



CUMULATIVE DEFAULT RATES & TRANSITION MATRIX DATA

2025

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1. PURPOSE AND SCOPE

The purpose of this study is to examine the results of the 2025 year-end cumulative default rate statistics and transition matrix, which were prepared in accordance with Articles 25 and 26 of the "Regulation on Principles Regarding Authorization and Activities of Rating Agencies" which was published in the official newspaper on April 17, 2012, with the number 28267. According to Article 25 of the Regulation, the results should be shared with the public.

In the calculation of cumulative default rates, both solicited and unsolicited credit rating observations assigned as a result of the methodologies used by JCR ER have been taken into account. Corporate Governance Rating scores have been excluded.

2. DATA ON OBSERVATION

For defaulted customers, the rating they held 90 days prior to their default date has been considered in the calculation of the cumulative default rate. However, Article 26/2 of the BRSA Regulation states: *"If no rating has been assigned to the customer 90 days prior, the first rating assigned within this 90-day period shall be used in the calculation of the cumulative default rate."* In line with this provision, the related customers who had less than 90 days between the report date and the default date and had not been previously rated by JCR ER were also included in the cumulative default calculations. Additionally, if a default event occurred before the publication date of a rating, any ratings assigned to that customer after the default date were excluded from the observation dataset.

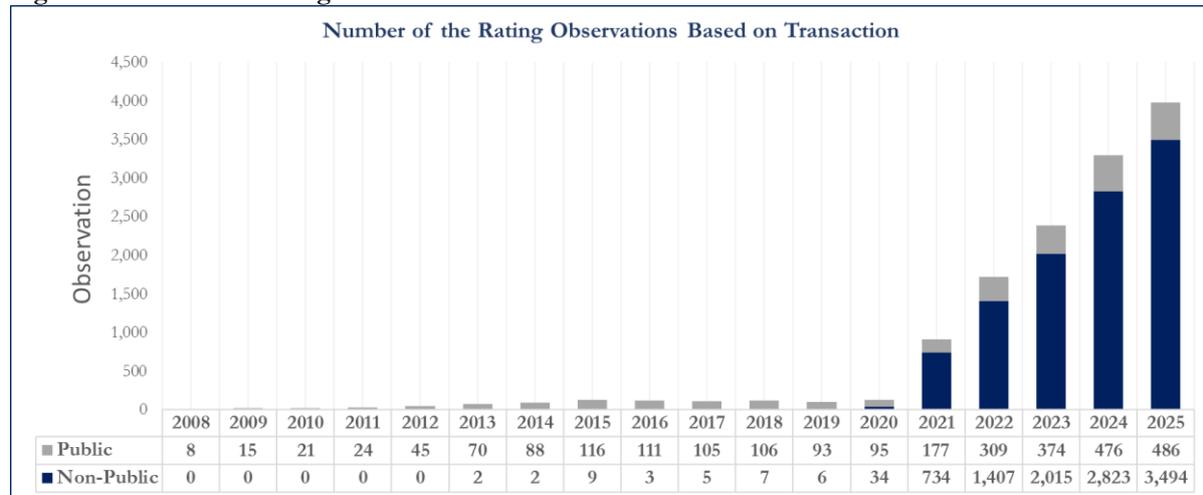
There is a total of 13,260 rating observations between 2008-2025 and a total of 303 default cases related to these observations.

The distribution of the mentioned observations by years on the basis of the rating transaction is given in the table and graphic below.

Table 1 : Number of Rating Observations Based on Transaction

Number of the Rating Observations Based on Transaction						
Year	Public		Non-Public		Total	
	Observation	Default	Observation	Default	Observation	Default
2008	8	0	0	0	8	0
2009	15	0	0	0	15	0
2010	21	0	0	0	21	0
2011	24	0	0	0	24	0
2012	45	0	0	0	45	0
2013	70	2	2	0	72	2
2014	88	8	2	0	90	8
2015	116	13	9	0	125	13
2016	111	11	3	0	114	11
2017	105	6	5	0	110	6
2018	106	3	7	0	113	3
2019	93	1	6	0	99	1
2020	95	2	34	0	129	2
2021	177	1	734	14	911	15
2022	309	1	1,407	38	1,716	39
2023	374	3	2,015	68	2,389	71
2024	476	5	2,823	86	3,299	91
2025	486	1	3,494	40	3,980	41
Total	2,719	57	10,541	246	13,260	303

