News Release



Japan Credit Rating Agency, Ltd.

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JCR's Financial Indicators by Rating Range 2018

JCR calculated the average financial indicators for each rating category, using financial data of the corporations to which JCR assigns ratings (including 'p' ratings and ratings under Credit Monitor), as a part of objective validation of the adequacy of JCR's ratings. This report is the updated 2018 version of the last "JCR's Financial Indicators by Rating Range 2017" released on December 19, 2017. The ratings are determined not only by quantitative but also qualitative assessment, and the consistency in the relationship between the grades of JCR's ratings and the financial indicators has been reaffirmed by these statistical tests, as should be for the base of credit rating. JCR calculates the level of financials as herewith presented for the use to check individual ratings. Since JCR sees other financial indicators, qualitative assessment and prospects for future developments as well in the actual ratings, they do not necessarily match the ratings that are herewith arithmetically assigned, even though the rated corporations may satisfy the level of financial averages given in this report. Nonetheless, JCR releases this report as a part of its efforts to improve its rating transparency.

Time Period for Data Collection

Two time periods are adopted for data collection: "the most recent FY" (from April 2017 to March 2018) and "the most recent 5 FYs" (from April 2013 to March 2018). (The previous two time periods were from April 2016 to March 2017 for the most recent FY and from April 2012 to March 2017 for the most recent 5 FYs.)

Data Used

Data for Japanese industrial corporations (excluding financial institutions, electric power and gas companies, air transport, agriculture and forestry, fishery, and mining industries with ratings of BB range and above) subject to JCR's ratings were used. JCR related the financial indicators to the JCR's ratings that were assigned when 5 months have passed since the end of the fiscal year (for example, FY ended March 2018 referenced to JCR's rating as of August 31, 2018). As a result, the number of corporations subject to data collection from April 2013 to March 2018 totaled 958 for manufacturing industry (192 for the most recent FY) and totaled 820 for non-manufacturing industry (157 for the most recent FY).

(Financial Technology Division)



