

Rating Methodology by Sector

National University Corporations

JCR takes into consideration different forms of corporations that establish schools in determination of rating for educational institutions. Such forms in Japan are mainly private (incorporated educational institutions) and national (national university corporations). The following outlines the rating methodology for national university corporations (hereafter "national universities").

1. Basic Concept

This rating methodology is applied to national universities established by the national government in accordance with the Act governing them. JCR comprehensively determines the rating on a national university corporation based on both the effect of credit enhancement by the government and the individual conditions (business base, financial base, etc.) as a single corporation. The reason why the effect of credit enhancement by the government is factored into the rating of national universities is that their management is controlled and involved by the government through investments, personnel of directors and officers, business operations, and budgets. Even if there is no explicit guarantee provision for the payment of principal and interest on debts owed by national universities, it is considered possible to expect support from the government in the event of emergency. Therefore, a certain floor (the lower limit of the rating) is laid down for the rating, and in principle, the rating is based on a rating equivalent to the creditworthiness of Japan. However, incorporating the effect of credit enhancement by the national government does not mean that a uniform rating level is assigned without analyzing the individual situation of the corporation as a single entity. JCR believes that the credit risk of a national university should be evaluated in light of its own individual situation in the first place, and the disparities in individual situations will be reflected in the rating results.

2. Effect of Credit Enhancement by the Government

(1) Policy Significance

National universities are the core of education and research in Japan and play important roles in directly embodying the nation's higher education policy. Specifically, they include: (i) promotion of research and education that leads the world's and Japan's "knowledge," (ii) a hub of knowledge and human resources for innovation creation, (iii) systematic human resource development, including human resource development for the realization of Society 5.0, (iv) maintenance of academic fields that do not necessarily have a large demand from an economic perspective but need to continue to exist for the inheritance and development of important academic fields, and promotion of education and research that entail a financial burden due to the large budget required for the construction of education and research facilities, such as those in the fields of science and engineering, and (v) a regional center of education and research (active and leading role in recurrent education, international student exchange, industry-university collaboration, international development, and

cooperation including networks among faculty members). Although private universities also play some of these roles, national universities are in a leading position and play a policy role that differs from that of the private sector.

(2) Management Control and Involvement by the Government

National universities, which were previously part of the national government's administrative organization, were granted independent corporate status in April 2004, funded by the government. The national university corporation system was designed on the basis of the independent administrative institution system, with the following objectives: (i) each university would be incorporated individually to ensure autonomous operations, (ii) private sector-oriented management methods would be introduced, (iii) a management system with participation from outside the university would be institutionalized, (iv) a shift to a flexible personnel system based on a non-civil service model, and (v) a shift to a post-evaluation system with the introduction of third-party evaluation. Although the design is partially different due to the nature of the educational institution, the ties with the government are extremely strong in terms of capital, operations, and finances.

3. Effect of Credit Enhancement by the Government

(1) Characteristics of Educational Institutions

Educational institutions, including national universities, have the following unique characteristics: (i) specialization and diversity of each academic discipline, (ii) difficulty in measurement of investment effect (education and research outcomes), (iii) public nature (necessity of inefficient field), (iv) diversity of stakeholders, (v) multi-tiered governance structure, (vi) non-repetitive nature in purchasing (educational) services. As a non-profit organization, it is necessary to recognize differences between a non-profit organization and a general business corporation, which performs reproduction on an enlarged scale and pays dividends to shareholders, and to focus on qualitative aspects. However, the approach for assessment itself is not basically different from that applied to a general business corporation.

(2) Business Environment

The finances of national universities are supported by basic funds from government subsidies. Specifically, management expense grants are provided for business operations, and subsidies for facilities & equipment expenses are provided for necessary expenses for facilities and equipment. There has been no change in the basic framework since the establishment of the corporation system. However, the government's support for basic funds has been gradually weakening. At the same time, the government has been deregulating national universities in an effort to increase their management discretion. For national universities, a decrease in operational financial resources will have a negative impact on the stable employment of faculty members and the maintenance of facilities and equipment. In this environment, national universities are faced with the important task of establishing independent financial resources, i.e., external sources of revenue such as research funds from the public and private sectors and donations. Without strategic management, they will not be able to secure sufficient funds, and are faced with a risk of a decline in the quality of both education and research.