Figure 1 : Number of Rating Observations Based on Transaction

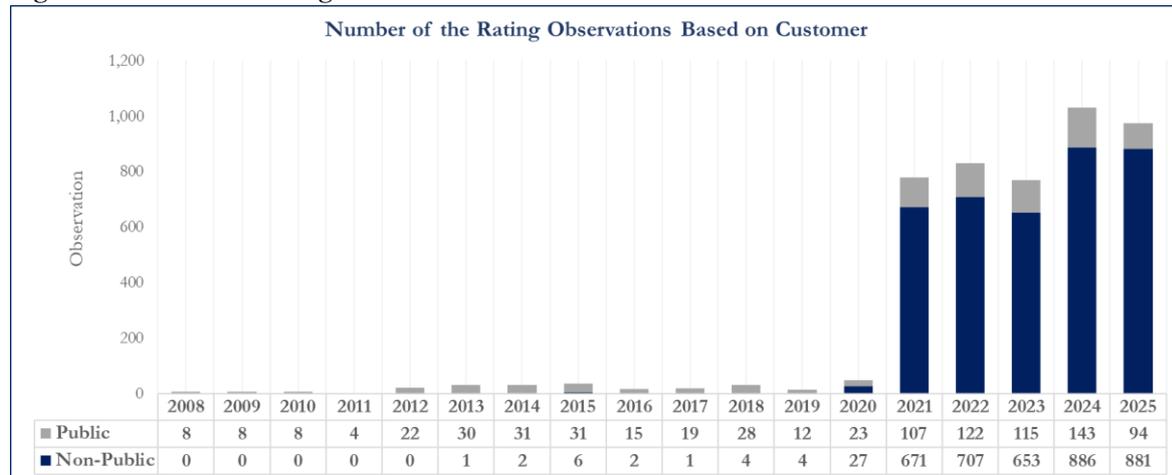


In the table and graphic below, the numbers are given on the basis of companies over the years. The first year that firms receive rating services from our Agency is considered in this customer-based study.

Table 2 : Number of Rating Observations Based on Customer

Number of the Rating Observations Based on Customer						
Year	Public		Non-Public		Total	
	Observation	Default	Observation	Default	Observation	Default
2008	8	0	0	0	8	0
2009	8	0	0	0	8	0
2010	8	0	0	0	8	0
2011	4	0	0	0	4	0
2012	22	0	0	0	22	0
2013	30	2	1	0	31	2
2014	31	6	2	0	33	6
2015	31	5	6	0	37	5
2016	15	5	2	0	17	5
2017	19	0	1	0	20	0
2018	28	1	4	0	32	1
2019	12	1	4	0	16	1
2020	23	1	27	0	50	1
2021	107	0	671	14	778	14
2022	122	1	707	28	829	29
2023	115	3	653	37	768	40
2024	143	2	886	38	1,029	40
2025	94	0	881	19	975	19
Total	820	27	3,845	136	4,665	163

Figure 2 : Number of Rating Observations Based on Customer



The distribution of rating transactions according to asset categories between 2008-2025 by transaction and firm based is given in the tables below.

Table 3 : Number of Rating Observations per Transaction According to Asset Category

Number of Rating Observations According to Asset Category (per Transaction, 2008-2025)						
Rating main and sub-asset categories	Publicly Announced		Non-Announced to Public		Total	
	Observation	Default	Observation	Default	Observation	Default
1 Central administrations, public institutions, international organizations and multilateral development banks:	48	0	5	0	53	0
1.1 Central administrations of the countries	47	0	4	0	51	0
1.2 Public institutions	1	0	1	0	2	0
1.3 International organizations and multilateral development banks	0	0	0	0	0	0
2 Companies:	2,423	57	10,529	246	12,952	303
2.1 Banks	188	0	12	0	200	0
2.2 Non-bank financial institutions	385	4	15	0	400	4
2.3 Corporate companies	1,850	53	10,502	246	12,352	299
2.4 Small and Medium Sized Businesses and other companies	0	0	0	0	0	0
3 Projects:	0	0	0	0	0	0
3.1 Project finance	0	0	0	0	0	0
4 Structured Debt Instruments	248	0	7	0	255	0
4.1 Structured Finance	248	0	7	0	255	0
4.2 Other structured finance instruments	0	0	0	0	0	0
Total	2,719	57	10,541	246	13,260	303

