

Impact Analysis of Bilateral Liberalization of Air Transport and Comparison with Air Macau

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Abstract: Air transport liberalization is an important way to promote the further development and improvement of air transport market. This experiment takes the bilateral liberalization measures of air transport as the research object and Air Macau as the case. Through comparison and analysis of the data of Air Macau and other airlines, it is found that the market share, total assets and total profits of the aviation industry in Macao even lag behind that of British Airways. However, the implementation of bilateral liberalization of air transport is expected to bring new development opportunities for Air Macau and promote its further improvement in the international aviation market. The bilateral air transport liberalization agreement has played a positive role in promoting Macao's aviation industry, making Macao airlines more competitive in the market.

Keywords: air transport, bilateral liberalization, impact analysis, Air Macau

1. Introduction

Air transport plays an important role in international trade and tourism, and aviation liberalization is one of the important trends in the development of international air transport [1-2]. Since the 1990s, most countries and regions have successively signed a series of bilateral and multilateral liberalization agreements, aiming to promote the opening and liberalization of the international aviation market, improve transport efficiency, expand market share, and maximize economic and social benefits [3-4]. The impact of aviation liberalization has gradually emerged, but there are also some disputes and challenges, such as price war and airline monopoly caused by too fierce market competition. Air Macau is the only airline in the Macao Special Administrative Region, and although it has signed liberalization agreements with several countries and regions, its market share is relatively small. Therefore, it is of certain practical significance for Air Macau to study aviation liberalization and its impact more deeply [5].

In recent years, many scholars and experts have analyzed the impact of bilateral liberalization of air transport and compared it with Air Macau Research was conducted. Among them, the impact of air transport liberalization on international tourism demand has been one of the hot spots in tourism economics. This study uses panel data regression method to examine the impact of air transport liberalization on tourism demand based on the international tourism demand data of 174 destination countries from 15 major departure countries in the world. Kim and Chang [6] shows that the liberalization of air transport will significantly promote the international tourism demand of the country of departure to the country of destination, and this impact will gradually increase with the increase of the geographical distance between the country of departure and the country of destination. In addition, the impact of air transport liberalization on tourism demand is also affected by other factors, such as political stability, economic development and tourism development level. Therefore, the formulation and implementation of air transport liberalization policies should comprehensively consider the influence of various factors to maximize economic and social benefits. Kim and Yang [7] explained that the liberalization of air transport is of great significance to the development of tourism, as it is expected to promote the development of international tourism, increase employment opportunities in tourism and increase the economic contribution of tourism. This study takes the tourism data of Southeast Asia before and after the launch of air transport liberalization policy as the analysis object, and uses the time series analysis method to study the impact of air transport liberalization policy on tourism development. Wang et al. [8] explained that the liberalization of air services had a huge impact on the efficiency of airlines. Liberalization has brought new market competition, encouraging airlines

to improve efficiency and reduce costs in order to remain competitive. In addition, liberalization promotes cooperation and alliances, allowing airlines to better utilize resources and service advantages. However, liberalization also brings challenging issues, such as restrictions on market access and regulatory uncertainty, which may affect airline operations and efficiency. Therefore, airlines need to effectively respond to the opportunities and challenges brought about by liberalization in order to maintain a competitive advantage and achieve long-term sustainable development.

This paper will analyze the impact of bilateral liberalization of air transport on the aviation market and various stakeholders, and explore its opportunities and challenges. At the same time, through the comparison with Air Macau, the impact of aviation liberalization on the domestic aviation market and its countermeasures will be discussed. Through this study, the purpose is to provide some valuable references for the further promotion of aviation liberalization and the decision making in related fields.

2. Relevant research

2.1 Impact of bilateral liberalization of air transport

2.1.1 Competition of airlines

With the promotion of bilateral liberalization of air transport, the competition among airlines is becoming increasingly fierce. They compete not only with each other on ticket prices, but also on the number of flights and the coverage of routes. This makes it necessary for airlines to enhance their competitiveness in terms of reputation, safety, service quality and punctuality. In order to be more attractive and competitive, airlines have also begun to focus on the improvement of comfort, such as food, entertainment and cabin design and other aspects of continuous innovation and improvement. In addition, airlines need to manage their relationships with airports, government agencies and air traffic control agencies to ensure that flights are safe and accurate.

2.1.2 Growing market demand

With the development of the global economy and the improvement of people's living standards, people's demand for tourism, business and other forms of travel has gradually increased. The implementation of bilateral liberalization of air transport has opened up a broader market for airlines. Many airlines from different countries and regions can carry out more cooperation and exchanges, thereby improving market share and service scope. In addition, with the development of the Internet and the popularization of information technology, airlines also need to continuously meet people's demand for convenient services such as online ticket purchase, electronic boarding pass and online check-in to better meet the market demand.

