

Rating Methodology by Sector

Air Transportation

1. Business base

Air transportation is highly important as the only transportation infrastructure that connects long distances in a short time. However, it is difficult for a company in the air transportation industry to control the major factors that affect earnings, and the industry is prone to large short-term fluctuations in earnings. For these reasons, in assigning the ratings, JCR places emphasis on how air transportation companies control their business risks. Specifically, JCR focuses on measures to increase revenues, aircraft strategies, and cost cutting initiatives.

(1) Characteristics of the industry

(i) Market overview

Social and economic trends, such as demographics and economic growth, are important in forecasting medium- and long-term trends in passenger demand. The number of passengers on domestic routes is not expected to grow significantly in the future due to the declining birthrate. In addition, the spread of remote conferencing and other factors make it difficult to anticipate an increase in business demand. On the other hand, passenger demand for international flights is expected to grow, driven by the increase in the number of foreign visitors to Japan. However, as with domestic flights, it is difficult to expect significant growth in the number of passengers departing from Japan.

In the short term, passenger demand fluctuates greatly due to factors such as terrorism, infectious diseases, and economic trends, and this is especially true for international flights. Looking at the period since 2000, there have been phases in which demand fell sharply due to events such as the September 11 simultaneous terrorist attacks in the U.S., SARS in China, global financial crisis accelerated by the collapse of Lehman Brothers, the Great East Japan Earthquake, and the COVID-19 pandemic. The impact of the COVID-19 pandemic was particularly significant, and not only was the drop in demand larger than those of previous events, but it also took time to recover.

(ii) Competitive situation

Domestic flights are in oligopoly by the two major airlines, All Nippon Airways and Japan Airlines, due to the limited number of departure and arrival slots available at Haneda Airport, a main airport. However, it is difficult to differentiate services in the air transportation industry, and since it is an equipment industry, it is prone to price competition when demand declines. In some cases, it also competes with the Shinkansen bullet train. There has been no change in the superiority of airplanes on long-distance routes, and although there are fewer plans to extend the Shinkansen, it is still necessary to check the status of speeding up and

route development of Shinkansen.

On international routes, competition is intensifying as the number of routes served by overseas airlines increases due to the progress of open skies and the expansion of airports in the Tokyo metropolitan area, and JCR is paying attention to the trend. In particular, overseas low-cost carriers (LCCs) are increasing their presence amid growing inbound demand. Nevertheless, the dominance of the two major airlines has not been significantly declined, thanks to the high preference for Japanese airlines among Japanese passengers in addition to their securing a large number of departure and arrival slots, including those of their affiliated LCCs.

(iii) Cost structure

The air transportation industry is both an equipment industry and a labor-intensive industry that requires a high level of expertise, so the industry has a large fixed cost burden for aircraft related and labor costs. Therefore, earnings tend to fluctuate significantly in the short term in the event of sudden changes in demand due to occurrence of events.

Fuel costs, taxes and public dues (airport fees, landing fees, fuel taxes, etc.) are typical variable costs. Fuel costs, in particular, account for a large proportion of costs and are subject to large fluctuations. The two major airlines are reducing the impact of fuel costs on earnings by introducing fuel surcharge and using hedging transactions, but this does not mean that they can completely curb the impact of fuel costs.

(iv) Risks related to policies

As the importance of air transportation as transportation infrastructure is high, a certain level of support by the government, such as institutional financing, can be seen. When the COVID-19 pandemic forced a significant reduction in flights, financial assistance was provided, including reductions and exemptions of taxes and public dues. On the other hand, there are also a number of regulations governing the air transportation industry and changes in policies could affect the industry, either positively or negatively. Moreover, as airlines are expected to operate independently as private companies, it would be difficult to factor in too much government support in the event of a business downturn.

(2) Important factors in market position and competitiveness

(i) Market position

For domestic routes, it is important how many departure and arrival slots the airline can hold for routes to and from Haneda Airport, which is a source of revenue. Although the slots are periodically reviewed, the two major airlines have secured about 80% of the slots. In addition, Haneda Airport is gradually expanding the number of slots for international flights, which is expected to increase the utilization rate of domestic flights by enhancing the convenience of connecting domestic and international flights.

Similarly, securing slots at Narita Airport is important for international flights, and the two major airlines have secured a certain share, including LCCs under their umbrella. On the other hand, on international routes,

the world's airlines are concentrated in three airline alliances, and partnerships through joint projects that go one step beyond these alliances are also being widely conducted. JCR is checking whether the airlines can maintain and improve the competitiveness of their network through global airline alliances.

