

# Research on the Investment Value of Guangzhou Baiyun International Airport Based on Multiples Valuation Method

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**Abstract.** Aviation has been an industry that has been widely watched by investors. As the upstream of the civil aviation industry chain, the airport industry is an important core asset of the entire industry chain, providing relevant services for global air transport companies and passengers. In recent years, China's aviation industry has been in a state of steady development. Until the outbreak of COVID-19 in 2020, the market focus turned to the impact of the speed of passenger traffic recovery during the epidemic on the recovery of airport performance. For core hub airports, the priority is whether asset values have changed. This paper analyzes Guangzhou Baiyun International Airport in China, and studies whether the investment value of the airport is fair through financial analysis, peer comparison, and multiple valuation methods. The study found that the airport's overall revenue decline in the past two years was mainly due to the epidemic, but it has performed better compared to industry players. Through multiples valuation, the theoretical stock value of Baiyun Airport in 2021 is 16.19 CNY higher than the actual value. The result indicated that the company's stock was undervalued and has good room for growth in the future, suggesting a purchasing opportunity. It is hoped that the research in this paper can expand the research on related aspects of the private airport industry, and also provide some help and reference for the valuation research of Guangzhou Baiyun International Airport.

**Keywords:** Multiples Valuation; Guangzhou Baiyun International Airport; China Aviation Industry; COVID-19 pandemic.

## 1. Introduction

Aviation airport, refers to the service activities provided by the airport to service objects such as passengers or airlines, is a branch of the air transport industry. Today, the leading enterprises of China's aviation airports mainly include Guangzhou Baiyun International Airport, Beijing Capital International Airport, Shanghai Hongqiao International Airport, Shanghai Pudong International Airport, Shenzhen Bao'an International Airport, and so on [1].

A journal of Finance & Accounting for Communications last year mentioned that after the epidemic, the listed airports experienced large differences in the decline in profits [3]. Among them, Beijing Capital and Shanghai Pudong International Airports experienced a severe decline in profitability, while Guangzhou Baiyun and Shenzhen Bao'an International Airports experienced a relatively small decline, and were still able to maintain balance. Besides, a journal of China Civil Aviation mentioned that the relatively low valuation level of listed airport companies in China is because the production volume is restricted by the limited capacity of runways and terminal buildings [4]. If the airport chooses to process expansion, like the recent expansion plan of Baiyun Airport, the financing cost would increase significantly. In terms of industry investment value, many securities companies believe that the fundamental growth logic and location advantages of first-tier airport companies have not changed due to the epidemic. Their revaluation is a deterministic event, and short-term stock price fluctuations would not change the upward trend of the aviation sector.

As far as the overall market is concerned, data from Orient Securities shows that the current cumulative penetration rate of civil aviation in China is 24.5%, which is far lower than the 90% in the United States [5]. This difference reflects the huge growth potential of China's aviation market. On the other hand, in terms of the individual investment value of Baiyun Airport, according to the public data of China Finance Information (CFI), 45.45% of the research reports from financial industries in China hold a buy rating on the stock of Baiyun Airport, 36.36% hold overweight rating,

and the remaining 18.18% hold outperform rating in the past three months [6]. These include CITIC Securities, China Merchants Securities, China International Capital Corporation Ltd. (CICC), etc. It is worth mentioning that Sinolink Securities pointed out that duty-free shop income determines the flexibility of airport performance. There is still a lot of room for improvement in the per capita consumption at Baiyun Airport. Moreover, because of the supplementary agreement signed with China Duty-Free Group, the airport could guarantee a drop in the short term and retain the flexibility of duty-free income. Therefore, it is reasonable to believe that the airport's performance would resume growth after the liberalization of international aviation. In addition, CICC predicts that the stock price of Baiyun Airport has a 12% upside potential in the next 2-3 years, which could outperform the industry. The research problem of this paper is, based on this environment, the commercial value of Guangzhou Baiyun International Airport is affected. According to the assumption, the industry decline is due to the epidemic, so when the epidemic recovers, the value of the airport should also recover.

