

Moody's Investors Service ("MIS")

Exhibit 1

Credit Ratings Performance Measurement Statistics

Performance Measurement Statistics, consisting of transition and default rates for each applicable asset class and subclass of credit rating over 1-year, 3-year, and 10-year time periods through December 31, 2015, are provided in the Transition/Default Matrices on the following pages, pp. 13-36 (the "Matrices"). Please note that all the numbers in the Matrices are in percentage.

Financial Institutions, Brokers and Dealers

Financial Institutions, Brokers and Dealers - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/ 31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	48	94%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	2%
Aa1	28	0%	75%	14%	4%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
Aa2	56	0%	4%	89%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Aa3	108	0%	0%	19%	66%	6%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	2%
A1	153	0%	0%	4%	9%	78%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%
A2	293	0%	0%	1%	1%	14%	73%	6%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%
A3	205	0%	0%	0%	1%	7%	11%	59%	18%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%
Baa1	173	0%	0%	0%	0%	1%	1%	28%	54%	9%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%
Baa2	225	0%	0%	0%	0%	0%	0%	7%	20%	49%	15%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%
Baa3	192	0%	0%	0%	0%	0%	0%	3%	4%	10%	62%	15%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%
Ba1	79	0%	0%	0%	0%	0%	0%	0%	0%	3%	14%	52%	16%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	5%
Ba2	60	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	15%	57%	13%	2%	0%	0%	0%	0%	0%	0%	0%	0%	2%	3%
Ba3	80	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	3%	11%	48%	18%	3%	0%	0%	0%	0%	0%	0%	0%	5%	10%
B1	74	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	69%	8%	4%	3%	0%	0%	0%	0%	0%	3%	4%
B2	88	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	6%	75%	6%	2%	0%	0%	0%	0%	5%	0%	5%
B3	64	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	9%	66%	5%	2%	2%	0%	0%	6%	0%	9%
Caa1	43	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	9%	44%	21%	0%	2%	0%	12%	2%	5%
Caa2	26	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	50%	0%	0%	0%	8%	0%	4%
Caa3	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	60%	0%	0%
Ca	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	0%	13%	0%	50%
C	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	50%	0%	0%
Total	2,010																								

Financial Institutions, Brokers and Dealers - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	51	78%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	2%
Aa1	35	0%	40%	37%	3%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%
Aa2	56	0%	0%	57%	20%	5%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	2%
Aa3	119	0%	1%	20%	47%	16%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	5%
A1	121	0%	0%	4%	9%	59%	11%	2%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	6%	4%
A2	305	0%	0%	1%	2%	12%	61%	11%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	2%
A3	208	0%	0%	0%	1%	9%	13%	38%	16%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	6%
Baa1	147	0%	0%	0%	0%	5%	2%	22%	33%	11%	8%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	10%
Baa2	213	0%	0%	0%	0%	0%	0%	10%	24%	22%	22%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	7%
Baa3	191	0%	0%	0%	0%	0%	0%	4%	9%	16%	34%	13%	3%	2%	1%	0%	0%	1%	0%	0%	0%	0%	0%	5%	13%
Ba1	81	0%	0%	0%	0%	0%	0%	1%	0%	10%	16%	30%	19%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	6%	11%
Ba2	67	0%	0%	0%	0%	0%	0%	0%	0%	1%	9%	10%	31%	16%	7%	3%	3%	1%	0%	0%	0%	0%	0%	4%	12%
Ba3	107	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	4%	5%	22%	21%	12%	1%	2%	0%	0%	0%	0%	6%	5%	21%
B1	79	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	5%	6%	29%	18%	6%	3%	1%	0%	0%	0%	4%	10%	15%
B2	80	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	5%	9%	40%	5%	4%	1%	1%	3%	0%	9%	5%	16%
B3	89	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	33%	16%	4%	0%	0%	0%	9%	4%	25%
Caa1	42	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	5%	33%	0%	2%	0%	19%	2%	33%
Caa2	18	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	28%	6%	0%	0%	0%	39%	11%	17%
Caa3	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Ca	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%
C	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Total	2,013																								

Financial Institutions, Brokers and Dealers - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	97	38%	0%	19%	1%	7%	3%	2%	1%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	13%
Aa1	74	1%	3%	3%	1%	11%	12%	8%	7%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	39%
Aa2	169	0%	2%	4%	6%	8%	22%	2%	6%	1%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	15%	30%
Aa3	276	0%	3%	5%	10%	6%	15%	9%	3%	1%	1%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	12%	30%
A1	203	0%	0%	0%	2%	13%	6%	4%	8%	4%	1%	1%	2%	0%	1%	0%	1%	0%	0%	0%	0%	0%	5%	14%	33%
A2	236	0%	0%	2%	4%	8%	11%	9%	6%	3%	2%	3%	0%	2%	0%	1%	0%	1%	0%	0%	0%	0%	4%	11%	33%
A3	197	0%	0%	2%	3%	11%	12%	15%	9%	3%	2%	3%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%	4%	7%	26%
Baa1	136	0%	0%	0%	3%	3%	3%	14%	14%	9%	4%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	5%	10%	32%
Baa2	99	0%	0%	0%	0%	1%	1%	7%	12%	9%	7%	8%	9%	1%	5%	0%	0%	0%	1%	0%	0%	0%	4%	4%	30%
Baa3	97	0%	0%	0%	0%	0%	2%	1%	9%	14%	14%	1%	0%	2%	0%	1%	0%	0%	0%	0%	0%	0%	3%	5%	46%
Ba1	44	0%	0%	0%	0%	0%	0%	0%	5%	5%	9%	2%	0%	2%	0%	2%	0%	0%	2%	0%	0%	0%	18%	5%	50%
Ba2	52	0%	0%	0%	0%	0%	0%	0%	2%	4%	17%	12%	6%	4%	2%	2%	0%	12%	0%	0%	0%	0%	12%	12%	17%
Ba3	38	0%	0%	0%	0%	0%	0%	0%	0%	8%	8%	3%	3%	5%	5%	16%	0%	0%	0%	0%	0%	0%	8%	0%	45%
B1	78	0%	0%	0%	0%	0%	0%	0%	1%	6%	19%	1%	4%	4%	8%	3%	5%	1%	0%	0%	0%	0%	8%	1%	38%
B2	36	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	6%	3%	11%	0%	0%	0%	0%	42%	6%	31%
B3	25	0%	0%	0%	0%	0%	0%	0%	0%	0%	28%	0%	0%	0%	0%	12%	8%	0%	0%	0%	0%	0%	8%	4%	40%
Caa1	29	0%	0%	0%	0%	0%	0%	0%	0%	10%	3%	0%	0%	0%	0%	21%	0%	0%	14%	7%	0%	0%	0%	0%	45%
Caa2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Caa3	-																								
Ca	-																								
C	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Total	1,889																								

