

## JCR's Financial Indicators by Rating Range 2022

JCR has compiled financial data with the fiscal year ended March 2022 as the most recent fiscal year for corporations rated by JCR (including 'p' ratings and ratings under Credit Monitor) and calculated financial indicators (average values) by rating range. While ratings are determined based on both quantitative and qualitative assessments, JCR confirmed that the relationship between the ranks in the ratings and the performance of financial indicators is basically consistent in the calculation. However, some indicators show large fluctuations from the previous year with respect to the average values in areas with a small number of corporations. As JCR determines actual rating based on assessments of other financial indicators in addition to these financial indicators and qualitative assessments, as well as future prospects, the ratings are not necessarily assigned to the corporations that meet the average values of the calculated results. Even so, JCR hereby releases the calculated results as part of efforts to improve its rating transparency.

### Periods Covered for Calculation

The periods covered for calculation are the following two periods: "Most Recent Period" (from April 2021 to March 2022) and "Most Recent 5-Year Period" (from April 2017 to March 2022). The periods covered for calculation for the previous fiscal year were the following: "Most Recent Period" (from April 2020 to March 2021) and "Most Recent 5-Year Period" (from April 2016 to March 2021).

### Data Covered for Calculation

The data covered for calculation are Japanese industrial corporations to which JCR assigned ratings in the BB range and higher (excluding those in the financial, electric power, gas, air transportation, agriculture, forestry, fishery and mining sectors). JCR used the ratings assigned 5 months after the end of the fiscal year when the indicators were observed for the calculation (e.g., the rating as of the end of August 2022 in the case of the fiscal year ended March 2022). As a result, the number of corporations covered for Most Recent 5-Year Period totaled 874 (184 for Most Recent Period) in the manufacturing industry and 711 (168 for Most Recent Period) in the non-manufacturing industry.

(Information Services Department)

Table 1: Average Values of Financial Indicators by Rating Range

	Rating Range	Manufacturing				Non-Manufacturing				
		Most Recent 5-Year Period		Most Recent Period		Most Recent 5-Year Period		Most Recent Period		
		(Previous Period)		(Previous Period)		(Previous Period)		(Previous Period)		
Number of Corporations	AAA	2	1	1	1	18	24	4	4	
	AA	137	150	33	31	111	107	28	26	
	A	486	515	103	102	386	461	96	92	
	BBB	234	266	43	50	195	239	37	44	
	BB	15	14	4	3	1	11	3	3	
Profitability	Operating Income Margin (%)	AAA	8.81	8.08	9.55	8.08	12.51	15.81	0.75	-12.89
		AA	11.95	11.24	12.60	9.94	9.16	9.31	7.96	6.44
		A	6.56	6.70	6.68	5.40	6.55	7.37	6.22	4.88
		BBB	4.85	4.75	6.18	4.24	4.52	5.76	4.54	2.60
		BB	1.41	3.13	-1.49	1.67	-54.03	17.39	-9.34	21.76
	Net Income Margin (%)	AAA	8.67	8.25	9.08	8.25	5.94	8.25	-1.25	-16.86
		AA	8.23	7.27	9.86	6.66	5.58	5.43	5.38	2.16
		A	4.34	4.29	4.88	3.25	4.79	5.19	4.87	3.96
		BBB	2.77	2.75	4.39	2.69	3.35	3.56	6.97	0.89
		BB	-1.07	-0.12	-2.55	-0.39	-42.21	8.81	-9.92	13.68
	ROA (Business Income) (%)	AAA	4.38	3.84	4.91	3.84	5.90	6.62	1.37	-0.68
		AA	9.04	8.66	9.39	6.90	5.42	5.99	4.80	3.94
		A	5.81	5.96	5.69	4.57	4.99	5.14	4.89	4.28
		BBB	4.44	4.47	5.82	3.92	4.33	4.68	3.67	2.81
		BB	1.98	3.30	-0.35	2.02	-15.33	4.58	-3.28	8.89
Debt Service Capacity	Interest-bearing Debt / EBITDA (years)	AAA	5.79	6.30	5.28	6.30	19.73	14.59	14.37	92.50
		AA	1.64	1.78	1.71	2.19	8.46	7.80	6.54	21.30
		A	2.73	2.66	2.73	3.69	5.37	5.58	5.42	9.18
		BBB	3.63	3.63	3.06	3.84	4.87	5.65	5.36	6.51
		BB	8.89	6.98	12.86	13.55	-	13.82	14.81	12.33
	Net Interest-bearing Debt / EBITDA (years)	AAA	4.55	5.03	4.07	5.03	18.37	13.56	13.51	86.29
		AA	1.03	1.21	1.00	1.37	3.99	3.36	4.93	5.40
		A	1.59	1.59	1.57	1.98	3.84	4.16	4.07	6.41
		BBB	1.76	1.85	1.56	1.80	3.46	4.03	3.68	4.46
		BB	5.38	3.89	8.84	5.28	-	9.93	10.16	9.07
	Interest-bearing Debt / Operating Cash Flow (years)	AAA	8.22	9.32	7.12	9.32	9.22	7.19	27.84	40.32
		AA	2.24	2.34	3.11	2.55	7.35	6.89	6.48	9.65
		A	4.39	3.78	6.06	4.19	7.41	7.83	8.51	8.16
		BBB	5.29	4.75	7.35	4.85	7.45	7.83	6.92	7.05
		BB	10.54	10.67	6.59	16.37	-	22.38	19.46	17.22
Financial Structure	Equity Ratio (%)	AAA	38.18	37.59	38.77	37.59	42.17	43.68	33.22	33.97
		AA	57.45	55.58	55.31	53.92	39.91	40.61	39.66	39.65
		A	49.90	49.34	48.94	48.95	41.31	40.62	41.36	41.16
		BBB	46.95	45.72	46.28	46.48	40.33	38.99	42.83	38.92
		BB	15.59	16.17	20.61	11.54	9.87	30.75	23.68	32.20
	Debt-to-Equity Ratio (Interest-bearing Debt) (times)	AAA	1.05	1.09	1.01	1.09	0.98	0.91	1.50	1.41
		AA	0.35	0.40	0.38	0.43	0.96	0.90	1.01	1.04
		A	0.56	0.57	0.57	0.64	0.93	0.98	0.95	0.99
		BBB	0.62	0.70	0.62	0.63	1.03	1.13	1.06	1.17
		BB	2.99	3.10	1.91	4.03	6.83	1.95	3.49	1.89
	Debt-to-Equity Ratio (Net Interest-bearing Debt) (times)	AAA	0.82	0.87	0.78	0.87	0.89	0.83	1.40	1.31
		AA	0.21	0.26	0.23	0.26	0.72	0.67	0.76	0.74
		A	0.35	0.37	0.35	0.40	0.68	0.75	0.68	0.70
		BBB	0.36	0.43	0.36	0.36	0.74	0.83	0.74	0.78
		BB	2.13	2.15	1.32	2.72	4.33	1.44	2.27	1.45
Size	Equity Capital (JPY 100 mn)	AAA	248,253	234,045	262,460	234,045	50,848	41,862	37,150	35,962
		AA	13,051	12,354	15,164	13,248	10,973	10,926	12,897	11,706
		A	3,773	3,599	4,269	3,879	3,444	3,230	3,595	3,603
		BBB	731	741	1,032	923	811	767	907	742
		BB	1,716	1,670	1,734	1,603	406	338	285	699
	EBITDA (JPY 100 mn)	AAA	45,252	40,365	50,139	40,365	14,227	11,924	9,775	7,877
		AA	3,137	2,967	3,848	2,939	2,697	2,732	2,980	2,686
		A	838	844	955	757	748	760	599	563
		BBB	139	161	274	178	166	168	144	117
		BB	726	770	557	733	-499	131	-145	402