## 2. Company Information

### 2.1 Introduction of Baiyun Airport

Guangzhou Baiyun International Airport, founded in 1932 and operated by Guangdong Airport Authority, is the main airport in Guangzhou, the capital of Guangdong Province, China. It is one of the three major gateway complex hub airports in China, as well as a world-class airport cluster in the Pearl River Delta and the core airport in the Guangdong-Hong Kong-Macau Greater Bay Area. According to the official website, Baiyun Airport is currently the base airport of China Southern Airlines. In addition, Air China, Shenzhen Airlines, China Eastern Airlines and Hainan Airlines have all implemented base operations at Baiyun Airport. In terms of class, Baiyun Airport is a 4F-class civil international airport and ranks among the top 30 airports in the world [7]. According to the online airport guide, "Baiyun" means "white cloud" in Chinese, referring to the Baiyun Mountain near the airport. The operating company of the airport, Guangzhou Baiyun International Airport Co. Ltd., was established in 2000 and listed on Shanghai Stock Exchange in 2003. A year later, the airport was relocated. The new airport is approximately 28 kilometres away from the downtown area of Guangzhou. Since the relocation, various businesses of Baiyun Airport have developed rapidly, the hardware facilities have been continuously improved, and the construction of an international aviation hub has continued to advance [1].

According to the information on the airport's official website, Guangzhou Baiyun International Airport has two terminals, Terminal 1 (T1) has a construction area of more than 500,000 square meters, and Terminal 2 (T2) and the comprehensive transportation center have a construction area of more than 800,000 square meters. Currently, the designed capacity of T1 and T2 can meet an annual passenger throughput of 80 million passengers. The airport has three runways with lengths of 3,800 meters, 3,800 meters, and 3,600 meters. The large capacity guarantees that the airport's annual cargo and mail throughput can reach 2.5 million tons, and 620,000 aircraft takeoffs and landings. So far, Guangzhou Baiyun International Airport has opened more than 232 navigation points in China and abroad, with more than 400 routes.

### 2.2 The Capacity of Baiyun Airport

According to the information on the airport's official website, Guangzhou Baiyun International Airport has two terminals, Terminal 1 (T1) has a construction area of more than 500,000 square meters, and Terminal 2 (T2) and the comprehensive transportation center have a construction area of more than 800,000 square meters. Currently, the designed capacity of T1 and T2 can meet an annual passenger throughput of 80 million passengers. The airport has three runways with lengths of 3,800 meters, 3,800 meters, and 3,600 meters. The large capacity guarantees that the airport's annual cargo and mail throughput can reach 2.5 million tons, and 620,000 of aircraft takeoffs and landings. So far,

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On September 27, 2020, the Phase III Expansion Project of Baiyun Airport was started, which mainly includes airport engineering, air traffic control engineering, and fuel supply engineering. It is building a new terminal building T3 with an area of 422,000-square-meter, a 144, 000-square-meter of corridors in T2, two new runways, and 242,000 square meters of integrated transportation center and parking building. The expansion is expected to be completed and put into use by the end of 2025. After completion, Baiyun Airport will have 5 runways and 2 terminal areas. The number of aircraft take-offs and landings could reach 775,000 a year, the passenger throughput could reach 120 million, and the cargo throughput could reach 3.8 million tons [8].

### 3. Financial Analysis

#### 3.1 Financial indicators

The debt-to-assets ratio reflects the percentage of total assets that are financed by borrowing and could be used to measure the extent to which a company protects the interests of creditors during liquidation. Generally, the controllable range of the ratio is between 40% to 60%. The debt-to-assets ratio of Baiyun Airport has been relatively low in recent years, and it has dropped even more after the epidemic. Although there were signs of recovery in 2021, it was still lower than the industry average. The advantage of a low debt-to-assets ratio is that the company has strong solvency. However, at the same time, it also indicates that the ability of enterprises to use external funds is weak, and the capital has not been fully and effectively utilized. On the other hand, the main business of Baiyun Airport Company is the aviation service industry, which is mainly concentrated in the Guangzhou area. Due to the pandemic, the number of flights and passenger throughput have decreased significantly, and both the company's aviation business income and non-aviation business income have been greatly affected.

