

Analysis of the International Competitiveness of Sichuan Liquor Cluster from the Perspective of Diamond Model

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Abstract: China is the world's largest producer and consumer market of spirits. However, compared with other world-renowned spirits, the export volume and value of Chinese Baijiu are rather small. This paper intends to use Porter's Diamond Model to analyze the current development status of the Sichuan Liquor Cluster from six perspectives, which are divided into internal and external factors: factor conditions, demand conditions, related and supporting industries, firm strategy, structure and rivalry, external opportunities and support. It also identifies the existing problems in the international competitiveness of the Sichuan Liquor Cluster and proposes corresponding solutions. The research aims to enhance the international competitiveness of Chinese Baijiu, address the overcapacity in the Chinese Baijiu industry, break the industry's excessive dependence on the domestic market, and further promote the global dissemination of Chinese culture and strengthen the influence of Chinese culture.

Keywords: Diamond Model; International Competitiveness; Cluster

1. Introduction

With the development of the economy, residents' income levels and consumption levels have been continuously improving, and the demand for high-quality commodities and services with cultural connotations has been increasing day by day. As a beverage with profound historical and cultural heritage and social attributes, Baijiu has been favored by more and more consumers. Domestically, the competition in the Baijiu market has become increasingly fierce, and the market demand has been approaching saturation. On the contrary, in the international market, the market demand share of Chinese Baijiu is much smaller compared with that of well-known spirits from

other countries. To enhance the international competitiveness of Chinese Baijiu and promote its exports, this study takes Sichuan—China's largest Baijiu production base—as the research object. By means of the Diamond Model, it analyzes the international competitiveness of the Sichuan Liquor Cluster, accurately grasps the current development situation of the import and export trade of spirits, and rationally assesses the opportunities and challenges. This not only helps to resolve the overcapacity in the Chinese Baijiu industry and break the industry's excessive reliance on the domestic market, but also contributes to promoting the global spread of Chinese culture and enhancing the influence of Chinese culture [1].

2. Analysis of the International Competitiveness of Sichuan Liquor Cluster

2.1 Factor Conditions

Factor conditions are the fundamental elements for the survival and development of an industry, including basic factors such as geographical location, natural resources, and climatic conditions, as well as advanced factors like knowledge and capital. The latitude of 28°N has been identified by the Food and Agriculture Organization (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) as “the most suitable ecological zone for brewing high-quality and pure distilled liquor at the same latitude on Earth.” The core production area of Sichuan's liquor industry is just located in the region around 28°N, known as “China's Bordeaux—the Baijiu Golden Triangle”, boasting a unique geographical advantage. Moreover, this area is situated in a subtropical humid climate zone with a relatively high annual average temperature, which provides suitable temperature conditions for Baijiu fermentation. Under appropriate temperatures, microorganisms can grow and reproduce better, thereby

producing abundant flavor substances and improving the taste and quality of Baijiu [2].

In addition to its geographical advantages, the Sichuan Liquor Cluster also has strengths in raw materials. The unique glutinous red sorghum in Luzhou, Sichuan, has plump grains, high starch content, and strong water absorption, making it very suitable for liquor brewing. Furthermore, Sichuan Province is rich in groundwater resources. After long-term natural filtration, this water contains an appropriate amount of minerals, which not only ensures the pure taste of the liquor but also helps improve the liquor's quality and flavor.

2.2 Demand Conditions

Chinese Baijiu has a relatively low market share in the international market, mainly due to low taste recognition and cultural differences. Compared with world-renowned spirits such as brandy, whiskey, and vodka, Baijiu has unique taste characteristics. For international consumers unaccustomed to its flavor, the acceptance of Baijiu may be relatively low, which is an important factor affecting the international competitiveness of Sichuan Baijiu. Additionally, foreigners' lack of understanding of Chinese Baijiu culture has affected the demand for Baijiu in the international market due to cultural differences. Sichuan Baijiu has a long history and profound cultural background, but international consumers know very little about it. They are almost unaware of the historical heritage, craftsmanship spirit, and humanistic beauty of Sichuan Baijiu culture, which is another important factor leading to the low demand for Sichuan Baijiu in the international market.

2.3 Related and Supporting Industries

An industry and its related supporting industries are interdependent and share a common fate. The advantage of one industry may rely on the competitive edge of its related industries; similarly, a competitive industry usually drives the development of its related sectors. These two parties can cooperate and share information, thereby fostering the competitiveness of related industries in terms of technology, processes, sales, markets, or services. The development of Sichuan Liquor is inseparable from its ancient cellars and the well-connected logistics and transportation industry.

