

The Impacts of Low Cost Carriers' Entry on International Tourism Demand

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Low-cost carriers (LCC) entered China in 2004. With the expansion of leisure travelers and Internet users as well as the improvements of people's disposable income and living standard, it is forecasted to be a great potential for the development of LCC in China. After the entry of LCCs, more people were anticipated to travel. The two global-known LCCs, AirAsia and Singapore Tiger Airways in the Shenzhen International Airport, have generated 30% of the total international flights and 50% of the total international tourists to the airport. Moreover, it is estimated that AirAsia solely would bring one million passengers to Shenzhen in the coming five years compared with 130,000 in 2004 (Ling, 2008). Is the attractiveness of LCCs big enough for new travelers? Or, it is only a change of airline or airport selection without a direct impact on tourism demand? It is crucial to understand the mobility impact in order to make future tourism planning more precise. Therefore, this paper would investigate the relationship between the entry of LCCs and the international inbound tourism demand of the destination, based on secondary data.

Importance of transport in tourism

Murphy, Pritchard and Smith (2000) suggested that tourist experience was comprised of destination environments and service infrastructure, which included transport services. Furthermore, infrastructure was found to be an important predictor of both destination quality and perceived trip value. Many scholars also supported that infrastructure was one of the determinants of the attractiveness of a tourism destination (Prideaux, 2000; Khadaroo & Seetana, 2008). Hence, transport played an important role in tourism as it could create and develop new attractions and healthy growth of the existing ones (Kaul, 1985).

Aviation development creates opportunities for mass international travel, and makes a significant contribution to the growth of tourism in many parts of the world, including destinations in South Korea, Hong Kong, Canada, Spain, Africa and Pacific Islands (Khadaroo & Seetana, 2008; Prideaux, 2000; Seo, Park, & Yu, 2008; Wong, 2006). In Australia, the decentralized tourism development was relied on the efficiency, quality and capacity of the transport networks. Cairns, for

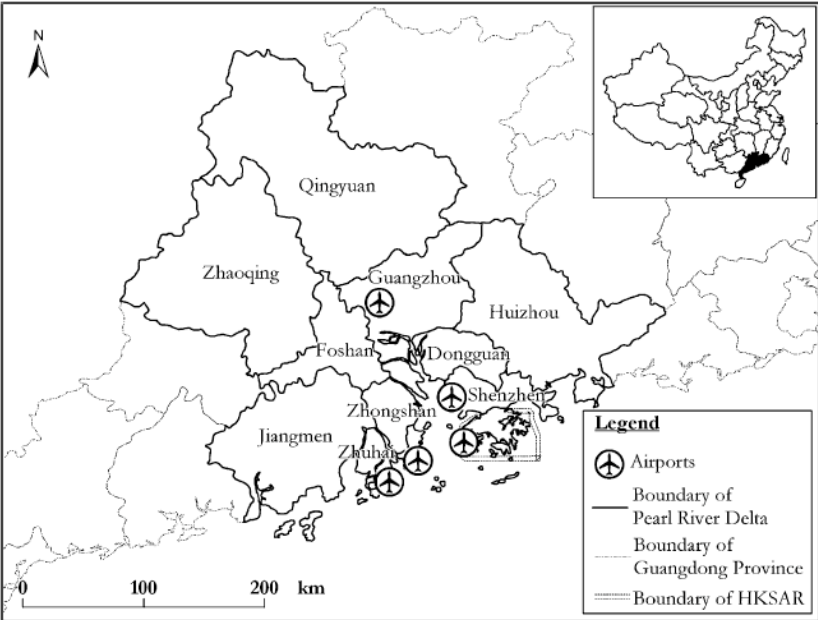
instance, was not successful in developing a significant international market because of the inconvenience of flying through intermediate airports (Prideaux, 2000).

Founder of AirAsia, Mr. Fernandes believed that air travel was the only way to develop interconnectivity in Asia, because there was almost no inter-regional highways and high-speed international rail in the region (The New York Times, 2004). According to the “Mega-trends of tourism in Asia Pacific”, LCCs would become one of the king makers of booming tourism (UNWTO, 2006). It may be argued that they induce either an additional demand or win passengers from other transport modes. In fact, an interview (Uherek, 2006) showed that 59% of the LCCs passengers were new travelers and 37% of them shifted from other airlines. From the new travelers, 71% would not have traveled without the low cost offer. These indicated the attractiveness and importance of low-cost-carriers to tourism industry.

