

## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



On July 2, 2019, Morningstar, Inc., the parent of Morningstar Credit Ratings, LLC (“MCR”), completed its acquisition of DBRS, Inc. (“DBRS”). Following the acquisition, DBRS and MCR took steps to integrate their credit rating operations under the brand name DBRS Morningstar. As of November 5, 2020, DBRS and MCR announced completion of analytical integration.<sup>1</sup> As of that day, MCR had no outstanding credit ratings and MCR no longer issues or monitors credit ratings.

At the time of the acquisition, each of DBRS and MCR was registered with the U.S. Securities and Exchange Commission (SEC) as a nationally recognized statistical rating organization (NRSRO). On November 15, 2019, MCR filed an amendment to its Form NRSRO with the SEC withdrawing its NRSRO registration effective December 30, 2019. Also on that date, DBRS filed an amendment to its Form NRSRO with the SEC to identify MCR as a credit rating affiliate of DBRS. Effective November 23, 2020, MCR ceased to operate as a credit rating affiliate of DBRS and further to an amendment to DBRS’s Form NRSRO on the same day, DBRS no longer identifies MCR as a credit rating affiliate.

Previous credit ratings determined and/or monitored by MCR on financial institutions (e.g., banks), corporate issuers and asset-backed securities, as applicable, between December 30, 2019 and November 23, 2020 were deemed issued by DBRS in accordance with DBRS’s Form NRSRO and, thereby, retained their status as NRSRO ratings.

DBRS (as well as the other DBRS Morningstar Group of Companies<sup>2</sup>) assigns and monitors credit ratings in accordance with the applicable DBRS Morningstar policies, procedures and rating methodologies using DBRS Morningstar’s rating scales.

This Exhibit includes the 2020 transition and default rates for the DBRS Morningstar Group of Companies for a 1-year, 3-year, and 10-year time period in each class of ratings for which DBRS was registered as an NRSRO through the most recent calendar year end. Following those transition and default rate tables are the tables for MCR’s transition and default rates for the same period, as applicable.

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<sup>1</sup> For information on the analytical integration of DBRS and MCR, please see Annex A to Exhibit 2 and the related press release of DBRS Morningstar at <https://www.dbbrsmorningstar.com/research/369707/dbrs-and-morningstar-credit-ratings-conclude-analytical-integration-process>

<sup>2</sup> The DBRS Morningstar Group of Companies includes DBRS, DBRS Limited, DBRS Ratings Limited and DBRS Ratings GmbH.

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Following the transition and default rates are: (1) descriptions of each symbol, number, or score in the rating scale used to denote a credit rating category and notches within a category for each class and subclass of credit ratings in the DBRS Morningstar and MCR transition/default matrices, as applicable, (2) an explanation of the conditions under which (a) DBRS Morningstar classifies obligors, securities, or money market instruments as being in default and (b) MCR classified obligors, securities or money market instructions as being in default (while previous MCR credit ratings were outstanding), and (3) (a) the uniform resource locator (URL) of DBRS Morningstar's corporate Internet website where DBRS Morningstar's credit rating history is required to be disclosed pursuant to 17 CFR 17g-7(b) is located and (b) the URL of the website where MCR's rating history is required to be disclosed pursuant to 17 CFR 17g-7(b) is also located (and for greater clarity the website where the rating history of previous MCR ratings is disclosed is incorporated by reference into DBRS Morningstar's corporate Internet website).

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2019 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)	6	100.00%																											
AA	16		100.00%																										
AA (low)	21			100.00%																									
A (high)	29					96.55%																						3.45%	
A	19					10.53%	78.95%	5.26%	5.26%																				
A (low)	24							91.67%	4.17%																			4.17%	
BBB (high)	16								93.75%	6.25%																			
BBB	9								11.11%	77.78%		11.11%																	
BBB (low)	25									8.00%	80.00%	8.00%																4.00%	
BB (high)	8											87.50%																12.50%	
BB	11									9.09%	9.09%	36.36%					45.45%												
BB (low)	4												75.00%															25.00%	
B (high)	3													66.67%	33.33%														
B	1														100.00%														
B (low)	1															100.00%													
CCC (high)																													
CCC	1																		100.00%										
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	194																												

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	17		29.41%	70.59%																									
AA (low)	19			21.05%	73.68%																							5.26%	
A (high)	21				28.57%	71.43%																							
A	24					50.00%	20.83%	8.33%																				20.83%	
A (low)	25					4.00%	32.00%	52.00%	4.00%																			8.00%	
BBB (high)	8							25.00%	62.50%																			12.50%	
BBB	9							11.11%	22.22%	55.56%																		11.11%	
BBB (low)	20								25.00%	60.00%	10.00%																	5.00%	
BB (high)	3									66.67%	33.33%																		
BB	6									16.67%	33.33%						50.00%												
BB (low)	6									16.67%	16.67%			33.33%														33.33%	
B (high)	2														50.00%													50.00%	
B	1																										100.00%		
B (low)																													
CCC (high)	1														100.00%														
CCC	3														33.33%	33.33%		33.33%											
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	165																												

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2010 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	2			50.00%																								50.00%	
AA (high)	3				33.33%		33.33%																						33.33%
AA	22		18.18%	45.45%	9.09%	13.64%		4.55%																					9.09%
AA (low)	16			25.00%	50.00%	12.50%																							12.50%
A (high)	23				17.39%	39.13%	4.35%	17.39%																				4.35%	17.39%
A	21					23.81%	9.52%	4.76%		4.76%																		9.52%	47.62%
A (low)	16					6.25%	25.00%	18.75%		6.25%																			43.75%
BBB (high)	13						7.69%	15.38%	7.69%		7.69%																		61.54%
BBB	9						11.11%	11.11%		11.11%																		11.11%	55.56%
BBB (low)	5								20.00%																				80.00%
BB (high)	1										100.00%																		
BB	1																												100.00%
BB (low)	2																		50.00%										50.00%
B (high)	4										25.00%																		50.00%
B	1																												100.00%
B (low)																													
CCC (high)																													
CCC	1																												100.00%
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	140																												

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																									Other Outcomes During 12/31/2019-12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	3			100.00%																									
AA (low)	4			25.00%	75.00%																								
A (high)	6					100.00%																							
A	8					25.00%	75.00%																						
A (low)	3							100.00%																					
BBB (high)	1								100.00%																				
BBB	2								50.00%	50.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	27																												

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017-12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	2			100.00%																									
AA (low)	4			50.00%	50.00%																								
A (high)	4					100.00%																							
A	7					42.86%	57.14%																						
A (low)	1							100.00%																					
BBB (high)	2							50.00%	50.00%																				
BBB	1									100.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	21																												

