



NEWS RELEASE

Jul 1, 2005

R&I announces Broad-Definition Default Ratio for FY 2004 The Broad-Definition Default Ratio and the Rating Transition Matrix

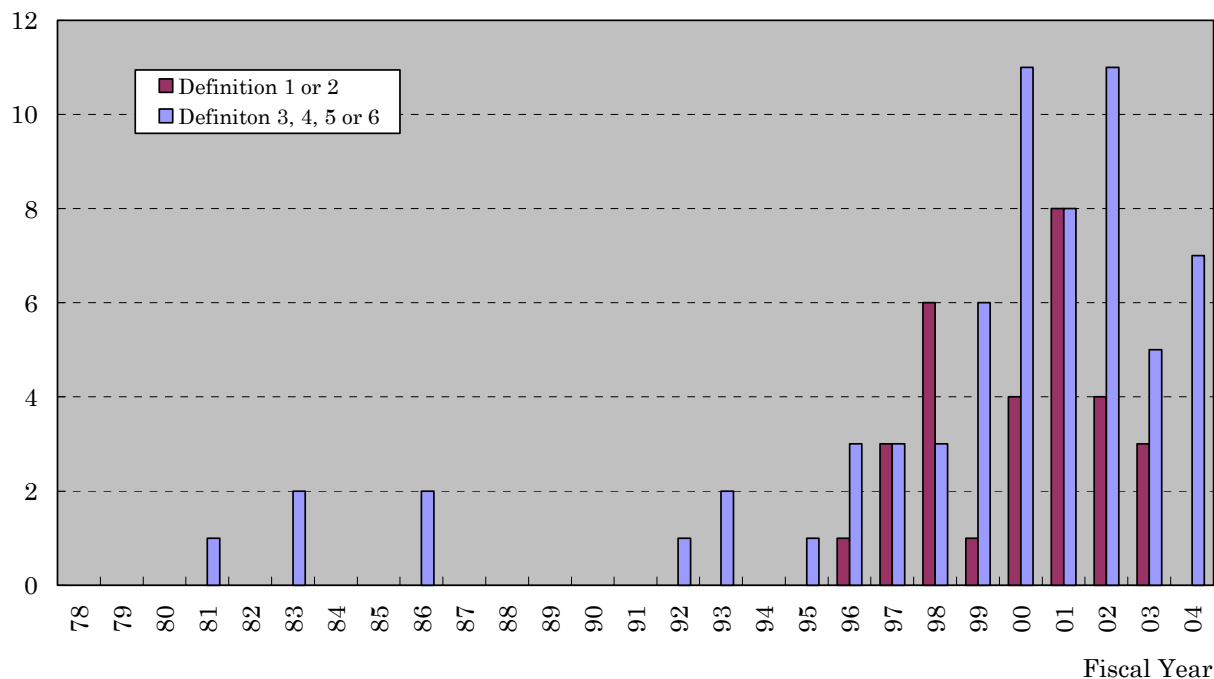
Rating and Investment Information, Inc. (R&I) today announced the results of the broad-definition default ratio for fiscal 2004. The surveys on which this ratio is based cover 1,273 issuers rated by R&I from fiscal 1978 to the beginning of fiscal 2004. A strong correlation between R&I ratings and the broad-definition default ratio can be observed. Some of the major characteristics for fiscal 2004 included - (1) the number of issuers covered by the survey that suffered broad-definition default were seven, approximately the same number as fiscal 2003 (8 issuers); (2) there were no issuers suffered definition 1 (bond defaults) nor definition 2 (a legal bankruptcy).

Broad-definition default ratio is an alternative indicator of bond default ratio under the environment where there are few cases of a bond default. R&I has been providing the ratio since June 2000. The "broad-definition default" includes not only the instance of defaulting on publicly offered corporate bonds and legal bankruptcy, but also debt relief, etc.

Apart from the broad-definition default ratio, R&I will be announcing in a forthcoming news release a new definition of defaults and a default ratio based on the definition.

NEWS RELEASE

Exhibit 1. Incidence of broad-definition default





NEWS RELEASE

1 The Broad-Definition Default Ratio

1.1 The Definition of Broad-Definition Default Ratio

The broad-definition default ratio (referred to below as the “default ratio”) refers to the probability of an issuer being substantially incapable of making payment on its debts. At the present time, when there are few actual instances of defaulting on publicly offered corporate bonds, this ratio serves as an indicator of the potential bond default ratio. When R&I calculates the default ratio, issuers that fit the definition shown in Exhibit 2 are counted as instances of broad-definition default. The six definitions provided here are a detailed enumeration of circumstances in which third-party economic loss is incurred due to substantial default.