LCC development of Pearl River Delta Region

With the large population and prosperous economy, Pearl River Delta (PRD) is one of the major aviation hubs in China. It is the largest multi-airport region in China which is made up of five airports within 200 km in radius, namely Hong Kong International Airport, Guangzhou International Airport, Shenzhen International Airport, Macau International Airport and Zhuhai International Airport (Figure 1). In 2007, the two airports in Guangzhou and Shenzhen were ranked the second and the fifth in the number of passengers in Mainland China respectively (Civil Aviation Administration of China, 2008), and the Hong Kong International Airport was the fourteenth busiest airport in the world which generated the most passenger enplanement in the region (ACI, 2008).

Figure 1 The Pearl River Delta Multi-Airport Region



Source: Loo,2008

Apart from the Zhuhai International Airport, all the other four airports in the PRD were served by LCCs. In 5th July 2004, the launch of Bangkok-Macau flights by Thai AirAsia marked the beginning of the LCC era of the region, and also China (AirAsia.com, 2004). Therefore, the data available of visitor arrivals since 2004 would be used in the following analysis.

According to Figure 2, the PRD multi-airport region generated 86.17% of the total low-cost flights in China. It is also found that the number of low-cost flights in the mainland airports was less than the Special Administrative Regions (SAR) airports – Guangzhou and Shenzhen received 23.40% while Hong Kong and Macau 62.77%. The reason could be the higher transport demand and the more opened sky policy of the SARs. Three origins, namely Kuala Lumpur, Singapore and Bangkok have comprised 66.26% of the total arrival flights in the PRD region. The visa-free policy might explain the high demand: nationals from Malaysia, Singapore and Thailand could visit the two SARs without visa for 30 days; furthermore, the above visitors in tour groups organized by travel agencies registered in the two SARs were exempted from visa requirements for not exceeding 6 days when entering some of the PRD cities (Immigration Department, 2008; Ministry of Foreign Affairs, 2002; Statistics and Census Service, Government of Macao SAR, 2008). Hence, they were the major international markets for the tourism industry in the region, and so the impacts of LCCs from Bangkok, Kuala Lumpur and Singapore were selectively analyzed in this paper.

Figure 2 Summary of the LCC Weekly International Arrival Flights in China in Dec 2008

	Kuala Lumpur	Singapore	Bangkok	Others	Total	%
Guangzhou	14	7	0	2	23	8.16%
Shenzhen	14	12	10	7	43	15.25%
Hong Kong	14	11	14	44	83	29.43%
Macau	21	18	28	27	94	33.33%
Others	16	15	4	4	39	13.82%
Total	79	63	56	84	282	100.00%
%	28.01%	22.34%	19.86%	29.79%	100.00%	

Since 2004, LCCs entered the competitive aviation market in the PRD Region. They have changed the monopoly market dominated by the full-service carriers. Guangzhou International Airport welcomed Tiger Airways flying between Singapore and Guangzhou in 2006, and AirAsia started to fly between Kuala Lumpur and Guangzhou in 2008. In the Shenzhen International Airport, Bangkok Airways and Silk Air started to fly from Bangkok and Singapore since 2004 and 2005 respectively, and AirAsia launched services from Kuala Lumpur in 2007. In the Hong Kong International Airport, Jetstar began its service from Singapore in 2004, Thai AirAsia and AirAsia launched their flights from Bangkok and Kuala Lumpur in 2008 respectively. Macau International Airport was the pioneer of LCC development in the region: Thai AirAsia and Bangkok Airways started their services from

Bangkok in 2004, AirAsia from Kuala Lumpur chose Macau as its first market in China in 2004, and Tiger Airways launched its flights from Singapore in 2005 (AsiaTravelTips.com, 2008).

