

# ***Hainan Airlines Development Strategy in the Post-Pandemic Era***

**Songchun Zhang<sup>1,a,\*</sup>**

*<sup>1</sup>School of Economics, The University of Queensland, Brisbane, Queensland, Australia, 4072  
a. Songchun.zhang@uqconnect.edu.au*

*\*corresponding author*

**Abstract:** Since late 2017, Hainan Airlines Holdings Limited has experienced an outbreak of liquidity crisis, the COVID-19 pandemic, government takeover, and bankruptcy restructuring procedures. Against this background, this paper uses Porter's five forces model as well as the SWOT model to study the current internal and external situation of Hainan Airlines Holdings Ltd. and examine its potential strengths as well as the aspects that need to be improved. The study shows that Hainan Airlines' external environment is not competitive and its internal management still has potential for improvement. In addition, it should seize the potential development opportunity of the establishment of the Free Trade Zone in Hainan Province to revitalize the company.

**Keywords:** COVID-19, Hainan airlines, porter's five forces, SWOT, post-pandemic era

## **1. Introduction**

Hainan Airlines Holdings Limited (Hainan Airlines) is one of the four largest airlines in China with a young and luxurious fleet of Boeing 787, Boeing 737 series Airbus A350 series and Airbus A330 series passenger and cargo aircraft, creating a premium first class cabin with individual space and a spacious and comfortable new business class for passengers. Hainan Airlines Holdings Co., Ltd. was ranked 141st in the 2020 Fortune China 500 list launched in July 2020.

In late 2017, Hainan Airlines experienced an outbreak of liquidity risk and failed to initiate effective risk mitigation efforts. The COVID-19 pandemic that began in early 2020 exacerbated Hainan Airlines' liquidity crisis and made it unsustainable for a while. On February 29, 2020, the People's government of Hainan Province led the establishment of the "Joint Working Group of Hainan Airlines Group ". On April 24, 2022, Hainan Airlines issued an announcement that the merger reorganization plan had been executed and confirmed by a court ruling.

This paper will use Porter's five forces model to analyze Hainan Airlines' external environment and SWOT model to analyze Hainan Airlines' internal environment.

Finally, based on the results of the analysis, this paper will propose how Hainan Airlines can get out of its operational difficulties and achieve healthy and sustainable development in the post-pandemic era [1-3]. This paper has important reference value for relevant research on how the Chinese aviation industry can get out of the post-epidemic period.

## **2. Analysis of the External Environment of Hainan Airlines**

Early in the 1980s, Michael Porter put forth the Porter's Five Forces model, in which he claimed that there are five factors that determine the scope and intensity of competition in a market, and that these factors work in concert to affect the market's attractiveness and the competitive strategy choices of existing firms. The five forces are the ability of future competitors to enter an industry, the ability of existing competitors to compete, the ability of substitutes to replace existing competitors, and the negotiating power of suppliers and buyers.

### **2.1. Bargaining Power of Suppliers**

From the perspective of Hainan Airlines' cost structure, Hainan Airlines' suppliers are mainly divided into three parts: civil aircraft suppliers, aviation fuel suppliers, and airport facilities suppliers. Regarding civil aircraft supply, civil airliner manufacturers Boeing and Airbus have formed a duopoly in the international status quo, and the market power of these two suppliers is comparable, so Hainan Airlines' bargaining power is very weak.

In addition, all airlines in mainland China need to purchase new airliners through China National Aviation Equipment Group Corporation (CNAC). In this case, although all airlines purchasing airliners together can give them some bargaining power, Hainan Airlines has to pay a certain percentage of commission to CNAC because of its monopoly.

Similar to the status quo of the civil airliner industry, China Aviation Fuel Company Limited has a monopoly on the supply of aviation fuel in mainland China, and it is difficult for private capital to enter the aviation fuel supply market, so Hainan Airlines has little bargaining power in this regard [4].

### **2.2. Bargaining Power of the Buyer**

Hainan Airlines' bargaining power over airfares is low and will be further weakened in the future. First of all, there is large volatility in the Chinese civil aviation market. During some major holidays, especially the Chinese New Year, airfares are high and do not have large discounts, but during non-holiday and non-weekend periods, airfares are often sold at 30% to 50% discounts. Secondly, if Hainan Airlines sets its airfares high, most short and medium-haul passengers will choose the more frequent high-speed rail as their mode of travel. Finally, a large number of travel agencies and airline agents in China, which have a large number of customers, further reduces Hainan Airlines' bargaining power [5].

