The Impact of COVID-19 on the Air Transport Industry

Jingfei Yan *
Singapore Institution of Management, Singapore
*Corresponding author: jyan010@mymail.sim.edu.sg

Abstract. Since the founding of the People's Republic of China, China's civil aviation industry has been developing rapidly and occupies an important position in the country's economy and transportation, at the beginning of 2020, the world broke out in a large-scale epidemic -- COVID-19. During this period, all walks of life suffered a huge impact. A large number of enterprises went bankrupt due to high risk and insufficient response capacity. What are the major effects on the financials of company and what are the main reasons that cause this substantial change? With the liberalization of national policies and the transformation of the epidemic, tourism has gradually recovered. Nowadays, this kind of topic becomes more and more popular, some people have become interested in what's going on of the airline company especially the stocks. To see how the China Southern airline worked and operated to affect the financials during COVID-19, that is the reason why this paper needs financial analyze to tell people.

Keywords: Air transport industry; China Southern Airline; COVID-19; Strategy.

1. Introduction

In 2020, which is the most serious time, COVID-19 pandemic swept the whole world, it is resulting that not only the transformation of people's lifestyle and behavior, but also it can cause a huge influence of an industry or a country. In the terms of the airline industry, the development of aviation industry is the product of globalization, which serves the rapid flow of people and logistics. Due to the epidemic, people have basically suspended public and business travel, and replaced them with remote and non-contact office such as video conference, the percentage of the traveller volume has dropped dramatically, most airlines lost money for the year. Countries had to shut down, all kinds of flows came to a sudden halt, the entire industry quickly frozen. For the aviation industry, the epidemic may not only affect the traffic volume and efficiency in the short and medium term, but also have a long-term and profound impact and change on the passenger structure, consumption habits, operation mode and competition pattern of the century-old industry.

This paragraph said that for the China South airline which has a certain representation in the aviation filed, it is the airline with the most planes, the most developed route network, and the largest annual passenger volume in China. China Southern Airlines' annual passenger volume ranks first in Asia and third in the world. Its fleet size ranks first in Asia and fourth in the world. It is the airline with the most flights, the densest route network, and the largest annual passenger volume in China. However, out of everyone's surprise, because of COVID-19 occurred suddenly and continuously which means that even after 2020, the COVID-19 still did not disappear, exchange rate fluctuations and crude oil prices both got persistently high at the same time, together with there were a decline in the willingness of passengers to travel and a sharp drop in the number of flights, this Asia's largest airline company was in extreme operational difficulty. Financial statements belong to the content that enterprises need to present, which involves the scope of social responsibility, and is also the enterprise initiative that investors look at more. Reporting quality is critical both from the standpoint of investors and internal users. It is released to the public after rigorous review. In general, it is based on the daily accounting records, in a unified and fixed index system, according to the requirements of the operation, to ensure the timeliness of the premise of making corresponding records, information retention. After that, it will be drawn into a statement format, containing multiple detailed forms, such as liabilities, flow, profits and other accounting data, which will be presented in their own forms, so as to meet the comprehensive and detailed requirements.

For the analysis of such reports, it is necessary to integrate past reports and current information, fill in the high-quality information collected from various channels, and participate in the analysis together. The whole process will be based on the established index system, path, means, focusing on the main business level to launch a review. During this period, this report can get more detailed and comprehensive feedback on the operation of the enterprise, so the understanding of its operation level will step to a new level, and this judgment is relatively scientific. Based on this premise, it can also explore the trend of the enterprise and reason about the business results it may encounter later. On the one hand, these can be used by the enterprise as an effective reference for the next stage of work, which can be used for reference in the scheme design, so, as to make it easier to upgrade the management work. On the other hand, it also allows investors to make better judgments.