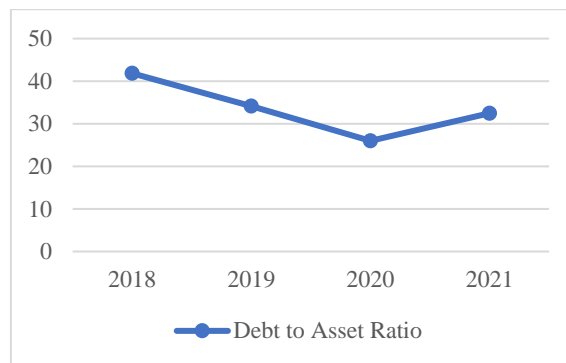


Figure 1. Annual Debt-to-Assets Ratio of Baiyun Airport

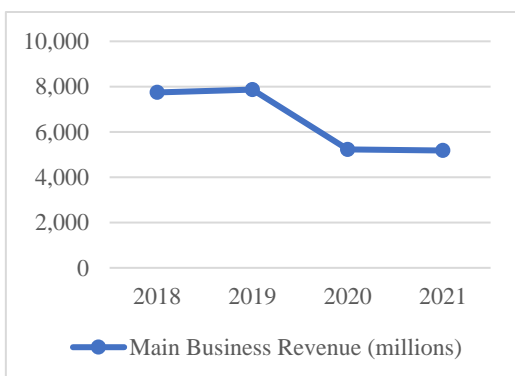


Figure 2. Annual Main Business Revenue of Baiyun Airport

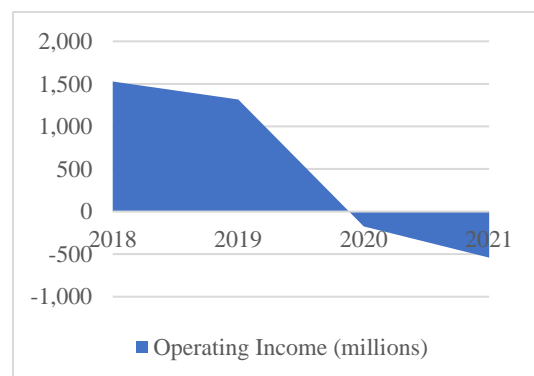


Figure 3. Annual Operating Income of Baiyun Airport

From 2016 to 2019, the business development of Baiyun Airport was in good condition, the company's revenue and aviation operating income both increased year by year. Since 2020, due to the COVID-19 pandemic, the airport industry has been hit, and the company's revenue has declined. Although the company has taken measures to reduce costs and create profits, various indicators of the airport business still dropped significantly. Fortunately, the airport relies on the construction of the operation management organization mechanism, and the normal rate of flight release has hit a new high. In 2020, the normal rate of flight release at Baiyun Airport was 91.79%, ranking among the top in the world, meanwhile the first in the world in passenger throughput [1]. Judging from the various business indicators of China's airports of that year, Baiyun Airport will be at the forefront of the country in various indicators, with obvious advantages in air transportation.

### 3.2 Countermeasure for financial deterioration during Covid-19

In 2021, in response to the huge operating pressure brought about by the continuous impact of the epidemic, the company had formulated an implementation plan for cost reduction and benefit creation from various aspects. Such as procurement, maintenance, and labour. On the other hand, the company actively developed the business of passenger to freighter conversions and promoted the related revenue. As a result, the increase in costs and expenses was lower than the increase in revenue, and the rise in profit was higher than that in passenger volume.