In order to better understand the LCC development in the region, the ratios of LCCs to full-service carriers in the four airports were estimated. The LCCs were the airlines stating that they were operating under low-cost concept. Only the full-service carriers based in the four PRD airports, and the flag carriers based in Kuala Lumpur, Singapore and Bangkok were counted. Moreover, only direct arrival flights and non-code sharing flights flying between the above airports were included in the calculations. The data were gathered from the flight schedules' timetables of the respective airlines in December 2008. The resulting ratios were summarized in Figure 3. It showed that Macau International Airport had the highest ratios of 3.19 and revealing that there were more low-cost flights flying from the three origins than the full-service carriers. Being the regional hub-airports for many major full-service carriers, Guangzhou and Hong Kong International Airports had the ratios of 0.32 and 0.17 respectively. The international flights operating at Shenzhen International Airport from the three cities were all served by the LCCs, and hence the ratio was undefined.

Figure 3 The Ratios of LCC to Full-Service Carriers (FSC) in the Pearl River Delta Airports in Dec, 2008

	LCC/FSC		LCC/FSC
Guangzhou International Airport	0.32	Hong Kong International Airport	0.17
Shenzhen International Airport	NA	Macau International Airport	3.19

Since Macau is the earliest destination served by LCCs in the region and also China, it has the highest LCC ratio to the full-service carriers, the impacts of the carriers' entry to the international inbound tourism demand would be significant. Hence, the relationship of the LCC development and the inbound tourism from Malaysia, Singapore and Thailand to Macau would be analyzed in the following parts.

Impacts of LCCs' entry to the international inbound tourism in Macau

Since tourism demand is affected by multiple factors, the influence of transport in general and LCCs in particular cannot be assessed by the real figures of visitor arrivals of the destinations. Hence, the percentages of visitor arrivals from a specific origin to the total visitor arrivals between 2004 and 2008 were compared in order to hold the other demand factors constant. The attractiveness of the destination would be the same to different market, and thus the percentages should not be variable. The growth of the percentages may imply the growing attractiveness of the destination, which could be attributed by the entry of LCCs.

According to Figures 4, the increases of percentages in Macau from the three markets were all significant. From 2004 to November 2008, the percentages of visitor arrivals from Malaysia to the

total visitor arrivals in Macau increased from 0.38% to 11.22%, Singapore 0.49% to 7.35% and Thailand 0.87% to 7.04%. Though there were seasonal fluctuations of the percentages, it was found that they were generally increasing. All the three markets generated a huge growth in tourism demand since 2004. It could be explained by the casino development of Macau. In 2004, the opening of Sands Macau ushered the new era for turning the city into the “Eastern Las Vegas”. In 2000-2005, the international visitor arrivals to Macau have increased from 5,197,000 to 9,014,000 with 73.45% growth (UNESCAP, 2008). In 2005, it was ranked the twentieth in terms of international visitor arrivals in the world (UNWTO, 2008). However, without the increasing supply of air transport and the entry of LCCs, international inbound visitor arrivals might not have such a significant increase. And, the escalating increase in the percentages could also indicate the changes of supply factors targeting the three markets, which could be the increase in supply of low-cost flights.

Figure 4 Changes in Percentages of Visitor Arrivals from Malaysia, Singapore and Thailand at the Airport to the Total Visitor Arrivals in Macau in 2004 – Nov, 2008