For Moody's definition on default, please refer to [Rating Symbols and Definitions](#)

Withdrawn with missing reasons will show up in the Withdrawn (other) column.

Insurance Companies

Insurance Companies - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	5	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa1	12	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa2	80	0%	0%	95%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	
Aa3	62	0%	0%	0%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	
A1	149	0%	0%	0%	1%	97%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	
A2	204	0%	0%	0%	0%	9%	80%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	
A3	120	0%	0%	0%	0%	1%	7%	81%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	4%	
Baa1	60	0%	0%	0%	0%	0%	0%	5%	83%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	7%	
Baa2	76	0%	0%	0%	0%	0%	0%	0%	14%	78%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	
Baa3	39	0%	0%	0%	0%	0%	0%	0%	0%	21%	67%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	
Ba1	16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	81%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	6%	
Ba2	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	56%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	
Ba3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	
B1	15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	7%	80%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	
B2	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
B3	13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	69%	0%	0%	0%	0%	0%	0%	8%	15%	
Caa1	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%	0%	0%	0%	0%	0%	0%	25%	
Caa2	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	83%	0%	0%	0%	0%	17%	0%	
Caa3	-																									
Ca	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
C	-																									
Total	889																									

Insurance Companies - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	6	83%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa1	13	0%	85%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
Aa2	66	0%	0%	92%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Aa3	74	0%	0%	0%	68%	14%	4%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	9%
A1	124	0%	0%	0%	7%	79%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	7%
A2	239	0%	0%	0%	0%	18%	61%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	16%
A3	134	0%	0%	0%	0%	4%	9%	59%	14%	3%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	9%
Baa1	45	0%	0%	0%	0%	0%	0%	2%	71%	7%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	9%
Baa2	69	0%	0%	0%	0%	0%	0%	6%	12%	65%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	6%
Baa3	48	0%	0%	0%	0%	0%	0%	0%	8%	23%	35%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	10%	13%
Ba1	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	56%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	22%
Ba2	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Ba3	13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	8%	8%	38%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%
B1	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	11%	22%	11%	0%	0%	0%	0%	0%	0%	11%	0%
B2	19	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	32%	16%	21%	0%	0%	0%	0%	0%	0%	0%	26%
B3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	40%	10%	0%	0%	0%	0%	0%	0%	40%
Caa1	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	20%	20%	0%	0%	0%	20%	0%	20%
Caa2	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	33%	0%	0%	17%	0%	0%	0%	0%	33%	0%
Caa3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
Ca	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%
C	-																								
Total	900																								

Insurance Companies - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	34	15%	15%	9%	0%	0%	6%	3%	0%	0%	0%	0%	3%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	6%	41%
Aa1	26	0%	19%	12%	15%	0%	15%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	15%
Aa2	120	0%	0%	25%	16%	13%	5%	1%	3%	2%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	4%	27%
Aa3	193	0%	0%	13%	13%	25%	11%	1%	2%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	26%
A1	75	0%	0%	0%	3%	15%	24%	7%	1%	5%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	40%
A2	160	0%	0%	0%	0%	13%	25%	9%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	48%
A3	177	0%	0%	0%	0%	15%	22%	16%	5%	2%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	34%
Baa1	61	0%	0%	0%	0%	15%	18%	3%	16%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	31%
Baa2	26	0%	0%	0%	0%	4%	4%	0%	12%	38%	8%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	27%
Baa3	33	0%	0%	0%	0%	3%	0%	0%	12%	18%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	15%	33%
Ba1	23	0%	0%	0%	0%	0%	0%	13%	30%	13%	4%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	9%	26%
Ba2	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Ba3	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	0%	8%	17%	0%	0%	0%	0%	0%	0%	0%	0%	67%
B1	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	13%	0%	0%	0%	0%	0%	0%	0%	75%
B2	18	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	11%	11%	6%	11%	6%	0%	0%	0%	0%	0%	0%	50%
B3	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	40%	40%
Caa1	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Caa2	-																								
Caa3	-																								
Ca	-																								
C	-																								
Total	984																								