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2010 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	1			100.00%																									
AA (low)	4			25.00%		75.00%																							
A (high)	1						100.00%																						
A	1						100.00%																						
A (low)	1						100.00%																						
BBB (high)	1																												100.00%
BBB	2								50.00%	50.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	11																												



Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2019 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	0																												
AA (high)	0																												
AA	4			75.00%	25.00%																								
AA (low)	6				100.00%																								
A (high)	12				8.33%	91.67%																							
A	26					3.85%	80.77%	3.85%	7.69%																				3.85%
A (low)	50							84.00%	8.00%		4.00%																2.00%	2.00%	
BBB (high)	36								83.33%	11.11%			2.78%																2.78%
BBB	62								9.68%	75.81%	4.84%	4.84%															3.23%	2.78%	
BBB (low)	48									8.33%	75.00%	4.17%			4.17%														8.33%
BB (high)	2											100.00%																	
BB	5												100.00%																
BB (low)	6													50.00%			16.67%	16.67%						16.67%					
B (high)	15													6.67%	60.00%	6.67%	20.00%												6.67%
B	15															60.00%	26.67%		6.67%	20.00%	20.00%								6.67%
B (low)	5																20.00%		20.00%	20.00%	20.00%							20.00%	
CCC (high)	4																	25.00%	25.00%	25.00%								25.00%	
CCC	2																					50.00%				50.00%			
CCC (low)	0																												
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	298																												

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	0																												
AA (high)	0																												
AA	4			50.00%	50.00%																								
AA (low)	5			20.00%	80.00%																								
A (high)	12				8.33%	91.67%																							
A	24					4.17%	62.50%	4.17%	8.33%																				20.83%
A (low)	44						4.55%	72.73%	13.64%		2.27%																2.27%	4.55%	
BBB (high)	35						2.86%	8.57%	57.14%	20.00%		2.86%	2.86%																5.71%
BBB	47								23.40%	44.68%	10.64%	8.51%															2.13%	10.64%	
BBB (low)	41								26.83%	46.34%																	7.32%	19.51%	
BB (high)	6								16.67%	50.00%	33.33%																		
BB	6											66.67%																	33.33%
BB (low)	4									25.00%		25.00%																	50.00%
B (high)	3												33.33%																66.67%
B	8												12.50%	12.50%	25.00%	12.50%													37.50%
B (low)	1																												100.00%
CCC (high)	2																										50.00%	50.00%	
CCC	0																												
CCC (low)	1																												100.00%
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	243																												

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2010 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	1																												100.00%
AA (high)	2				100.00%																								
AA	6			33.33%	33.33%																								33.33%
AA (low)	3				33.33%		33.33%																						33.33%
A (high)	15					46.67%	13.33%																					26.67%	13.33%
A	30					3.33%	30.00%	13.33%	3.33%	3.33%																		6.67%	40.00%
A (low)	52						3.85%	28.85%	17.31%	3.85%	3.85%																	17.31%	25.00%
BBB (high)	36							5.56%	8.33%	11.11%	16.67%	5.56%																2.78%	50.00%
BBB	42							28.57%	16.67%	11.90%		2.38%																7.14%	33.33%
BBB (low)	19								21.05%	15.79%	5.26%																	5.26%	52.63%
BB (high)	9									11.11%		11.11%																	66.67%
BB	4								25.00%		25.00%																		50.00%
BB (low)	6								16.67%																			16.67%	50.00%
B (high)	1											16.67%																	100.00%
B	0																												
B (low)	0																												
CCC (high)	1																												100.00%
CCC	0																												
CCC (low)	0																												
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	227																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		RMBS One Year Transition December 31,2019 -- December 31,2020																						Other Outcomes					
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	4429	92%																											8%
AA(high)	344	13%	83%																										4%
AA	406	6%		2%	87%																								5%
AA(low)	119	14%			2%	80%																							4%
A(high)	183				4%	2%	87%																						7%
A	337				2%	2%		90%																					4%
A(low)	88	1%			2%	5%	2%	2%	85%		1%																		2%
BBB(high)	167				1%	1%	4%		89%			1%																	4%
BBB	303				3%	4%	1%	1%	4%	84%			1%																2%
BBB(low)	88						22%		13%	2%	61%																		2%
BB(high)	202			1%			11%	15%	7%	15%	1%	3%	63%																
BB	284								7%	41%	14%	1%	5%	70%															4%
BB(low)	92														36%														3%
B(high)	189											11%	10%	20%															
B	244														4%	2%	87%	2%											5%
B(low)	20												5%				10%	80%											5%
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	1																												
CC(low)	0																												
C(high)	0																												
C	3306																										98%	1%	1%
C(low)	0																												
Total	10802																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		RMBS Three Year Transition December 31,2017 -- December 31,2020																						Other Outcomes					
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	3042	72%																											28%
AA(high)	276	46%	18%																										36%
AA	475	41%	19%	17%																									23%
AA(low)	43	47%	21%	9%	5%		2%																						16%
A(high)	147	34%	5%	18%	4%	22%																							17%
A	282	19%	5%	16%	7%	17%	26%																						10%
A(low)	51	31%	6%	22%	2%	8%	6%	10%																					15%
BBB(high)	62	26%	2%	3%	3%	5%	15%	10%	13%	3%		3%			2%														15%
BBB	238	2%			4%	7%	6%	17%	4%	15%	27%			2%															15%
BBB(low)	61	7%	2%	3%	21%	3%	13%	7%	13%	3%	7%						2%												19%
BB(high)	49	2%			2%	18%	4%	12%	16%	10%	12%	20%																	4%
BB	180				1%	2%		12%	19%	4%	14%	3%	18%	18%			1%												8%
BB(low)	45		2%			2%	16%		11%	11%	11%	16%	7%	14%	2%	4%													4%
B(high)	75						7%	1%		56%	17%	3%	8%	1%	5%	1%													1%
B	191	1%				2%		2%		3%	3%	7%	13%	5%	22%	32%													10%
B(low)	3																67%												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	3356																1%									97%	1%	1%	
C(low)	0																												
Total	8576																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		RMBS Ten Year Transition December 31,2010 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	1228	3%																										94%	3%
AA(high)	39						3%									3%								5%				89%	
AA	397	2%																										94%	4%
AA(low)	18			11%													11%											75%	3%
A(high)	11	9%					27%									9%												55%	
A	570	4%						1%																2%				90%	3%
A(low)	26	12%			12%			4%			8%			8%										12%				36%	
BBB(high)	30				3%	3%	7%	3%	7%	3%	3%	3%	3%	7%		10%								20%				21%	
BBB	368	6%	2%	2%				3%	4%	1%	2%	5%	2%	2%	5%									6%			59%	1%	
BBB(low)	41	2%					2%					5%	7%		7%									27%				50%	
BB(high)	13								8%															54%				38%	
BB	136	3%	2%	5%		2%	2%	2%	4%	4%	2%	2%	4%				6%							29%			32%	1%	
BB(low)	25				4%	4%																		76%		4%	12%		
B(high)	16	6%			6%		6%									6%								29%			43%	4%	
B	174	3%		1%		2%	1%	1%	1%	2%	2%	1%	2%		1%	10%								39%			34%		
B(low)	2																							100%					
CCC(high)	0																												
CCC	33																											100%	
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	3350																								90%		2%	8%	
C(low)	0																												
Total	6477																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		CMBS One Year Transition December 31,2019 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	2034	95%																											5%
AA(high)	132	4%	93%																										3%
AA	275	4%	2%	87%																									7%
AA(low)	231	1%		4%	85%	1%	1%																						8%
A(high)	140		2%	4%	2%	84%	1%	1%																					7%
A	180			5%		1%	86%	2%	1%																				5%
A(low)	277						1%	96%	1%																				2%
BBB(high)	145			1%			2%		90%		2%	1%																	4%
BBB	214									97%	2%																		1%
BBB(low)	297								1%	2%	90%	3%	1%																3%
BB(high)	97											81%	5%	5%	2%				1%										6%
BB	173										1%	1%	90%	1%	3%	1%													3%
BB(low)	186												90%	2%	3%										1%				3%
B(high)	111													90%	5%	4%									1%				
B	161													1%	88%	9%													2%
B(low)	138																92%		8%										
CCC(high)	0																												
CCC	10																		90%							10%			
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	22									4%																77%	4%	15%	
C(low)	0																												
Total	4823																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		CMBS Three Year Transition December 31,2017 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	1416	67%																											33%
AA(high)	63	16%	68%			2%																							14%
AA	142	11%	7%	59%																									23%
AA(low)	111	7%	3%	7%	62%																								21%
A(high)	105	8%	2%	6%	4%	51%	1%												1%										27%
A	168	2%	1%	10%	4%	5%	52%	1%												1%									25%
A(low)	154	2%	1%			6%	2%	68%																					20%
BBB(high)	55	4%	2%	7%	2%	2%	2%	64%			2%																		15%
BBB	141				1%	1%	5%	3%	7%	62%	1%																		19%
BBB(low)	209			1%			1%	3%	3%	66%	1%	2%																	23%
BB(high)	59							3%	2%	5%	2%	63%	3%	2%						2%					2%				14%
BB	131								3%	2%	3%	2%	5%	68%	2%														19%
BB(low)	109												3%	71%	2%	6%	2%								2%				13%
B(high)	68	2%											3%	4%	70%	4%	3%		2%					3%					9%
B	121												3%	5%	67%	7%													17%
B(low)	74										1%				1%	1%	75%		8%										14%
CCC(high)	0																												
CCC	18								11%			6%														33%			50%
CCC(low)	1																												100%
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	13																												
C(low)	0																								39%				61%
Total	3158																												