(3) Market Position and Competitiveness

National universities as a whole play the roles described in the Policy Significance section, but the specific weight placed on them differs from one to another. In addition, their geographical characteristics and academic and research fields are also diverse. For example, there are universities that (i) promote excellence in education and research on a university-wide basis, comparable to overseas universities, (ii) promote world-class education and research in specific fields, and (iii) promote education and research rooted in the local community. Based on the individuality, characteristics, and mission of each national university, JCR will analyze its position and competitive situation.

National universities are well positioned within the educational institution sector. As an example, while accounting for about 10% of the total number of schools in the country, they accept about 20% of the undergraduate students and 60% of the graduate students. In terms of research, the number of cases adopted and amount allocated for grants-in-aid for scientific research account for about 60% of the total of research institutions. On the other hand, direct competition among national universities is limited due to functional differentiation. However, due to the limitations of history, size, geographical characteristics, and academic/research fields, the breadth and depth of relationships with stakeholders, i.e., opportunities to obtain funds, are varied.

(4) Characteristics of National University

(i) History

The history of a national university has a significant impact on its basic characteristics, academic and research areas, and size. Due to the history of establishment, length of history, and geographical characteristics, the accumulated tangible and intangible assets vary from one university to another. Based on these factors, national universities have established their principles and goals as their university charters, and conduct their business activities based on these charters. It is meaningful not merely to follow the history, but to use it as a clue to predict future business development.

(ii) Management

It is important from a rating perspective to understand the management capabilities, track record, and management stance. Management policies that respond to changes in the environment and measures to realize goals, etc., will be evaluated through interviews with the president and other relevant personnel. While systematically the president has strong authority over personnel, finance, and management, in many cases the top-down leadership style of a corporation is not effective in the management of national universities. JCR focuses its attention on whether a national university has found a common vision between the corporate body and faculty, defined role sharing between them and established a framework, in which cooperation and checks can work fully between them. JCR also confirms process and staff organization that practice and verify the above.

(iii) Risk Management and Organizational Structure

JCR assesses whether a national university has an organizational structure and a personnel assignment that can appropriately respond to the management policy, relationship between corporate body and faculty and changes to

the relationship, strength of autonomy of a department, planning of cross-faculty education and research projects, construction and operational conditions of the implementation organization, in relation to the faculty and staff members' morale and school tradition. JCR also confirms enhancement of its risk management system for scandals by faculty and staff members or students, asset management, etc.

(iv) Securing Human Resources and Their Management

Skillful management of human resources is a factor that influences ability to conduct education and research activities. JCR sees the characteristics in terms of the number of staff members, age structure, average years of service, pay level, etc. together with comparisons with rival schools, while confirming recruitment policy for faculty and other staff members and subsequent career paths of them. JCR also confirms personnel evaluation system, relations between such evaluation system and remuneration/promotion, and present situation of organizational activities such as competency development of faculty and other staff members.

(v) Future Vision and Management Plan

Analyses of future vision and management plan are extremely important in terms of rating. JCR comprehensively judges their appropriateness and feasibility, based on various materials related to the management plan, philosophy, policy for its medium- to long-term plan that are interviewed from the management, and implementation status of the short-term action plan. Under the national university corporation system, the Minister of Education, Culture, Sports, Science and Technology sets medium-term goals for business operations to be achieved by national universities over a six-year period, and national universities formulate plans to achieve these medium-term goals as their medium-term plans. In addition to the medium-term goals and medium-term plans that are contracted with the national government, the details of any separate independent management plans will be scrutinized.

(vi) One-corporation Multiple-university System

With the aim of promoting synergy and efficiency in education and research, a system of university collaboration and integration has been introduced, and some corporations have established multiple national universities. The credit rating is an evaluation of the creditworthiness of the corporation, and JCR evaluates the corporation as a whole after carefully examining the business foundation of each established university.