Table 4 : Number of Rating Observations per Firm According to Asset Category

Number of Rating Observations According to Asset Category (per Firm, 2008-2025)						
Rating main and sub-asset categories	Publicly Announced		Non-Announced to Public		Total	
	Observation	Default	Observation	Default	Observation	Default
1 Central administrations, public institutions, international organizations and multilateral development banks:	8	0	1	0	9	0
1.1 Central administrations of the countries	7	0	0	0	7	0
1.2 Public institutions	1	0	1	0	2	0
1.3 International organizations and multilateral development banks	0	0	0	0	0	0
2 Companies:	593	27	3,841	136	4,434	163
2.1 Banks	21	0	5	0	26	0
2.2 Non-bank financial institutions	63	1	6	0	69	1
2.3 Corporate companies	509	26	3,830	136	4,339	162
2.4 Small and Medium Sized Businesses and other companies	0	0	0	0	0	0
3 Projects:	0	0	0	0	0	0
3.1 Project finance	0	0	0	0	0	0
4 Structured Debt Instruments	219	0	3	0	222	0
4.1 Structured Finance	219	0	3	0	222	0
4.2 Other structured finance instruments	0	0	0	0	0	0
Total	820	27	3,845	136	4,665	163

3. CUMULATIVE DEFAULT RATES

The cumulative default rate represents the default rate of customers for a certain period of time given the same rating and is calculated for each rating in the master rating scale used by our institution.

The Banking Regulation and Supervision Agency has the authority to determine our institution's ratings' credit quality level equivalent which is used to calculate the capital adequacy ratio, and the determined ratios are announced to public on the Banking Regulation and Supervision Agency's (BRSA) website.

For each rating in the master scale, it is analyzed for the purpose of matching and reviewing of BRSA;

- The three-year cumulative default rates for the last two years,
- The ten-year averages of the three-year cumulative default rates

The results are given below.

For the calculation of realized three-year cumulative default rates, the ratings held by defaulted firms 90 days prior to their default date have been considered. Additionally, 13 customers who had less than 90 days between the report date and the default date and had not been previously rated were also included in the cumulative default calculations. The calculation of cumulative default rates is based on solicited and unsolicited ratings assigned in accordance with the methodologies applied by JCR ER.

The annual numbers of observation on the basis of rating is given in the table below.

Table 5: Number of Observations per Rating According to Years

Rating	Observation																	Total	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024		2025
AAA	2	3	3	4	7	7	9	5	7	9	12	11	15	69	111	137	142	135	688
AA+	0	0	0	0	1	2	1	1	1	2	3	2	1	28	78	107	104	102	433
AA	1	1	2	2	2	5	5	6	7	8	9	11	10	77	154	164	181	159	804
AA-	0	2	1	1	0	7	4	3	4	6	12	10	17	85	169	186	223	198	928
A+	1	0	1	1	4	5	2	6	3	3	9	8	11	81	157	239	281	288	1100
A	0	2	3	5	8	9	9	8	6	12	11	17	12	106	195	274	371	409	1457
A-	2	2	2	2	3	10	12	17	18	18	23	15	21	105	208	279	342	450	1529
BBB+	0	0	0	3	3	3	8	19	18	18	12	13	18	71	153	288	434	462	1523
BBB	1	2	5	1	4	9	16	27	24	22	13	6	14	91	158	249	367	511	1520
BBB-	0	2	1	3	9	12	21	26	20	10	6	4	6	100	178	251	429	598	1676
BB+	1	1	1	1	2	1	2	4	3	1	1	1	0	40	83	118	216	298	774
BB	0	0	2	1	0	1	0	0	1	0	0	0	2	34	41	55	114	177	428
BB-	0	0	0	0	1	0	0	2	0	0	1	0	1	13	16	21	59	112	226
B+	0	0	0	0	1	1	0	0	0	0	0	0	0	8	6	14	15	42	87
B	0	0	0	0	0	0	0	0	0	0	0	0	1	2	5	4	14	17	43
B-	0	0	0	0	0	0	1	1	0	1	1	1	0	1	0	2	5	21	34
CCC	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	1	1	7
CC	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	3
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PrD/D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	8	15	21	24	45	72	90	125	114	110	113	99	129	911	1,716	2,389	3,299	3,980	13,260

The annual number of defaults on the basis of rating is given in the table below.

Table 6: Number of 3-Year Cumulative Rating Observations Based on the Rating Year

Rating	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
AAA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
AA+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AA-	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	3	0	1	9
A+	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	5
A	0	0	0	0	0	0	0	0	0	1	1	0	0	2	4	2	2	0	12
A-	0	0	0	0	0	0	1	2	2	1	1	1	1	2	1	9	3	1	25
BBB+	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4	8	7	2	25
BBB	0	0	0	0	0	1	2	2	0	0	0	0	0	0	1	8	14	4	32
BBB-	0	0	0	0	0	0	5	7	5	2	0	0	0	2	11	16	22	11	81
BB+	0	0	0	0	0	0	0	1	1	0	0	0	0	1	7	12	18	5	45
BB	0	0	0	0	0	1	0	0	0	0	0	0	0	3	1	9	7	4	25
BB-	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	9	3	15
B+	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	1	6	11
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
B-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	6
CCC	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	0	1	0	6
CC	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
PrD/D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	8	13	11	6	3	1	2	15	39	71	91	41	303

As the three-year period has elapsed for companies rated in 2022 and prior, the defaults of mentioned companies within this timeframe have been factored into the table provided. Conversely, for companies rated in 2023 and onward, the observation periods are shorter due to the incomplete three-year span. For instance, a company rated in June 2024 is subject to an 18-month observation period, whereas a company rated in June 2025 is assessed based on only a six-month observation period.