Corporate Issuers

Corporate Issuers - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	14	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa1	28	0%	86%	7%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa2	22	0%	0%	73%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%
Aa3	91	0%	0%	19%	75%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
A1	140	0%	0%	0%	1%	88%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%
A2	196	0%	0%	0%	0%	1%	91%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
A3	298	0%	0%	0%	0%	0%	4%	83%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Baa1	344	0%	0%	0%	0%	0%	0%	6%	83%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%
Baa2	419	0%	0%	0%	0%	0%	0%	0%	5%	77%	11%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
Baa3	384	0%	0%	0%	0%	0%	0%	0%	1%	8%	78%	6%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	4%	2%
Ba1	137	0%	0%	0%	0%	0%	0%	0%	0%	1%	9%	69%	7%	3%	2%	0%	1%	0%	0%	0%	0%	0%	1%	5%	1%
Ba2	125	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	8%	66%	8%	4%	2%	0%	1%	0%	1%	0%	0%	0%	5%	2%
Ba3	140	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	13%	59%	9%	4%	0%	0%	1%	0%	1%	1%	0%	9%	2%
B1	154	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	14%	56%	10%	5%	2%	2%	0%	0%	0%	1%	6%	2%
B2	140	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	1%	10%	59%	6%	4%	1%	4%	1%	0%	4%	5%	2%
B3	190	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	9%	55%	9%	4%	1%	1%	0%	3%	12%	1%
Caa1	193	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	61%	11%	3%	3%	0%	6%	9%	2%
Caa2	90	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	9%	50%	11%	4%	0%	9%	13%	1%
Caa3	22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	55%	5%	0%	27%	5%	0%
Ca	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	0%	33%	11%	44%	0%	0%
C	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%
Total	3,138																								

Corporate Issuers - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	15	93%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa1	26	0%	88%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
Aa2	25	0%	0%	56%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
Aa3	73	0%	0%	5%	64%	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	1%
A1	147	0%	0%	10%	5%	54%	14%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	3%
A2	157	0%	0%	0%	0%	11%	70%	6%	6%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%
A3	279	0%	0%	0%	0%	1%	16%	54%	11%	4%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	5%
Baa1	368	0%	0%	0%	0%	0%	2%	17%	49%	13%	6%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	1%
Baa2	396	0%	0%	0%	0%	0%	0%	5%	17%	51%	14%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	2%
Baa3	343	0%	0%	0%	0%	0%	0%	0%	5%	17%	49%	8%	3%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	11%	4%
Ba1	116	0%	0%	0%	0%	0%	0%	1%	0%	6%	29%	34%	10%	2%	2%	1%	0%	0%	0%	0%	1%	0%	0%	13%	2%
Ba2	121	0%	0%	0%	0%	0%	0%	0%	0%	8%	13%	31%	11%	8%	5%	2%	0%	2%	1%	0%	0%	0%	1%	16%	3%
Ba3	108	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	20%	28%	10%	5%	2%	1%	0%	2%	0%	0%	3%	24%	4%
B1	152	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	6%	16%	24%	11%	7%	2%	3%	3%	1%	0%	2%	18%	3%
B2	106	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	4%	5%	14%	25%	9%	1%	1%	1%	0%	0%	6%	27%	6%
B3	208	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	9%	20%	15%	4%	1%	2%	0%	8%	29%	6%
Caa1	171	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	2%	11%	24%	9%	4%	2%	0%	11%	33%	4%
Caa2	63	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	5%	8%	17%	6%	3%	0%	16%	37%	2%
Caa3	22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	18%	9%	14%	0%	0%	18%	32%	5%
Ca	11	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	64%	0%	18%
C	-																								
Total	2,907																								

Corporate Issuers - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	54	20%	2%	6%	22%	6%	2%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	33%
Aa1	39	0%	21%	8%	13%	10%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	28%
Aa2	45	0%	11%	9%	13%	7%	11%	11%	2%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	20%
Aa3	74	0%	4%	0%	8%	23%	4%	19%	7%	7%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	8%	19%
A1	140	0%	1%	5%	4%	21%	19%	9%	4%	3%	1%	2%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	9%	20%
A2	225	0%	0%	1%	2%	6%	18%	16%	12%	4%	2%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	8%	27%
A3	330	0%	0%	2%	0%	2%	10%	15%	13%	8%	3%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	37%
Baa1	322	0%	0%	0%	0%	2%	6%	10%	20%	14%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	11%	29%
Baa2	329	0%	0%	0%	0%	0%	1%	6%	14%	17%	9%	5%	2%	2%	1%	0%	0%	1%	0%	0%	0%	0%	1%	13%	29%
Baa3	278	0%	0%	0%	0%	0%	1%	2%	5%	14%	15%	3%	2%	0%	1%	0%	1%	0%	0%	0%	0%	0%	1%	12%	41%
Ba1	116	0%	0%	0%	0%	0%	1%	2%	3%	9%	12%	6%	1%	3%	0%	2%	2%	1%	2%	0%	0%	0%	8%	5%	44%
Ba2	127	0%	0%	0%	0%	0%	3%	0%	2%	6%	5%	3%	4%	5%	2%	6%	4%	0%	0%	0%	0%	0%	6%	16%	38%
Ba3	104	0%	0%	0%	0%	0%	0%	0%	3%	1%	7%	1%	3%	5%	1%	7%	1%	1%	0%	0%	1%	0%	9%	14%	47%
B1	133	0%	0%	0%	0%	0%	0%	1%	1%	3%	5%	0%	3%	5%	2%	5%	2%	2%	0%	0%	0%	0%	17%	15%	42%
B2	155	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	1%	1%	3%	3%	4%	4%	0%	0%	1%	0%	12%	15%	55%
B3	150	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	1%	2%	1%	1%	0%	0%	19%	14%	57%
Caa1	90	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	1%	1%	2%	2%	0%	0%	0%	0%	29%	12%	49%
Caa2	45	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	4%	0%	0%	0%	0%	0%	0%	0%	18%	13%	62%
Caa3	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	9%	45%	
Ca	18	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	0%	61%	
C	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	75%	
Total	2,789																								

Residential Mortgage Backed Securities (RMBS)

