

Rating Methodology by Sector

Railroad

This rating methodology is applicable to major private railway companies and JR passenger railway companies. In addition to transportation business centered on railway business, each company is engaged in related business such as real estate, retail, and hotels. Given the strong linkage between railway companies' transportation businesses and related businesses, the rating approach outlined below focuses primarily on railway business while also referring to related businesses as appropriate.

1. Business base

When rating railway companies, while JCR checks stability of cash flows from the railway business, which is a highly public infrastructure business, JCR evaluates each business individually for related businesses based on rating methodology applicable to the industry, to which such business belongs, and then conducts an assessment on a consolidated basis. In the assessment on a consolidated basis, JCR places emphasis not only on the evaluation of individual businesses and realization of synergies among them but also on changes in overall corporate risk associated with changes in the business portfolio.

(1) Characteristics of industry

(i) Market overview

Excluding the pandemic period, the number of railway passengers carried has generally remained steady. However, the impact of declining birthrate and aging population is unavoidable in the medium to long term. Due to the nature of the railway business as a domestic infrastructure industry, it is strongly influenced by regional factors (demographics, economic conditions, modal share, etc.). Consequently, companies are implementing measures to increase the resident population along their lines and to boost the exchange population through initiatives like revitalizing tourism resources in response to the declining birthrate and aging population. There are also efforts seen to enhance convenience and increase appeal of areas along the lines by expanding direct through-service operations with other railway companies' lines.

Regarding related businesses (real estate, retail, hotels, etc.), operations are often developed around major railway terminals and areas surrounding railway lines, with primary objectives being improvement of convenience for residents along the lines and enhancement of ability to attract customers of station facilities. Consequently, transportation business and related businesses are closely related. Therefore, for related businesses, JCR places emphasis not only on the standalone profit of each business but also on the realization of synergies between the railway business and these related businesses. Furthermore, when a company promotes overseas expansion in real estate or hotel businesses, JCR assesses not only profit performance but also regional risk diversification and risk mitigation status for each project.

(ii) Competitive situation

Railway business is a licensed business with approval from the Minister of Land, Infrastructure, Transport and Tourism required under the Railway Business Act. Entry barriers are high due to factors such as substantial capital required for extensive infrastructure development, long-term nature of capital recovery, and need for advanced train operation expertise. While competitors of private railways and JR conventional lines are buses and private cars, modal share varies by region, leading to the different competitive situations. Furthermore, since competitions among private railways and those between private railways and JR companies vary by region, JCR confirms the competitive situations and their impacts on the number of passengers carried for each major line.

Regarding the Shinkansen operated by JR companies, there is competition with aircraft. However, considering travel time and frequency of services, JCR judges that the Shinkansen maintains a significant advantage over aircraft within their operating areas.

(iii) Cost structure

While railway business is a typical process industry, having (a) extensive railway networks, (b) numerous station facilities and railway cars, and (c) advanced train operation systems, the train operations require significant manpower. Given these business characteristics, JCR checks status of labor cost reductions through measures such as improving efficiency of station operations, implementing one-man operation, promoting DX (digital transformation), and implementing re-employment of retirees to secure personnel, in addition to checking utilization rates (i.e., changes in the number of passengers carried). Since the railway industry is a regulated industry, flexibility in fare adjustments is essentially low. However, as recent revisions to the regulations have made it easier to pass on increased costs to fares, JCR confirms each company's implementation status and outlook for raising upper limits of the fares, as well as the impact on railway business profits.

(2) Important factors in market position and competitiveness

(i) Market position

Railway companies obtain relatively stable cash flow centered around railway in each region, backed by factors such as expectation of a certain level of use and high barriers to entry. However, in the railway business, length of routes does not bring about high competitiveness, rather, maintaining many unprofitable routes carries risk of causing reduction of transportation efficiency. Therefore, JCR understands the population along the lines and checks progress and results of initiatives to improve railway transportation efficiency, including addressing unprofitable routes.

