



HR Ratings Accumulative Transition Matrix

May 2008 – December 2022

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The following transition matrix reflects the rating movements that HR Ratings assigned during the period of May 2008 until December 2022, including inter-annual movements.

The matrix excludes ratings that were withdrawn and fully paid bonds.

	HR AAA	HR AA +	HR AA	HR AA -	HR A +	HR A	HR A -	HR BBB +	HR BBB	HR BBB -	HR BB +	HR BB	HR BB -	HR B +	HR B	HR B -	HR C +	HR C	HR C -	HR D
HR AAA	96.5%	1.5%	0.7%	0.3%	0.3%	0.2%	0.1%	-	0.09%	0.06%	0.1%	-	-	-	0.1%	-	-	0.09%	-	0.09%
HR AA +	27.0%	60.2%	7.0%	2.7%	0.8%	0.5%	0.4%	-	-	-	0.1%	-	0.9%	-	-	-	-	0.1%	0.1%	0.2%
HR AA	14.5%	20.3%	55.5%	5.1%	1.8%	1.7%	0.3%	-	-	0.1%	-	0.1%	-	-	-	-	-	0.2%	0.3%	0.2%
HR AA -	7.4%	12.4%	20.3%	43.8%	3.1%	1.7%	1.0%	1.5%	0.3%	-	0.6%	0.8%	-	-	0.3%	1.7%	-	2.5%	0.9%	1.8%
HR A +	4.8%	4.4%	12.7%	21.7%	39.9%	8.5%	5.0%	0.9%	0.1%	0.2%	0.1%	0.6%	-	-	-	-	-	0.2%	0.2%	0.6%
HR A	2.7%	0.8%	1.3%	6.0%	25.5%	51.7%	7.1%	1.8%	0.8%	0.6%	0.3%	0.1%	-	-	-	-	-	0.3%	0.1%	0.9%
HR A -	0.2%	2.5%	1.6%	5.7%	11.1%	22.8%	28.1%	10.7%	7.2%	2.5%	0.8%	0.8%	-	0.8%	0.2%	-	0.2%	2.3%	0.2%	2.3%
HR BBB +	-	0.8%	0.8%	3.4%	5.5%	16.6%	19.2%	26.6%	10.3%	5.0%	5.8%	2.6%	1.1%	0.3%	-	0.0%	-	0.5%	0.5%	1.1%
HR BBB	0.8%	2.0%	2.0%	1.6%	2.4%	3.6%	9.9%	18.6%	36.8%	9.7%	3.6%	2.6%	1.0%	-	0.6%	0.2%	-	0.8%	2.2%	1.2%
HR BBB -	0.6%	-	-	-	0.4%	3.1%	6.4%	13.8%	25.4%	34.0%	6.6%	1.7%	1.3%	1.5%	0.4%	-	0.4%	0.9%	1.1%	2.6%
HR BB +	-	-	-	0.5%	2.5%	4.1%	3.8%	7.9%	13.9%	27.2%	28.6%	3.5%	1.6%	0.3%	1.9%	1.4%	-	0.5%	0.3%	1.9%
HR BB	-	-	-	-	-	0.5%	1.0%	2.6%	5.6%	9.2%	16.4%	43.6%	10.3%	3.1%	0.5%	-	-	2.6%	0.5%	4.1%
HR BB -	-	-	7.8%	2.9%	-	-	-	4.9%	3.9%	7.8%	8.8%	21.6%	34.3%	3.9%	1.0%	-	-	-	1.0%	2.0%
HR B +	-	-	-	-	-	-	-	-	-	-	-	12.5%	37.5%	50.0%	-	-	-	-	-	-
HR B	-	-	-	-	-	-	-	-	-	12.5%	37.5%	12.5%	-	-	37.5%	-	-	-	-	-
HR B -	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	25.0%	50.0%	-	-	-	
HR C +	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%	-	-	-
HR C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36.4%	31.8%	31.8%
HR C -	-	-	-	-	29.2%	8.3%	4.2%	-	-	-	-	-	-	-	-	-	-	-	54.2%	4.2%
HR D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0%
TOTAL																				0.92%



Credit
Rating
Agency

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