For the three-year cumulative default rates to be comparable and yield meaningful results, it is essential that the full three-year observation period is completed. Accordingly, in the table below, the three-year cumulative default rates have been calculated based on the last year in which the observation period was completed. For example, the rate calculated for 2025 represents the default rates in 2025 for the ratings assigned in 2022, following the completion of the three-year observation period.

Table 7 : 3 Years Cumulative Default Rates per Rating According to Years

Rating	3 Years Cumulative Default Rates										Last 10 Years Avg.	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
AAA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA+	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AA-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%	2.4%		1.6%
A+	0.0%	0.0%	0.0%	0.0%	0.0%	11.1%	0.0%	0.0%	1.2%	0.6%		1.1%
A	0.0%	0.0%	0.0%	0.0%	8.3%	9.1%	0.0%	0.0%	1.9%	2.1%		2.1%
A-	0.0%	8.3%	11.8%	11.1%	5.6%	4.3%	6.7%	4.8%	1.9%	0.5%		2.7%
BBB+	0.0%	0.0%	0.0%	11.1%	11.1%	0.0%	0.0%	0.0%	0.0%	2.6%		2.4%
BBB	11.1%	12.5%	7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%		1.6%
BBB-	0.0%	23.8%	26.9%	25.0%	20.0%	0.0%	0.0%	0.0%	2.0%	6.2%		8.4%
BB+	0.0%	0.0%	25.0%	33.3%	0.0%	0.0%	0.0%		2.5%	8.4%		7.4%
BB	100.0%			0.0%				0.0%	8.8%	2.4%		6.3%
BB-			50.0%			0.0%		0.0%	7.7%	6.3%		9.1%
B+	0.0%								37.5%	0.0%		20.0%
B								0.0%	0.0%	0.0%		0.0%
B-		0.0%	0.0%		0.0%	0.0%	0.0%		0.0%			0.0%
CCC				100.0%						100.0%		100.0%
CC				0.0%								0.0%
C												
PrD/D												
Total	2.8%	8.9%	10.4%	9.6%	5.5%	2.7%	1.0%	1.6%	1.6%	2.3%		2.9%

The table presented within the scope of this study shows the cumulative default rates observed over a three-year observation horizon following the year in which credit ratings were assigned during the 2016–2025 period. The approach applied in the analysis constitutes an ex-post performance assessment and aims to evaluate the discriminatory power and calibration consistency of the credit rating methodology.

Each year reported in the table does not represent the performance of that specific year itself, but rather reflects the realized default performance of ratings assigned three years earlier. Accordingly, for example, the data reported for 2025 correspond to the three-year cumulative default outcomes of ratings assigned in 2022. The ten-year average is calculated using a weighted approach based on the total number of observations and the total number of defaults across the relevant periods. In this context, the ten-year average shown in the table is derived from the total observation counts and total three-year cumulative defaults associated with ratings assigned during the 2013–2022 period. This methodology is intended to mitigate the impact of differences in observation volumes across periods and to ensure that the resulting default rates are statistically more representative.

The analysis results demonstrate the expected monotonic relationship between credit ratings and realized default rates. The fact that three-year cumulative default rates remained at 0% across all observed periods for the AAA, AA+, and AA rating categories indicates that the methodology consistently reflects the very low default expectation associated with the highest credit quality segment.

Within the upper investment-grade range, encompassing the AA-, A+, A, and A- rating categories, default rates are generally observed to remain at low levels, albeit with some period-specific fluctuations. This suggests that while these rating categories maintain high credit quality, they may exhibit relative sensitivity to macroeconomic and sector-specific developments.

For the BBB rating category, relatively higher default realizations are observed in earlier periods, followed by a pronounced decline in subsequent years, with default rates remaining at low levels in recent periods. This trend indicates a strengthening of the calibration consistency of the rating methodology over time.