2.1.3 Lower fares and more flight options

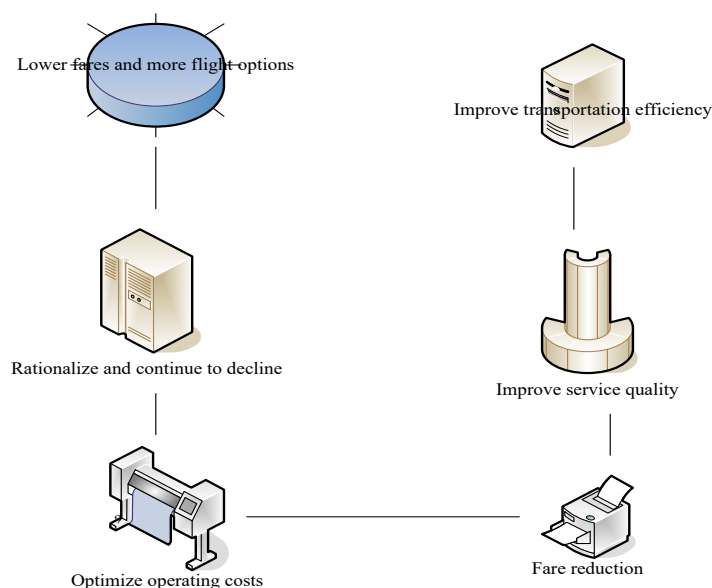


Figure 1: Graph of lower fares and more flight options

In the context of bilateral liberalization of air transport, airline competitiveness has been significantly improved, and as a result, air fares have been rationalized and continue to fall relative to the past. Airlines reduce fares by optimizing operating costs, improving transportation efficiency, improving service quality and other ways to attract more consumers [9-10]. At the same time, with the increasing competition in the aviation market, the number of flights has increased significantly, and airlines have begun to offer consumers more flight choices. This trend is not limited to the large airlines, in the market space is relatively small regional airlines will also provide consumers with a variety of solutions to attract more passengers. As shown in Figure 1.

2.2 Comparison with Air Macau

2.2.1 Characteristics and development history of Air Macau

Air Macau Limited is the only local airline in the Macao Special Administrative Region. Founded in 1994, it is mainly based in Hong Kong, Macau and southern Chinese cities, and expanded to Southeast Asia and South Asia in 2019. It is relatively small in terms of market and network size, and has greater flexibility and ability to respond quickly to the market compared with large airlines [11-12]. Air Macau has continuously improved its service quality and has received several international and domestic awards, such as the "Five-star Service Standard" from the China Southern Aviation Management Association.

2.2.2 Competition with other airlines

Competing with larger airlines, Air Macau's strengths lie in its ability to respond quickly to market changes, network flexibility and service quality. Although its market scale and network coverage are not as good as those of other large international airlines, Air Macau has maintained competitive advantages with other airlines in terms of service quality and customer experience [13-14]. In addition, Air Macau has successfully expanded the market in Southeast Asia and South Asia, and cooperated with a number of airlines in Chinese mainland to expand the scope of cooperation and increase market share.

2.2.3 Impact of bilateral liberalization of air transport on Air Macau

The implementation of bilateral liberalization of air transport has provided more flight opportunities and market share for Air Macau Limited. However, the benefits also include other airlines, especially those with larger market shares and more stable economies, which can better use their advantages in the market competition. In addition, bilateral liberalization of air transport will also bring market pressure on Air Macau Limited. In order to survive in the competitive market, Air Macau Co., Ltd. may need to reduce fares, improve service quality, expand market scale and other ways to cope with market competition. Therefore, in the context of bilateral liberalization of air transport, the opportunities and challenges faced by Air Macau Limited cannot be ignored [15].

3. Impact analysis of bilateral liberalization of air transport and comparison results and discussion with Air Macau

3.1 Impact analysis of bilateral liberalization of air transport and comparison with the current status of Air Macau

Liberalization of air transport means that airlines can fly freely between two countries or regions without being subject to set routes, prices and other restrictions. At present, many countries and regions in the world have realized bilateral liberalization of air transport. One of the benefits of bilateral liberalization is the promotion of more international tourism, business travel and trade activities. In addition, by allowing airlines the freedom to determine routes and prices, market competition and price competitiveness can also be improved. However, bilateral liberalization also has some negative side effects, including the possibility of excessive prices for airlines, safety and reduced service quality. On the Macau side, the Macao Special Administrative Region is a small country that serves as a transportation hub between Chinese mainland and Hong Kong, and its economy and tourism are highly dependent on the air transport industry. Air Macau is the only local airline in Macau and has not signed any bilateral liberalization agreements with airlines from other countries. This makes Air Macau have a great competitive disadvantage in terms of routes, prices and market competitiveness.

3.2 Impact analysis of bilateral liberalization of air transport and comparison verification with Air Macau

In order to verify the actual impact of bilateral liberalization of air transport on airlines and tourism, the data of Air Macau before and after signing bilateral liberalization agreements with other airlines were analyzed. The data before the signing of the bilateral liberalization agreement is referred to as "early data" and the data after the signing is referred to as "late data". As shown in Figure 2.