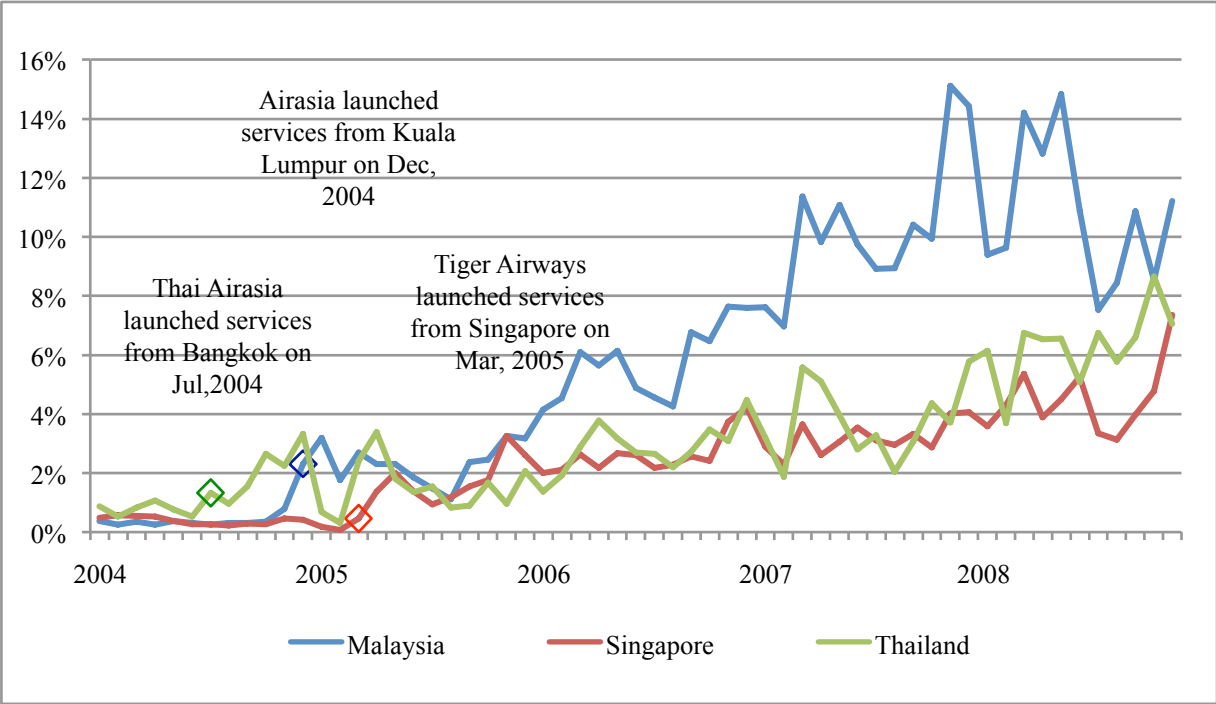
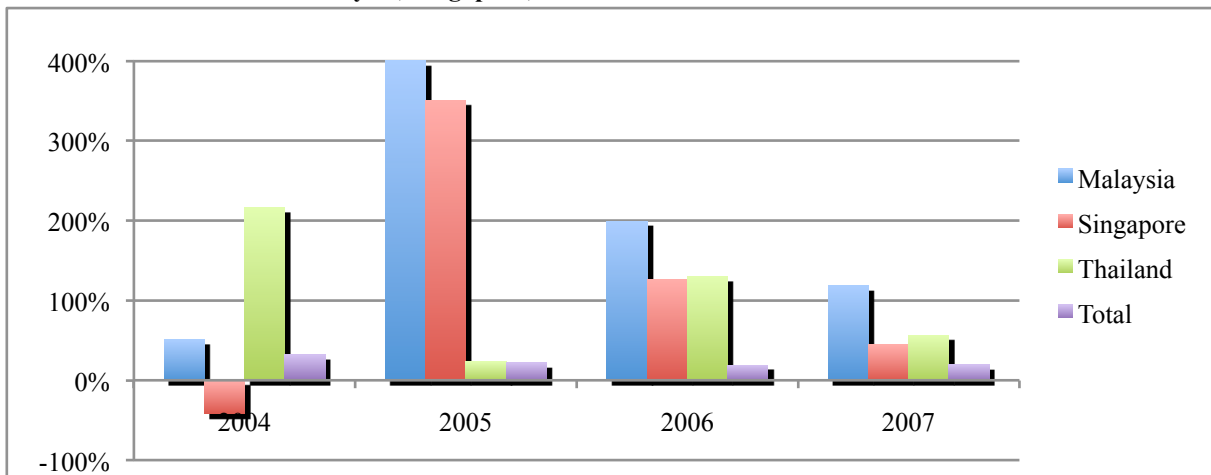