DBRS Morningstar

Credit Ratings as of 12/31/2020		CMBS Ten Year Transition December 31,2010 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	539	1%																										98%	1%
AA(high)	12																											100%	
AA	45	2%				2%																						96%	
AA(low)	18																											100%	
A(high)	21	5%																										95%	
A	53	2%		2%				2%																				94%	
A(low)	22					5%																			5%			90%	
BBB(high)	33																		3%						6%			91%	
BBB	55	2%						2%		4%	2%														2%			88%	
BBB(low)	42			2%																				5%		2%	2%	91%	
BB(high)	29																3%								3%			94%	
BB	36																								3%	3%		94%	
BB(low)	24																											100%	
B(high)	27	4%																										96%	
B	43			2%												5%									7%		2%	84%	
B(low)	34										3%																	97%	
CCC(high)	0																												
CCC	50									2%		2%														4%		92%	
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	68																									3%		97%	
C(low)	0																												
Total	1151																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		CLO One Year Transition December 31,2019 -- December 31,2020																									Other Outcomes		
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	3	33%																											67%
AA(high)	0																												
AA	3			67%																									33%
AA(low)	0																												
A(high)	0																												
A	0																												
A(low)	0																												
BBB(high)	0																												
BBB	0																												
BBB(low)	0																												
BB(high)	0																												
BB	0																												
BB(low)	0																												
B(high)	0																												
B	0																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	6																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		CLO Three Year Transition December 31,2017 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	6																												
AA(high)	0																												100%
AA	7			29%																									71%
AA(low)	0																												
A(high)	0																												
A	2																												100%
A(low)	0																												
BBB(high)	0																												
BBB	0																												
BBB(low)	0																												
BB(high)	0																												
BB	0																												
BB(low)	0																												
B(high)	0																												
B	0																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	15																												

## DBRS Morningstar

Credit Ratings as of 12/31/2020		CLO Ten Year Transition December 31,2010 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	2																												100%
AA(high)	5																												100%
AA	4																												100%
AA(low)	3																												100%
A(high)	1																												100%
A	1																												100%
A(low)	1																												100%
BBB(high)	0																												100%
BBB	1																												100%
BBB(low)	0																												100%
BB(high)	0																												100%
BB	0																												100%
BB(low)	1																												100%
B(high)	0																												100%
B	0																												100%
B(low)	2																												100%
CCC(high)	0																												100%
CCC	3																												100%
CCC(low)	2																												100%
CC(high)	0																												100%
CC	0																												100%
CC(low)	0																												100%
C(high)	0																												100%
C	0																												100%
C(low)	0																												100%
Total	26																												100%

