



South of the Clouds! Research on the Supply-Side Structural Reform Path of Tourism Industry in Yunnan Province

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Abstract. Based on the construction of the supply-side factor structure of tourism industry, it concludes that tourism industry factors include common factors and tourism industry factors; And through the data-driven empowerment method to carry on the quantitative comprehensive evaluation of the seven aspects of the supply factors of tourism industry in Yunnan Province, it is concluded that there are certain structural problems in the supply side factors of tourism in Yunnan province, and the joint force of factor supply is insufficient. Based on this, this study proposes to optimize and upgrade the factors of tourism supply, adjust and optimize the structure of tourism supply, improve and innovate the way of tourism supply, enrich and improve the quality of tourism service, so as to achieve the high-quality development of tourism industry in Yunnan Province.

Keywords: supply-side structural reform, tourism industry, data-driven weighting method, economic reform

1 Introduction

In 2016, the Inter-ministerial Joint Conference on Tourism Work of The State Council proposed to vigorously promote the supply-side structural reform of tourism and promote the high-quality development of the tourism industry, which is the beginning of the development of tourism supply-side structural reform under the background of supply-side structural reform. The importance of tourism for economic growth has been well documented in the literature (Castro-Nuño, Molina-Toucedo, & Pablo-Romero, 2013; Brida, Gómez, & Segarra, 2020)[1][2]. Nunkoo, Seetanah, Jaffur, Moraghen, & Sannasse (2020)[3] and Wang, Yang, & Yue, (2022)[4] pointed out that tourism growth contributed to GDP growth in middle-income and high-income countries. With the decline of traditional industries, tourism has become increasingly important in China's economy. Wickramasinghe & Naranpanawa (2022)[5] argued that the development of international tourism can support China's supply-side structural reform, while the development of tourism can promote the output decline of industries with overcapacity and absorb the remaining employment of these industries into tourism-related

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industries. According to Zhang, Liu, & Liu (2020)[6], tourism may grow one and a half times faster than any other industry. Therefore, improving the development of tourism becomes a key issue that governments and scholars may focus on.

In the post-pandemic era, under the changing demand preferences and travel modes of the tourism market (Osorio, Cadarso, Tobarra, & García-Alaminos, 2023)[7], it is necessary to further explore the path of supply-side structural reform of Yunnan's tourism industry, which is not only necessary for the high-quality development of Yunnan's tourism, but also driven by the situation of adapting to the changing market structure (Barišić, Kovač, & Arčabić, 2023)[8].

Supply and demand are always two important aspects of the economy. Only by correctly handling the relationship between the two can we promote sustainable and healthy economic development. The development of China's tourism industry has always been based on demand promotion, focusing on tourism consumption, investment and service trade export for a long time, ignoring the balance between supply and demand, resulting in increasingly prominent supply-side structural problems in tourism. The main performance is that the traditional supply exceeds the demand, and the new supply exceeds the demand. Oversupply of sightseeing products and undersupply of leisure products; The transfer of domestic tourism market to foreign countries leads to demand spillover, market spillover, investment spillover and benefit spillover.

At the same time, the tourism industry is also in a period of prominent contradictions, the supply of tourism products cannot keep up with the demand of consumption upgrading, and the government management and service level cannot keep up with the situation of rapid development of tourism (Papageorgiou & Vourvachaki, 2017)[9]. Specifically, the mismatch between supply and demand of tourism in China can be summarized into the following four aspects. Tourism product portfolio and its quality level do not match tourism demand; The supply and coordination of the tourism service supply chain do not match the tourism demand; The matching supply of tourism public service and tourism demand do not match; There is a mismatch between tourism related institutional supply and tourism demand.

This study plans to construct the supply-side factor structure of tourism industry and holds that tourism industry factors include common factors and tourism industry factors; And through the data-driven empowerment method, the quantitative comprehensive evaluation of the supply factors in seven aspects of Yunnan tourism industry, involving seven aspects such as accommodation, travel, shopping and leisure. The selection of secondary indicators is based on the principle of objectivity, authenticity and accessibility, and selects the index of hotels and high-quality hotels to measure the supply quality of "food". Select the hotel and high quality hotel index to measure the "accommodation" supply level; Considering the actual situation of transportation development in Yunnan, highway mileage is selected to measure the supply level of "line" (Zhang et al., 2020)[6]; As the main attraction to attract tourists, the index scenic spots and high-quality scenic spots are selected to measure the supply level of "tourism"; To a certain extent, the retail sales of consumer goods show the supply level of regional tourism commodities, which is selected as the indicator of "purchase"; The number of entertainment companies that can hold cultural and art exhibitions, cultural festival activities, cultural business performances and other businesses in a region reflects the

