from one another. Although many non-residents share this perception, their numbers are less after all.

Table 8: Respondents Profiles

		N	%
Gender	Male	85	53.8
	Female	73	46.2
	Total	158	100.0
Age	Under 24	23	14.2
	25~44	64	39.5
	45~64	58	35.8
	65 and over	17	10.5
	Total	162	100.0
Education	High School and under	54	34.8
	College	84	54.2
	Graduate School	17	11.0
	Total	155	100.0
Monthly Income	Unstable	32	22.9
	Under RMB 5,000	32	22.9
	5000~10000RMB	34	24.3
	10000~20000RMB	27	19.3
	Over 20000RMB	15	10.7
	Total	140	100.0
Residence Area	Residents in three port cities	76	46.6
	Not Residents in three port cities	87	53.4
	Total	163	100.0
Nationality/Area	Taiwan	15	9.3
	Hong Kong	6	3.7
	China	56	34.8
	Malaysia, Singapore	39	24.2
	USA, Canada, Australia and NZ	19	11.8
	Japan	2	1.2
	Philippine, Vietnam, Thailand	11	6.8
	India, Sri Lanka, South Africa, Mauritius and Swaziland	13	8.1
	Total	161	100.0
Total		163	

Table 8 shows the proportion of cruise passengers in six items including Gender, Age, Education, Income Residence Area and Nationality. With respect to age level, tourists aged 25 to 44 years old occupy the majority, accounting for 40% of all cruise tourists. Tourists 45 to 64 years old are in the second place, accounting for 36%, and tourists under the age of 24 account for 14%. Elderly tourists over 65 years old account for merely 10% of all cruise passengers. With respect to education level, tourists with a bachelor's and master's degree account for over 65%. Tourists with senior high school diploma account for merely 34.8%.

To conduct a Chi-square Test (homogeneous test) with respect to nationality, the statistics fail to provide an explanation of the results, because of too many samples whose number is less than five. However, the result of the cross tabulation table for the Chi-square indicates that X^2 =69.388, p=0.000<.001, which means the study findings are significant. Cruise passengers from Taiwan, China, and Hong Kong have different impressions of the port cities significantly. The reason is probably that the tourists from these countries do not have distinct impressions of the port cities in these regions. For future investors who plan to focus on direct links across the Taiwan Straits to realize the potential market of cruise tourism, this study suggests that strengthening the differences among the port cities of Taipei, Hong Kong, and Shanghai will be a major marketing direction.

Changes between 2006 and 2010 During 2006, this study adopted tabulation scales to assess tourists' cognitions of the attractions of different tourist destinations, including Taiwan's current attractions. From the impression indicators used in the 2006 survey, it is apparent that the multi-national tourists of Star Cruise showed much more interest in Taipei than in the other ports, as indicated by the number of indicators in which Taipei ranked comparatively high. An exception was "abundance of cultural and historical landscapes," which was ranked as inferior in Taipei in comparison to Shanghai. However, as

Table 10 shows, "passionate and friendly residents," "natural and ecological landscapes," and "various tour selections," which were among the indicators that ranked highest in Taipei, accounted for 43.1%, 40.8%, and 40.0% respectively. Without a doubt, these attractions were emphasized by cruise tourists and served as the marketing focus of Taiwan's tourism then.

Table 9: The Cross-Tab among Cruise Passengers and Cities Images

	χ² value	Cities Images			
		Difference	No Difference	Cannot recognize	
Residence Area		73%	23%	4%	131
Residents in three port cities	23.669*	84%	7%	9%	69
Not Residents in three port cities		60%	40%	0%	62
Nationality/Area		73%	22%	5%	129
Taiwan		69%	31%	0%	13
Hong Kong		100%	0%	0%	4
China		87%	2%	11%	53
Malaysia, Singapore		88%	12%	0%	25
USA, Canada, Australia and NZ	69.388**	75%	25%	0%	12
Japan		0%	100%	0%	2
Philippine, Vietnam, Thailand		9%	91%	0%	11
India, Sri Lanka, South Africa, Mauritius		33%	67%	0%	9
and Swaziland					

Table 9 shows the result of Pearson's Chi-square test, there is a significant difference between these two groups (X^2 =23.669, p=0.000<001). 84% port cities residents indicated that the differences of tourism image do exist, 7% thought there is no difference among these port cities. Among the tourists who were residents of other countries, 60% thought that different images exist in the port cities across the Taiwan Strait, and 40% thought no difference exists. To conduct a Chi-square Test (X^2 =69.388, p=0.000<001) with respect to nationality, Cruise passengers from Taiwan, China, and Hong Kong have different impressions of the port cities significantly. *p<0.05; **p<0.01; ***p<0.001

Table 10: Respondents' Interests in the Three Cities in 2006

	Taipei		Sha	Shanghai Hong		Kong	To	otal
	N	%	N	%	N	%	N	%
Natural & Ecological Landscapes	53	40.8	21	16.2	0	0	74.	56.9
Cultural and historical landscapes	33	25.4	35	26.9	7	5.4	75	57.7
Modern City Landscapes	43	33.1	11	8.5	27	20.8	81	62.3
Original Natural Features	46	35.4	19	14.6	6	4.6	71	54.6
Sufficient Fundamental Facilities	37	28.5	11	8.5	31	23.8	79	60.8
Reasonable Consumption level	41	31.5	16	12.3	20	15.4	77	59.2
Convenient Transportation	45	34.6	7	5.4	27	20.8	79	60.8
Passionate & Friendly Residents	56	43.1	7	5.4	7	5.4	70	53.8
Various Tour Selections	52	40.0	13	10.0	9	6.9	74	56.9
Features different from tourist's Home Town	38	29.2	11	8.5	10	7.7	59	45.4

Table 10 shows, "passionate and friendly residents," "natural and ecological landscapes," and "various tour selections," which were among the indicators that ranked highest in Taipei, accounted for 43.1%, 40.8%, and 40.0% respectively.