In the sub-investment-grade categories of BB+, BB, and BB-, default rates increase materially, as expected. For rating categories below B+, the limited number of observations leads to certain periods in which three-year cumulative default rates appear relatively low. This outcome should not be interpreted as an indication of low credit risk; rather, it reflects a statistical effect driven by small sample sizes. Accordingly, default rate assessments for these rating categories are interpreted with due consideration of data coverage and portfolio composition.

At the total portfolio level, despite period-specific fluctuations, three-year cumulative default rates have remained relatively low in recent years, with the ten-year average standing at 2.9%. Overall, the findings support the conclusion that the credit rating methodology exhibits a consistent, predictable performance aligned with regulatory expectations.

Due to the limited number of observations in certain credit rating categories, ratings have been grouped into defined rating ranges to enhance statistical representativeness, and three-year cumulative default rates have been recalculated accordingly. This grouping approach is intended to facilitate more stable, comparable, and meaningful interpretation of default rates.

Table 8 : Number of Observations per Rating Groups According to Years

Rating Group	Observation																			Total
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
AAA to AA-	3	6	6	7	10	21	19	15	19	25	36	34	43	259	512	594	650	594	2,853	
A+ to A-	3	4	6	8	15	24	23	31	27	33	43	40	44	292	560	792	994	1,147	4,086	
BBB+ to BBB-	1	4	6	7	16	24	45	72	62	50	31	23	38	262	489	788	1,230	1,571	4,719	
BB+ to BB-	1	1	3	2	3	2	2	6	4	1	2	1	3	87	140	194	389	587	1,428	
B+ to B-	0	0	0	0	1	1	1	1	0	1	1	1	1	11	11	20	34	80	164	
CCC & Below	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	1	2	1	10	
Total	8	15	21	24	45	72	90	125	114	110	113	99	129	911	1,716	2,389	3,299	3,980	13,260	

Table 9 : Number of Defaults per Rating Groups According to Years

Rating Group	Observation																			Total
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
AAA to AA-	3	6	6	7	10	21	19	15	19	25	36	34	43	259	512	594	650	594	2,853	
A+ to A-	3	4	6	8	15	24	23	31	27	33	43	40	44	292	560	792	994	1,147	4,086	
BBB+ to BBB-	1	4	6	7	16	24	45	72	62	50	31	23	38	262	489	788	1,230	1,571	4,719	
BB+ to BB-	1	1	3	2	3	2	2	6	4	1	2	1	3	87	140	194	389	587	1,428	
B+ to B-	0	0	0	0	1	1	1	1	0	1	1	1	1	11	11	20	34	80	164	
CCC & Below	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	1	2	1	10	
Total	8	15	21	24	45	72	90	125	114	110	113	99	129	911	1,716	2,389	3,299	3,980	13,260	

Table 10 : 3 Years Cumulative Default Rates per Rating Group According to Years

Rating Group	3 Years Cumulative Default Rates										2025	Last 10 Years Avg.
	2016	2017	2018	2019	2020	2021	2022	2023	2024			
AAA to AA-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.8%	0.5%	
A+ to A-	0.0%	4.3%	6.5%	7.4%	6.1%	7.0%	2.5%	2.3%	1.7%	1.1%	2.1%	
BBB+ to BBB-	4.2%	15.6%	12.5%	11.3%	8.0%	0.0%	0.0%	0.0%	0.8%	3.3%	4.2%	
BB+ to BB-	50.0%	0.0%	33.3%	25.0%	0.0%	0.0%	0.0%	0.0%	5.7%	6.4%	7.3%	
B+ to B-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	0.0%	10.3%	
CCC & Below	50.0%										100.0%	83.3%
Total	2.8%	8.9%	10.4%	9.6%	5.5%	2.7%	1.0%	1.6%	1.6%	2.3%	2.9%	

Within the AAA to AA- rating range, which represents the highest credit quality segment, three-year cumulative default rates are observed to remain generally at low levels throughout the analysis period. Despite temporary increases in a limited number of periods, the ten-year average default rate stands at 0.5%. This finding indicates that the highest rating group exhibits performance consistent with its low default risk profile.

In the A+ to A- rating range, three-year cumulative default rates display some period-to-period volatility and show a modest increase compared to the higher rating groups; however, overall levels remain consistent

with an investment-grade credit profile. This rating segment is assessed to represent an intermediate risk level, signaling the transition toward higher credit risk as ratings approach the BBB category.

Within the BBB+ to BBB– rating range, relatively higher default rates are observed in earlier periods, followed by a marked decline in subsequent years, with default rates remaining at low levels in recent periods. Nevertheless, as a result of period-specific effects, the ten-year average default rate is calculated at 4.2%. This outcome indicates that this lower investment-grade segment carries higher credit risk compared to higher-rated categories.