supply level of tourism and entertainment in a region to a certain extent, which can be used as a reflection index of "entertainment" (Zhang, Lu, Huang, & Zhang, 2022)[10]; At the same time, Yunnan, as a province where ethnic minorities live in a community, many ethnic festivals and festivals will welcome the city's small long holidays (Jeyacheya & Hampton, 2020)[11]. Such unique festival activities and leisure time can not only promote the change and adjustment of the supply factors of the tourism market in the province, but also further promote the supply adjustment of the time factors of the remote tourist source market. This study plans to select the fixed ethnic festival and holiday time of each city and prefecture as the factor index of "leisure," which is in line with the factor supply characteristics of Yunnan tourism industry.

Based on this, this study proposes to optimize and upgrade the factors of tourism supply, adjust and optimize the structure of tourism supply, improve and innovate the way of tourism supply, enrich and improve the quality of tourism service, so as to achieve the high-quality development of Yunnan tourism industry.

2 Literature Review

Innovative identification of the concept of supply-side structural reform. Cheng Yu made an innovative identification of the concept of supply-side structural reform and believed that supply-side as a concept should have four characteristics: In addition, he believes that the reform of tourism supply side can start from negotiation innovation and third-party social undertakings, so as to change the current development status of mainly relying on the three supply forms of enterprise, state-owned and individual. His identification of the concept of tourism supply-side structural reform is of great significance for further research on tourism supply-side structural reform. Many studies on the interpretation of the connotation of tourism supply-side structural reform focus on the important content of the reform. Sun Panpan believes that tourism supply-side structural reform is based on the theory of balance between supply and demand, focusing on the reform of tourism products, tourism management and system, tourism public services, tourism investment, tourism technology and other industrial supply content. Taking Hainan as an example, Liu Huacu et al. argued that there was a problem of insufficient effective supply in Hainan's tourism development, which was specifically reflected in the fact that the supply of prefecture-level tourism products was far greater than the demand, so it could not meet the needs of tourists pursuing personalized and high-quality. The mining of tourism culture is insufficient, and the distribution of industrial structure is unreasonable. Liu Qingyang believes that tourism supply-side structural reform is to reform and improve production factors, production technology, production mode and technological innovation. Gao Caixia et al. believed that in terms of the supply side of domestic tourism development, there are mainly problems such as the imbalance between supply scale and supply quality, unreasonable industrial structure, market and product structure, and insufficient investment in advanced tourism factors. By comparing the hot outbound tourism market with the sluggish international inbound tourism market, Zhang Weihong et al. pointed out that there are some problems

in the supply quality and supply environment of domestic tourism, which cannot meet the tourism needs of domestic and international tourists.

Some connotation interpretations focus on the balance of tourism supply-side structure. Liao Junhua believes that the supply-side structure problems in the initial stage of China's tourism development are mainly manifested as unreasonable supply structure and dislocation of supply and demand. Wang Yujie believes that tourism supply-side reform refers to the study of tourism supply-side structural reform under the theoretical paradigm of national supply-side structural reform, and then puts forward optimization strategies in terms of supply-side industrial structure and stock, so as to improve the overall supply level of tourism. Xue Huaaju et al. believed that the essence of supply-side structural reform is to achieve the coordinated development of supply and demand. To sum up, tourism supply-side structural reform, as a characteristic reform measure in line with the actual development of China's tourism, is still in its infancy in the domestic academic research on tourism supply-side structural reform.

First, carry out supply-side reform to provide impetus and support for the optimization and upgrading of tourism industry structure. Tourism supply-side reform is based on the theory of supply-demand balance, focusing on the reform of tourism products, tourism management and system, tourism public services, tourism investment, tourism technology and other industrial supply content. Tourism supply-side reform not only involves many of the above factors extensively and accurately, but also provides an important link for the organic linkage of various factors, which naturally constitutes the basic driving force for the optimization and upgrading of tourism industrial structure.