Table 1: Average Values of Financial Indicators by Rating Range

| | | | Most Da | Manufac | | ant EV | Most Day 15 | Non-Manut | | ant EV |
|------------------------|--|-----------------------|------------------|---------------|--------------|--------------|-------------------|-------------------|---------------|---------------|
| | | | Most Recent 5 | | Most Red | | Most Recent 5 | | Most Rec | |
| Number of C | Corporations | AAA | till FY2017 0 | till FY2016 | FY2017 0 | FY2016 | till FY2017 23 | till FY2016 22 | FY2017 5 | FY2016 |
| Nulliber of C | Corporations | AA Range | 131 | 128 | 28 | 27 | | 83 | 19 | 1 |
| | | A Range | 522 | 517 | 106 | 105 | | 401 | 84 | 8 |
| | | BBB Range | l | 301 | 55 | 57 | | 302 | 47 | 5 |
| | | BB Range | 15 | | 3 | 3 | | 23 | 2 | |
| Profitability | Operating Income Margin (%) | AAA | - | - | - | - | 21.62 | 21.41 | 21.96 | 21.98 |
| | | AA Range | 10.65 | 9.68 | 12.46 | 11.50 | 10.12 | 9.64 | 10.53 | 10.76 |
| | | A Range | 6.88 | 6.38 | 7.65 | 7.18 | 7.64 | 7.38 | 8.30 | 7.49 |
| | | BBB Range | l | 4.54 | 5.36 | 5.55 | 6.53 | 6.38 | 6.48 | 6.24 |
| | | BB Range | 4.23 | 3.21 | 4.52 | 5.58 | 13.60 | 12.88 | 16.70 | 14.98 |
| | Net Income/Total Capital Employed | AAA | - | - | - | - | 4.95 | 4.73 | 5.32 | 5.40 |
| | | AA Range | 5.08 | 4.29 | 6.76 | 5.34 | 3.72 | 3.48 | 4.31 | 3.70 |
| | | A Range | 3.84 | 3.38 | 4.61 | 3.99 | 3.16 | 2.93 | 3.75 | 3.26 |
| | | BBB Range BB Range | 2.63 -0.25 | 2.33 -1.29 | 2.73 1.66 | 3.33 1.01 | 2.68 2.16 | 2.43 1.85 | 3.16 1.44 | 2.63 |
| | Business Income/Total Capital | AAA | -0.25 | -1.29 | 1.00 | 1.01 | 8.40 | 8.38 | 8.30 | 1.31 8.71 |
| | | AA Range | 8.57 | 7.71 | 10.31 | 8.91 | 6.54 | 6.30 | 6.82 | 6.56 |
| | | A Range | 6.28 | 5.84 | 6.95 | 6.39 | 5.29 | 5.21 | 5.52 | 5.56 |
| | | BBB Range | 4.79 | 4.45 | 5.23 | 5.28 | 4.83 | 4.62 | 5.26 | 4.74 |
| | | BB Range | 3.90 | 3.02 | 4.90 | 5.03 | 4.58 | 4.92 | 3.08 | 2.99 |
| Debt | Interest-bearing Debt/EBITDA Ratio | AAA | - 0.00 | - 0.02 | | - | 2.27 | 2.27 | 2.51 | 2.19 |
| Service | (year) | AA Range | 1.72 | 1.84 | 1.46 | 1.78 | 3.37 | 3.50 | 3.28 | 3.50 |
| Capacity | | A Range | 2.64 | 2.87 | 2.07 | 2.28 | 4.37 | 4.55 | 4.16 | 4.05 |
| | | BBB Range | 3.25 | 3.66 | 2.92 | 3.06 | 5.31 | 5.63 | 4.20 | 6.85 |
| | | BB Range | 3.93 | 3.97 | 4.68 | 4.38 | 9.05 | 8.82 | 13.64 | 13.75 |
| | Net Interest-bearing Debt/EBITDA | AAA | - | - | - | - | 2.09 | 2.11 | 2.27 | 1.97 |
| | Ratio (year) | AA Range | 1.18 | 1.25 | 1.01 | 1.26 | 2.63 | 2.76 | 2.44 | 2.78 |
| | | A Range | 1.79 | 1.99 | 1.25 | 1.41 | 3.35 | 3.45 | 3.19 | 3.05 |
| | | BBB Range | 1.81 | 2.17 | 1.49 | 1.64 | 3.93 | 4.19 | 3.07 | 4.71 |
| | | BB Range | 2.47 | 2.44 | 3.23 | 2.65 | 6.59 | 6.83 | 9.58 | 10.00 |
| | Interest-bearing Debt/Operating Cash | AAA | | | - | | 2.98 | 3.00 | 3.24 | 2.86 |
| | Flow Ratio (year) | AA Range | 2.39 | 2.55 | 2.02 | 2.71 | 6.52 | 6.05 | 7.68 | 4.83 |
| | | A Range | 3.66 | 4.16 | 3.19 | 3.28 | 7.12 | 6.98 | 7.37 | 6.96 |
| | | BBB Range | 5.21 7.20 | 6.03 9.26 | 4.29 7.28 | 3.93 7.03 | 7.70 14.60 | 8.06 12.56 | 6.50 22.29 | 8.75 |
| | Net Interest-bearing Debt/Operating | BB Range AAA | 1.20 | | 1.20 | 7.03 | 2.75 | 2.79 | 22.29 | 24.56 2.60 |
| | | AA Range | 1.64 | 1.72 | 1.39 | 1.94 | 5.39 | 4.94 | 6.44 | 3.83 |
| | | A Range | 2.44 | 2.86 | 1.99 | 2.13 | 5.42 | 5.57 | 5.71 | 5.11 |
| | | BBB Range | 2.96 | 3.72 | 1.88 | 2.23 | 5.81 | 6.33 | 4.63 | 7.00 |
| | | BB Range | 4.59 | 5.84 | 4.93 | 4.77 | 11.14 | 9.96 | 14.94 | 18.01 |
| Financial Structure | Equity Ratio (%) | AAA | - | | - | - | 45.33 | 44.57 | 45.49 | 45.79 |
| | | AA Range | 55.22 | 54.85 | 56.25 | 55.49 | 42.27 | 41.73 | 42.34 | 43.02 |
| | | A Range | 48.54 | 47.62 | 50.21 | 49.35 | 39.35 | 39.05 | 40.62 | 40.18 |
| | | BBB Range | 44.37 | 43.48 | 45.70 | 44.98 | 37.67 | 36.50 | 39.83 | 38.98 |
| | | BB Range | 28.35 | 32.21 | 16.90 | 24.96 | 39.92 | 39.55 | 29.64 | 29.92 |
| | Debt/Equity Ratio (Interest-bearing | AAA | - | | - | - | 0.76 | 0.80 | 0.78 | 0.74 |
| | | AA Range | 0.42 | 0.44 | 0.36 | 0.42 | 0.75 | 0.80 | 0.70 | 0.79 |
| | | A Range | 0.57 | 0.62 | 0.48 | 0.55 | 0.94 | 0.96 | 0.92 | 0.89 |
| | | BBB Range | 0.78 | 0.87 | 0.59 | 0.76 | 1.17 | 1.28 | 0.99 | 1.07 |
| | Dahat/Carrier Datia (Alas Internant Incoming | BB Range | 1.62 | 1.24 | 2.74 | 1.97 | 1.46 | 1.56 | 2.02 | 2.00 |
| | Debt/Equity Ratio (Net Interest-bearing | AAA AA Range | 0.00 | 0.20 | 0.05 | 0.00 | 0.70 | 0.75 | 0.70 | 0.67 |
| | Debt) (Times) | | 0.29 0.39 | 0.30 0.44 | 0.25 0.30 | 0.28 0.36 | 0.59 0.72 | 0.64 0.75 | 0.51 0.70 | 0.62 |
| | | A Range BBB Range | 0.39 | 0.44 | 0.30 | 0.36 | 0.72 | 1.01 | 0.70 | 0.68 0.82 |
| | | BB Range | 1.08 | 0.39 | 2.05 | 1.07 | 1.08 | 1.01 | 1.42 | 1.45 |
| | Earned Surplus/Equity Capital Ratio | AAA | - 1.00 | - | - 2.00 | 1.07 | 81.93 | 81.67 | 82.81 | 81.53 |
| | | AA Range | 74.08 | 74.04 | 77.93 | 77.09 | 64.45 | 64.62 | 65.72 | 66.49 |
| | | A Range | 62.35 | 61.47 | 65.99 | 64.87 | 60.83 | 59.65 | 65.69 | 63.85 |
| | | BBB Range | | 46.76 | 52.91 | 49.68 | 56.90 | 55.44 | 60.00 | 58.89 |
| | | BB Range | -16.18 | -13.46 | -18.32 | -45.99 | 61.49 | 59.05 | 69.08 | 70.71 |
| Size | Equity Capital (Y100 mn) | AAA | - | - | - | - | 35,607 | 31,624 | 43,432 | 41,032 |
| | | AA Range | 11,589 | 10,609 | 13,095 | 12,094 | 8,999 | 8,435 | 9,467 | 9,204 |
| | | A Range | 3,081 | 2,961 | 3,328 | 2,959 | 2,717 | 2,583 | 3,020 | 2,963 |
| | | BBB Range | l | 695 | 697 | 713 | 799 | 756 | 826 | 771 |
| | | BB Range | 902 | 614 | 1,799 | 1,525 | 227 | 218 | 200 | 186 |
| | EBITDA (Y100 mn) | AAA | | - | - | | 11,020 | 10,038 | 12,764 | 12,565 |
| | | AA Range | 2,868 | 2,564 | 3,245 | 2,976 | | 1,906 | 2,171 | 2,149 |
| | | A Range | 764 | 724 | 884 | 733 | | 717 | 801 | 817 |
| | | BBB Range | | 175 | 167 | 182 | | 171 | 189 | 160 |
| | | BB Range | 373 | 212 | 883 | 702 | 34 | 39 | 30 | 28 |