(ii) Initiatives to bolster income

Business passengers tend to prioritize convenience over price compared to tourists, and the unit price is relatively high. In addition, the frequency of use by the same customer tends to be higher. For these reasons, airlines are focusing on attracting and retaining business passengers, and are working to increase their convenience, including improving services for passengers in classes with high-value seats, strengthening corporate sales activities, expanding frequent flyer program, simplifying booking and boarding procedures, and expanding route networks. JCR pays attention to whether the airlines have been successful in steadily acquiring business passengers through these initiatives.

On the other hand, with tourism demand expected to grow, especially in Asia, companies are strengthening not only full-service carriers (FSCs) but also LCCs and launching new brands. The key point is how far they can broaden their customer base while maintaining the separation of each service.

It is also important for airlines to maximize earnings by appropriately responding to fluctuations in demand by adjusting supply and fares. On the supply side, the key is to make aircraft available in line with demand. On the fare side, airlines are required to accurately forecast demand and grasp the competitive situation, and to set fares in such a way as to ensure profitability while stimulating demand. If the aircraft fleet and fares are not properly set, earnings opportunities will be lost, and a disparity in the earnings strength of companies will arise depending on their business management capabilities.

(iii) Aircraft strategies

Aircraft are the source of earnings, and JCR focuses on the aircraft fleet strategy of each airline as a matter to materialize the management strategy of each airline. In particular, aircraft strategies are very important in fuel cost reduction and growth strategies. In addition, replacement of aircraft with more fuel-efficient ones, which the airlines are promoting, plays a central role in reducing CO2 emissions.

The introduction of new highly fuel-efficient aircraft can significantly reduce fuel costs. In particular, replacing large aircraft with medium and small size aircraft capable of long-distance flights can lower fixed costs on long distance routes, improving profitability per flight.

The introduction of new medium and small size aircraft is also effective in route expansion. Aircraft that can operate at low cost will enable the airlines to open new routes that were considered unprofitable in the past. Such aircraft are also expected to be effective in improving less profitable routes.

(iv) Cost cutting and safe operations

Further intensification of competition, especially on international routes, is expected in the future. In addition, fluctuations in demand due to economic fluctuation and occurrence of events are inevitable. Therefore, it is

important to focus on further cost reductions and improve durability against changes in the external environment. On the other hand, ensuring safe operations is a top priority issue for the air transportation industry. JCR will closely monitor whether the airlines can balance cost reductions with ensuring safe operations and can avoid safety-related problems.

2. Financial base

(1) Earnings strength

JCR places importance on earnings strength from the perspective of the maintenance and expansion of the business. As earnings strength is susceptible to economic cycles and events, however, JCR evaluates it within a certain cycle, rather than only based on a single period of performance. When a significant change in earnings level is seen, JCR analyzes the factors behind the change, and if the change is not due to economic cycles or temporary factors, but rather structural or trending changes, JCR reflects it in its rating. While it is important for a company to earn a high level of profit during a boom period, JCR focuses more on whether the company has an earnings structure that is resilient to recession so that the downward swing of earnings can be controlled even during economic downturns.

Key financial indicators:

- Operating income
- Ordinary income
- EBITDA
- Ordinary income on sales
- ROA

(2) Cash flow generation capability

Air transportation companies are constantly raising funds for replacement with new aircraft and investment in systems, and are making investments on an ongoing basis. It is necessary to confirm whether these investments yield results as planned and the cash flow generated can be appropriately allocated to repay external debt.

Key financial indicators:

- Operating cash flow
- Free cash flow
- Ratio of interest-bearing debt to EBITDA
- Ratio of interest-bearing debt to operating cash flow

(3) Safety

Air transportation companies are subject to high earnings volatility, so it is important for them to have sufficient capital to buffer against earnings fluctuations. In addition, interest-bearing debt tends to increase due to large capital expenditures, and they also have many aircraft that are financed through off-balance

sheet transactions. Therefore, JCR pays attention not only to interest-bearing debt on the balance sheet, but also to the status of debt, including lease transactions.

Key financial indicators:

- Shareholders' equity
- Interest-bearing debt
- Interest-bearing debt and lease obligations
- Equity ratio
- Debt equity ratio

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Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza,
Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026