In 2022, China Duty-Free Group (CDFG) issued the announcement "Announcement on the Subsidiary Signing the Supplementary Agreement for the Operation of the Entry and Exit Duty-Free Store Project". For Baiyun Airport, this contract adjustment only involves the period of the epidemic, only adjusts the guarantee, not the commission ratio, and does not affect the revenue expectations of Baiyun Airport after the epidemic. In addition, in 2019, the tax-free guaranteed income of Baiyun Airport is about 500 million yuan. From 2020 to 2022H1, Baiyun Airport received a total of 480 million yuan in rent from China Exemption. There is no major difference in the amount of revenue recognized by Baiyun Airport before, and there is no retrospective adjustment. Even better, the contract for inbound duty-free shops has been increased to 2029, which means that the 42% commission of inbound duty-free shops can be extended to 2029 [9].

## 4. Competitor Analysis

The most appropriate comparable firms of Baiyun International Airport are Shanghai Airports, Beijing Capital International Airport, and Shenzhen Bao'an International Airport.

**Table 1.** 2021 Annual Operating data Comparison

Company	Passenger throughput	Cargo and mail throughput	Take-off and landing sorties
Pudong Airport	32206814	3982616.4	349524
Capital Airport	32639013	1401312.7	298176
Bao'an Airport	36358185	1568274.5	317855
Baiyun Airport	40249679	2044908.7	362470

All four airports have similar operating data during 2021. Before the epidemic, Beijing Capital International Airport's passenger throughput, cargo and mail throughput, and takeoffs and landings sorties were all higher than the remaining listed airports. After the epidemic, the economic situation in China was stronger in the south and weaker in the north, making Baiyun Airport and Bao'an Airport surpassed Beijing Airport in all aspects.

Shanghai is a city in mainland China with two civil international airports. The two airports in Shanghai are Pudong International Airport and Hongqiao International Airport, which are located on the east and west sides of the city. Pudong Airport is a 4F-level international airport, and Hongqiao is a 4E-level international airport. In order to adapt to the new operation pattern of Shanghai Airport with "one city and two airports", on May 28, 1998, with the approval of the Shanghai Municipal

People's Government, Shanghai Airport (Group) Co., Ltd. was established to operate and manage Shanghai Pudong International Airport and Hongqiao International Airport in a unified manner. The company was exclusively initiated and established in February 1998. In October 2018, the company was listed on Forbes' Global Best Employers List. Two years later, it ranked 1423rd on the 2020 Forbes Global 2000 list [10].

Beijing Capital International Airport was built in 1958 and is located in Beijing, the capital of China. It is a 4F-level international airport, and one of the three major gateway complex hubs in China, a member of the international air cargo hub group in the Bohai Rim region. The operating company, Beijing Capital International Airport Co., Ltd., was listed in Hong Kong in 2000. According to relevant company announcements, from 2000 to 2018, the annual passenger throughput of Beijing Capital International Airport increased from 21.69 million to 101 million, ranking first in Asia and second in the world. Beijing Capital International Airport is one of the essential foundations for ensuring the economic development of Beijing.

Shenzhen Bao'an International Airport is also a 4F-level civil transport airport, which locates in Shenzhen, China. It is one of the world's top 100 airports and one of China's four major air cargo centers and express distribution centers. Shenzhen Airport (Group) Co., Ltd. is a wholly state-owned limited liability company authorized by the Shenzhen Municipal Government and the management organization of Shenzhen Bao'an International Airport. It was established in 1989 and listed on the Shenzhen Stock Exchange in 1998. Thanks to the rapid development of China's civil aviation and Shenzhen's economy and society, Shenzhen Airport's business indicators have achieved leapfrog development. In 2021, it won the Airport Service Quality (ASQ) Award in the Asia-Pacific region with an annual passenger throughput of more than 40 million by Airports Council International [11].

## 5. Valuation

### 5.1 Multiples Valuation Method

In this analysis, Multiples Valuation using price earnings ratio will be used as the major method of evaluating Baiyun International Airport. The price-to-earnings (PIE) valuation method estimates a company's share price as the product of its earnings and a PIE multiple determined from a set of comparable companies. The P/E valuation method is widely used to solve valuation problems involving initial public offerings, employee stock ownership plans, gifts, tax and estate settlements, and corporate restructurings. A very important step in using the PIE valuation method is the selection of comparable companies [12]. As listed, in this case, the chosen comparable firms are Shanghai Airports, Beijing Capital International Airport, and Shenzhen Bao'an International Airport. All of them are 4F-level civil transport airports and the leading airports in the country.