For the B+ to B– rating range, which lies below the investment-grade threshold, pronounced volatility in default rates is observed due to the limited number of observations. However, when the ten-year average is considered, the default rate reaches 10.3%, indicating a meaningful degree of differentiation relative to investment-grade rating groups.

Overall, when ten-year averages of three-year cumulative default rates are analyzed across rating groups, the results become more informative. The findings confirm that the rating methodology preserves its discriminatory power, with default rates differentiating consistently across rating levels and exhibiting an increasing trend as credit ratings deteriorate.

In addition to the distributions discussed above, the observation counts, default counts, and cumulative default rates for investment-grade and sub-investment-grade segments are presented in the tables below.

Table 11 : Number of Observations Based on Rating Level According to Years

Rating Level	Observation																		
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Investment Grade	7	14	18	22	41	69	87	118	108	108	110	97	125	813	1,561	2,174	2,874	3,312	11,658
Speculative	1	1	3	2	4	3	3	7	6	2	3	2	4	98	155	215	425	668	1,602
Total	8	15	21	24	45	72	90	125	114	110	113	99	129	911	1,716	2,389	3,299	3,980	13,260

Table 12 : Number of Defaults Based on Rating Level According to Years

Rating Level	Default																		
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Investment Grade	0	0	0	0	0	1	8	11	9	6	3	1	2	7	26	48	49	20	191
Speculative	0	0	0	0	0	1	0	2	2	0	0	0	0	8	13	23	42	21	112
Total	0	0	0	0	0	2	8	13	11	6	3	1	2	15	39	71	91	41	303

Table 13 : 3 Years the Cumulative Default Rates Based on Ratings Level According to Years

Rating Level	3 Years Cumulative Default Rates										
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Last 10 Years Avg.
Investment Grade	1.4%	9.2%	9.3%	8.3%	5.6%	2.7%	1.0%	1.6%	0.9%	1.7%	2.3%
Speculative	33.3%	0.0%	28.6%	33.3%	0.0%	0.0%	0.0%	0.0%	8.2%	8.4%	9.2%
Total	2.8%	8.9%	10.4%	9.6%	5.5%	2.7%	1.0%	1.6%	1.6%	2.3%	2.9%

An examination of the results indicates that, within the investment-grade rating segment, three-year cumulative default rates exhibit period-specific fluctuations but generally remain at low and manageable levels. Although relatively elevated default rates are observed during the 2018–2020 period, a pronounced decline is evident in subsequent years, with default rates converging toward the 1–2% range.

This recent improvement trend is assessed to be consistent with changes in portfolio composition, methodological enhancements in the rating process, and the strengthening of the overall risk assessment framework. Indeed, the ten-year average default rate for the investment-grade segment stands at 2.3%, indicating performance in line with the low default expectations associated with this category. When compared with the total portfolio, default rates within the investment-grade segment are observed to be materially lower. This finding supports the conclusion that the rating methodology provides a meaningful distinction between investment-grade and speculative-grade credit quality. As also illustrated in Table 13, the ten-year average cumulative default rates differ significantly between the two groups.

4. TRANSITION MATRIX RESULTS

The transition matrix is a table that illustrates the percentage or decimal distribution of the companies' ratings that they had at the beginning of the period according to the ratings that they had at the end of the period for the companies. Ratings of the companies whose contracts are not renewed during the calculation periods are not considered in the transition matrix computations, but their figures are provided in the tables for information purposes. As the structured finance ratings' validity time are dictated by the maturity of the security subject to financing, they are not included in the transition matrix analysis.

Transition matrix results for the last 3 years are given in the tables below. The W/D column is an abbreviation of "Withdrawn" and represents entities for which no rating was assigned in the final year covered by the matrix.