RMBS - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	1,711	88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	
Aa1	292	19%	68%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	
Aa2	316	4%	15%	64%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	0%	
Aa3	248	2%	10%	13%	58%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	
A1	599	1%	1%	24%	5%	51%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	
A2	668	1%	1%	27%	7%	4%	54%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	
A3	862	0%	0%	4%	5%	11%	2%	64%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	3%	
Baa1	1,313	0%	0%	1%	2%	5%	4%	4%	68%	1%	4%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	2%	
Baa2	774	0%	0%	1%	2%	4%	6%	8%	6%	57%	5%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	0%	
Baa3	1,099	0%	0%	0%	1%	3%	2%	6%	8%	3%	63%	2%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2%	
Ba1	986	0%	0%	0%	0%	1%	1%	2%	4%	8%	11%	62%	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2%	
Ba2	896	0%	0%	0%	0%	1%	0%	1%	2%	5%	13%	10%	56%	1%	5%	1%	0%	0%	0%	0%	0%	0%	0%	4%	2%	
Ba3	1,316	0%	0%	0%	0%	0%	0%	1%	1%	1%	4%	12%	4%	64%	3%	4%	0%	0%	0%	0%	0%	0%	0%	3%	2%	
B1	1,091	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	7%	12%	6%	61%	1%	4%	1%	0%	0%	0%	0%	0%	4%	1%	
B2	1,128	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	5%	10%	6%	66%	2%	2%	0%	0%	0%	0%	0%	4%	2%	
B3	1,079	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	5%	14%	3%	63%	4%	1%	0%	0%	0%	0%	4%	0%	
Caa1	1,989	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	6%	4%	68%	7%	1%	0%	0%	6%	2%	1%	
Caa2	2,243	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	4%	3%	77%	3%	1%	0%	6%	1%	1%	
Caa3	2,280	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	4%	2%	81%	3%	0%	4%	1%	0%	
Ca	3,162	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	3%	3%	87%	1%	3%	1%	0%	
C	3,297	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	3%	82%	7%	2%	0%	
Total	27,349																									

RMBS - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	2,317	51%	2%	1%	0%	0%	0%	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	36%	5%
Aa1	462	8%	26%	1%	2%	1%	0%	4%	5%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	4%
Aa2	562	4%	4%	30%	1%	1%	1%	6%	8%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	7%
Aa3	781	5%	4%	4%	14%	7%	20%	10%	7%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	3%
A1	932	0%	1%	3%	1%	18%	1%	9%	18%	2%	2%	2%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	32%	7%
A2	866	1%	4%	18%	5%	4%	17%	5%	12%	3%	3%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	23%	2%
A3	793	0%	1%	18%	3%	7%	3%	15%	13%	5%	3%	4%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	20%	5%
Baa1	1,028	0%	1%	3%	4%	6%	3%	10%	28%	3%	8%	4%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	18%	4%
Baa2	861	0%	0%	2%	1%	4%	4%	8%	6%	32%	7%	7%	4%	3%	2%	0%	0%	0%	0%	0%	0%	0%	0%	17%	3%
Baa3	960	0%	0%	1%	1%	5%	3%	4%	4%	2%	38%	6%	10%	4%	2%	2%	0%	0%	0%	0%	0%	0%	0%	14%	3%
Ba1	932	0%	0%	0%	1%	2%	1%	3%	6%	6%	11%	33%	2%	11%	4%	1%	1%	0%	0%	0%	0%	0%	1%	13%	3%
Ba2	809	0%	0%	0%	0%	2%	1%	2%	2%	3%	13%	8%	32%	3%	10%	2%	1%	0%	1%	0%	0%	0%	0%	14%	4%
Ba3	1,397	0%	0%	0%	0%	1%	1%	1%	2%	2%	5%	9%	4%	42%	7%	6%	2%	2%	0%	0%	0%	0%	1%	10%	8%
B1	1,085	0%	0%	0%	0%	1%	1%	1%	3%	1%	6%	8%	9%	5%	31%	3%	8%	5%	1%	0%	0%	0%	2%	13%	3%
B2	1,225	0%	0%	0%	0%	0%	0%	1%	1%	1%	3%	4%	5%	7%	4%	35%	4%	10%	3%	1%	0%	0%	2%	14%	3%
B3	1,509	0%	0%	0%	0%	0%	0%	1%	1%	1%	2%	4%	3%	4%	8%	3%	33%	13%	9%	2%	1%	0%	6%	8%	3%
Caa1	2,394	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	2%	2%	3%	4%	2%	40%	14%	4%	1%	0%	20%	4%	2%
Caa2	3,056	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	3%	6%	3%	2%	42%	7%	3%	0%	27%	2%	1%
Caa3	2,856	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	2%	2%	2%	3%	2%	53%	7%	0%	23%	2%	1%
Ca	3,697	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	2%	2%	3%	3%	66%	2%	16%	2%	1%
C	5,807	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	1%	2%	3%	3%	45%	38%	3%	1%
Total	34,329																								