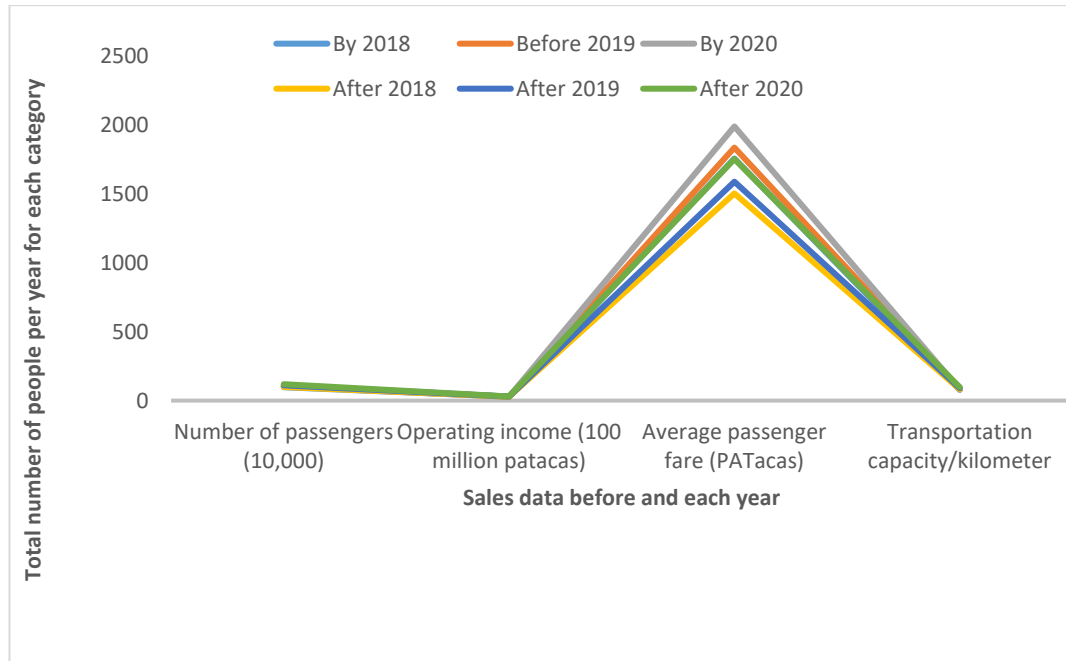


Figure 2: Comparison of pre-and post-period data of Air Macau

Figure 2 lists four key data indicators of Air Macau before and after the signing of the bilateral liberalization agreement. These indicators are: number of passengers, operating revenue, average passenger fare and transport capacity. The data show that after the signing of the bilateral liberalization agreement, Air Macau has achieved significant growth. For example, passenger numbers increased 13.2 percent from 1.106 million to 1.189 million, while operating revenue increased 13.8 percent from 2.93 billion patacas to 2.99 billion patacas. Transport capacity increased by 17.3%, from 90.1 km to 97.0 km. These data show that the bilateral air transport liberalization agreement has played a positive role in promoting Macao's aviation industry, making Macao airlines more competitive in the market. In addition, the average passenger fare decreased from 1,988.2 patacas to 1,752.1 patacas, indicating that in the face of increased competition, Air Macau has to reduce fares to improve its competitiveness.

3.3 Impact analysis of bilateral liberalization of air transport and comparison strategy with Air Macau

In view of the disadvantages of Air Macau, it is suggested that the Macao government and Air Macau should actively sign bilateral liberalization agreements with other countries' airlines to promote the development of Macao's economy and tourism industry. Bilateral liberalization agreements can improve market competitiveness and price competitiveness, and to some extent guarantee the quality and safety of services. Macao can take advantage of this opportunity to expand the market share of its airlines and offer better routes and more competitive fares, thus attracting more travelers and tourists to Macau. In addition, Macao can also take advantage of the opportunity of aviation liberalization to further strengthen trade and economic cooperation with other countries and regions. However, before signing the liberalization agreement, Air Macau needs to ensure that its service quality and safety meet international standards to avoid major safety incidents and passenger complaints. In addition, Macao can consider introducing more international airlines into the local market and cooperate with them to jointly promote the liberalization of air transport and achieve mutual benefit and win-win results.

4. Conclusion

The implementation of bilateral liberalization measures in air transport has a positive impact on the development of the air transport industry and the upgrading of Macao's aviation industry, which is conducive to the further development and improvement of the global aviation market. Under the implementation of this policy, Macao's aviation industry is expected to play an important role as a transit area, attract more ticket sales and passenger traffic, and add more impetus to the development of Macao's aviation industry. Macao's aviation industry should integrate global aviation market resources, promote in-depth cooperation in the field of air transport, and make positive contributions to the overall development of the industry. It can be predicted that the measures of bilateral liberalization of air transport will have an important impact on the development and competition pattern of the global aviation market in the future.

Acknowledgements

Macao Polytechnic University, MacaoSAR, China Research Funds: RP/CEC-01/2022.

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