DBRS Morningstar

Credit Ratings as of 12/31/2020		CDO One Year Transition December 31,2019 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	12	50%																											
AA(high)	6		83%																									50%	
AA	61				55%	3%			37%																			17%	
AA(low)	2				50%	50%																						5%	
A(high)	0																												
A	0																												
A(low)	1				100%																								
BBB(high)	0																												
BBB	2										100%																		
BBB(low)	0																												
BB(high)	0																												
BB	0																												
BB(low)	0																												
B(high)	0																												
B	0																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	1																												
CC(low)	0																												
C(high)	0																												
C	2																												
C(low)	0																												
Total	87																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		CDO Three Year Transition December 31,2017 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	16	37%																										63%	
AA(high)	4		100%																										
AA	11		9%	45%																								45%	1%
AA(low)	8			75%																								25%	
A(high)	5			20%	20%			40%																				20%	
A	38			31%	5%			55%																				9%	
A(low)	18			61%																								39%	
BBB(high)	2			50%																								50%	
BBB	2									100%																			
BBB(low)	0																												
BB(high)	1																											100%	
BB	0																												
BB(low)	0																												
B(high)	0																												
B	0																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	1																												
CC(low)	0																												
C(high)	0																												
C	2																												
C(low)	0																												
Total	108																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		CDO Ten Year Transition December 31,2010 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	15																												100%
AA(high)	9																												100%
AA	21			4%																									96%
AA(low)	20																												100%
A(high)	13																												100%
A	11																												100%
A(low)	15		6%																										94%
BBB(high)	6								16%																				84%
BBB	11									18%																			82%
BBB(low)	21																												100%
BB(high)	1																												100%
BB	1																												100%
BB(low)	13																												100%
B(high)	1																												100%
B	1																												100%
B(low)	2																												100%
CCC(high)	2																												100%
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	2																												
CC(low)	0																												
C(high)	0																												
C	18																												
C(low)	0																												
Total	183																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		ABCP One Year Transition December 31,2019 -- December 31,2020																						Other Outcomes					
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	23	60%																											
AA(high)	0																											39%	1%
AA	22			40%																								59%	1%
AA(low)	2					50%																						50%	
A(high)	2					100%																							
A	14			21%			57%																					21%	1%
A(low)	1							100%																					
BBB(high)	0																												
BBB	1									100%																			
BBB(low)	0																												
BB(high)	0																												
BB	1												100%																
BB(low)	0																												
B(high)	0																												
B	1																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	67																												



DBRS Morningstar

Credit Ratings as of 12/31/2020		ABCP Three Year Transition December 31,2017 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	22	46%																											
AA(high)	0																											54%	
AA	30			26%		3%																						70%	1%
AA(low)	2				50%																							50%	
A(high)	1				100%																								
A	16			25%			31%																					43%	1%
A(low)	3					33%		33%																				34%	
BBB(high)	1																											100%	
BBB	1									100%																			
BBB(low)	0																												
BB(high)	0																												
BB	1															100%													
BB(low)	0																												
B(high)	0																												
B	1																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	78																												

Credit Ratings as of 12/31/2020		ABCP Ten Year Transition December 31,2010 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	5	20%																										80%	
AA(high)	2																											100%	
AA	11			27%																								73%	
AA(low)	2																											100%	
A(high)	5																											100%	
A	4							25%																				75%	
A(low)	3																											100%	
BBB(high)	1																											100%	
BBB	3										33%																	67%	
BBB(low)	0																												
BB(high)	1																											100%	
BB	1														100%														
BB(low)	0																												
B(high)	0																												
B	1																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	39																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		Other ABS One Year Transition December 31,2019 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	700	75%			2%																							22%	1%
AA(high)	85	27%	67%																									6%	
AA	136	19%	3%	65%																								12%	1%
AA(low)	22	9%	5%		82%																							4%	
A(high)	45	13%	9%	4%	2%	59%																						13%	
A	132	5%		14%		5%	53%					8%																11%	4%
A(low)	12	8%	8%					67%																				17%	
BBB(high)	33		9%	3%	3%	21%	3%		40%																			21%	
BBB	105				1%		7%	4%	5%	66%	2%							5%	7%									3%	
BBB(low)	16							6%	6%		69%																	19%	
BB(high)	14					14%	7%	7%	36%			29%																7%	
BB	63									6%	2%		71%		3%							16%						2%	
BB(low)	4													100%															
B(high)	1											100%																	
B	14															72%		21%										7%	
B(low)	1																100%												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	1383																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		Other ABS Three Year Transition December 31,2017 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	543	35%																										64%	1%
AA(high)	45	42%	11%																									47%	
AA	134	29%	7%	22%																								41%	1%
AA(low)	26	46%	12%		12%			8%																				22%	
A(high)	63	18%	5%	2%		18%		3%																				54%	
A	144	22%	2%	10%	1%		19%						4%															42%	
A(low)	23	9%		17%	9%			9%																				56%	
BBB(high)	27	33%			4%	4%			11%																			48%	
BBB	102	15%	11%	4%	1%	1%	6%	2%		26%							1%	5%										28%	
BBB(low)	19	5%		5%	5%	5%			5%	5%	11%																	59%	
BB(high)	13	23%		8%																								69%	
BB	47		4%	4%	2%	13%	13%	6%	9%	6%	2%	4%	13%									9%						15%	
BB(low)	6										33%		33%															34%	
B(high)	1																											100%	
B	8						13%		25%	25%		13%	13%															11%	
B(low)	1													100%															
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	0																												
C(low)	0																												
Total	1202																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		Other ABS Ten Year Transition December 31,2010 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	276	9%																										91%	
AA(high)	4		25%																									75%	
AA	57			3%																								97%	
AA(low)	3																											100%	
A(high)	6																											100%	
A	77			9%																								91%	
A(low)	2																											100%	
BBB(high)	8																											88%	
BBB	56									12%																		100%	
BBB(low)	3																											100%	
BB(high)	3																											100%	
BB	7																											100%	
BB(low)	0																												
B(high)	0																												
B	1																											100%	
B(low)	1																											100%	
CCC(high)	0																												
CCC	4																											100%	
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	2																											100%	
C(low)	0																												
Total	510																												

DBRS Morningstar

Credit Ratings as of 12/31/2020		Other One Year Transition December 31,2019 -- December 31,2020																							Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	63	92%																										8%	
AA(high)	18	6%	83%																									11%	
AA	54	4%	2%	69%		4%																						21%	
AA(low)	24	8%	4%		50%	4%																						34%	
A(high)	18	6%			11%	72%	6%																					5%	
A	59				3%	2%	2%	58%	3%																			32%	
A(low)	30		3%	3%				67%		7%																		20%	
BBB(high)	19					5%			84%	5%																		6%	
BBB	48						10%		6%	63%	2%																	19%	
BBB(low)	38							3%		55%	5%																	37%	
BB(high)	17				6%					6%	77%	6%																5%	
BB	13									8%	8%		54%	8%														22%	
BB(low)	1													100%															
B(high)	0																												
B	3												33%				67%												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	0																												
CC(low)	0																												
C(high)	0																												
C	1																											100%	
C(low)	0																												
Total	406																												

Other Structured Finance contains: Insurance Premium Finance, Structured Settlements, Timeshare Loans, Healthcare Receivables, Marine Container Leases, Film Rights, Property Assessed Clean Energy (PACE) Assessments and Aircraft Leases

