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Rating Methodology by Sector

Railroad

1. Business base

Most railroad companies in Japan are engaged in operating other businesses, such as real estate, distribution and hotel, in addition to their core railroad business. The credit ratings of railroad companies reflect the stability of railroad business, as it is an important part of the public infrastructure. JCR assesses the companies' overall businesses in credit ratings, as the risks of some of the related businesses are susceptible to economic fluctuations, countering the stability of cash flow from the railroad and real estate rental business, based on the rating methods used for each business.

(1) Characteristics of the industry

(i) Market overview

In recent years, the railroad ridership has been steady. However, from the medium-term perspective, the effect of the declining birthrate and aging population is inevitable. Owing to a characteristic as a domestic infrastructure industry, the railroad business is susceptible to the nature of the operation area in terms of demographics, economic condition, passenger share ratio, etc., and the Kinki area is overall more susceptible to the aging population than the Tokyo metropolitan area. In response to the aging population, each railroad company is working to improve ability to attract customers for commercial facilities in its stations and activate sightseeing resources. Efforts are also observed in convenience improvement through expansion of mutual direct operation with lines of other railroad operators to enhance attractiveness of areas along railroad lines. The related businesses, including real estate, distribution and hotels, are characterized often by developing business for purpose of retaining ridership and increasing the convenience for residents primarily around terminals and areas along railroad lines as well as improving the drawing power of station facilities. Moreover, some of the railroad operators are developing real estate and hotel businesses overseas.

(ii) Competitive situation

Railroad business is subject to a license issued by the Minister of Land, Infrastructure, Transport and Tourism (MLIT) according to the Railway Business Act. Barriers to entry are high, mainly due to the requirement of massive infrastructure development necessitating large outlays of funds and lengthy investment recovery time frames, and advanced expertise necessary for train operation. The competitors of private railroads and local JR lines are buses and private automobiles, and each region has its own situation in terms of competition among various types of transportation. In the Tokyo metropolitan area, JR and private railroad companies have separated the geographical areas for their operations in general, whereas, in other regions, private and JR lines often compete against one another. JCR, therefore, examines the competition and its effect on ridership for each of the tracks.

Attention is being paid to companion between the Shinkansen lines operated by JR companies and airline services. JCR sees that the bullet trains demonstrate significant advantages over airlines in terms of travel time and schedule frequency.

(iii) Cost structure

An upper limit approval system for railroad fares has been adopted, which is based on the yardstick method to determine the fares according to the standard cost calculated by comparing the costs of multiple companies. Although fares below the upper limit are left to the decision of the railroad operators, in reality, flexible pricing responsive to demand is difficult, partly due to the requirement of reporting to and examination by the MLIT. As a consequence, railroad companies need to observe conditions in regard to maintaining and increasing ridership and cost reductions in their railroad business.

Railroad business is a typical process industry, encompassing (a) extensive railroad networks, (b) numerous station facilities and railroad cars, and (c) advanced train operating systems. At the same time, the ratio of fixed costs, particularly those related to labor and the depreciation of vehicles, is high due to the necessity of employing a large workforce for train operations. In view of such a cost structure, JCR considers that the reduction of personnel expenses through such efforts as improving the efficiency of station operations, implementing driver-only operation, and adopting reemployment after mandatory retirement to retain personnel is important in increasing profit in addition to raising the ridership ratio.

(2) Important factors in market position and competitiveness

(i) Market position

Railroad companies own transportation infrastructure in each region that is highly public in nature, which supports the stability of cash flow in their railroad business. A long route distance, however, does not necessarily result in high competitiveness. Rather, transportation efficiency may suffer if many routes prove unprofitable. In some cases, the profit before depreciation in the railroad business of a private railroad company with long routes is less than that of a company with shorter routes. JCR, thus, considers that the population along the railroad lines and efforts to improve the efficiency of railroad transportation, including the responses to unprofitable routes, must be observed.

Although the same applies to the JR companies, their strong business foundations backed by dominant railroad networks in the metropolitan areas are regarded as sufficient to cover the current loss from regional unprofitable routes.