2. A Deficiency Tendency and Strategy of China South Airline

2.1 Revenue, Net Profit Reduction, Load Factor Reached the Lowest

The aviation industry is still not getting better. According to the Civil Aviation Administration [1], the total turnover of civil aviation in the first half of 2022 was 29.34 billion tonnage kilometers, 46.7% of the same period in 2019. The number of passenger trips was 118 million, down 52 percent year-on-year to 36.7 percent in the same period in 2019. At its lowest, there were only 2,967 daily flights nationwide, 17.8 percent of the same period in 2019. The freight transport business has gradually recovered. The volume of freight transport in the first half of this year was 3.077 million tons, down 17.9% year on year, but it has recovered to 87.5% of 2019. In June this year, the overall scale of air cargo transport has reached 89.7 percent of that of the same period in 2019.

2.2 Strategy that Response from China Southern Airline

Due to the sporadic epidemic in China, air travel demand in the summer and peak season in China was disrupted [2]. In August, ASK, RPK and passenger transport volume of China Southern Airlines decreased by 40.83%, 51.23% and 55.48% year-on-year, respectively, and passenger transport volume of single quarter decreased by 21.58% and 26.04% quarter-on-quarter, respectively. However, benefiting from the rising income level of the domestic line, the company's quarterly revenue increased by 2.02% year on year. In the third quarter, China Southern Airlines continued the growth trend of the second quarter, showing the higher potential of overseas internal line earnings growth [3]. The outbreak of a big crisis leads to a complete collapse of demand, stock prices back to the bottom of the cycle, and also means the start of a new cycle. Under the continuous impact of COVID-19 epidemic, China Southern Airlines shares came to the bottom of the big cycle level. Recently, important progress has been made in the research and development of specific drugs for COVID-19, but there is still a long way to go before the drugs are on the market and the turning point of passenger flow needs to be patiently waited for. Although the pace of recovery is difficult to grasp, the trend is certainly upward [4]. As the largest carrier by capacity in China, China Southern adopts Beijing-Guangzhou dual hub layout and is now in a period of strategic opportunity. Post-epidemic era, if the industry supply and demand elasticity cash, the company will be fully profitable. This paper will continue to consolidate the dual hub mode, accelerate the development of Daxing Airport, and look forward to international routes [5]. Since October 2020 [6], all flights of China Southern Airlines in Beijing have been transferred to Daxing Airport for operation, becoming the largest main base airline of Daxing Airport. Since then, China Southern Airlines has started the dual-hub operation mode. In the future, the company's routes from Daxing airport will be further encrypted. Beijing Daxing hub from the express line products will also be accelerated to build [7].

■ The industry whole financial report between 2019 and 2023

	2019A	2020A	2021E	2022E	2023E
Operating income(million)	154,322	92,561	127,115	169,899	182,641
YoY (%)	7.4	-40.0	37.3	33.7	7.5
Net profit	2,651	-10,842	3,969	4,487	6,120
YoY(%)	-11.1	-509.0	-136.6	13.1	36.4
Gross profit margin	12.1	-2.5	13.0	14.0	14,8
Net profit	1.7	-11.7	3.1	2.6	3.4
ROE(%)	4.0	-13.9	5.1	5.4	6.9
EPS	0.17	-0.71	0.26	0.29	0.40
P/E(times)	39.8	-9.7	26.6	23.5	17.3
P/B(times)	1.7	1.5	1.4	1.4	1.3

Fig. 1 The industry whole financial report between 2019 and 2023
Source:Picture from http://guba.eastmoney.com/news,600029,1018583705.html