RMBS - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	23,405	3%	0%	1%	0%	1%	1%	1%	3%	2%	3%	2%	2%	3%	2%	2%	2%	4%	4%	2%	1%	1%	8%	17%	36%	
Aa1	1,305	0%	0%	1%	1%	1%	1%	5%	3%	3%	4%	3%	2%	4%	4%	2%	2%	2%	2%	2%	6%	6%	23%	13%	10%	
Aa2	2,741	0%	0%	1%	0%	1%	1%	3%	2%	1%	3%	5%	3%	4%	6%	3%	3%	2%	4%	3%	4%	5%	18%	8%	19%	
Aa3	1,016	2%	1%	2%	1%	1%	1%	2%	1%	1%	3%	3%	2%	3%	5%	2%	2%	4%	2%	3%	3%	6%	21%	9%	20%	
A1	737	0%	0%	1%	1%	2%	1%	2%	3%	1%	2%	1%	2%	3%	5%	2%	3%	4%	3%	2%	6%	12%	26%	6%	14%	
A2	2,742	0%	0%	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	3%	2%	2%	3%	2%	4%	9%	10%	32%	6%	16%	
A3	1,248	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	1%	0%	1%	2%	1%	2%	1%	3%	3%	9%	20%	42%	3%	9%	
Baa1	1,248	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	1%	1%	0%	1%	1%	1%	1%	1%	1%	6%	17%	50%	6%	9%	
Baa2	2,602	0%	0%	0%	0%	1%	0%	1%	1%	1%	0%	0%	1%	0%	1%	0%	1%	1%	1%	1%	4%	10%	55%	6%	16%	
Baa3	1,451	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	1%	0%	1%	0%	1%	3%	8%	65%	6%	10%	
Ba1	457	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	0%	0%	1%	0%	1%	1%	0%	1%	1%	4%	70%	8%	10%	
Ba2	763	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	1%	1%	0%	1%	2%	3%	71%	5%	14%	
Ba3	121	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	2%	1%	1%	1%	1%	0%	1%	0%	1%	3%	9%	54%	7%	18%	
B1	46	0%	0%	0%	0%	2%	2%	2%	2%	0%	0%	2%	15%	0%	7%	0%	2%	2%	0%	0%	0%	4%	28%	11%	20%	
B2	286	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	2%	0%	2%	5%	71%	2%	15%	
B3	70	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	1%	4%	1%	0%	0%	0%	11%	10%	6%	1%	41%	4%	16%	
Caa1	48	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	21%	0%	17%	4%	52%	
Caa2	23	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	9%	4%	57%	0%	22%	
Caa3	14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	0%	50%	7%	21%	
Ca	58	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	2%	0%	0%	0%	0%	0%	0%	21%	0%	45%	9%	22%	
C	33	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	9%	73%	3%	9%	
Total	40,414																									

We are now reporting default rates for structured finance credits, a switch from the impairment rates which we reported previously under the old guidance.

For Moody's definition on default, please refer to [Rating Symbols and Definitions](#)

Commercial Mortgage Backed Securities (CMBS)

CMBS - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	1,767	83%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	
Aa1	96	18%	66%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	0%	
Aa2	168	20%	10%	52%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	
Aa3	247	6%	8%	9%	65%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	
A1	196	7%	1%	9%	5%	60%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	
A2	204	2%	1%	7%	11%	9%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	0%	
A3	212	2%	0%	2%	3%	10%	5%	63%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	
Baa1	129	2%	0%	6%	5%	5%	12%	5%	46%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	0%	
Baa2	147	0%	0%	2%	1%	4%	4%	10%	8%	48%	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	20%	1%	
Baa3	260	1%	0%	1%	0%	3%	2%	5%	8%	4%	57%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%	
Ba1	133	1%	0%	1%	0%	2%	1%	3%	5%	9%	3%	46%	0%	3%	3%	0%	0%	1%	0%	0%	0%	0%	0%	24%	0%	
Ba2	155	0%	0%	1%	1%	0%	0%	0%	1%	3%	11%	9%	60%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	12%	1%	
Ba3	314	0%	0%	1%	0%	0%	0%	1%	1%	0%	0%	2%	2%	59%	4%	2%	4%	2%	3%	3%	2%	1%	0%	12%	0%	
B1	158	0%	0%	1%	1%	0%	1%	1%	0%	1%	8%	4%	6%	3%	46%	3%	5%	1%	1%	3%	1%	0%	0%	16%	1%	
B2	202	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	2%	6%	2%	61%	4%	3%	1%	2%	1%	0%	0%	11%	0%	
B3	155	0%	0%	0%	0%	1%	0%	0%	0%	0%	3%	3%	1%	1%	8%	1%	61%	4%	1%	1%	0%	1%	0%	16%	0%	
Caa1	184	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	3%	4%	4%	61%	7%	5%	1%	0%	2%	11%	1%	
Caa2	190	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	2%	1%	0%	1%	1%	4%	2%	63%	14%	0%	1%	1%	11%	1%	
Caa3	345	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	1%	2%	69%	2%	4%	3%	15%	0%	
Ca	93	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	2%	2%	6%	63%	9%	3%	11%	0%	
C	202	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	2%	0%	65%	22%	6%	1%	
Total	5,557																									