Table 2: Calculating Formulas for Financial Indicators

| Financial Indicator | Formula | | | | | |
|---|--|--|--|--|--|--|
| Operating Income Margin | Operating Income/Net Sales x 100 | | | | | |
| Net Income/Total Capital Employed Ratio | Y (Net Income)/A (Total Capital Employed) x 100 | | | | | |
| Business Income/Total Capital Employed Ratio | Y (Operating Income + Total Amount of Interest and Dividend Income)/A (Total Capital Employed) x 100 | | | | | |
| Interest-bearing Debt/EBITDA Ratio | A (Interest-bearing Debt)/EBITDA | | | | | |
| Net Interest-bearing Debt/EBITDA Ratio | A (Net Interest-bearing Debt)/EBITDA | | | | | |
| Interest-bearing Debt/Operating Cash Flow Ratio | A (Interest-bearing Debt)/Operating Cash Flow | | | | | |
| Net Interest-bearing Debt/Operating Cash Flow Ratio | A (Net Interest-bearing Debt)/Operating Cash Flow | | | | | |
| Equity Ratio | Equity Capital/(Total Assets - New Stock Subscription) x 100 | | | | | |
| Debt/Equity Ratio (Interest-bearing Debt) | Interest-bearing debt/Equity Capital | | | | | |
| Debt/Equity Ratio (Net Interest-bearing Debt) | Net Interest-bearing debt/Equity Capital | | | | | |
| Earned Surplus/Equity Capital Ratio | Earned Surplus/Equity Capital x 100 | | | | | |
| Equity Capital | Net Assets - Share Warrants - Minority Interests | | | | | |
| EBITDA | Operating Income + Total Amount of Interest and Dividend Income + Depreciation Expense | | | | | |
| Total Capital Employed | Total Assets - New Stock Subscription - Treasury Stock + Notes Receivable Discounted + Notes Receivable Endorsed | | | | | |
| Net Interest-bearing Debt | Larger of (Interest-bearing Debt - Cash and Deposits) or Zero | | | | | |

Notes:

- *1: Y...: In cases where the number of months of a fiscal year is less than 1 year, indicators are annualized.
- *2: A...: Average of the beginning value and ending value.
- *3: In the calculation of the averages, excluded are outliers in the ratios for Interest-bearing Debt/ Operating Cash Flow, Net Interest-bearing Debt/Operating Cash Flow, Interest-bearing Debt/ EBITDA, and Net Interest-bearing Debt/EBITDA.
- *4: Excluded also are less than -3000% figures for Earned Surplus/Equity Capital Ratio in the average calculation.

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

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