The price-to-earnings valuation formula is  $Price\ per\ Share_{Baiyun} = P/E_{comparable\ firms} * EPS_{Baiyun}$ . The theoretical price per share of Baiyun Airport should be equal to the average price-earnings ratio of comparable firms multiply by the earnings per share of Baiyun Airport.

### 5.2 Data

All data used in this report are from 2021 annual reports of relating companies.

**Table 2.** Financial Metrics Comparison

Company	Operating Profit	Net Profit	ROE
Pudong Airport	-2,275,498,821	-1,710,938,710	-6.03
Capital Airport	-2,820,414,000	-2,116,537,000	-10.49
Bao'an Airport	-11,329,705	-34,439,109	-0.29
Baiyun Airport	-541,494,704	-405,846,660	-2.18

Among selected firms, based on aviation and related services revenue of each company, Baiyun International Airport had relatively higher operating profit, net profit and return on equity. Credit to the airport's response to the operating pressure brought by the pandemic. For example, the company has formulated an implementation plan to reduce costs and create benefits. It has continuously increased efforts to reduce costs and create benefits from ten aspects, including investment, procurement, outsourcing, labour, energy, maintenance, finance, cultural publicity, cost reduction, and incentive mechanisms, and achieved a low increase in costs and expenses. In terms of revenue growth, profit growth was higher than passenger volume growth.

### 5.3 Results

**Table 3.** Indicators used in Valuation Calculation

Company	Earnings per Share	Price per Share	P/E Ratio
Pudong Airport	-0.89	46.69	-52.46
Capital Airport	-0.46	4.77	-10.37
Bao'an Airport	-0.0168	7.32	-435.71
Baiyun Airport	-0.17	12.06	-70.94

Based on the collected data, the average price-earnings ratio of comparable firms is  $[(-52.46) + (-10.37) + (-435.71)] / 3 = -166.18$  CNY. The earnings of Baiyun International Airport in 2021 were -0.17 CNY. Following the formula price-to-earnings valuation, the theoretical value of Baiyun International Airport in 2021 is 28.25 CNY.

By reviewing historical data, the actual price per share of Baiyun International Airport is 12.06 on December 31, 2021. Compared to the theoretical price per share of Baiyun International Airport (28.25 CNY), the actual price per share of Baiyun International Airport was undervalued by 16.19 CNY.

### 5.4 Discussion

#### 5.4.1 Future Outlook

Thanks to the company's location and competitive advantages, there has been no essential change due to the epidemic. Based on the multiples valuation result, this is a good opportunity to purchase the stock. In addition to calculation, from the perspective of industry analysis, the "Supplementary Agreement" still retains the company's future tax-free business profitability. More importantly, it is estimated to be a deterministic event that with the continuous advancement of new crown vaccination/treatment, aviation demand has recovered and the value of first-tier airports has become more important. According to Everbright Securities, the company's net profit forecast for 22-24 years is -0.3 billion CNY, 780 million CNY, and 1.43 billion CNY [13].

Looking forward to the second half of 2022, although the fundamentals of aviation and airport companies cannot be fully recovered, with the market consensus, investors would maintain an optimistic attitude towards the post-epidemic profit after recovery [14]. In the long run, researchers are firmly optimistic about the elasticity of the aviation cycle, and the reversal of supply and demand would increase the ticket load factor and promote the performance of companies [5].

#### 5.4.2 Investment Risk

While this research supports buying Baiyun Airport shares, any investment involves risk. Under the current circumstances, the most unsatisfactory is that if the overseas epidemic lasts longer than expected, it will affect the demand for overseas routes, which in turn will affect the company's performance. Secondly, Sino-US trade frictions and Sino-US air rights disputes have led to large fluctuations in the RMB exchange rate, which also affect the demand for international routes at all times. In addition, huge fluctuations in oil prices can affect airline profits [14].