1.2 Issuers Covered

As a rule, the sample of issuers covered includes all of the issuing entities domiciled in Japan that received an R&I long-term debt rating during the period from April 1, 1978 to April 1, 2004. Sovereign issuers, local government bodies, life insurance companies and issuers of asset-backed securities, however, are excluded. Altogether, there were 1,273 such issuers, of which 608 had ratings as of April 1, 2004.

1.3 Ratings

The ratings used for the default ratio calculation are issuer ratings (R&I changed the name from “senior long-term credit rating” in March 2005), which R&I introduced in October 2001. The calculation does not include insurance claims-paying ability ratings or short-term debt ratings. It also excludes ratings for bonds backed by guarantees by parent companies, banks, or financial guarantee companies. For the fiscal years through March 31, 1998, the calculation uses ratings issued by the Japan Bond Research Institute (JBRI) and Nippon Investors Services (NIS), the two companies that merged to form R&I. It also includes publicly announced trial ratings assigned prior to these two companies’ commencement of business ratings. In instances when there are ratings from both JBRI and NIS, the lower of the two ratings is used.

When R&I assigns an issuer rating, it first analyzes that company’s default risk to determine the likelihood the issuer will fall into default or other management difficulties (default risk analysis). The next step is to analyze recovery risk, which means gauging the likely extent of the recovery of the principal of corporate bonds and other specific obligations in the event of default (recovery risk analysis). Analysis of default risk constitutes the essence of the rating process. Such analysis evaluates an issuer’s ability to meet all of its financial obligations, and its outcome carries considerable weight in terms of assessing a company’s creditworthiness. The rating at this stage is known as an Issuer Rating. It is used for the default ratio in order to perform a rating-specific calculation of the probability of a corporate issuer being substantially incapable of making payment on its debts.

Exhibit 2

Definition of the broad-definition default ratio

- (1) Bond default
- (2) Legal bankruptcy
 - (a) Court application for bankruptcy
 - (b) Court application to come under the protection of the Corporate Reorganization Law
 - (c) Court application to come under the protection of the Civil Rehabilitation Law (under the Composition Act prior to April 2000)
 - (d) Court application for special liquidation measures to commence
 - (e) Court application for liquidation procedures under commercial law to commence
 - (f) Discretionary liquidation after a first nonpayment
 - (g) Receipt of an order terminating bank dealings following a second nonpayment
 - (h) Internal liquidation even without nonpayment (i.e., when a company representative acknowledges a state of bankruptcy)
 - (i) Nationalization as part of bankruptcy proceedings
 - (j) Voluntary termination of business
- (3) Abandonment of claims, Debt equity swap
- (4) Emergency merger or transfer of key operating assets (when the assets do not have any value)
- (5) Infusion of capital to avoid having negative equity
- (6) A position of negative equity (when this is followed by the receipt of financial assistance to avoid bankruptcy)



NEWS RELEASE

Definition of the Issuer Rating

Issuer Rating is R&I's opinion regarding an issuer's overall capacity to repay its entire financial obligation, and it will be assigned to all issuers. The rating symbols are the same as Long-term Issue Rating.

1.4 Calculation Method

The groups that appear in Exhibit 1 and elsewhere indicate groupings for default ratio surveys. Each group has been named according to the first fiscal year of its survey period. For example, the 2000 group refers to the group of 737 companies that had R&I ratings as of April 1, 2000.

The survey starts on April 1 of each year, from April 1, 1978 to April 1, 2004. This produces a total of 27 sets of survey results.

Each group is broken down by each rating as of the survey's starting point. The number of default cases over the years that have elapsed since the survey began is counted for each rating. The default figure for each rating is then divided by the total number of issuers that initially held that rating. The outcome of this process is each group's rating-specific cumulative default ratio.

Using the 2000 group as an example, its 737 issuers can be assorted by their initial ratings as follows: 18 issuers had an AAA rating, 92 an AA, 263 an A, 279 a BBB, 74 a BB, and 11 a rating of B or lower. Of the 11 issuers with a rating of B or lower, three companies had defaulted within one year, five within two years, six within three years, and six within four years. When each of these annual figures is divided by the original total of 11 companies, this yields cumulative default ratios for the first through the fourth year of 27.3%, 45.5%, 54.5%, and 54.5%, respectively.