(ii) Environment along the railroad lines

The development of each railroad company is indivisible from the development of economies along the railroad lines. Whether the core railroad business and related segments will maintain the ability to generate stable cash flow in the future is affected significantly by the drawing power and potential of core terminals and tourist attractions along the railroad lines as well as the characteristics of areas along railroad lines, demographics, and trends in the development of the surrounding areas connected by railroads. Hence, JCR analyzes in detail the surrounding environment of each railroad line and applies its competitiveness to a rating assessment.

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

Currently, as the market turns from its mature state to one of contraction, efforts to minimize the effects of the declining birthrate and aging population are important. Activities to improve the value of areas along the railroads of each company, such as (a) maintaining residents along the railroad lines, (b) acquiring residents from areas around the railroads of other companies to the company's own area, and (c) promoting tourist attractions along the railroad lines and developing commercial facilities at the company's terminal to increase the number of non-commuters, are likely to have an impact on future ridership. Although some of these activities will not contribute to short-term earnings, JCR expects long-term benefits to areas along railroad lines and, therefore, monitors the progress of such efforts in each area.

(iv) Cost reduction in railroad business

In response to declining ridership, the railroad business has been pushing ahead with measures, such as personnel cost cut, reduction in the number of trains in operation through review of timetables and implementation of driver-only operation. Introduction of new energy-saving train cars is also contributing to operation cost cut. Reduction in costs has a limit in terms of safety maintenance/improvement, but a further reduction in fixed costs is inevitable given the medium to long-term demand outlook. As every railroad operator is continuing to work on fixed cost reduction efforts such as efficiency gain in station operations, JCR is paying attention to future efforts and their results.

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

Because room for increasing profit in the railroad business is limited in the long run, it is important for the operators to enhance related businesses. While profits from real estate rental business are relatively stable, large housing development projects aimed at increasing population in areas along railroad lines, promoted particularly by private railroad companies, have been declining. Distribution and hotel businesses are susceptible to business fluctuations, changes in consumer behavior, and other factors. Given close relationships between the development of related businesses and the above measures to improve the value of areas along railroad lines, JCR considers it necessary for a railroad company to first identify the characteristics of areas along railroad lines and, then, to develop clear strategies, such as the establishment of a business to increase its profits; to improve its brand image, helping to differentiate itself from competitors; and to contribute to the convenience of residents in areas along railroad lines. Therefore, JCR examines each company's policies on its related businesses through analysis of development projects and others in its medium-term management plan, which is applied to rating assessment.

2. Financial base

(1) Earnings strength

JCR attempts to understand not only the consolidated earnings power, but also the conditions related to cost in the railroad business and the financial positions of related businesses, and those of its sub-segments if necessary. The trends in extraordinary profits and losses are also monitored with consideration given to large assets owned and frequent reorganization of business segments.

Key financial indicators:

- ■ Operating margin
- ■ Extraordinary profit/loss items

(2) Cash flow generating ability

Improving and maintaining the ability to generate cash flow are important due to the necessity of investment in development of areas along railroad lines in addition to continuous investment in safety in the railroad business. On top of the consolidated cash flow generating ability, trends in the cash flow of each segment, such as the stable railroad business and real estate rental business, must be confirmed.

Key financial indicators:

- ■ EBITDA
- ■ Ratio of interest-bearing debt to EBITDA

(3) Safety

In the railroad business, the amount of interest-bearing debt tends to be large due to massive investment required and lengthy investment recovery time frames. Although business and financial restructuring in some cases have resulted in significantly reduced capital in the past, such situations have almost ended in recent years and large capital reduction risk has been low. That said, JCR continues to confirm the risk of reporting of appraised loss on real estate for sale and the risk of impairment loss on assets for business use.

Among companies which are enhancing hotel business, there are cases that unexpired leasing fees on operating leases (off-balance sheet debts) under lease contracts are expanding. For companies with a large amount of unexpired leasing fees, JCR incorporates the repayment burden in its rating evaluation, in addition to on-balance sheet interest-bearing debts.

Key financial indicators:

- Interest-bearing debt
- Equity ratio
- Debt equity ratio

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