Second, it should be integrated into the supply-side reform to form a driving force system for the optimization and upgrading of tourism industry structure. Tourism industry structure reform is the key link and important content of tourism supply-side reform, and the optimization and upgrading of tourism industry structure should be included in the overall context of tourism supply-side reform. To integrate the optimization and upgrading of tourism industry structure into the process of supply-side reform, it is important to realize that the tourism industry itself is a large system with balanced supply and demand, and the reform of tourism industry structure is not independent but should be organically integrated with the supply-side reform of tourism products, tourism public services, tourism policies and systems, tourism technology and other aspects. At the same time, the government, enterprises, tourists and other stakeholders and actors at macro and micro levels, as well as tourism resources, infrastructure, human resources, policy support, ecological environment and other factors, are comprehensively considered to form a driving force system for the optimization and upgrading of tourism industrial structure.

Based on the above research, this study plans to infer that the connotation of tourism supply-side structural reform should not only focus on the main content of supply-side reform, but also pay attention to the problem of structural balance: The supply-side structural reform of the tourism industry is different from that of other industries, which is related to the comprehensiveness of the tourism industry.

3 Research Design

3.1 Research Object

Based on the data related to tourism supply side and tourism income of 16 cities and prefectures in Yunnan Province, this research plan studies the efficiency input-output problem of supply-side factors of tourism development in Yunnan Province, tries to establish the evaluation index system of supply-side factors of tourism industry development in Yunnan Province, and obtains the results of the evaluation of supply-side factors of tourism development in Yunnan and the analysis of tourism performance.

3.2 Data Source

The research scope selected in this study is 16 cities and prefectures in Yunnan Province, and the time selected is 2023 data. The main sources of research data are the statistical bulletines of all cities and states in Yunnan Province in 2023 and the Statistical Yearbook of Yunnan Province, among which the statistical data of enterprises come from Tianyancha, the official website of Ctrip, and the Department of Culture and Tourism of Yunnan Province.

3.3 Research Method

This study uses the data-driven weighting method to determine the weight of the factor supply index of tourism industry in Yunnan and uses the multiple linear regression in econometrics to empirically analyze the tourism performance, so as to measure the factor input efficiency of the supply side of tourism industry in Yunnan. Specific analysis is as follows:

(1) The method to determine the weight of supply-side factor index in Yunnan tourism industry

When evaluating the supply-side factors of tourism industry in Yunnan, in order to avoid the subjective errors in the weight determination of analytic hierarchy process and the influence of the processing accuracy of eigenvalue vectors in the construction of matrix, this study adopts the data-driven weighting method, which is a method to determine the weight of supply-side factors based on the frequency of events. This study adopts the relevant statistical data of 16 cities and prefectures in Yunnan Province in 2023, uses the coefficient of variation method to determine the weight of each factor index, and determines the representativeness of the index by observation of the dispersion degree of the index, so as to determine the contribution degree of the supply-side factors of the tourism industry to the development of Yunnan tourism industry.

(2) Multiple linear regression model of supply-side factors of Yunnan tourism industry

This study uses multiple linear regression model to analyze the impact of supply-side factors of tourism industry on the development performance of tourism industry in Yunnan Province. The explanatory variable (independent variable) X is the seven aspects of the supply-side factor input of the tourism industry, such as accommodation,

travel, shopping and entertainment. Based on the sample data of 16 cities and prefectures in Yunnan, this paper takes the income of each factor input on the supply side (tourism income) as the dependent variable, so as to determine the relative impact of each factor input on tourism income.

4 Conclusion

The high-quality development of Yunnan Province needs to focus on the positioning in the market demand, highlighting the key points in the cultural endowment, and improving the quality, reputation and city brand influence at the macro and micro levels. To deepen the supply-side structural reform of tourism industry in Yunnan, we should fundamentally promote the healthy development of tourism industry by means of reform to meet the market demand. The essence is to deal with the relationship between government and market, let the market play a decisive role in resource allocation, and better play the role of government. The reform and innovation of tourism system and mechanism should be the driving force, the restructuring of tourism products should be the core, the contradiction between tourism supply and demand should be solved as the goal, the large and high-quality supply of tourism products should be the support, the effective implementation of relevant policies should be the guarantee, and the happy tourism of the people should be the goal. Deepening the supply-side structural reform of Yunnan tourism industry can be carried out from four aspects: optimizing and upgrading tourism supply elements, adjusting and optimizing tourism supply structure, perfecting and innovating tourism supply mode, enriching and improving tourism service quality, so as to achieve high-quality development of Yunnan tourism industry.

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