Note: As three out of four AAA-rated corporations under “Most Recent Period” in the Non-Manufacturing category are railway companies, indicators may reflect the impact of the COVID-19 pandemic, following the previous fiscal year.

Table 2: Calculating Formulas for Financial Indicators

Financial Indicator	Formula
Operating Income Margin	Operating Income / Net Sales x 100
Net Income Margin	Net Income After tax / Net Sales x 100
ROA (Business Income)	Y (Operating Income + Total of Interest and Dividend Income) / A (Total Capital Employed) x 100
Interest-bearing Debt / EBITDA	Interest-bearing Debt / EBITDA
Net Interest-bearing Debt / EBITDA	Net Interest-bearing Debt / EBITDA
Interest-bearing Debt / Operating Cash Flow	Interest-bearing Debt / Operating Cash Flow
Equity Ratio	Equity Capital / (Total Assets - Paid-in Advances on New Stocks) x 100
Debt-to-Equity Ratio (Interest-bearing Debt)	Interest-bearing Debt / Equity Capital
Debt-to-Equity Ratio (Net Interest-bearing Debt)	Net Interest-bearing Debt / Equity Capital
Equity Capital	Capital - Paid-in Advances on New Stocks
EBITDA	Operating Income + Total of Interest and Dividend Income + Depreciation Expenses + Goodwill Amortization
Total Capital Employed	Total Assets - Paid-in Advances on New Stocks + Notes Receivable Discount + Notes Receivable Transfer
Interest-bearing Debt	Short-term Loans Payable + CP + Current Portion of Long-term Loans + Current Portion of Bonds + Bonds Payable + Long-term Loans Payable + Current Portion of Lease Obligations, etc. + Lease Obligations, etc.
Net Interest-bearing Debt	Interest-bearing Debt - Cash and Deposits

Notes:

1. Y: In cases where the number of months in a fiscal period is less than 12, indicators are annualized.
2. A: Average of the values at the beginning and end of the fiscal period
3. In the calculation of Net Interest-bearing Debt, the amount is zero when the interest-bearing debt is less than cash and deposits.
4. In the calculation of average values, outliers for Interest-bearing Debt / Operating Cash Flow, Interest-bearing Debt / EBITDA and Net Interest-bearing Debt / EBITDA are excluded.
5. The formula for calculating Operating Income is Gross Profit – SGA Expenses for some of the companies adopting IFRS.

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