### **2.3. Existing Competitors**

The current situation of China's civil aviation industry is that the market is monopolized by three major state-controlled airline groups, which are called national airlines. These companies have strong financial strength, large fleet size and experienced employees, and have shown the advantage of scale effect, and Hainan Airlines has no obvious difference and no obvious competitive advantage compared with the services provided by these airlines.

The other type of airline in China's civil aviation market is the private low-cost airline camp represented by Spring Airlines, they are characterized by low-cost airlines, sacrificing travel comfort to provide lower-priced tickets, these airlines have a limited number of aircraft types and routes, and therefore also have lower management and maintenance costs, Hainan Airlines also has no significant competitive advantage over them [6].

## 2.4. Threat of New Entrants

Since the civil aviation industry has high barriers to entry and exit, it is difficult for other capital to enter the industry, and in 2007, the Civil Aviation Administration of China issued a document requiring strict approval for new airlines. In addition, the high-tech, high-investment, high-risk and low-return nature of the airline industry makes it difficult for an airline to invest enough capital and time to achieve scale effects. Finally, the safety of the public in the civil aviation industry makes it difficult for the public to trust and choose a new airline. In summary, Hainan Airlines has no significant threat from new entrants [7].

## 2.5. The Threat of Substitutes

China's current mode of transport mainly contains railroad transport, road transport, air transport, waterway transport and pipeline transport five, for mainly engaged in passenger transport of Hainan Airlines, its main alternative to air transport is railroad transport and road transport.

In short-haul transportation, road and railroad transportation has a greater competitive advantage than air transportation, especially China's free highway policy on holidays makes some of the passengers who want to travel with the family during the holidays choose to drive, because self-driving travel brings more flexibility and fun to these passengers. Thanks to the rapid development of China's infrastructure construction, China now has the world's largest high-speed railroad operation network, and because of China's large population base, Chinese railroads can operate some popular lines with extremely low intervals, even to the extent of busing high-speed railroads, which makes passengers have more competitive advantages when choosing high-speed railways. This allows passengers to choose high-speed rail travel with a choice of train times, seats and fares that air transport cannot offer [8].

## 3. SWOT Analysis of Hainan Airlines

SWOT analysis is a situational study based on the internal and external competitive environment and conditions. It stands for Strengths, Weaknesses, Opportunities, and Threats. It examines and lists the key internal strengths and weaknesses as well as external opportunities and dangers that are directly relevant to the study's subject. It then compares them to one another and draws a number of findings that are appropriate.

SWOT analysis enables us to perform a thorough, methodical, and correct analysis of the context in which the research subject is situated, allowing us to design development strategies, plans, and countermeasures based on the study's findings.

### 3.1. Advantages

Hainan Airlines has a well-known corporate brand image and a good international brand image. Hainan Airlines has been awarded the "Five Star Award for Safe Flight" by the General Administration of Civil Aviation of China and "Five Star Airline" and "Best Airline in China" by related organizations. In addition, Hainan Airlines has a wide range of routes. In addition, Hainan Airlines has a wealth of route resources, up to now Hainan Airlines and its affiliates have more than 2,000 internal and external routes, and route resources are an important intangible asset for the airline.

### 3.2. Disadvantages

HNA's comprehensive business management is inadequate and its corporate reputation and ratings have been reduced to a low level. Over the past decade, HNA has made several international mergers and acquisitions in various industries including air transportation, hotels, tourism, real estate, internet,

finance and technology. These mergers and acquisitions have greatly increased HNA Group's liabilities, and with the tightening of the Chinese government's macro-financial policies, HNA Group's cash flow is no longer able to maintain normal corporate operations. In addition, HNA's return on assets in the past five years is far below the average of China's civil aviation industry, which indicates that HNA Group's operating capacity and resource allocation efficiency are low.

At the end of 2017, Hainan Airlines suffered a liquidity crisis due to mismanagement, mismanagement and disorderly investment, coupled with the market downturn, which turned into a serious insolvency debt crisis. On September 15, 2020, HNA Group was listed as a "defaulted executor" by the Beilin District People's Court for "refusing to fulfill its obligations as determined by the legal documents in force". As shown in Table 1, Hainan Airlines' financial data for 2020 deteriorates to a greater extent compared to 2019.