(ii) Environment along the railroad lines

The business development of each railway company is indivisible from the economies along the railway lines. Whether core railway business and related businesses can maintain stable cash flow generating ability going

forward depends significantly on the ability to attract customers and future potential of major railway terminals and tourism resources along the lines, as well as the characteristics, demographics, and development trend of the surrounding areas connected by the railways. Therefore, JCR analyzes in detail the surrounding environment and each company's initiatives by railway line and incorporates the competitiveness of each line into the evaluation.

(iii) Measures to improve the value of areas along railroad lines

As the market shifts from maturity to contraction, initiatives to minimize the impact of declining birthrate and aging population are important. JCR checks efforts and results aimed at enhancing the value of areas of the railway lines, including: (a) retaining residents along the lines, (b) attracting residents from areas along other companies' lines to the areas along its lines, and (c) revitalizing tourism resources along the lines and developing commercial facilities at key stations to increase the use of non-commuters.

(iv) Cost reduction in railroad business

In the railway business, companies have been promoting initiatives to improve operation efficiency, including reducing labor costs, decreasing the number of operating trains through revisions of timetables, and implementing one-person operation. They have been also promoting reductions of train operation cost through introduction of new energy-saving railway cars. While there are limits to cost reduction from the perspective of maintaining and improving safety, further reductions in fixed costs are unavoidable, given the medium- to long-term demand outlook. Each company has been ongoingly promoting fixed cost reductions, such as improving efficiency of station operations, and JCR will confirm the results of these efforts.

(v) Contribution of related businesses to profit and their synergy

Since room for profit growth in the railway business is limited from a long-term perspective, strengthening of related businesses is important. While stability of profits from the real estate leasing business is relatively high, retail and hotel businesses are susceptible to economic fluctuations and changes in consumer behavior. Therefore, if initiatives to strengthen related businesses are planned, JCR places emphasis on their content and investment scale. Since the development of related businesses is closely related to policies for enhancing the value of areas along the lines, it is necessary to pursue it with clear strategies, such as businesses that will expand profits, enhance brand image to differentiate the company from competitors or contribute to the convenience of residents along the lines, after identifying the characteristics of areas along the lines. JCR checks management policies shown in long-term visions and also development plans shown in medium-term management plans, and after analyzing the prospects for commercialization, progress of plans, financial impact, etc., JCR incorporates these factors into its assessment.

Financial base

(1) Earnings strength

JCR checks not only earnings strength on a consolidated basis but also cost structure of the railway business, profit/loss status of related businesses, and that of their sub-segments, if necessary. JCR places emphasis on operating margin to grasp progress of operational efficiency improvements, including those in indirect departments, on which each railway company is working. Given the large scale of assets held by railway companies and frequent reorganizations in business segments, JCR also confirms trends in extraordinary profit/loss items related to business restructuring.

Key financial indicators:

- Operating margin
- Extraordinary profit/loss items

(2) Cash flow generating ability

Since railway companies make investments to strengthen related businesses in addition to maintenance and renewal investments centered on the railway business, JCR checks the status and outlook for their cash flow generating ability to secure the investment funds. JCR places emphasis not only on consolidated cash flow generating ability but also on the trends in cash flows by business segment, such as the stable railway business and real estate leasing business. As external financing is often assumed for investments to strengthen related businesses unlike in the case of maintenance and renewal investments, JCR checks balance between cash flow generating ability and interest-bearing debt, a ratio, which indicates debt repayment capacity, and its trends.

Key financial indicators:

- EBITDA
- Ratio of interest-bearing debt to EBITDA

(3) Safety

Investments for development of areas along the railway lines, particularly redevelopment projects at major terminals, tend to become large investments and require extended development periods, making interest-bearing debt large. Therefore, JCR checks both the current status and outlook for both investment progress and trend in interest-bearing debt. Since risk tolerance of individual railway companies varies based on characteristics of areas along the lines and business portfolio, JCR also checks balance between interest-bearing debt and equity capital. There are cases where unexpired leasing fees on operating leases (off-balance sheet debts) under lease contracts are increasing for companies strengthening businesses like hotels. For companies with a large amount of unexpired leasing fees, JCR considers not only the on-balance sheet interest-bearing debt but also the repayment burden in the evaluation.

Key financial indicators:

- Interest-bearing debt
- Equity ratio

■ Debt equity ratio

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