#### 5.4.3 Limitations of Multiples Valuation

Although the Multiples Valuation method incorporates loads of information in a simple way and free ride on the market's information. It comes with some limitations. The Multiples Valuation method implicitly assumes comparable firms' strategies, growth rates, and costs of capital are all similar; however, perfect competitors are impossible in reality. Although all discussed airports are in the leading position in the Chinese aviation industry, they share different strategies and financial situations. The fact is, Baiyun and Shanghai Airports are transforming their development strategies from scale expansion to quality building in 2022, while Beijing Capital Airport is aiming at improving the efficiency of operation and management, and Shenzhen Bao'an Airport plans to revitalize existing funds and enrich wealth management and investment channels. Moreover, it does not consider future major operational changes, even though they are going to be implemented soon. For example, the third-phase expansion project of Baiyun Airport is expected to be finished in 2025.

## 6. Conclusion

With the overall aviation industry hit by the epidemic, all listed airports in China have been traumatized. In 2020, when the epidemic was the most raging, Guangzhou Baiyun International Airport, as one of the leading airports in China, actively took countermeasures. Although it was not spared, it tried its best to maintain passenger throughput, cargo throughput, and takeoffs and landings sorties. Through the research and analysis above, it is found that the stock price of Baiyun Airport is now undervalued, and the price is almost close to the historical bottom. However, with the gradual recovery of the epidemic and the gradual relaxation of China's epidemic prevention policies, the stock price of the airport is expected to return to the right track. Researchers from many securities companies are also bullish and believe that the share price of Baiyun Airport will increase significantly in the next several years. Therefore, now is a good time to invest in Guangzhou Baiyun International Airport Co. Ltd. Meanwhile, this paper recommends that investors pay more attention to the airport industry, related policies and the industry recovery brought about by the recovery of the epidemic.

For further analysis, it is recommended to consider the research limitation of this paper. In order to be consistent, this paper used information from companies' annual reports, which does not include the latest first quarterly report for 2022. The historical data used during the analysis includes only 2018 to 2021. If using the latest data, the calculation and analysis results may be different from the above results, and a more accurate judgment could be made for the future situation.

## References

- [1] Eastmoney. Real Stuff! Analysis of Leading Enterprises in China's Aviation Airport Industry in 2021 - Guangzhou Baiyun International Airport: The normal flight release rate has hit a new high. August 18,