Table 14 : Transition Matrix between 2022-2025 based on the Ratings

Rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	D	Default	W/D	Total	
AAA	82.8%	1.1%	13.8%	1.1%	1.1%																		11	98
AA+	17.5%	54.0%	14.3%	4.8%	3.2%	1.6%	4.8%																5	68
AA	1.4%	13.5%	48.2%	13.5%	8.5%	7.1%	2.8%	3.5%		0.7%													12	153
AA-	2.0%	2.0%	17.3%	31.3%	20.0%	9.3%	3.3%	4.7%	2.7%	2.0%	1.3%	0.7%									2.7%		13	163
A+		0.7%	3.4%	17.7%	32.7%	17.0%	9.5%	6.8%	6.8%	2.7%	0.7%	1.4%										0.7%	8	155
A			2.8%	9.0%	18.0%	30.9%	15.2%	8.4%	3.9%	7.3%	1.7%	0.6%										2.2%	18	196
A-		0.5%	1.6%	2.7%	8.7%	19.7%	29.0%	19.7%	8.7%	6.6%	1.1%	0.5%			0.5%							0.5%	26	209
BBB+				2.1%	4.3%	14.2%	22.7%	19.1%	17.0%	11.3%	2.1%	0.7%	2.8%		0.7%							2.8%	13	154
BBB			0.7%	1.5%	5.9%	6.7%	17.0%	20.7%	25.9%	11.1%	5.2%	3.7%	0.7%									0.7%	23	158
BBB-					0.6%	5.7%	10.8%	17.1%	19.0%	30.4%	5.1%	3.2%	1.3%									7.0%	20	178
BB+						1.3%	5.3%	5.3%	13.2%	23.7%	25.0%	10.5%	1.3%			2.6%	2.6%					9.2%	13	89
BB									2.6%	21.1%	26.3%	28.9%	13.2%	5.3%								2.6%	10	48
BB-								8.3%		16.7%	16.7%	25.0%	16.7%									8.3%	7	19
B+										14.3%													2	9
B										16.7%		33.3%			16.7%	16.7%	16.7%						1	7
B-											100.0%												1	2
CCC															16.7%	16.7%						66.7%	4	10
CC																							6	6
C																							1	1
D																							1	1
Total	88	59	129	122	156	180	182	160	137	142	60	40	17	5	6	6	1	0	0	0	39	195	1724	

W/D: Withdrawn describes companies that can't be rated since their contract has not been renewed.

Table 15 : Transition Matrix between 2023-2025 based on the Ratings

Rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	D	Default	W/D	Total	
AAA	86.5%	2.9%	9.6%																			1.0%	10	114
AA+	9.6%	66.3%	14.5%	4.8%	2.4%		2.4%																4	87
AA	0.7%	7.5%	60.5%	13.6%	6.8%	6.1%	2.0%	2.0%															12	159
AA-		0.6%	10.5%	49.7%	20.5%	7.6%	5.8%	2.3%		0.6%		0.6%										1.8%	5	176
A+		0.5%	3.8%	13.6%	41.8%	19.2%	7.0%	5.2%	6.1%	0.9%	0.9%					0.5%						0.5%	25	238
A			0.4%	2.0%	17.9%	43.0%	18.7%	8.4%	4.0%	3.6%	0.8%	0.4%										0.8%	24	275
A-			0.4%	1.5%	5.7%	18.9%	36.4%	18.6%	7.6%	7.6%	0.8%	0.4%										2.3%	12	276
BBB+				0.8%	3.9%	7.4%	21.1%	33.6%	17.6%	9.4%	2.0%	0.4%	0.4%		0.4%							3.1%	28	284
BBB						1.7%	9.6%	17.2%	36.0%	22.2%	5.9%	1.7%	2.1%		0.4%							3.3%	15	254
BBB-						2.3%	4.1%	8.1%	18.0%	40.1%	10.8%	5.4%	2.3%		1.4%	0.5%						7.2%	27	249
BB+					0.9%			3.6%	9.1%	25.5%	32.7%	13.6%	1.8%									10.9%	15	125
BB									2.0%	9.8%	21.6%	33.3%	11.8%	3.9%	2.0%							15.7%	10	61
BB-										15.4%	23.1%	38.5%	15.4%			7.7%						10.9%	15	125
B+										7.1%	14.3%	28.6%	14.3%	7.1%	21.4%	28.6%						7.1%	4	18
B											16.7%												1	7
B-															66.7%	16.7%						50.0%	1	3
CCC																	50.0%					50.0%	6	8
CC																	100.0%						5	6
C																							1	1
D																							0	0
Total	99	71	139	149	207	249	259	237	225	234	102	58	25	7	12	8	1	0	0	0	67	215	2364	