(5) Ability to Attract Students

Unlike incorporated educational institutions, student fees account for a relatively small portion of revenue for national universities. However, since students form the basis of educational and research activities, it is important to analyze the stability of their ability to attract students. In confirming trends in applicants and enrollment for undergraduate and graduate schools, evaluation should be made not only on direct indicators such as the ratio of applicants to enrollment and the ratio of annual number of incoming students to annual enrollment limit, but also in relation to the diversity of students, track record of producing human resources, and entrance examination reforms.

(6) Ability for Educational and Research Activities

Ability for educational and research activities is a driving force for growth of national universities and is one of the important factors to judge their future. JCR will confirm whether a framework for constant improvement of their own activities has been established and is in operation, based on the results of the evaluation of national university corporations and the performance reports that form the basis of the evaluation.

Educational activity ability has a strong relationship with attracting students and production of human resources, and in relation to these, JCR will confirm the status of improvement of educational organizations, curricula, methods, and measurement of educational outcomes. In the case of universities that focus on research, the evaluation will place more weight on graduate schools. On the other hand, since research activity ability is directly related to the ability to obtain external fund, it is of high importance in the rating. In addition to general indicators related to research, JCR will evaluate the results of various institutional-type competitive funds, collaborative and commissioned research, etc., while confirming the unique management resource allocation system, efforts to enhance the research environment, human resource management reforms, etc.

(7) Social Collaboration

As management bodies responsible for the public, national universities are required to accelerate the realization of their missions, while strengthening the external deployment of their functions through collaboration with various stakeholders. Returning intellectual achievements to society can be viewed as an activity to fulfill social responsibility as a national university and to gain understanding and support from stakeholders. It contributes to the diversification of operational financial resources and the acquisition of new business opportunities, and JCR confirms the status of efforts through indicators such as private-sector collaborative research, donations, and intellectual property revenue. In addition, effective and appropriate information dissemination to stakeholders is necessary, and JCR also pays attention to its publicity system, activity performance and plan.

(8) International Expansion Ability

The ability to expand internationally is an essential element in attracting excellent students and faculty members from around the world and enhancing the ability for educational and research activities. However, such efforts do not always lead to an immediate increase in revenue, and the cost burden often precedes it. In addition to the status of budgetary measures, the ability for international expansion will be measured by the status of partnerships with overseas universities, etc. and the results of international exchange of students and faculty members.

(9) University Hospital

National universities with university hospitals are highly significant and important in terms of healthcare policy as (i) advanced treatment hospitals, (ii) institutions for training physicians, (iii) core regional hospitals, and (iv) centers for clinical research. In addition, university hospital revenue accounts for a relatively high proportion of that of the corporation as a whole, and the interest-bearing debt accounts for the majority of the corporation's such debt. Therefore, the impact of the hospitals' business conditions on the financial management of the corporation as a whole cannot be ignored. In assigning the rating, JCR focuses on the impact on the corporation's finances, taking into account (i) status

and results of efforts to improve profit, (ii) trends in functional indicators (average number of hospitalization days, bed occupancy rates, etc.), and (iii) degree of financial independence from the university. The segment operational profit/loss includes the amount of profit that the segment is obligated to earn from the beginning in order to repay its borrowings, which must be adjusted for in the analysis.

4. Assessment of Financial Base

(1) Revenue Composition and Diversity of Revenue Sources

The revenue structure of national universities can be broadly categorized into (i) management expense grants and subsidies for facilities & equipment expenses, (ii) revenue from tuition and other fees from students, (iii) external funds (commissioned research, collaborative research, commissioned projects, donations, and subsidies), and (iv) revenue from university hospitals, with a particularly high dependence on management expense grants and other sources. In order to increase the stability of cash flow, it is important to expand and diversify the independent financial resources, and JCR will evaluate the status of such efforts and trends in performance. The rating, however, does not focus on the amount of these sources, but rather on whether the corporation can secure operational financial resources commensurate with the scale of its operations, and to link this to earnings stability and growth.