1.5 Method for Computing the Cumulative Average Default Ratio

The computation of the cumulative average default ratios that appear in Exhibit 1 is performed as follows.

The number of samples with a rating r for the n -year group is designated $N_{n,r}$, and the number of companies that defaulted during the one-year period of the k th year counting from the year the survey was begun is designated $D_{n,r,k}$. Next, the average default ratio $M_{r,k}$ is determined by dividing the total of the number of companies in default in each group by the total number of samples. In other words,

$$M_{r,k} = \sum_{n \in N} D_{n,r,k} \div \sum_{n \in N} N_{n,r}$$

$$N = \{1978, 1979, \dots, 2004\}$$

The cumulative average default ratio $P_{r,t}$ in year t for rating r is determined as the sum of the average default ratios from the year the survey was begun until the t th year. That is,

$$P_{r,t} = \sum_{k \leq t} M_{r,k}$$

2 The Rating Transition Matrix

The rating transition matrix shows how ratings assigned to issuers change over a certain period of time. Exhibit 3 is a concrete example of a rating transition matrix. The exhibit indicates what specific issuer ratings as of April 1, 2003 had become one year later, on April 1, 2004. For example, on April 1, 2003, there were 66 issuers with a BBB- rating. Of these, 48 still had a BBB- rating on April 1, 2004, 2 had been upgraded to BBB, and 2 had been downgraded to BB+. The 14



NEWS RELEASE

remaining companies did not have ratings as of April 1, 2004, mainly because their rated bonds had been redeemed.

The rating transition matrix serves as the basis for broad-definition default ratio computations. Exhibit 3 shows that the total number of companies considered cases of broad-definition default (the numbers appear in columns "BD1" through "BD6") was two. All issuers were in the BB zone or lower on April 1, 2003. Meanwhile, as the exhibit's "Total" column shows, a total of 51 companies had a rating in the BB zone or lower on that date. Accordingly, the broad-definition default ratio for the BB zone or lower can be calculated as 3.92% (2 / 51).

Because the broad-definition default is not the same as actual default, there are instances when an issuer has a rating while it has been counted as a case of broad-definition default. Such issuers are categorized as an instance of broad-definition default in Exhibit 3. For example, even when an issuer has an actual rating of B+, it will be tallied in the "BD6" column and not in the column for a B+ rating if that issuer fits Category 6 of the definition of broad-definition default. The data that can be downloaded are available not only in the format shown in Exhibit 3 but also as a matrix that consists solely of actual ratings and omits any consideration of the concept of broad definition default.

Exhibit 3: Sample rating transition matrix

First Survey year		Rating on April 1 of the final survey year																Cumulative number of companies fitting definition 1, 2, 3, 4, 5, or 6 of broad-definition default through April 1 of the final survey year						Number of companies with no rating on April 1 of the final survey year						
2003 to (2004)	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	BD1	BD2	BD3	BD4	BD5	BD6	(NR)	TOTAL	
AAA	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
AA+	0	27	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
AA	0	2	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	
AA-	0	0	1	36	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	42	
A+	0	0	0	0	59	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	63	
A	0	0	0	0	1	64	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	68	
A-	0	0	0	0	0	2	103	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	118	
BBB+	0	0	0	0	0	3	68	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	82	
BBB	0	0	0	0	0	0	9	51	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	78	
BBB-	0	0	0	0	0	0	2	48	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	66	
BB+	0	0	0	0	0	0	0	0	0	14	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	27	
BB	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	
BB-	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	7	
B+	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	
B	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3	
B-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CCC+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CCC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CCC-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

3. To Access the Data

Detailed calculation results can be downloaded from R&I's web site (<http://www.r-i.co.jp/>). For a list of broad-definition default bond issuers not covered in this news release and changes in their ratings, please contact R&I as follows:

Akira Ishiwata or Tomoyuki Hirose
 Structured Finance Rating Division.
 Phone: +81-3-3276-3406
 E-mail: ishiwata@r-i.co.jp or thirose@r-i.co.jp



NEWS RELEASE

Appendix 1: Broad-definition default ratios for each rating
n year (cumulative) broad-definition default ratios (%)