## DBRS Morningstar

DBRS Morningstar		Other Three Year Transition December 31,2017 -- December 31,2020																									Other Outcomes		
Credit Ratings as of 12/31/2020		AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
Credit Rating	Number of Outstanding Ratings																												
AAA	35	83%																											17%
AA(high)	6	33%	50%																										17%
AA	24	13%	17%	25%																									45%
AA(low)	8		25%	25%	25%																								25%
A(high)	9	11%			11%	33%																							34%
A	57	9%	4%		4%	2%	4%	28%																					49%
A(low)	18				6%			6%	44%																				44%
BBB(high)	15					7%			60%																				33%
BBB	39				13%			10%	8%	41%																			28%
BBB(low)	32							3%	3%		6%	22%																	66%
BB(high)	6										17%	67%																	16%
BB	9				11%						11%		22%																56%
BB(low)	1																												100%
B(high)	0																												
B	2																												
B(low)	0																												
CCC(high)	0																												
CCC	0																												
CCC(low)	0																												
CC(high)	0																												
CC	1																												
CC(low)	0																												100%
C(high)	0																												
C	0																												
C(low)	0																												
Total	262																												

Other Structured Finance contains: Insurance Premium Finance, Structured Settlements, Timeshare Loans, Healthcare Receivables, Marine Container Leases, Film Rights, Property Assessed Clean Energy (PACE) Assessments and Aircraft Leases

**DBRS Morningstar**

Credit Ratings as of 12/31/2020		Other Ten Year Transition December 31,2010 -- December 31,2020																								Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn-Other
AAA	11	9%																										91%	
AA(high)	0																												
AA	2																											100%	
AA(low)	0																												
A(high)	2																											100%	
A	11						18%																					82%	
A(low)	2																											100%	
BBB(high)	3																											100%	
BBB	7																											100%	
BBB(low)	1																											100%	
BB (high)	1																											100%	
BB	2																											100%	
BB(low)	0																												
B (high)	0																												
B	0																												
B (low)	0																												
CCC (high)	0																												
CCC	0																												
CCC (low)	0																												
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	42																												

Other Structured Finance contains: Insurance Premium Finance, Structured Settlements, Timeshare Loans, Healthcare Receivables, Marine Container Leases, Film Rights, Property Assessed Clean Energy (PACE) Assessments and Aircraft Leases



Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2019 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)	6	100.00%																											
AA	16		100.00%																										
AA (low)	21			100.00%																									
A (high)	29					96.55%																						3.45%	
A	19					10.53%	78.95%	5.26%	5.26%																				
A (low)	24							91.67%	4.17%																			4.17%	
BBB (high)	16								93.75%	6.25%																			
BBB	9								11.11%	77.78%			11.11%																
BBB (low)	25									8.00%	80.00%		8.00%															4.00%	
BB (high)	8											87.50%																12.50%	
BB	11									9.09%	9.09%	36.36%					45.45%												
BB (low)	4												75.00%															25.00%	
B (high)	3														66.67%	33.33%													
B	1															100.00%													
B (low)	1																100.00%												
CCC (high)																													
CCC	1																			100.00%									
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	194																												

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	17		29.41%	70.59%																									
AA (low)	19			21.05%	73.68%																							5.26%	
A (high)	21				28.57%	71.43%																							
A	24					50.00%	20.83%	8.33%																				20.83%	
A (low)	25					4.00%	32.00%	52.00%	4.00%																			8.00%	
BBB (high)	8							25.00%	62.50%																			12.50%	
BBB	9							11.11%	22.22%	55.56%																		11.11%	
BBB (low)	20								25.00%	60.00%	10.00%																	5.00%	
BB (high)	3									66.67%	33.33%																		
BB	6									16.67%	33.33%						50.00%												
BB (low)	6									16.67%	16.67%			33.33%														33.33%	
B (high)	2														50.00%													50.00%	
B	1																										100.00%		
B (low)																													
CCC (high)	1														100.00%														
CCC	3														33.33%	33.33%		33.33%											
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	165																												

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2010 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	2			50.00%																								50.00%	
AA (high)	3				33.33%		33.33%																						33.33%
AA	22	18.18%	45.45%	9.09%	13.64%			4.55%																					9.09%
AA (low)	16			25.00%	50.00%	12.50%																							12.50%
A (high)	23				17.39%	39.13%	4.35%	17.39%																				4.35%	17.39%
A	21					23.81%	9.52%	4.76%			4.76%																	9.52%	47.62%
A (low)	16					6.25%	25.00%	18.75%		6.25%																			43.75%
BBB (high)	13						7.69%	15.38%	7.69%		7.69%																		61.54%
BBB	9						11.11%	11.11%		11.11%																		11.11%	55.56%
BBB (low)	5								20.00%																				80.00%
BB (high)	1										100.00%																		100.00%
BB	1																												100.00%
BB (low)	2																		50.00%										50.00%
B (high)	4										25.00%																		50.00%
B	1																												100.00%
B (low)																													
CCC (high)																													
CCC	1																												100.00%
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	140																												

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2019 -12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	3			100.00%																									
AA (low)	4			25.00%	75.00%																								
A (high)	6					100.00%																							
A	8					25.00%	75.00%																						
A (low)	3							100.00%																					
BBB (high)	1								100.00%																				
BBB	2								50.00%	50.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	27																												

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017-12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	2			100.00%																									
AA (low)	4			50.00%	50.00%																								
A (high)	4					100.00%																							
A	7					42.86%	57.14%																						
A (low)	1							100.00%																					
BBB (high)	2							50.00%	50.00%																				
BBB	1									100.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	21																												

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2010 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA																													
AA (high)																													
AA	1			100.00%																									
AA (low)	4			25.00%		75.00%																							
A (high)	1						100.00%																						
A	1						100.00%																						
A (low)	1						100.00%																						
BBB (high)	1																												100.00%
BBB	2								50.00%	50.00%																			
BBB (low)																													
BB (high)																													
BB																													
BB (low)																													
B (high)																													
B																													
B (low)																													
CCC (high)																													
CCC																													
CCC (low)																													
CC (high)																													
CC																													
CC (low)																													
C (high)																													
C																													
C (low)																													
Total	11																												

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																										Other Outcomes During 12/31/2019 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)	
AAA	0																													
AA (high)	0																													
AA	4			75.00%	25.00%																									
AA (low)	6				100.00%																									
A (high)	12				8.33%	91.67%																								
A	26					3.85%	80.77%	3.85%	7.69%																				3.85%	
A (low)	50							84.00%	8.00%		4.00%																2.00%	2.00%		
BBB (high)	36								83.33%	11.11%			2.78%																2.78%	
BBB	62								9.68%	75.81%	4.84%	4.84%															3.23%	1.61%		
BBB (low)	48									8.33%	75.00%	4.17%				4.17%													8.33%	
BB (high)	2											100.00%																		
BB	5												100.00%																	
BB (low)	6													50.00%			16.67%	16.67%						16.67%						
B (high)	15													6.67%	60.00%	6.67%	20.00%												6.67%	
B	15															60.00%	26.67%		6.67%	20.00%	20.00%								6.67%	
B (low)	5															20.00%			20.00%	20.00%									20.00%	
CCC (high)	4																	25.00%	25.00%	25.00%									25.00%	
CCC	2																					50.00%					50.00%			
CCC (low)	0																													
CC (high)	0																													
CC	0																													
CC (low)	0																													
C (high)	0																													
C	0																													
C (low)	0																													
Total	298																													