The cellar is the "soul" of liquor. The older the

cellar, the more microorganisms accumulate in the cellar mud; the longer the fermentation cycle of the grain lees (zaopei), the higher the content of flavor substances in the mother lees, and the richer and more aromatic the resulting liquor. Sichuan is home to a large number of cellars dating back to the Qing Dynasty, and even some ancient cellars with a history of several hundred years from the Ming Dynasty. The aged cellar mud in these ancient cellars has absorbed the essence of fermented substances over hundreds of years—unlike the loess-colored mud of new cellars, it presents a glossy gray-black hue, with a soft and fine texture, emitting a rich and complex aroma. The microbial communities in the cellar mud continuously engage in a fascinating exchange and symbiosis with the microorganisms in the fermented grains, creating the unique aroma of Sichuan Liquor.

Gone are the days when "good liquor needs no bush." While high-quality aroma is a prerequisite, for Sichuan Liquor to "go global", it also requires robust logistics support. A well-developed logistics system ensures that Sichuan Liquor is transported from production areas to destinations quickly and accurately. At the same time, efficient logistics can reduce transportation costs, enhancing the price competitiveness of Sichuan Liquor. This is crucial for exploring new markets and attracting consumers. Efficient and professional logistics services also help improve the brand image of Sichuan Liquor and strengthen consumers' trust and loyalty toward the products.

Furthermore, the regional agglomeration of an industry and its related sectors plays a vital role in improving the information environment and its quality. Industrial agglomeration is a process driven by both economies of scope and external economies, which can generate effects such as the regional brand effect for industrial development, the resource-sharing effect, the industrial division and cooperation effect, and the effect of enhancing industrial innovation capabilities. Industrial agglomeration can also bring about economies of scale and knowledge spillover effects.

2.4 Firm Strategy, Structure, and Rivalry

Sichuan liquor enterprises are located in the "China Baijiu Golden Triangle", enjoying a superior geographical location. Currently, the Sichuan Liquor industrial cluster has formed a "6+10+20+N" structure, with "Six Golden

Flowers” as leading enterprises, “Ten Small Golden Flowers” as the backbone, and “Top 20 Base Liquor Enterprises” as competitive base liquor producers. Due to the long history of the liquor industry, the tendency of products and services toward homogenization, slow industry growth, and the large number of enterprises within the Sichuan Liquor cluster, competition within the Sichuan Liquor industry is relatively fierce.

Leading enterprises hold a distinct advantage in this intra-industry competition. In 2023, Wuliangye’s revenue exceeded 80 billion yuan, and Luzhou Laojiao’s revenue surpassed 30 billion yuan for the first time. Meanwhile, enterprises are adopting increasingly diversified competitive strategies:

Brand Differentiation Strategy: Enterprises attract consumers of different segments through unique brand positioning and cultural connotations. Wuliangye positions itself as a high-end brand, while Luzhou Laojiao emphasizes the inheritance of its history and culture. Other small and medium-sized Sichuan liquor enterprises adopt a multi-product strategy, covering price ranges from high-end to mid-to-low-end, expanding consumer choices and meeting the needs of different consumers.

Market Expansion Strategy: Sichuan liquor enterprises actively explore domestic and international markets by participating in international wine exhibitions, holding tasting events, and other activities to enhance brand awareness and influence. At the same time, they expand online markets through e-commerce platforms and other channels, broadening sales channels and coverage [3].

Cultural Marketing Strategy: Enterprises focus on cultural marketing and brand building. By exploring and inheriting liquor culture and organizing cultural events, they enhance the cultural connotation and influence of their brands.

2.5 External Opportunities

China’s accession to the World Trade Organization (WTO) has brought significant opportunities to Sichuan liquor enterprises:

Enterprises can leverage the WTO’s global platform to expand overseas markets and export products to all parts of the world, which helps increase the international popularity and market share of Sichuan Liquor.

It provides opportunities for Sichuan liquor

enterprises to cooperate and exchange with international counterparts, including cooperation in technology, brand development, and market expansion. This facilitates enterprises in absorbing advanced international experience and technologies, thereby improving product quality and international competitiveness.

WTO accession has further opened up China’s liquor market. Sichuan liquor enterprises can enjoy various policy dividends such as reduced tariffs and fewer non-tariff barriers, which helps lower production costs and enhance market competitiveness.

Relying on the WTO’s global platform, Sichuan liquor enterprises can strengthen digital marketing and international marketing efforts. They can use new media tools such as the Internet and social media for brand promotion and market expansion, which contributes to boosting the international influence and market competitiveness of Sichuan Liquor brands [4,5].

2.6 Government

The Sichuan Provincial Government attaches great importance to the development of the Sichuan Liquor industry and has introduced a series of policies and measures to support local liquor enterprises. For instance, documents like Action Plan for Building the “Sichuan Liquor” Brand and Promoting High-Quality Development of Sichuan Liquor (2024-2027) (Draft for Comments) have outlined a detailed development blueprint for the industry. According to the policy plan, by 2027, the quality of “Sichuan Liquor” will be continuously consolidated, brand value will be steadily enhanced, industrial innovation capabilities will be strengthened, and market competitiveness and international influence will be expanded steadily [6].