CMBS - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	1,708	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	59%	0%	
Aa1	120	13%	15%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	
Aa2	241	16%	8%	24%	1%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	0%	
Aa3	199	8%	7%	7%	21%	4%	3%	1%	1%	2%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	1%	
A1	170	5%	4%	8%	5%	22%	3%	6%	1%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	44%	0%	
A2	223	4%	0%	5%	7%	5%	27%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	0%	
A3	205	8%	2%	4%	3%	6%	3%	18%	0%	2%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	49%	0%	
Baa1	192	4%	1%	3%	4%	2%	5%	3%	17%	2%	1%	4%	0%	3%	0%	0%	0%	1%	0%	0%	0%	0%	0%	51%	1%	
Baa2	225	4%	2%	1%	1%	3%	1%	7%	9%	17%	2%	1%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	50%	0%	
Baa3	324	2%	0%	2%	1%	2%	2%	2%	4%	3%	29%	3%	1%	2%	1%	0%	0%	0%	0%	0%	1%	0%	2%	43%	0%	
Ba1	212	1%	0%	2%	1%	3%	1%	3%	4%	5%	2%	18%	2%	3%	1%	1%	3%	0%	0%	0%	0%	0%	1%	46%	0%	
Ba2	205	2%	0%	0%	1%	1%	0%	1%	0%	2%	6%	5%	32%	2%	3%	1%	1%	2%	0%	0%	0%	0%	2%	34%	0%	
Ba3	486	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%	1%	1%	30%	7%	4%	7%	5%	5%	9%	2%	1%	0%	23%	0%	
B1	193	3%	0%	2%	1%	0%	1%	2%	1%	1%	2%	2%	2%	2%	18%	6%	4%	3%	4%	3%	0%	2%	2%	43%	1%	
B2	233	2%	0%	2%	0%	0%	0%	1%	1%	1%	1%	3%	1%	3%	2%	31%	6%	5%	2%	4%	0%	1%	3%	30%	0%	
B3	248	0%	0%	1%	0%	0%	1%	0%	1%	0%	3%	1%	2%	1%	4%	1%	19%	6%	4%	7%	1%	2%	8%	37%	0%	
Caa1	259	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	1%	2%	2%	3%	2%	24%	9%	10%	1%	2%	12%	28%	0%	
Caa2	289	0%	0%	0%	1%	1%	0%	1%	0%	0%	0%	2%	1%	1%	2%	1%	4%	2%	24%	13%	1%	4%	18%	24%	0%	
Caa3	466	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%	1%	2%	2%	31%	3%	7%	24%	26%	0%	
Ca	215	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	4%	21%	15%	44%	10%	0%	
C	525	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	12%	73%	10%	3%	
Total	6,938																									

CMBS - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	2,668	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	1%	1%	4%	0%	0%	0%	41%	47%
Aa1	173	2%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	1%	0%	1%	33%	60%
Aa2	466	3%	0%	2%	1%	1%	0%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	45%	40%
Aa3	251	4%	2%	1%	2%	2%	0%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	2%	51%	29%
A1	166	0%	0%	1%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	1%	1%	1%	0%	1%	0%	0%	0%	1%	45%	48%
A2	477	3%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%	1%	0%	0%	5%	42%	40%
A3	349	3%	1%	1%	1%	1%	0%	0%	2%	1%	1%	1%	1%	1%	1%	1%	2%	0%	1%	1%	0%	0%	7%	50%	24%
Baa1	294	3%	0%	1%	0%	1%	1%	2%	1%	0%	1%	1%	0%	0%	2%	0%	1%	1%	1%	2%	1%	2%	10%	47%	22%
Baa2	471	1%	0%	1%	0%	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%	0%	1%	0%	1%	1%	0%	1%	13%	41%	32%
Baa3	432	1%	1%	1%	0%	1%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	1%	1%	2%	0%	1%	20%	40%	25%
Ba1	265	3%	0%	0%	1%	1%	0%	0%	0%	1%	1%	2%	0%	1%	2%	0%	1%	0%	1%	2%	0%	0%	29%	38%	16%
Ba2	320	1%	0%	1%	1%	1%	1%	0%	1%	1%	1%	0%	1%	1%	1%	1%	1%	0%	2%	1%	1%	2%	32%	35%	18%
Ba3	252	2%	0%	0%	0%	1%	0%	0%	1%	0%	0%	2%	0%	1%	2%	1%	1%	1%	0%	2%	1%	1%	45%	29%	9%
B1	196	1%	0%	1%	0%	0%	1%	2%	1%	1%	1%	1%	2%	1%	0%	0%	1%	2%	2%	2%	0%	1%	58%	21%	6%
B2	221	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	1%	1%	1%	2%	2%	0%	56%	23%	10%
B3	207	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%	1%	67%	17%	4%
Caa1	38	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	0%	0%	0%	5%	3%	0%	3%	0%	3%	0%	0%	71%	3%	8%
Caa2	44	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	2%	2%	0%	0%	0%	0%	2%	0%	0%	73%	7%	11%
Caa3	20	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	80%	10%	10%
Ca	14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	71%	0%	29%
C	15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	73%	0%	27%
Total	7,339																								

CMBS: Commercial real estate (CRE) CDOs, where 70% or more of the collateral is comprised of CRE loans, are classified as CMBS. If the collateral backing the transaction contains less than 70% CRE loans, then the deal is classified as a CDO.

Collateralized Loan Obligations (CLOs)

CLOs - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	1,861	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%
Aa1	158	58%	20%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	0%
Aa2	366	14%	3%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
Aa3	97	43%	19%	2%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	28%	0%
A1	101	31%	20%	8%	3%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	0%
A2	279	5%	4%	3%	5%	6%	71%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%
A3	101	6%	5%	7%	13%	14%	12%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	0%
Baa1	91	1%	7%	5%	8%	18%	14%	8%	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%
Baa2	116	2%	3%	8%	2%	7%	10%	9%	9%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	0%
Baa3	259	0%	0%	0%	2%	3%	4%	4%	7%	8%	66%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Ba1	134	0%	0%	1%	2%	1%	4%	9%	9%	16%	17%	28%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%
Ba2	163	0%	0%	0%	0%	0%	1%	0%	4%	3%	15%	15%	53%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%
Ba3	250	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	6%	10%	77%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
B1	77	0%	0%	0%	0%	0%	0%	0%	1%	3%	0%	5%	13%	19%	49%	0%	1%	0%	0%	0%	0%	0%	0%	8%	0%
B2	118	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	3%	1%	3%	88%	0%	0%	0%	0%	0%	0%	0%	3%	0%
B3	48	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	4%	4%	77%	0%	0%	4%	0%	0%	0%	8%	0%
Caa1	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	20%	10%	0%	0%	0%	0%	50%	0%
Caa2	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Caa3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	80%	10%	0%	0%	0%	10%	0%
Ca	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	0%	33%	0%	
C	-																								
Total	4,247																								