Cumulative average broad-definition default ratios (%)

year elapsed	1	2	3	4	5	6	7	8	9	10
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.34	0.52	0.72
AA	0.00	0.00	0.05	0.11	0.17	0.36	0.57	0.86	1.26	1.53
A	0.04	0.13	0.31	0.54	0.88	1.18	1.47	1.79	2.15	2.43
BBB	0.13	0.39	0.71	1.11	1.50	1.97	2.41	2.79	3.13	3.51
BB	1.96	3.74	5.36	6.43	7.44	8.58	10.02	11.36	12.59	13.49
B or lower	8.16	12.90	16.81	18.61	19.86	21.22	23.36	25.57	28.53	30.82
BBB or above	0.07	0.22	0.44	0.71	1.01	1.36	1.70	2.04	2.38	2.70
BB or lower	3.10	5.42	7.46	8.66	9.73	10.90	12.48	14.00	15.61	16.83
ALL	0.29	0.59	0.94	1.27	1.63	2.03	2.45	2.86	3.29	3.67

2004 group (The group for which the survey commenced April 1, 2004. The same applies below.)

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	-	-	-	-	-	-	-	-	-	8
AA	0.00	-	-	-	-	-	-	-	-	-	107
A	0.00	-	-	-	-	-	-	-	-	-	249
BBB	0.00	-	-	-	-	-	-	-	-	-	211
BB	3.70	-	-	-	-	-	-	-	-	-	27
B or lower	16.67	-	-	-	-	-	-	-	-	-	6
BBB or above	0.00	-	-	-	-	-	-	-	-	-	575
BB or lower	6.06	-	-	-	-	-	-	-	-	-	33
ALL	0.33	-	-	-	-	-	-	-	-	-	608

2003

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	-	-	-	-	-	-	-	-	7
AA	0.00	0.00	-	-	-	-	-	-	-	-	104
A	0.00	0.00	-	-	-	-	-	-	-	-	249
BBB	0.00	0.00	-	-	-	-	-	-	-	-	226
BB	2.50	5.00	-	-	-	-	-	-	-	-	40
B or lower	9.09	18.18	-	-	-	-	-	-	-	-	11
BBB or above	0.00	0.00	-	-	-	-	-	-	-	-	586
BB or lower	3.92	7.84	-	-	-	-	-	-	-	-	51
ALL	0.31	0.63	-	-	-	-	-	-	-	-	637

2002

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	-	-	-	-	-	-	-	18
AA	0.00	0.00	0.00	-	-	-	-	-	-	-	92
A	0.00	0.00	0.00	-	-	-	-	-	-	-	261
BBB	0.00	0.00	0.00	-	-	-	-	-	-	-	238
BB	3.77	9.43	11.32	-	-	-	-	-	-	-	53
B or lower	25.00	33.33	41.67	-	-	-	-	-	-	-	12
BBB or above	0.00	0.00	0.00	-	-	-	-	-	-	-	609
BB or lower	7.69	13.85	16.92	-	-	-	-	-	-	-	65
ALL	0.74	1.34	1.63	-	-	-	-	-	-	-	674

2001

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	-	-	-	-	-	-	18
AA	0.00	0.00	0.00	0.00	-	-	-	-	-	-	88
A	0.39	0.39	0.39	0.39	-	-	-	-	-	-	255
BBB	0.39	1.16	1.16	1.55	-	-	-	-	-	-	258
BB	1.67	5.00	11.67	11.67	-	-	-	-	-	-	60
B or lower	25.00	37.50	37.50	37.50	-	-	-	-	-	-	8
BBB or above	0.32	0.65	0.65	0.81	-	-	-	-	-	-	619
BB or lower	4.41	8.82	14.71	14.71	-	-	-	-	-	-	68
ALL	0.73	1.46	2.04	2.18	-	-	-	-	-	-	687

Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage <http://www.r-i.co.jp>

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.



NEWS RELEASE

2000

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	18
AA	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	92
A	0.00	0.38	0.76	0.76	0.76	-	-	-	-	-	263
BBB	0.00	0.36	0.72	0.72	1.08	-	-	-	-	-	279
BB	4.05	4.05	5.41	10.81	10.81	-	-	-	-	-	74
B or lower	27.27	45.45	54.55	54.55	54.55	-	-	-	-	-	11
BBB or above	0.00	0.31	0.61	0.61	0.77	-	-	-	-	-	652
BB or lower	7.06	9.41	11.76	16.47	16.47	-	-	-	-	-	85
ALL	0.81	1.36	1.90	2.44	2.58	-	-	-	-	-	737