However, the result of the investigation of Chinese cruise tourists conducted in 2010 was greatly different from that of 2006, and disappointingly so for Taiwan. Table 11 shows, Hong Kong had better performances on average than either Taipei or Shanghai. These indicators include "modern city landscapes," "sufficient fundamental facilities," "various tour selections," and "reasonable expenses," which accounted for respectively 4.23, 3.97, 3.82, and 3.58. Taipei was in second place on three

indicators. These were "diversified nature and ecology," "original nature features" and "passionate and friendly residents," which accounted for 3.43, 3.73, and 3.90 respectively. Shanghai had better performances on the indicators of "abundant cultural and historical landscapes" and "convenient transportation," and these accounted for 3.46 and 3.72 respectively.

Table 11: Respondents' Interests in the Three Cities in 2010

	Taipei		Sha	ınghai	Hong Kong	
	N	Means	N	Means	N	Means
Natural & Ecological Landscapes	40	3.43	37	2.78	38	2.79
Cultural and historical landscapes	41	3.27	37	3.46	37	3.11
Modern City Landscapes	38	3.08	38	4.03	40	4.23
Original Natural Features	41	3.73	36	2.58	37	2.76
Sufficient Fundamental Facilities	39	3.05	37	3.59	38	3.97
Reasonable Consumption level	39	3.21	38	3.24	38	3.58
Convenient Transportation	39	3.44	39	3.72	39	4.10
Passionate & Friendly Residents	40	3.90	37	3.05	39	3.46
Various Tour Selections	39	3.62	37	3.41	38	3.82
Features different from tourist's Home Town	39	3.72	36	3.06	38	3.82
Mean		3.44		3.29		3.56

Table 11 shows, Hong Kong had better performances on average than either Taipei or Shanghai in the survey of 2010.

CONCLUSIONS

The purpose of this study is to find the differences in tourism image among cruise passengers across the Taiwan Straits. Base on the literatures (Crouch & Ritchie, 1999, Douglas & Douglas, 2004, Gallarza et al. 2002, Swart et al. 1974, Gibson, 2006, Hritz & Cecil, 2008), the success of cruse port operation is not only related to harbor authority's facilities and management, but also the destination impression and tourism images of the major port cities. The findings suggest that the tourists from these countries do not have distinct impressions of the port cities in these regions. The results are valuable because of this study demonstrate that cruise tourists who are residents or have sufficient cognitions on the port cities can be able to distinguish differences among these cities tourism images.

This study was a panel study by distributing the same questionnaire survey to cruise passengers in Asia during 2006 and 2010. The 116 valid samples of 2006 were taken from the route of Singapore to the Straits of Malacca and the 47 valid samples were taken from the direct route across the Taiwan Strait of RCI and Costa Cruises. The data conducted by the descriptive statistics of cross-tab analyze and the Chi-Square Test.

The contribution of this study lies in its development of impression indicators which can be used for the development of the port cities. By researching both domestic and foreign literatures, this study conclude that the impression indicators implemented are different from some aspects than those currently emphasized by Taiwan's tourism. Therefore, this study proposes two suggestions. First is the differences tourism images among the major port cities of Hong Kong, Shanghai and Taipei should focus on the resident tourists, especially on marketing. The analysis of the questionnaire items indicates that local residents perceive more dissimilarity among the three cities of Taipei, Hong Kong, and Shanghai than do international tourists, particularly those from Southeastern Asia, India, and Africa. It is therefore suggested that the cruise tourist industries focusing on direct links across the Taiwan Strait make every effort to analyze the differences of tourism image so that these differences can be marketed to advantage. Secondly, Taipei should enhance its major tourism indicators, due to enormous changes in its image that have taken place in the past four years. The results showed that Taipei has regressed as a tourist

destination spot; therefore, the tourism industries and government in Taiwan need to put more effort in improving this situation. Currently, Taipei is in the lead, as compared to Hong Kong and Shanghai, with three indicators: diversified nature and ecology, original nature and landscapes, and passionate and friendly residents. However, these indicators do not serve as important factors in developing cruise port cities. The reason is with these two indicators in lead, probably that it is difficult for cruise tourists to evaluate them immediately in shore excursion merely one to two days on board. From the aspects of cruise tours and the development of harbors, it is needed to integrate the attractions and marketing content of Taipei and with other indicators of tourist attraction. Recently, Hong Kong and Shanghai have made rich and rapid progress in the development of their cruise ports. It is likely that there will soon be increased competitiveness among Taipei, Hong Kong, and Shanghai. Generally, the efforts made by Taiwan's industries, government and academicians will be the crucial factors in determining the profitability of cruise tourism in this area.

The conclusions of this study are subject to several limitations. First of all, the sample is unrepresentative of the general population among two surveys in 2006 and 2010. Due to time and financial restriction, the researcher selected a convenient sampling on the cruise ship. Therefore, the results have to be clarify with considerable caution. Second, the restriction of the scope of the study to current tourists, therefore, the further research with an emphasis on potential tourists between Taiwan Straits is strongly suggested. According to the research restriction and finding, some suggestions for further investors who plan to focus on direct links across the Taiwan Straits to realize the potential market of cruise tourism, this study suggests that further strengthening the differences in tourism image among the port cities of Taipei, Hong Kong, and Shanghai will be a major marketing direction.

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