Table 16 : Transition Matrix between 2024-2025 based on the Ratings

Rating	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	D	Default	W/D	Total	
AAA	94.5%	2.7%	1.8%																			0.9%	7	117
AA+	1.2%	84.0%	12.3%	1.2%	1.2%																		1	82
AA	0.6%	2.4%	74.4%	13.4%	5.5%	2.4%	0.6%	0.6%															11	175
AA-			8.5%	67.2%	15.4%	5.5%	3.0%																13	214
A+			0.4%	7.9%	61.1%	21.0%	7.1%	1.6%	0.8%														29	281
A				0.3%	9.9%	61.6%	18.0%	6.4%	2.3%	0.6%	0.3%											0.6%	23	367
A-					2.2%	10.8%	59.7%	19.0%	4.4%	2.2%	0.3%				0.3%							1.0%	25	340
BBB+					0.5%	0.5%	12.9%	53.0%	21.5%	8.1%	1.3%	0.5%										1.8%	32	428
BBB					0.3%	0.3%	0.9%	11.3%	58.1%	18.9%	4.4%	1.5%	0.3%									4.1%	24	368
BBB-						0.8%	0.3%	3.8%	13.8%	57.8%	12.8%	2.6%	1.8%	0.5%		0.3%						5.6%	33	424
BB+							0.5%	2.6%	19.5%	49.5%	15.8%	2.6%	0.5%	1.1%								7.9%	28	218
BB								1.0%	5.8%	14.6%	53.4%	12.6%	3.9%	2.9%								5.8%	16	119
BB-									6.0%	4.0%	8.0%	54.0%	4.0%	2.0%	6.0%							16.0%	10	60
B+										5.6%	11.1%	50.0%	16.7%	11.1%	5.6%	3.1%						5.6%	3	21
B											7.7%				69.2%	7.7%						15.4%	3	16
B-																100.0%							3	6
CCC			12.5%				12.5%										37.5%	25.0%					4	12
CC																	100.0%						1	2
C																							2	2
D																							0	0
Total	106	75	153	179	239	320	331	352	369	378	183	108	56	19	19	14	2	0	0	0	81	268	3252	

The analysis of the 2024–2025 one-year transition matrix indicates that rating stability is high across all rating levels. As the observation horizon extends to two- and three-year transition matrices, the increase in transition rates (particularly at lower rating levels) is assessed to be reasonable. This reflects the generally weaker financial condition and lower stability of entities in these rating categories, as well as the declining number of observations at these rating levels over longer horizons. To enable a more accurate and robust assessment of the transition matrices, credit ratings have been grouped, and the results of the analysis are presented in the tables below.

Table 17 : Transition Matrix between 2022-2025 based on the Ratings Groups

Rating Group	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC & Below	Default	W/D	Total
AAA to AA-	74.8%	18.6%	4.5%	0.9%	0.2%		0.9%	41	482
A+ to A-	12.2%	60.2%	24.2%	2.0%	0.2%		1.2%	52	560
BBB+ to BBB-	1.4%	28.8%	57.6%	8.3%	0.2%		3.7%	56	490
BB+ to BB-		4.0%	34.9%	48.4%	5.6%		7.1%	30	156
B+ to B-			14.3%	42.9%	35.7%	7.1%		4	18
CCC & Below					33.3%		66.7%	12	18
Total	398	518	439	117	17	1	39	195	1724

Table 18 : Transition Matrix between 2023-2025 based on the Ratings Groups

Rating Group	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC & Below	Default	W/D	Total
AAA to AA-	80.6%	16.6%	1.6%	0.4%			0.8%	31	536
A+ to A-	6.7%	69.5%	21.3%	1.1%	0.1%		1.2%	61	789
BBB+ to BBB-	0.3%	17.3%	67.2%	9.9%	0.8%		4.5%	70	787
BB+ to BB-		0.6%	28.7%	55.7%	3.4%		11.5%	35	209
B+ to B-			4.5%	31.8%	54.5%		9.1%	6	28
CCC & Below					66.7%	33.3%		12	15
Total	458	715	696	185	27	1	67	215	2364

Table 19 : Transition Matrix between 2024-2025 based on the Ratings Groups

Rating Group	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ to B-	CCC & Below	Default	W/D	Total
AAA to AA-	88.1%	11.3%	0.2%	0.2%			0.2%	32	588
A+ to A-	2.4%	83.6%	13.1%	0.2%	0.1%		0.5%	77	988
BBB+ to BBB-		5.7%	81.9%	8.4%	0.3%		3.8%	89	1220
BB+ to BB-			15.5%	71.4%	4.7%		8.5%	54	397
B+ to B-				11.8%	79.4%		8.8%	9	43
CCC & Below	11.1%	11.1%			55.6%	22.2%		7	16
Total	513	890	1099	347	52	2	81	268	3252

When the transition matrices are analyzed on a rating group basis, rating migrations are assessed to remain within reasonable levels. The downgrades observed in lower rating groups within the two- and three-year transition matrices are, as noted above, primarily attributable to the generally weaker financial condition and lower stability of entities in these categories, as well as to the declining number of observations at the relevant rating levels.

Overall, the transition matrix results indicate that the credit ratings preserve a monotonic risk ordering, exhibiting high stability in higher rating groups and increasing volatility and default risk in lower rating groups. These findings support the discriminatory power, dynamic consistency, and alignment of the rating methodology with regulatory expectations.

Best Regards,

JCR EURASIA RATING