1999

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	24
AA	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	-	90
A	0.00	0.00	0.37	0.74	0.74	0.74	-	-	-	-	271
BBB	0.00	0.66	1.31	1.64	2.62	2.95	-	-	-	-	305
BB	3.45	12.07	13.79	15.52	20.69	20.69	-	-	-	-	58
B or lower	25.00	37.50	50.00	50.00	50.00	50.00	-	-	-	-	8
BBB or above	0.00	0.29	0.72	1.01	1.45	1.59	-	-	-	-	690
BB or lower	6.06	15.15	18.18	19.70	24.24	24.24	-	-	-	-	66
ALL	0.53	1.59	2.25	2.65	3.44	3.57	-	-	-	-	756

1998

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	29
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	118
A	0.00	0.33	0.33	0.66	1.32	1.32	1.66	-	-	-	302
BBB	0.93	1.23	2.78	3.40	3.70	4.94	4.94	-	-	-	324
BB	11.43	14.29	20.00	20.00	20.00	25.71	25.71	-	-	-	35
B or lower	25.00	50.00	75.00	75.00	75.00	75.00	75.00	-	-	-	4
BBB or above	0.39	0.65	1.29	1.68	2.07	2.59	2.72	-	-	-	773
BB or lower	12.82	17.95	25.64	25.64	25.64	30.77	30.77	-	-	-	39
ALL	0.99	1.48	2.46	2.83	3.20	3.94	4.06	-	-	-	812

1997

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	30
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	-	-	120
A	0.35	0.69	1.04	1.39	1.74	2.08	2.08	2.08	-	-	288
BBB	0.00	1.15	2.02	3.75	4.32	4.90	6.63	6.63	-	-	347
BB	2.86	11.43	14.29	17.14	17.14	17.14	17.14	17.14	-	-	35
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	1
BBB or above	0.13	0.76	1.27	2.17	2.55	2.93	3.69	3.82	-	-	785
BB or lower	2.78	11.11	13.89	16.67	16.67	16.67	16.67	16.67	-	-	36
ALL	0.24	1.22	1.83	2.80	3.17	3.53	4.26	4.38	-	-	821

1996

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	29
AA	0.00	0.00	0.91	0.91	0.91	0.91	0.91	0.91	1.82	-	110
A	0.00	0.35	1.05	1.75	2.11	2.46	2.81	2.81	2.81	-	285
BBB	0.58	0.87	1.74	2.61	3.77	4.64	4.93	6.09	6.09	-	345
BB	0.00	0.00	4.65	6.98	11.63	13.95	18.60	18.60	18.60	-	43
B or lower	25.00	25.00	25.00	25.00	25.00	25.00	50.00	50.00	50.00	-	4
BBB or above	0.26	0.52	1.30	1.95	2.60	3.12	3.38	3.90	4.03	-	769
BB or lower	2.13	2.13	6.38	8.51	12.77	14.89	21.28	21.28	21.28	-	47
ALL	0.37	0.61	1.59	2.33	3.19	3.80	4.41	4.90	5.02	-	816

Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
 Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage http://www.r-i.co.jp

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.



NEWS RELEASE

1995

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31
AA	0.00	0.00	0.00	0.99	0.99	0.99	0.99	0.99	0.99	1.98	101
A	0.00	0.00	0.37	0.74	1.11	1.85	2.21	2.58	2.58	2.58	271
BBB	0.00	0.58	0.86	2.02	2.88	4.03	4.61	4.90	5.48	5.48	347
BB	0.00	0.00	2.63	2.63	5.26	10.53	13.16	18.42	21.05	21.05	38
B or lower	25.00	25.00	25.00	25.00	25.00	25.00	25.00	50.00	50.00	50.00	4
BBB or above	0.00	0.27	0.53	1.33	1.87	2.67	3.07	3.33	3.60	3.73	750
BB or lower	2.38	2.38	4.76	4.76	7.14	11.90	14.29	21.43	23.81	23.81	42
ALL	0.13	0.38	0.76	1.52	2.15	3.16	3.66	4.29	4.67	4.80	792