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																								Other Outcomes During 12/31/2017 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	0																												
AA (high)	0																												
AA	4			50.00%	50.00%																								
AA (low)	5			20.00%	80.00%																								
A (high)	12				8.33%	91.67%																							
A	24					4.17%	62.50%	4.17%	8.33%																				20.83%
A (low)	44						4.55%	72.73%	13.64%		2.27%																2.27%	4.55%	
BBB (high)	35						2.86%	8.57%	57.14%	20.00%		2.86%	2.86%																5.71%
BBB	47								23.40%	44.68%	10.64%	8.51%															2.13%	10.64%	
BBB (low)	41								26.83%	46.34%																	7.32%	19.51%	
BB (high)	6								16.67%	50.00%	33.33%																		
BB	6											66.67%																	33.33%
BB (low)	4										25.00%	25.00%																	50.00%
B (high)	3												33.33%																66.67%
B	8												12.50%	12.50%	25.00%	12.50%													37.50%
B (low)	1																												100.00%
CCC (high)	2																										50.00%	50.00%	
CCC	0																												
CCC (low)	1																												100.00%
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	243																												



Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																							Other Outcomes During 12/31/2010 12/31/2020 (Percent)				
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)
AAA	1																												100.00%
AA (high)	2				100.00%																								
AA	6			33.33%	33.33%																								33.33%
AA (low)	3				33.33%		33.33%																						33.33%
A (high)	15					46.67%	13.33%																					26.67%	13.33%
A	30					3.33%	30.00%	13.33%	3.33%	3.33%																		6.67%	40.00%
A (low)	52						3.85%	28.85%	17.31%	3.85%	3.85%																	17.31%	25.00%
BBB (high)	36							5.56%	8.33%	11.11%	16.67%	5.56%																2.78%	50.00%
BBB	42							28.57%	16.67%	11.90%		2.38%																7.14%	33.33%
BBB (low)	19								21.05%	15.79%	5.26%																	5.26%	52.63%
BB (high)	9									11.11%		11.11%																	66.67%
BB	4								25.00%		25.00%																		50.00%
BB (low)	6								16.67%																			16.67%	50.00%
B (high)	1											16.67%																	100.00%
B	0																												
B (low)	0																												
CCC (high)	1																												100.00%
CCC	0																												
CCC (low)	0																												
CC (high)	0																												
CC	0																												
CC (low)	0																												
C (high)	0																												
C	0																												
C (low)	0																												
Total	227																												

## **MORNINGSTAR CREDIT RATINGS**

Form NRSRO Annual Certification

### **EXHIBIT 1:**

Performance Measurement Statistics

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																				Other Outcomes During 12/31/2019 - 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	Default	Paid Off	Withdrawn (other)
AAA	0																								
AA+	0																								
AA	0																								
AA-	0																								
A+	0																								
A	0																								
A-	0																								
BBB+	0																								
BBB	0																								
BBB-	0																								
BB+	0																								
BB	0																								
BB-	0																								
B+	0																								
B	0																								
B-	0																								
CCC+	0																								
CCC	0																								
CCC-	0																								
CC	0																								
C	0																								
Total	0																								

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																				Other Outcomes During 12/31/2017 - 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	Default	Paid Off	Withdrawn (other)
AAA	0																								
AA+	0																								
AA	0																								
AA-	3																							100.00%	
A+	3																							100.00%	
A	7																							100.00%	
A-	11																							100.00%	
BBB+	13																							100.00%	
BBB	5																							100.00%	
BBB-	2																							100.00%	
BB+	0																								
BB	0																								
BB-	0																								
B+	0																								
B	0																								
B-	0																								
CCC+	0																								
CCC	0																								
CCC-	0																								
CC	0																								
C	0																								
Total	44																								

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**Table 3: Financial Institutions, Brokers, or Dealers - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

MCR

Corporate 1 Year Transition

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																					Other Outcomes During 12/31/2019 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	Default	Paid Off	Withdrawn (other)
AAA	0																								
AA+	0																								
AA	0																								
AA-	0																								
A+	0																								
A	0																								
A-	0																								
BBB+	0																								
BBB	0																								
BBB-	0																								
BB+	0																								
BB	0																								
BB-	0																								
B+	0																								
B	0																								
B-	0																								
CCC+	0																								
CCC	0																								
CCC-	0																								
CC	0																								
C	0																								
Total	0																								

MCR

Corporate 3 Year Transition

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																				Other Outcomes During 12/31/2017 - 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	CC	C	Default	Paid Off	Withdrawn (other)
AAA	1																								100.00%
AA+	2																								100.00%
AA	7																								100.00%
AA-	14																								100.00%
A+	16																								100.00%
A	31																								100.00%
A-	40																								100.00%
BBB+	52																								100.00%
BBB	45																								100.00%
BBB-	39																								100.00%
BB+	18																								100.00%
BB	13																								100.00%
BB-	5																								100.00%
B+	4																								100.00%
B	4																								100.00%
B-	6																								100.00%
CCC+	0																								
CCC	0																								
CCC-	0																								
CC	0																								
C	0																								
Total	297																								

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**Table 6: Corporate Issuers - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix



MCR

RMBS 1 Year Transition

Credit Ratings as of 12/31/2019		Credit Ratings as of (Percent)																			Other Outcomes During 12/31/2019 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	216																					4.63%	95.37%
AA+	47																					6.38%	93.62%
AA	26																					3.85%	96.15%
AA-	33																						100.00%
A+	44																						100.00%
A	71																					9.86%	90.14%
A-	103																						100.00%
BBB+	118																					0.85%	99.15%
BBB	100																					2.00%	98.00%
BBB-	227																					0.44%	99.56%
BB+	114																					1.75%	98.25%
BB	52																						100.00%
BB-	41																						100.00%
B+	30																						100.00%
B	15																						100.00%
B-	7																						100.00%
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	1,244																						

MCR

RMBS 3 Year Transition

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2017 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	129																					22.48%	77.52%
AA+	19																					21.05%	78.95%
AA	28																					53.57%	46.43%
AA-	15																					6.67%	93.33%
A+	10																					60.00%	40.00%
A	33																					42.42%	57.58%
A-	15																					13.33%	86.67%
BBB+	30																					46.67%	53.33%
BBB	19																					26.32%	73.68%
BBB-	42																					30.95%	69.05%
BB+	30																					3.33%	96.67%
BB	12																					16.67%	83.33%
BB-	22																					13.64%	86.36%
B+	5																						100.00%
B	10																					20.00%	80.00%
B-	5																					20.00%	80.00%
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	424																						