2021. Retrieved on July 30, 2022. Retrieved from: <https://baijiahao.baidu.com/s?id=1708408540722338198&wfr=spider&for=pc>.
- [2] Civil Aviation Administration of China. Statistical Bulletin of National Civil Transport Airport Production 2021. March 22, 2022. Retrieved on July 30, 2022. Retrieved from: [http://www.caac.gov.cn/XXGK/XXGK/TJSJ/202203/t20220322\\_212478.html](http://www.caac.gov.cn/XXGK/XXGK/TJSJ/202203/t20220322_212478.html).
- [3] H. Li, F. Li, A brief analysis of the financial impact of the new crown epidemic on my country's listed airports -- a study based on the 2020 financial reports of some listed airports, *FINANCE & ACCOUNTING FOR COMMUNICATIONS*, (11), 1992, pp. 66 - 73.
- [4] J. Qiu, Y. Yuan, W. Wang, Q. Zuo, G. Zhu, J. Ning, J. HU, Y. Zhou, Y. Zhang, Business model optimization strategy of listed airport companies in terms of value management, *China Civil Aviation*, (2), 2011, pp.42 - 44.
- [5] Orient Securities. Three major airlines aircraft procurement landing, the industry capacity is expected to maintain slow growth, firmly optimistic about the elasticity of the aviation cycle. July 4, 2022. Retrieved on August 3, 2022. Retrieved from: [https://pdf.dfcfw.com/pdf/H3\\_AP202207041575770237\\_1.pdf?1656953847000.pdf](https://pdf.dfcfw.com/pdf/H3_AP202207041575770237_1.pdf?1656953847000.pdf).
- [6] China Finance Information. List of research reports of Baiyun Airport (600004). August 10, 2022. Retrieved on August 10, 2022. Retrieved from: <https://quote.cfi.cn/ybyl/870/600004.html>.
- [7] World Airport Codes. World Top 30 Airports. 2019. Retrieved on July 26, 2022. Retrieved from: <https://www.world-airport-codes.com/world-top-30-airports.html>.
- [8] JIEMIAN. Guangzhou Baiyun Airport's passenger throughput ranks first in the country. January 26, 2022. Retrieved on July 31, 2022. Retrieved from: <https://baijiahao.baidu.com/s?id=1723018646929750679&wfr=spider&for=pc>.
- [9] Xueqiu. Baiyun Airport Tax Free Supplemental Agreement Landed. June 27, 2022. Retrieved on August 10, 2022. Retrieved from: <https://xueqiu.com/4532787837/223683372>.
- [10] Forbes. Shanghai International Airport. 2022. Retrieved on August 10, 2022. Retrieved from: <https://www.forbes.com/companies/shanghai-international-airport/?sh=3a294cc323b5>.
- [11] Shenzhen Baoan International Airport. Shenzhen Airport has won the Airport Service Quality Award of the same level by the International Airport Association for two consecutive years. April 1, 2022. Retrieved on August 3, 2022. Retrieved from: <https://www.szairport.com/szairport/kgxw/202204/fc417bb9abfe488a8eabd8496eb818f3.shtml>.
- [12] A.W. Alford, The Effect of the Set of Comparable Firms on the Accuracy of the Price-Earnings Valuation Method, *Journal of Accounting Research*, Wiley, 30 (1), 1992, pp. 94 – 108. DOI: <https://doi.org/10.2307/2491093>.
- [13] Everbright Securities. Tax-free rental collection model remains unchanged, retaining future profit flexibility -Comments on the revision of the tax-free agreement of Baiyun Airport (600004.SH). June 25, 2022. Retrieved on August 10, 2022. Retrieved from: [https://pdf.dfcfw.com/pdf/H3\\_AP202206261574876206\\_1.pdf?1656255750000.pdf](https://pdf.dfcfw.com/pdf/H3_AP202206261574876206_1.pdf?1656255750000.pdf).
- [14] Everbright Securities. After all the hardships, stay still - the medium-term investment strategy of the transportation industry in 2022. June 1, 2022. Retrieved on August 3, 2022. Retrieved from: [https://pdf.dfcfw.com/pdf/H3\\_AP202206021569499752\\_1.pdf?1654169898000.pdf](https://pdf.dfcfw.com/pdf/H3_AP202206021569499752_1.pdf?1654169898000.pdf).
- [15] Everbright Securities. Domestic aviation demand rebounded month-on-month in May, summer transportation is expected to accelerate recovery —Commentary on the operation data of the aviation and airport industry in May 2022. June 16, 2022. Retrieved on July 27, 2022. Retrieved from: [https://pdf.dfcfw.com/pdf/H3\\_AP202206161572543070\\_1.pdf?1655397626000.pdf](https://pdf.dfcfw.com/pdf/H3_AP202206161572543070_1.pdf?1655397626000.pdf).
- [16] Sinolink Securities. Baiyun Airport Research Report: Abundant production capacity, waiting for demand to recover. July 31, 2022. Retrieved on August 10, 2022. Retrieved from: <https://xw.qq.com/cmsid/20220801A0268C00>.
- [17] China Finance Information. Baiyun Airport (600004): 1H22 forecast performance is slightly lower than expected; pay attention to epidemic trends. July 14, 2022. Retrieved on July 31, 2022. Retrieved from: <https://quote.cfi.cn/ybdata.aspx?id=20220714000121>.