CLOs - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	1,320	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	64%	0%
Aa1	345	52%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	0%
Aa2	172	35%	1%	5%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	0%
Aa3	168	50%	7%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42%	0%
A1	155	42%	6%	2%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	0%
A2	176	32%	7%	1%	1%	3%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%	0%
A3	191	30%	6%	3%	1%	3%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	54%	0%
Baa1	149	23%	11%	5%	5%	8%	3%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	0%
Baa2	151	13%	7%	3%	7%	5%	7%	5%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	0%
Baa3	206	6%	4%	6%	3%	9%	8%	5%	4%	2%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	0%
Ba1	295	3%	2%	3%	2%	6%	4%	4%	6%	8%	6%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%	0%
Ba2	244	3%	1%	1%	3%	1%	3%	5%	8%	7%	9%	11%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	0%
Ba3	216	0%	0%	0%	1%	0%	1%	0%	3%	1%	8%	10%	11%	19%	2%	0%	1%	0%	0%	1%	0%	0%	0%	40%	0%
B1	185	1%	0%	1%	0%	0%	1%	2%	1%	3%	4%	7%	13%	12%	16%	1%	4%	1%	2%	1%	0%	0%	0%	32%	0%
B2	29	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	3%	7%	21%	10%	14%	3%	0%	3%	7%	0%	0%	0%	28%	0%
B3	20	5%	0%	0%	0%	0%	0%	0%	0%	5%	5%	0%	5%	5%	10%	5%	5%	0%	0%	0%	0%	0%	10%	45%	0%
Caa1	15	0%	0%	0%	7%	0%	0%	7%	13%	0%	0%	0%	13%	13%	0%	0%	7%	0%	7%	0%	0%	0%	0%	33%	0%
Caa2	17	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	18%	0%	0%	6%	12%	0%	0%	0%	53%	0%
Caa3	21	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	5%	5%	5%	0%	0%	0%	0%	14%	0%	10%	57%	0%
Ca	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	11%	11%	0%	0%	0%	0%	0%	22%	33%	0%
C	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	75%	0%
Total	4,088																								

CLOs - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	619	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	28%	
Aa1	42	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	69%	12%	
Aa2	217	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	78%	15%	
Aa3	37	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	73%	
A1	57	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	25%	
A2	276	4%	1%	1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	77%	14%	
A3	86	10%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	50%	
Baa1	32	0%	0%	0%	0%	3%	0%	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	34%	
Baa2	381	1%	0%	0%	0%	0%	1%	1%	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	2%	68%	24%	
Baa3	110	0%	0%	0%	0%	2%	0%	0%	3%	1%	1%	3%	1%	3%	3%	0%	4%	0%	2%	2%	0%	0%	1%	45%	31%	
Ba1	34	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	3%	62%	26%	
Ba2	198	0%	0%	1%	0%	0%	1%	0%	1%	0%	1%	0%	0%	2%	2%	0%	0%	0%	0%	0%	1%	0%	5%	66%	24%	
Ba3	87	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	6%	2%	0%	14%	26%	48%	
B1	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	
B2	5	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	40%	0%	
B3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Caa1	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
Caa2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	67%	
Caa3	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	67%	
Ca	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
C	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
Total	2,216																									

Collateralized Debt Obligations (CDOs)

CDOs - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	247	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	3%
Aa1	58	33%	43%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	0%
Aa2	60	23%	8%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
Aa3	37	19%	22%	5%	49%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
A1	48	6%	8%	10%	19%	23%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	10%
A2	75	3%	8%	1%	11%	15%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	1%
A3	58	9%	2%	2%	10%	14%	9%	31%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	12%
Baa1	35	0%	0%	0%	9%	11%	14%	31%	11%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	11%
Baa2	31	3%	0%	0%	6%	10%	13%	10%	16%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Baa3	50	4%	0%	0%	4%	4%	8%	4%	8%	4%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	8%
Ba1	50	0%	0%	0%	4%	2%	6%	6%	6%	2%	16%	34%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	2%
Ba2	44	0%	0%	0%	7%	7%	0%	0%	2%	0%	16%	14%	34%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	2%
Ba3	32	0%	0%	3%	0%	0%	3%	0%	6%	0%	22%	6%	3%	25%	3%	0%	0%	0%	0%	0%	0%	0%	0%	28%	0%
B1	28	0%	0%	0%	0%	0%	0%	0%	7%	0%	7%	29%	4%	4%	25%	0%	0%	4%	0%	0%	0%	0%	0%	21%	0%
B2	42	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	2%	7%	60%	0%	2%	0%	0%	0%	0%	0%	21%	0%
B3	45	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	7%	7%	22%	11%	29%	2%	0%	0%	0%	0%	0%	7%	11%
Caa1	48	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	2%	4%	8%	15%	4%	10%	42%	0%	0%	0%	0%	0%	13%	0%
Caa2	48	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	2%	2%	0%	2%	0%	6%	8%	69%	2%	0%	0%	0%	6%	0%
Caa3	121	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%	0%	1%	2%	2%	3%	2%	70%	0%	1%	0%	12%	4%
Ca	309	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	2%	89%	1%	0%	5%	2%
C	488	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	89%	0%	4%	7%
Total	1,954																								