1994

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29
AA	0.00	0.00	0.00	0.00	0.91	0.91	0.91	0.91	0.91	0.91	110
A	0.00	0.00	0.00	0.77	1.93	2.32	3.09	3.47	3.86	3.86	259
BBB	0.00	0.00	0.66	0.66	1.66	2.66	3.99	5.32	5.65	5.98	301
BB	0.00	0.00	0.00	3.03	3.03	6.06	12.12	12.12	18.18	21.21	33
B or lower	0.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	50.00	50.00	4
BBB or above	0.00	0.00	0.29	0.57	1.57	2.15	3.00	3.72	4.01	4.15	699
BB or lower	0.00	2.70	2.70	5.41	5.41	8.11	13.51	13.51	21.62	24.32	37
ALL	0.00	0.14	0.41	0.82	1.77	2.45	3.53	4.21	4.89	5.16	736

1993

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31
AA	0.00	0.00	0.00	0.00	0.00	0.89	0.89	0.89	1.79	1.79	112
A	0.00	0.00	0.00	0.00	0.79	1.98	2.77	3.95	3.95	4.35	253
BBB	0.80	0.80	0.80	1.61	1.61	2.81	3.21	4.02	6.02	6.83	249
BB	0.00	0.00	0.00	0.00	0.00	0.00	3.70	11.11	11.11	14.81	27
B or lower	0.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	40.00	5
BBB or above	0.31	0.31	0.31	0.62	0.93	2.02	2.48	3.26	4.19	4.65	645
BB or lower	0.00	0.00	3.13	3.13	3.13	3.13	6.25	12.50	12.50	18.75	32
ALL	0.30	0.30	0.44	0.74	1.03	2.07	2.66	3.69	4.58	5.32	677

1992

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35
AA	0.00	0.00	0.00	0.00	0.00	1.68	3.36	3.36	3.36	4.20	119
A	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.62	3.24	3.24	247
BBB	0.00	0.86	0.86	1.29	2.16	2.16	3.45	3.88	4.31	6.47	232
BB	0.00	0.00	0.00	0.00	4.17	4.17	8.33	12.50	16.67	16.67	24
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	33.33	3
BBB or above	0.00	0.32	0.32	0.47	0.79	1.11	2.21	2.69	3.48	4.42	633
BB or lower	0.00	0.00	0.00	0.00	3.70	3.70	7.41	11.11	18.52	18.52	27
ALL	0.00	0.30	0.30	0.45	0.91	1.21	2.42	3.03	4.09	5.00	660

1991

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	2.38	2.38	2.38	2.38	42
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.91	2.73	2.73	2.73	110
A	0.00	0.00	0.89	0.89	1.33	1.33	1.33	2.22	3.11	4.89	225
BBB	0.00	0.00	0.00	0.00	0.00	0.89	0.89	1.79	2.23	2.68	224
BB	0.00	0.00	0.00	0.00	0.00	4.17	4.17	8.33	12.50	12.50	24
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	33.33	33.33	33.33	66.67	3
BBB or above	0.00	0.00	0.33	0.33	0.50	0.83	1.16	2.16	2.66	3.49	601
BB or lower	0.00	0.00	0.00	0.00	0.00	3.70	7.41	11.11	14.81	18.52	27
ALL	0.00	0.00	0.32	0.32	0.48	0.96	1.43	2.55	3.18	4.14	628

Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
 Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage <http://www.r-i.co.jp>

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.



NEWS RELEASE

1990

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.22	4.44	4.44	45
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	1.85	1.85	108
A	0.00	0.00	0.00	1.01	1.01	1.52	1.52	1.52	2.02	2.53	198
BBB	0.00	0.00	0.41	0.41	0.41	0.41	1.23	1.23	2.46	2.87	244
BB	0.00	0.00	0.00	0.00	0.00	0.00	4.55	4.55	4.55	9.09	22
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	50.00	2
BBB or above	0.00	0.00	0.17	0.50	0.50	0.67	1.01	1.34	2.35	2.69	595
BB or lower	0.00	0.00	0.00	0.00	0.00	0.00	4.17	8.33	8.33	12.50	24
ALL	0.00	0.00	0.16	0.48	0.48	0.65	1.13	1.62	2.58	3.07	619

1989

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56	39
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.27	2.27	88
A	0.00	0.00	0.00	0.00	1.18	1.18	1.76	1.76	1.76	1.76	170
BBB	0.00	0.00	0.00	0.36	0.36	0.36	0.36	1.09	1.45	2.55	275
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.00	4.00	25
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	2
BBB or above	0.00	0.00	0.00	0.17	0.52	0.52	0.70	1.05	1.57	2.27	572
BB or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70	7.41	7.41	27
ALL	0.00	0.00	0.00	0.17	0.50	0.50	0.67	1.17	1.84	2.50	599