In February 2021, the Hainan High People's Court ruled that Hainan Airlines Group should be reorganized, and in October 2021, the Hainan High People's Court successfully concluded the case and approved the reorganization plan [9].

Table 1: Hainan Airlines 2020 vs. 2019 Financial Data.

	Operating income	Total Assets	Net cash flows from operating activities	Gearing ratio (%)
2020	164,576,692	29,401,026	-506,068	113.52
2019	209,937,916	72,389,410	13,732,697	70.76
Rate of change (%)	-21.61	-59.38	-103.69	60.43

(Unit: thousand Currency: RMB)

### 3.3. Opportunities

China's civil aviation industry is still in the development stage, and the number of airplane rides by citizens is low, and there is still more room for improvement. According to Airbus' forecast, the number of airplane rides per capita in China will reach 0.675 in 2025, compared to 0.47 in 2019. Studies show that the development of a country's civil aviation industry is highly correlated with the extent of its economic development, and as a country's economy develops, demand for both business travel and personal travel will increase, which will drive a sustained and steady increase in air passenger demand.

The establishment of the Hainan Free Trade Zone brings a whole new opportunity for the development of Hainan Airlines. On April 14, 2018, the Chinese government issued a document announcing the construction of China's Hainan Free Trade Pilot Zone, with the implementation scope of the entire island of Hainan. With the development of the Hainan Free Trade Zone, Hainan's civil aviation market has also entered a new period of development. Currently, Hainan Airlines is participating in the preparation of a new airport in Sanya, and this new airport is expected to become an important hub for future South China Sea aviation.

### 3.4. Threats

The impact of the COVID-19 pandemic is still ongoing. With the outbreak of the COVID-19 pandemic in early 2020, all Chinese airlines are drastically reducing their capacity. According to the relevant policies of the Chinese government, the number of Hainan Airlines' international flights has been drastically reduced, while the demand in the domestic air passenger market has been drastically reduced due to the change in public attitudes towards domestic travel, which makes the situation of

Hainan Airlines Group, which is already in the process of bankruptcy restructuring, even more difficult.

International oil price fluctuations. Oil is one of the main operating costs of airlines, and the fluctuation of international oil prices in recent years has caused Hainan Airlines' operating costs to change.

Increased competition from domestic low-cost airlines. The emergence of the COVID-19 pandemic and the implementation of anti-pandemic measures have reduced the public's disposable income by a certain percentage, which has enhanced the competitive advantage of low-cost airlines, and passengers who were willing to fly Hainan Airlines are now choosing flights of low-cost airlines, led by Spring Airlines, because of the ticket prices [10].

#### **4. The Development Strategy Hainan Airlines Should Take in the Post-pandemic Era**

##### **4.1. Replace the Management Team and Hire Professional Managers**

Hainan Airlines should replace its management team, hire managers with relevant experience, streamline its organizational structure, improve its operation and investment capacity, expand its management tools, realize comprehensive budgeting and refined management, reduce its management and operation costs, and create more room for lowering fares to attract consumers.

##### **4.2. Reduce the Number of Airliners Operated by the Company to Better Utilize the Advantages of Scale Effect**

Operating more types of passenger aircraft will greatly increase the company's costs, these costs include flight and maintenance personnel training costs, related maintenance parts storage costs, etc. Therefore, the appropriate reduction of the company's operating aircraft types will greatly reduce the airline's operating costs, so that Hainan Airlines can better play the scale effect, to maximize the level of corporate profits.

##### **4.3. Innovative Business Types, Maximize the Use of Company Resources**

Since the outbreak of the COVID-19 pandemic, many of Hainan Airlines' civil airliners have been sealed off and unable to take off for a long period of time not only cannot bring profits to the company, but also increase the related maintenance costs. In this regard, Hainan Airlines should make efforts to increase the types of business, such as converting passenger planes into cargo planes for cargo transportation and developing civil charter business, to maximize the use of the company's resources, bring more cash flow and profits for the company, to help the enterprise out of the liquidity crisis.