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**Table 9: RMBS - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

MCR

## CMBS 1 Year Transition

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2019 - 12/31/2020		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	219																					6.39%	93.61%
AA+	42																					2.38%	97.62%
AA	44																					4.55%	95.45%
AA-	41																						100.00%
A+	34																					5.88%	94.12%
A	40																					5.00%	95.00%
A-	57																						100.00%
BBB+	23																					4.35%	95.65%
BBB	40																					5.00%	95.00%
BBB-	69																						100.00%
BB+	12																						100.00%
BB	19																						100.00%
BB-	54																					1.85%	98.15%
B+	5																						100.00%
B	14																					7.14%	92.86%
B-	26																					3.85%	96.15%
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	739																						

MCR

CMBS 3 Year Transition

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2017 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	1,052																					18.44%	81.56%
AA+	39																					25.64%	74.36%
AA	60																					25.00%	75.00%
AA-	104																					26.92%	73.08%
A+	39																					28.21%	71.79%
A	58																					20.69%	79.31%
A-	169																					23.08%	76.92%
BBB+	47																					14.89%	85.11%
BBB	79																					13.92%	86.08%
BBB-	138																				0.72%	20.29%	78.99%
BB+	22																					40.91%	59.09%
BB	45																					20.00%	80.00%
BB-	98																					29.59%	70.41%
B+	18																				5.56%	27.78%	66.67%
B	52																					23.08%	76.92%
B-	52																					34.62%	65.38%
CCC+	0																						
CCC	1																				100.00%		
CCC-	0																						
Total	2,073																						

MCR

CMBS 10 Year Transition

Credit Ratings as of 12/31/2010		Credit Ratings as of 12/31/2020 (Percent)																		Other Outcomes During 12/31/2010 - 12/31/2020 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	2,615																				0.11%	80.54%	19.35%
AA+	219																				0.91%	67.58%	31.51%
AA	199																				0.50%	74.87%	24.62%
AA-	159																				0.63%	65.41%	33.96%
A+	148																				1.35%	64.86%	33.78%
A	212																				0.94%	58.49%	40.57%
A-	210																				0.95%	49.05%	50.00%
BBB+	265																				2.26%	43.40%	54.34%
BBB	261																				2.68%	37.93%	59.39%
BBB-	281																				3.20%	30.60%	66.19%
BB+	276																				6.52%	23.55%	69.93%
BB	160																				5.00%	23.75%	71.25%
BB-	121																				8.26%	21.49%	70.25%
B+	123																				8.13%	17.89%	73.98%
B	95																				9.47%	13.68%	76.84%
B-	207																				10.14%	14.01%	75.85%
CCC+	133																				17.29%	8.27%	74.44%
CCC	122																				18.85%	5.74%	75.41%
CCC-	886																				37.02%	3.16%	59.82%
Total	6,692																						

MCR

CLO 1 Year Transition

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2019 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	73																					12.33%	87.67%
AA+	4																						100.00%
AA	2																						100.00%
AA-	4																					25.00%	75.00%
A+	4																						100.00%
A	3																						100.00%
A-	8																					25.00%	75.00%
BBB+	8																						100.00%
BBB	63																						100.00%
BBB-	15																						100.00%
BB+	0																						
BB	3																						100.00%
BB-	1																						100.00%
B+	1																						100.00%
B	2																						100.00%
B-	0																						
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	191																						

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**Table 14: CLOs - 3 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix



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**Table 15: CLOs - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 16: CDOs - 1 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 17: CDOs - 3 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

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**Table 18: CDOs - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 19: ABCP - 1 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 20: ABCP - 3 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

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**Table 21: ABCP - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

MCR

Other ABS 1 Year Transition

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2019 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	10																						100.00%
AA+	2																					50.00%	50.00%
AA	8																					12.50%	87.50%
AA-	0																						
A+	9																						100.00%
A	30																					3.33%	96.67%
A-	12																					8.33%	91.67%
BBB+	3																						100.00%
BBB	16																						100.00%
BBB-	2																						100.00%
BB+	1																						100.00%
BB	1																						100.00%
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	94																						



MCR

Other ABS 3 Year Transition

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2020 (Percent)																			Other Outcomes During 12/31/2017 - 12/31/2020 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	Default	Paid Off	Withdrawn (other)
AAA	11																					9.09%	90.91%
AA+	0																						
AA	5																					40.00%	60.00%
AA-	4																					50.00%	50.00%
A+	1																						100.00%
A	10																					10.00%	90.00%
A-	5																					40.00%	60.00%
BBB+	0																						
BBB	9																						100.00%
BBB-	0																						
BB+	0																						
BB	1																						100.00%
BB-	0																						
B+	0																						
B	1																					100.00%	
B-	0																						
CCC+	0																						
CCC	0																						
CCC-	0																						
Total	47																						

**Table 24: Other ABS - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 25: SFP - 1 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 26: SFP - 3 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

**Table 27: SFP - 10 Year Transition and Default Rates**

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Morningstar Credit Ratings has not assigned credit ratings in this class/subclass for the length of time necessary to produce a Transition/Default Matrix

## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



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### **Categories and notches within a category for each class and subclass of credit ratings in DBRS Morningstar Group of Company's<sup>1</sup> Transition/Default Matrix:**

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All rating categories below, other than AAA and D, also contain subcategories "(high)" and "(low)". The absence of either a "(high)" or "(low)" designation indicates the rating is in the middle of the category. Subcategory "(high)" reflects a lower risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an obligations has been issued, while subcategory "(low)" reflects a higher risk.

#### **AAA**

Highest credit quality. The capacity for the payment of financial obligations is exceptionally high and unlikely to be adversely affected by future events.

#### **AA**

Superior credit quality. The capacity for the payment of financial obligations is considered high. Credit quality differs from AAA only to a small degree. Unlikely to be significantly vulnerable to future events.

#### **A**

Good credit quality. The capacity for the payment of financial obligations is substantial, but of lesser credit quality than AA. May be vulnerable to future events, but qualifying negative factors are considered manageable.

#### **BBB**

Adequate credit quality. The capacity for the payment of financial obligations is considered acceptable. May be vulnerable to future events.

#### **BB**

Speculative, non-investment grade credit quality. The capacity for the payment of financial obligations is uncertain. Vulnerable to future events.

#### **B**

Highly speculative credit quality. There is a high level of uncertainty as to the capacity to meet financial obligations.

#### **CCC / CC / C**

Very highly speculative credit quality. In danger of defaulting on financial obligations. There is little difference between these three categories, although CC and C ratings are normally applied to obligations that are seen as highly likely to default, or subordinated to obligations rated in the CCC

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<sup>1</sup> The DBRS Morningstar Group of Companies is comprised of DBRS, Inc., DBRS Limited, DBRS Ratings Limited and DBRS Ratings GmbH.

## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



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to B range. Obligations in respect of which default has not technically taken place but is considered inevitable may be rated in the C category.

### **D**

When the issuer has filed under any applicable bankruptcy, insolvency or winding up statute or there is a failure to satisfy an obligation after the exhaustion of grace periods, a downgrade to D may occur. DBRS may also use SD (Selective Default) in cases where only some securities are impacted, such as the case of a “distressed exchange”.

### **Conditions under which DBRS classifies obligors, securities, or money market instruments as being in default:**

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DBRS issues a default rating when:

- The issuer has filed under any applicable bankruptcy, insolvency or winding up statute.
- There is failure to pay or satisfy an obligation (subject to applicable grace periods and/or waiver of such failure) in accordance with the underlying transaction documents and DBRS believes that this default will subsequently be general in nature and include all obligations.
- Independent of the issuer rating, securities described as a “Distressed Exchange” are downgraded to ‘D’.
- DBRS also reserves the right to downgrade ratings to ‘D’ when it believes that a general default is imminent and unavoidable, although this is a less frequent and a more subjective decision.

The preceding categories and subcategories are publicly available at:

<https://www.dbrsmorningstar.com/research/236754/long-term-obligations-rating-scale.pdf>

For completeness, all of DBRS rating scales are publicly available at:

<https://www.dbrsmorningstar.com/understanding-ratings/#about-ratings>

## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



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### **Categories and notches within a category for each class and subclass of credit ratings in MCR's Transition/Default Matrix:**

MCR no longer operates as a credit rating agency or issues or monitors credit ratings.

So long as operated as a credit rating agency, MCR utilized a set of letter ratings ranging from AAA to D to express its opinion on the credit quality of a security based on MCR's then in effect policies and procedures. MCR also provided finer gradations (notches) of the ratings ranging from AA to CCC by adding a plus or minus sign to indicate relative strength within the rating categories. The definitions for previous MCR credit ratings were as follows:

#### **AAA**

A rating of AAA was the highest credit rating assigned by MCR. A rating of AAA indicated an extremely strong ability to make timely interest payments and ultimate principal payments on or prior to a rated final distribution or maturity date.

#### **AA+, AA, AA-**

A rating in the AA category indicated a very strong ability to make timely interest and ultimate principal payments on or prior to a rated final distribution or maturity date.

#### **A+, A, A-**

A rating in the A category indicated a strong ability to make timely interest and ultimate principal payments on or prior to a rated final distribution or maturity date, but that ability could be influenced by adverse changes in circumstances or conditions, such as adverse business or economic conditions.

#### **BBB+, BBB, BBB-**

A rating in the BBB category indicated the ability to make timely payments of interest and ultimate principal payments on or prior to a rated final distribution or maturity date, but that ability could be impacted by adverse changes in circumstances or conditions, such as adverse business or economic conditions.

#### **BB+, BB, BB-**

A rating in the BB category indicated the ability to make timely payments of interest and ultimate payment of principal on or prior to a rated final distribution or maturity date in the absence of various adverse circumstances or conditions such as adverse business or economic conditions. The vulnerability of securities rated BB to the previously mentioned conditions was greater than that of higher rated securities or issuers.

#### **B+, B, B-**

A rating in the B category indicated a default had not yet occurred, but the issuer or securities were vulnerable to adverse changes in the business or economic environment. Securities rated in the B category were more vulnerable to nonpayment of timely interest and ultimate payment of principal



## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



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on or prior to a rated final distribution date than higher rated securities.

### **CCC+, CCC, CCC**

A rating in the CCC category indicated a material likelihood of default, and for corporate and financial institution obligations, significant dependence on favorable business conditions to avoid default or capital restructuring. For structured finance securities, forecasted or actual losses may have eroded but not yet eliminated available credit support.

### **CC**

A rating of CC on a corporate or financial institution issuer or security indicated a default had not yet occurred but the issuer or security was extremely dependent on favorable business conditions to avoid default or significant capital restructuring. This rating did not apply to structured finance securities.

### **C**

A rating of C on a corporate or financial institution issuer or security indicated a default was expected in the very near term. Corporate and financial institution issuers or securities would be rated C and placed on Under Review Negative during a cure period for payments of interest and principal. This rating did not apply to structured finance securities.

### **SD**

A rating of SD indicated a selective default when an issuer had defaulted on one or more but not all its debt obligations without entering bankruptcy. Selective Default was not applicable to individual issues and therefore was not applicable to structured finance securities.

### **D**

A rating of 'D' indicated that a default had occurred; or, for structured finance securities, (1) actual losses have reduced the principal balance of the security; or (2) actual losses have eliminated available credit support.

Additionally, forecasted losses that would reduce the principal balance of the security or eliminate the available credit support, subject to our reasonable judgment, may be indicative of a D rating.

For purposes of the above, the following terms had the following meanings:

“Default” generally included one or more of the following:

(i) Failure to pay (1) timely interest and/or (2) principal. (ii) Any bankruptcy, administration, receivership, winding up, liquidation or other termination of the business of the issuer. (iii) Execution of a distressed debt exchange. A distressed debt exchange was the repayment of a debt instrument for any consideration other than the par value of the debt, in cash, at its contracted maturity date to avoid a payment default or bankruptcy. Execution of a distressed debt exchange for some, but not all, of an obligor’s debt obligations would result in a rating of SD. (iv) Failure to

## Exhibit 1 – Transition/Default Rates

Form NRSRO – Update of Registration

July 2021



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meet non-debt obligations such as trade payables would not be considered a default or selective default. (v) Under certain circumstances, subject to MCR's reasonable judgment, an interest or principal shortfall on a structured finance security may not be deemed a default. Factors that would affect MCR's decision included the magnitude of the shortfall, likelihood of recurrence, certainty and timing of a repayment, and the current rating of the security.

"Forecasted losses" generally included one or more of the following: (i) Projected losses resulting from specially serviced loans, and/or (ii) Projected losses due to a decline in current appraisal values, and/or (iii) Projected losses due to anticipated payment defaults on any loans.

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### URL Page:

Please note below the uniform resource locators (URLs) of the websites which provide the credit rating histories of the DBRS Morningstar credit ratings and previous MCR credit ratings that are required to be disclosed pursuant to 17 CFR 17g-7(b) :

DBRS:

<https://www.dbrsmorningstar.com/about/historyAgree/>

MCR:

The rating history of previous MCR ratings is available at:

<https://ratingagency.morningstar.com/MCR/regulatory/Credit-Ratings-History> (which is incorporated by reference into DBRS Morningstar's corporate Internet website).