1988

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	68
A	0.00	0.00	0.00	0.00	0.00	1.31	1.31	1.96	3.27	3.27	153
BBB	0.00	0.00	0.00	0.00	0.34	0.34	0.34	0.34	0.34	0.68	296
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.17	4.17	24
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	3
BBB or above	0.00	0.00	0.00	0.00	0.18	0.55	0.55	0.73	1.10	1.46	547
BB or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70	7.41	27
ALL	0.00	0.00	0.00	0.00	0.17	0.52	0.52	0.70	1.22	1.74	574

1987

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	117
BBB	0.00	0.00	0.00	0.00	0.00	0.37	0.37	0.37	0.37	0.37	271
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	25
B or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3
BBB or above	0.00	0.00	0.00	0.00	0.00	0.21	0.21	0.21	0.21	0.43	469
BB or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.57	28
ALL	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.20	0.60	497

1986

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96
BBB	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.43	0.43	0.43	230
BB	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	23
B or lower	-	-	-	-	-	-	-	-	-	-	0
BBB or above	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.25	401
BB or lower	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	4.35	23
ALL	0.24	0.24	0.24	0.24	0.24	0.24	0.47	0.47	0.47	0.47	424

Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
 Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage <http://www.r-i.co.jp>

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.



NEWS RELEASE

1985

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	92
BBB	0.00	0.51	0.51	0.51	0.51	0.51	0.51	1.02	1.02	1.02	197
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
B or lower	-	-	-	-	-	-	-	-	-	-	0
BBB or above	0.00	0.28	0.28	0.28	0.28	0.28	0.28	0.56	0.56	0.56	357
BB or lower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
ALL	0.00	0.27	0.27	0.27	0.27	0.27	0.27	0.54	0.54	0.54	371

1984

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78
BBB	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	168
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18
B or lower	0.00	0.00	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	9
BBB or above	0.00	0.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	303
BB or lower	0.00	0.00	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	27
ALL	0.00	0.00	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	330

1983

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	74
BBB	0.00	0.00	0.00	0.65	0.65	0.65	0.65	0.65	0.65	0.65	155
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26
B or lower	10.00	10.00	10.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	10
BBB or above	0.00	0.00	0.00	0.35	0.35	0.35	0.35	0.35	0.35	0.35	284
BB or lower	2.78	2.78	2.78	5.56	5.56	5.56	5.56	5.56	5.56	5.56	36
ALL	0.31	0.31	0.31	0.94	0.94	0.94	0.94	0.94	0.94	0.94	320

1982

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	76
BBB	0.00	0.00	0.00	0.00	0.68	0.68	0.68	0.68	0.68	0.68	148
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29
B or lower	0.00	5.88	5.88	5.88	11.76	11.76	11.76	11.76	11.76	11.76	17
BBB or above	0.00	0.00	0.00	0.00	0.36	0.36	0.36	0.36	0.36	0.36	281
BB or lower	0.00	2.17	2.17	2.17	4.35	4.35	4.35	4.35	4.35	4.35	46
ALL	0.00	0.31	0.31	0.31	0.92	0.92	0.92	0.92	0.92	0.92	327

1981

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	73
BBB	0.00	0.00	0.00	0.00	0.00	0.74	0.74	0.74	0.74	0.74	136
BB	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	29
B or lower	0.00	0.00	5.56	5.56	5.56	11.11	11.11	11.11	11.11	11.11	18
BBB or above	0.00	0.00	0.00	0.00	0.00	0.38	0.38	0.38	0.38	0.38	265
BB or lower	2.13	2.13	4.26	4.26	4.26	6.38	6.38	6.38	6.38	6.38	47
ALL	0.32	0.32	0.64	0.64	0.64	1.28	1.28	1.28	1.28	1.28	312

Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
 Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage <http://www.r-i.co.jp>

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.