##### **4.4. Make Full Use of Relevant Policies and Seize Historical Opportunities**

Hainan Airlines, as a local enterprise in Hainan Province, has advantages in the region that other airlines cannot match. In the current period when the Chinese government is vigorously promoting the construction of Hainan Free Trade Zone, Hainan Airlines should enhance communication with the government, seize the opportunity and strive to create new growth points for the enterprise.

#### **5. Conclusion**

Under the dual impact of the major liquidity crisis and the new crown epidemic, Hainan Airlines is currently experiencing great operational problems and is in bankruptcy and reorganization proceedings. An analysis of Hainan Airlines' external environment found that Hainan Airlines has weak supplier bargaining power and weak buyer bargaining power, while at the same time, Hainan

Airlines' competitors have greater competitive advantages, with high-speed rail and road transport as substitutes having stolen some of its passenger traffic, although the threat from its new entrants is low. An analysis of Hainan Airlines' internal situation reveals that Hainan Airlines has certain intangible assets but currently has weak management capabilities and is in a serious liquidity crisis. In addition, the threat to Hainan Airlines is exacerbated by the COVID-19 pandemic, changes in international jet fuel prices and the presence of competitors, but the establishment of the Hainan Free Trade Zone is a unique opportunity for Hainan Airlines.

In summary, Hainan Airlines should replace its management team with a more professional one, reduce the number of aircraft it operates to increase its scale, improve its aircraft availability and take advantage of the establishment of the Hainan Free Trade Zone to help it grow and develop.

Due to the limited space, the data and analysis model used in this paper, only the main features of Hainan Airlines' internal and external environment were studied, while many potential details were not covered. In future research, researchers can focus more on how Hainan Airlines can seize the major opportunity of the establishment of Hainan Free Trade Zone to achieve sustainable development.

## References

- [1] Bazzo João Pedro, Braga Carlos Kaue, Pereira Rafael H.M.. *The impact of COVID-19 on air passenger demand and CO2 emissions in Brazil*[J]. *Energy Policy*, 2022, 164(prepublish).
- [2] Sobieralski Joseph B., Mumbower Stacey. *Jet-setting during COVID-19: Environmental implications of the pandemic induced private aviation boom*[J]. *Transportation Research Interdisciplinary Perspectives*, 2022, 13.
- [3] Liu Anyu, Kim Yoo Ri, O'Connell John Frankie. *Corrigendum to "Covid-19 and the aviation industry: The interrelationship between the spread of the Covid-19 pandemic and the frequency of flights on the EU Market"* [Ann. Tour. Res., Volume 91, November 2021, 103298][J]. *Annals of Tourism Research*, 2022(prepublish).
- [4] Zhang Jingran, Zhang Shaojun, Wu Ruoxi, Duan Maosheng, Zhang Da, Wu Ye, Hao Jiming. *The new CORSIA baseline has limited motivation to promote the green recovery of global aviation*. [J]. *Environmental pollution (Barking, Essex : 1987)*, 2021, 289.
- [5] Warnock-Smith David, Graham Anne, O'Connell John F., Efthymiou Marina. *Impact of COVID-19 on air transport passenger markets: Examining evidence from the Chinese market*[J]. *Journal of Air Transport Management*, 2021, 94.
- [6] Anonymous. *Evidence review – Public health measures in the aviation sector in the context of COVID-19: quarantine and isolation (21 May 2021)*[J]. *Weekly Epidemiological Record*, 2021, 96(20).
- [7] Miani Peter, Kille Tarryn, Lee Seung Yong, Zhang Yahua, Bates Paul Raymond. *The impact of the COVID-19 pandemic on current tertiary aviation education and future careers: Students' perspective*[J]. *Journal of Air Transport Management*, 2021(prepublish).
- [8] Dube Kaitano, Nhamo Godwell, Chikodzi David. *COVID-19 pandemic and prospects for recovery of the global aviation industry*[J]. *Journal of Air Transport Management*, 2021, 92(prepublish).
- [9] Broward County Aviation Department: *On-Site COVID-19 Testing Service Kicks Off at FLL*[J]. *Manufacturing Close - Up*, 2020.
- [10] Ink Aviation and Tendo Health launch global Digital Health Platform to help reopen borders; *The framework supports rapid COVID-19 testing before departure and works with other secure digital health passports*[J]. *M2 Presswire*, 2020.