In terms of fiscal and financial policies, the government has increased support for Sichuan liquor enterprises, providing fiscal incentives such as preferential loans and tax reductions, and guiding financial institutions to offer more financing services to these enterprises. In brand cultivation and promotion, the government has organized specialized expositions such as the China International Wine Expo and the China International Famous Liquor Expo, providing platforms for Sichuan liquor enterprises to showcase their brands and conduct exchange and cooperation. It also actively promotes “Sichuan Liquor” to enhance its global reputation and

popularity.

To support Sichuan liquor enterprises in implementing internationalization strategies and expanding overseas markets, the government has further issued work plans for promoting Sichuan Liquor exports and overseas promotion plans. Focusing on reducing enterprises' costs in logistics, promotion, circulation, and other links, these policies aim to further optimize the business environment for Baijiu exports.

3. Recommendations for Enhancing the International Competitiveness of the Sichuan Liquor Cluster

3.1 Strengthen Scientific Research Capabilities, Innovate Flavors, and Improve the International Competitiveness of Products

Although Sichuan liquor enterprises represented by Wuliangye have made many beneficial explorations and practices in the international development of Chinese Baijiu enterprises, compared with major international distilled spirits, the international recognition of Sichuan Liquor's taste remains low, resulting in an extremely low international market share. Sichuan Liquor is dominated by strong-aroma Baijiu, and its unique taste differs significantly from the medium-to-low alcohol content liquors generally preferred by global consumers. Foreign consumers find it difficult to accept high-alcohol Baijiu and prefer softer-tasting rice-aroma Baijiu or other types of liquor.

Therefore, Sichuan liquor enterprises should strengthen their scientific research and innovation capabilities, improve the professional competence of technical personnel, and explore innovative flavors. Based on the taste preferences of the international market, they can develop more new products with soft taste and moderate alcohol content to meet the needs of different consumers and enhance the international competitiveness of Sichuan Liquor [7].

3.2 Strengthen Brand Promotion, Publicize Sichuan Liquor Culture, and Enhance International Recognition of Products

Cultural and habitual differences between China and the West lead to foreigners' lack of recognition of Chinese Baijiu. Baijiu has a profound cultural heritage and historical tradition in China, but in the international market, due to cultural and habitual differences, many

consumers do not understand Baijiu's brewing process and tasting methods, making it difficult for them to develop a recognition of Sichuan Liquor.

Thus, it is necessary to deeply explore and inherit Sichuan Liquor culture, strengthen research on the history and brewing technology of Sichuan Liquor, and showcase its profound cultural heritage and unique brewing process. By holding events such as the "Sichuan Liquor Culture Week", the history, culture, products, and innovation achievements of Sichuan Liquor can be displayed in a concentrated manner. Through cultural exchanges and publicity, international attention and participation can be attracted, the visibility and reputation of Sichuan Liquor in the international market can be improved, and consumers can gain a better understanding of the cultural heritage and unique charm of Sichuan Liquor.

3.3 Accelerate Digitalization, Expand Sales Channels, and Explore the International Market

First, Sichuan liquor enterprises should actively introduce and adopt advanced digital technologies, and use cloud computing, big data, and the Internet of Things (IoT) to improve the automation and intelligence level of the production process. For example, IoT technology can be used to realize real-time monitoring and data analysis of the production process, thereby improving product quality and production efficiency.

Second, Sichuan liquor enterprises can use digital means for marketing, such as social media marketing, Search Engine Optimization (SEO), and content marketing, to expand brand influence and enhance product visibility. At the same time, in-depth analysis of consumer behavior can be conducted using big data technology to achieve precise marketing.

Third, Sichuan liquor enterprises should actively expand sales channels. In addition to consolidating traditional offline sales channels, they should also actively explore online sales channels such as e-commerce platforms and social media, establish cooperative relationships with e-commerce platforms such as JD.com, Tmall, and Pinduoduo, and increase the online exposure and sales volume of Sichuan Liquor products. Meanwhile, social media platforms such as WeChat and Weibo can be used for brand promotion and product marketing.

Finally, full market research and analysis of the international market should be conducted to understand information such as consumer needs, competitive landscape, and policies and regulations in the target market, providing a basis for enterprises to formulate appropriate market strategies. The international market can be explored and brand visibility and reputation can be enhanced through market research and analysis, brand building and international promotion, and international marketing strategies [8, 9].

4. Conclusion

In summary, the Sichuan Liquor enterprise cluster has a certain degree of competitiveness in the international market, but it also faces some challenges and opportunities. The analysis based on the Diamond Model shows that the Sichuan Liquor enterprise cluster has strong advantages in factor conditions, related and supporting industries, and government support, but still needs to strengthen aspects such as brand building and marketing.

In the future, Sichuan liquor enterprises should continue to increase R&D investment, improve product quality, strengthen brand building and marketing, and expand the international market to further enhance their international competitiveness. At the same time, the government and all sectors of society should also strengthen support and attention to the Sichuan Liquor industry, and jointly promote the international development of the Sichuan Liquor industry.

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