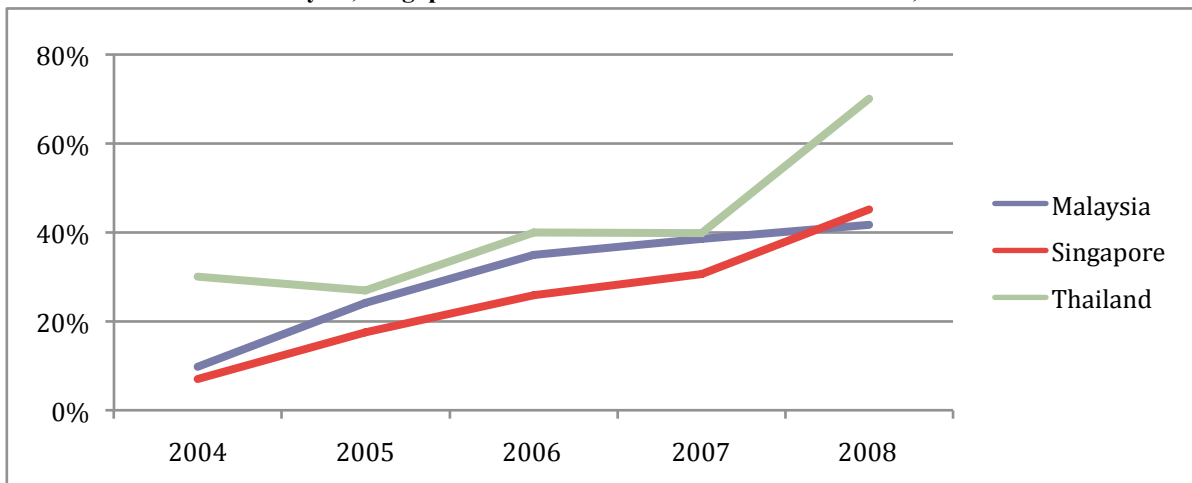
Figure 5 further indicated the significant growth of the three markets – Malaysia, Singapore and Thailand in terms of visitor arrivals at airport in Macau. Throughout the four years, the percentage increases of tourism demand in the three markets exceeded that in total of Macau. The only exception was Singapore market in 2004, which could be the reason that LCC from Singapore has not arrived at Macau until 2005. Furthermore, the general growth was decreasing with years even though the number of flights was increasing. It implied that the impacts of the LCCs’ entry on tourism demand would be diminished with years of operation. Still the growth was positive, sustainable visitor arrivals to the destination would be forecasted in a more mature stage.

Figure 5 Comparison of the growth of Visitor Arrivals at the Airport in Macau from Malaysia, Singapore, Thailand and total in 2004 - 2007



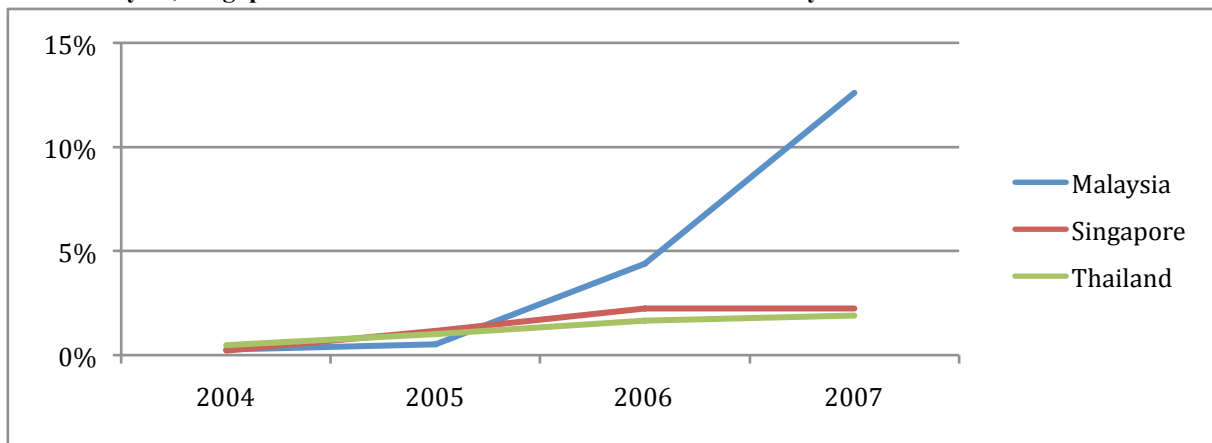
Macau is located in the PRD multi-airport region, so tourists can go to Macau by transiting from airports outside Macau in a close proximity. Hong Kong International Airport, for example, receives many transfer passengers to Macau and so ferry transfer service is provided in SkyPier near the terminal. The journey takes approximately fifty minutes with eight scheduled sailings everyday (Airport Authority Hong Kong, 2008). Still the percentages of visitor arrivals at the Macau International Airport to the total visitor arrivals of the three origins have significantly since 2004 as shown in Figure 6 – Malaysia increased from 9.77% to 41.75%, Singapore from 7.02% to 45.10% and Thailand from 30.09% to 70.11%. More people chose to go to Macau by direct flights to the Macau International Airport in order to save time as well as money by LCCs. Since the three markets were served by LCCs in majority, the increasing trend of direct international visitor arrivals could thus be explained by the entry of LCCs.