(2) Expenditure Composition and Flexibility of Expenditure Structure

Personnel expense accounts for large part of expenditures of national universities. As majority of education and research expenses or administrative expenses are fixed in nature, their expenditure structure is rigid. The key point is how efficiently a national university allocates and uses its funds in order to maintain and improve quality of education and research. Specifically, JCR confirms budgeting, management process, existence of management resource allocation system where discretion of the executive can work, trends in revisions to the personnel system, and room for cost reductions through partial outsourcing of business processes and improved material procurement methods.

(3) Asset Management, Management Policy and System

Due to deregulation, many universities are engaged in real estate lending and fund management. These revenues are positioned as operational surplus funds and can be used to finance the redemption of bonds and other securities. The focus is not only on the actual trends in asset management revenues, but also on whether an appropriate asset management system and a risk management system have been established.

(4) Financial Base

The financial risk of national universities is low. This is because subsidies for facilities & equipment expenses and other funds are provided by the government for the maintenance of facilities and equipment in the education and research divisions. However, the amount and timing of subsidies may be restricted by the government's financial situation and fiscal policy, and it is not always possible to flexibly implement maintenance plans as envisioned. For this reason, since the requirements for long-term loans and bond issuance have been eased, there has been a move to actively raise funds from external sources. The revenue forecast for the corporation as a whole and how cash flow is managed are important

points, and the redemption plan, fund management status, and the status of projects in which investments are made will be checked. However, even in this case, financial risk is likely to be restrained, as it is necessary to obtain approval for the redemption plan from the Ministry of Education, Culture, Sports, Science and Technology every fiscal year.

(5) Financial Ratio Analysis

The accounting system for national universities follows that of corporate accounting, but incorporates specific accounting procedures in consideration of the unique nature of their operations. The unique characteristics of national universities include: (i) due to their public nature, they are not intended to earn profits and do not assume self-support accounting, but are financed by the national government; (ii) in some cases, decision-making is not completed based on their independent judgments, as facilities and equipment are determined and budgeted by the national government; and (iii) an investor to invest for the purpose of obtaining distribution from profit is not planned in the system, and profits are not distributed. Furthermore, some national universities may have an education and research division that secures financial resources and achieves results through appropriate allocation of such resources, and a university hospital that earns revenue through its own activities to generate financial resources. The accounting system of national universities should be comprehensively understood, taking into account that national universities are non-profit organizations where the intentions of the government and those of the universities overlap and that the full amount of external funds obtained, such as grants-in-aid for scientific research, does not appear in the financial statements. JCR not only traces numerical figures or compares financial indicators of a national university with those of rival universities, but reads such figures in relation to qualitative factors to forecast future earnings and financials. Even if there is a burden on profit and finances, JCR may judge that the situation is not problematic from a rating perspective, as long as it is within the range assumed by JCR based on a clear facilities and equipment investment policy and education and research policy.

Key financial indicators:

- Ratio of ordinary revenue to the previous year
- Ratio of management expense grants to ordinary revenue
- External fund ratio ((grants for commissioned research + grants for commissioned projects + donations + subsidies) / ordinary revenue)
- The number of cases and amount adopted for grants-in-aid for scientific research
- Ratio of annual number of incoming students to annual enrollment limit, Ratio of number of students enrolled to enrollment limit
- Ratio of long-term loans payable to proceeds from university hospital ((long-term loans payable + contribution for NIAD-QE inherited debts) / proceeds from university hospital)

Because of the possibility of human or mechanical error as well as other factors in the information herein, JCR makes no representation or warranty, express or implied, as to accuracy, results, adequacy, timeliness, completeness or merchantability, or fitness for any particular purpose, with respect to any such information, and is not responsible for any errors or omissions, or for results obtained from the use of such information. Under no circumstances will JCR be liable for any special, indirect, incidental or consequential damages of any kind caused by the use of any such information, including but not limited to, lost opportunity or lost money, whether in contract, tort, strict liability or otherwise, and whether such damages are foreseeable or unforeseeable. Information herein is statements of opinion, and not statements of fact as to credit risk decisions or recommendations regarding decisions to purchase, sell or hold any securities such as individual bonds or commercial paper. JCR retains all rights pertaining to this document. Any reproduction, adaptation, alteration, etc. of this document, is prohibited, whether or not wholly or partly, without prior consent of JCR.

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