NEWS RELEASE

1980

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44
BBB	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.05	1.05	1.05	95
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23
B or lower	0.00	0.00	0.00	12.50	12.50	12.50	18.75	18.75	18.75	18.75	16
BBB or above	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.57	0.57	175
BB or lower	0.00	0.00	0.00	5.13	5.13	5.13	7.69	7.69	7.69	7.69	39
ALL	0.00	0.00	0.00	0.93	0.93	0.93	1.87	1.87	1.87	1.87	214

1979

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45
BBB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20
B or lower	0.00	0.00	0.00	0.00	6.25	6.25	6.25	12.50	12.50	12.50	16
BBB or above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	175
BB or lower	0.00	0.00	0.00	0.00	2.78	2.78	2.78	5.56	5.56	5.56	36
ALL	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.95	0.95	0.95	211

1978

year elapsed	1	2	3	4	5	6	7	8	9	10	number of issuers
AAA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13
AA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19
A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48
BBB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	96
BB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20
B or lower	0.00	0.00	0.00	0.00	0.00	6.25	6.25	6.25	12.50	12.50	16
BBB or above	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	176
BB or lower	0.00	0.00	0.00	0.00	0.00	2.78	2.78	2.78	5.56	5.56	36
ALL	0.00	0.00	0.00	0.00	0.00	0.47	0.47	0.47	0.94	0.94	212

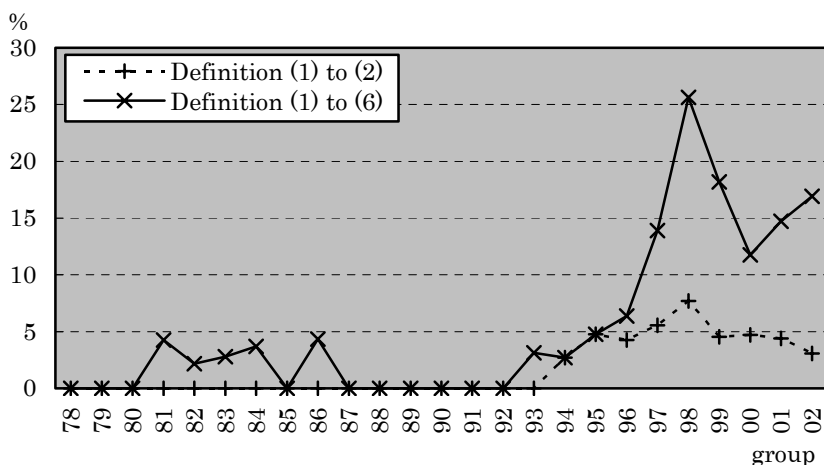
Rating and Investment Information, Inc. Nihonbashi 1-chome Bldg., 1-4-1, Nihonbashi, Chuo-ku, Tokyo 103-0027, Japan
Structured Finance Rating Division TEL. 03-3276-3406-3428 FAX. 03-3276-3429 EMAIL sfdept@r-i.co.jp Homepage <http://www.r-i.co.jp>

Ratings are statements of R&I's opinion shown in certain symbols regarding an Issuer's general capacity (credit quality) to repay its financial obligation and individual debts (bonds and loans, etc.) and it is not a statement of recommendations to buy, hold, or sell any securities. Information has been obtained by R&I from sources believed to be reliable, however, its accuracy, adequacy, or completeness is not guaranteed. Therefore, R&I is not responsible for any errors or omissions or the result obtained from the use of the rating. As a general rule, R&I provides the rating services for a rating fee paid by the Issuer.

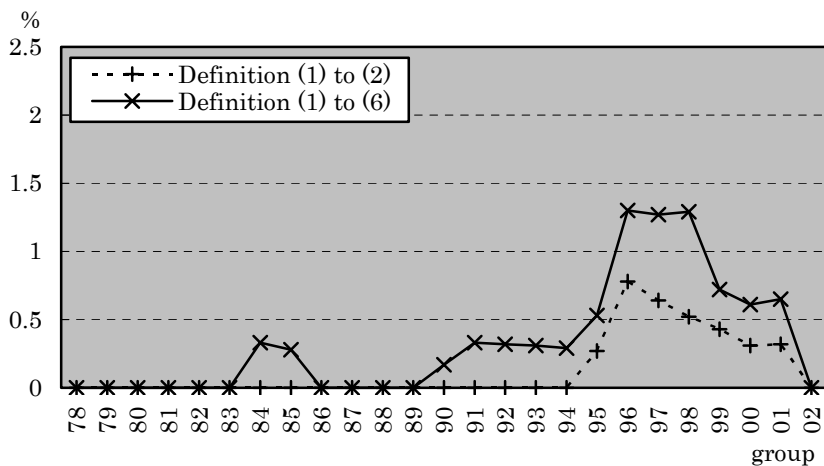
NEWS RELEASE

Appendix 2: Difference in three-year cumulative default ratios by the definition of default

Trends in three-year cumulative default ratios (BB or lower)



Trends in three-year cumulative default ratios (above BBB)



Trends in three-year cumulative default ratios (All)