3. Pandemic Influence on Cost of Airline

The cost of aviation fuel is the main production cost of airlines, which is greatly affected by the international crude oil price [8]. According to public data, the spot price of West Texas Light crude oil (WTI) and North Sea Brent crude oil has continued to fluctuate higher since 2021. After the Russia-Ukraine war broke out in February 2022, the price of Brent crude approached $140 a barrel. Prices eased slightly in the second quarter, but the average price held steady at $114 a barrel. High crude oil prices are putting pressure on airlines' profit margins. Assuming constant fuel consumption, a 10 per cent increase or decrease in average fuel prices would result in an increase or decrease in operating costs of RMB1.44 billion, China Southern said in its interim results. In terms of cost control, in the first half of 2022, China Southern Airlines' selling expenses were 1.925 billion yuan, and its management expenses were 1.646 billion yuan, down 20.22% and 7.27% year-on-year, respectively [9]. However, due to the impact of exchange rate fluctuations, the net loss of exchange in the reporting period was about RMB 2.052 billion, while the net income of exchange in the same period of 2021 was RMB 793 million, leading to a significant increase of 135.04% in financial expenses, which recorded RMB 4.823 billion, even exceeding the financial expenses of the whole year of 2021. China Southern Airlines' lease liabilities are mainly denominated in US dollars. During the six months to June 30, 2022, the company's US dollar lease liabilities are equivalent to RMB 41.686 billion, and the exchange rate of US dollar to RMB is 6.7114, which is about 5.20% higher than the central price of 6.3794 on the first settlement date of 2022. Increased 3.89 percent from the midpoint of 6.4601 in the same period of 2021[9]. According to the previous data, the company's financial expenses are basically consistent with the change trend of the exchange rate between the US dollar and RMB [10].

4. Conclusion

Industry short - term setback, medium - and long-term development can be. In the short term, there are still sporadic and regional relapses of the epidemic. The recovery of air transport demand is still uncertain due to the impact of the epidemic control, and the negative impact of the spread of the epidemic on international routes continues. Medium to long term, the economic development of China's economy as the world's second-largest economy, strong toughness, expanding domestic demand and consumption upgrade to bring market growth space, along with domestic epidemic control and promotion of vaccine, the improvement of the aviation market supply and demand, the improvement of the network and fulfill the policy of civil aviation, national policy support, financial institutions, the air transport industry still has broad prospects for development. Domestic airlines are faced with both opportunities and challenges in the environment. Airlines with route network advantages, location advantages and stable operation have strong comprehensive competitiveness and anti-risk ability, and it can achieve considerable development.

References

[1] Popa I, Bosinceanu A. Restarting the air transport industry after Covid-19--An economic forecast. Ovidius University Annals, Economic Sciences Series, 2020, 0(1): 451-456.

[2] Peng Zheng. Analysis of the impact of the new coronal pneumonia epidemic on civil aviation and policy recommendations. Traffic standardization, 2020.

[3] Lu Xuewen. Analysis of the financial performance of the air transport industry under the impact of the new crown epidemic. Heilongjiang University, MA thesis, 2002.

[4] Zhan Jianhua. Research on the Impact of Public Health Emergencies on the Stock Return of Chinese Airlines. Fujian Normal University, MA thesis, 2021.

[5] Chen Guicai. The impact of the Xinguan epidemic on China's civil aviation industry. The impact of the Xinguan epidemic on China's civil aviation industry ,MA thesis, 2021.

[6] Wang Jing. Research on the Profitability of China's Listed Airlines. Tianjin University of Finance and Economics, MA thesis, 2019.

[7] Yang Huijun. Research on financial risk analysis and countermeasures of air transport industry. Financial circles, 2015, (33): 2.

[8] Sakkakom Maneenop, Suntichai Kotcharin.,The impacts of COVID-19 on the global airline industry: An event study approach. Journal of Air Transport Management, 2020, 89, 101920.

[9] Amine Belhadi, Sachin Kamble, Charbel Jose Chiappetta Jabbour, Angappa Gunasekaran, Nelson Oly Ndubisi, Mani Venkatesh. Manufacturing and service supply chain resilience to the COVID-19 outbreak: Lessons learned from the automobile and airline industries. Technological Forecasting and Social Change, 2021, 163: 120447.

[10] Xia Menghong. Comparison of the financial situation of three major domestic airlines under the epidemic situation. Yanbian University, MA thesis, 2021.