Figure 6 Changes in Percentages of Visitor Arrivals at the Airport to the Total Visitor Arrivals of Malaysia, Singapore and Thailand in Macau in 2004 - Nov, 2008



With the convenience and cheap airfares provided by the LCCs, many travelers were attracted to Macau, not only for casinos and entertainment, but also for transitions to other Chinese cities. The number of tourists arriving at Macau by air but leaving by other modes or outside Macau was calculated by the differences between the visitor arrivals and departures at the airport. The total number increased from 50,318 to 154,037 between 2004 and November 2007. Number of visitors from Malaysia increased by 54 times, Singapore by 96 times and Thailand by 56 times. It indicated that many air travelers preferred to travel outside Macau, instead of staying in a single city. Another statistics of arrivals of same-day visitor by air also revealed the similar result. In Figure 7, the increasing percentages of the same-day visitor by air from the three origins were found. It meant that more air travelers transited to other cities from Macau. LCCs help to lower the cost of travel, therefore travelers are more interested in traveling further away and treat Macau as a starting point of the journey.

Figure 7 Changes in Percentages of Same-Day Visitor Arrivals at the Airport from Malaysia, Singapore and Thailand to the Total Visitor Arrivals by Air in Macau in 2004 - 2007



Conclusion

In order to facilitate the tourism development of a city, the government should integrate transport policies into tourism planning. For an emerging international tourist destination, like Macau after 2004, transport development is crucial in stimulating the international inbound tourism demand. It is not necessary to attract full-service carrier to the destination's airport, because LCC is competitive and attractive enough. Moreover, as LCC development was forecasted as a trend of the aviation industry in the coming decades (UNWTO, 2006), the authority could consider building a LCC airport to attract more budget travelers by providing incentives to the airlines to encourage low-cost traffic. Apart from the aviation aspect, the authority should conduct a visitor arrival forecast in order to make a better tourism-marketing plan. The opening of a new route would help to develop a new market, marketing strategies should be targeted to the market so as to optimize the opportunity and attract the maximum visitor arrivals.

The LCCs' entry has generated some positive impacts to the tourism industry of a destination. It enhances the supply factor of air transport, and thus the attractiveness of the city. New travelers are attracted by the convenience and cheaper airfares. In spite of the diminished percentages with years of operation, the growth is still positive and sustainable when the market becomes more mature. Moreover, it improves the transport network and so the mobility of the city. More tourists choose to visit the destination directly instead of transiting from other cities, and more travelers get to the city for transiting to other cities as well. Hence, a well-developed LCC airport can be positioned as a transport node for international tourism. After all, LCC helps to stimulate inbound tourism.

The case of Macau has created a big picture of the impacts brought by the LCC development in international inbound tourism. Since 2004, the year of the entry of LCC, the tourism industry of Macau has become more and more prosperous. Nevertheless, the Macau International Airport is still under-utilized. In this study, the impact of full-service carrier was neglected which exerted a large influence to many major airports in the world. Furthermore, the multi-airport region effect was not taken into consideration which might create multi-lateral effects among airports and destinations. Hence, the competitive strength of the two kinds of carriers is suggested to be compared and the multi-airport region effect be assessed in the future study.

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