CDOs - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	314	24%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	74%	2%	
Aa1	64	13%	13%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	0%	
Aa2	49	10%	2%	20%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	2%	
Aa3	71	23%	1%	0%	6%	1%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	1%	
A1	72	15%	1%	4%	0%	7%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	68%	3%	
A2	77	16%	5%	3%	6%	3%	21%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	1%	
A3	77	6%	4%	5%	3%	3%	0%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%	6%	
Baa1	54	11%	4%	2%	7%	7%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%	6%	
Baa2	76	9%	11%	0%	17%	3%	0%	0%	5%	1%	0%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	51%	0%	
Baa3	65	6%	2%	2%	6%	12%	2%	0%	3%	3%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%	3%	
Ba1	95	5%	8%	3%	7%	8%	4%	7%	0%	1%	1%	5%	2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	43%	2%	
Ba2	107	5%	2%	1%	1%	2%	10%	6%	3%	3%	3%	5%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	55%	2%	
Ba3	52	0%	0%	0%	6%	2%	6%	4%	4%	0%	6%	8%	2%	4%	2%	0%	0%	0%	0%	0%	0%	0%	2%	56%	0%	
B1	69	1%	1%	3%	4%	1%	3%	3%	4%	0%	4%	9%	0%	1%	1%	0%	0%	0%	1%	1%	0%	0%	0%	52%	7%	
B2	55	0%	2%	0%	4%	0%	0%	2%	0%	0%	5%	0%	0%	7%	0%	13%	4%	5%	2%	0%	0%	0%	0%	55%	2%	
B3	47	0%	0%	0%	0%	4%	9%	0%	2%	0%	2%	0%	4%	0%	0%	0%	9%	6%	0%	0%	0%	0%	2%	51%	11%	
Caa1	67	0%	0%	0%	1%	0%	1%	0%	0%	0%	3%	3%	0%	0%	7%	4%	0%	12%	0%	1%	0%	0%	9%	55%	1%	
Caa2	102	0%	0%	1%	0%	1%	2%	0%	1%	0%	1%	1%	4%	2%	6%	8%	4%	4%	20%	6%	2%	0%	0%	38%	0%	
Caa3	274	0%	0%	0%	1%	0%	1%	1%	0%	0%	3%	2%	0%	0%	1%	2%	1%	3%	4%	22%	4%	1%	3%	45%	7%	
Ca	630	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	2%	0%	1%	1%	1%	3%	41%	3%	5%	28%	9%	
C	721	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	58%	17%	13%	9%	
Total	3,138																									

CDOs - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	2,052	2%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	7%	4%	7%	24%	48%
Aa1	206	0%	1%	0%	0%	0%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	8%	20%	57%
Aa2	672	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	9%	17%	19%	50%
Aa3	190	0%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	4%	2%	7%	24%	60%
A1	165	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	1%	1%	1%	12%	26%	58%
A2	521	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	1%	1%	1%	0%	0%	1%	1%	26%	17%	49%
A3	310	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%	1%	0%	0%	0%	31%	20%	45%
Baa1	125	0%	1%	0%	1%	2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	13%	15%	65%
Baa2	644	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	2%	34%	15%	45%
Baa3	188	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	5%	20%	17%	54%
Ba1	111	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	14%	18%	64%	
Ba2	171	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	3%	3%	9%	22%	61%
Ba3	92	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	12%	18%	50%
B1	38	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	26%	63%
B2	38	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	8%	11%	76%
B3	31	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	26%	16%	45%
Caa1	26	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	35%	15%	46%
Caa2	32	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	9%	53%
Caa3	40	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	28%	23%	48%
Ca	66	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	48%	14%	33%
C	65	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	66%	6%	23%
Total	5,783																								

CDO: Derivative securities such as structured notes and repackaged securities are not considered as part of this sector. Commercial real estate (CRE) CDOs are also excluded (see the definition of CMBS).

Asset-Backed Commercial Paper (ABCP)

ABCP - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	173	64%	0%	0%	0%	0%	35%	1%
P-2	17	12%	47%	0%	0%	0%	35%	6%
P-3	2	0%	0%	50%	0%	0%	0%	50%
NP	-							
Total	192							

ABCP - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	204	43%	0%	0%	0%	0%	55%	1%
P-2	31	26%	26%	3%	0%	0%	29%	16%
P-3	1	0%	0%	0%	0%	0%	100%	0%
NP	-							
Total	236							

ABCP - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	474	12%	1%	0%	0%	2%	14%	70%
P-2	4	0%	0%	0%	0%	0%	25%	75%
P-3	-							
NP	-							
Total	478							

This subclass covers all Moody's rated public short-term issuances

Other Asset Backed Securities (ABS)

Other ABS - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	2,361	76%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	0%
Aa1	265	26%	59%	0%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%
Aa2	255	13%	6%	65%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%
Aa3	235	9%	5%	9%	63%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%
A1	275	3%	5%	17%	5%	33%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
A2	323	2%	3%	13%	4%	7%	57%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	0%
A3	165	1%	3%	2%	7%	12%	5%	48%	2%	0%	2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	18%	0%
Baa1	148	0%	0%	3%	3%	6%	4%	7%	56%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	18%	0%
Baa2	166	0%	0%	2%	2%	5%	2%	6%	6%	60%	2%	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	11%	1%
Baa3	109	0%	0%	0%	2%	3%	3%	6%	8%	5%	43%	4%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%
Ba1	75	0%	0%	3%	0%	1%	0%	1%	1%	5%	12%	51%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	1%
Ba2	96	0%	0%	0%	0%	0%	0%	4%	4%	6%	6%	4%	4%	55%	4%	1%	0%	3%	1%	0%	0%	0%	0%	10%	0%
Ba3	53	0%	0%	0%	0%	0%	0%	2%	2%	4%	6%	2%	6%	53%	8%	4%	0%	0%	0%	0%	0%	0%	0%	15%	0%
B1	102	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	2%	6%	56%	3%	3%	0%	1%	0%	0%	0%	0%	27%	0%
B2	71	0%	0%	0%	0%	0%	0%	1%	1%	0%	0%	1%	0%	1%	3%	56%	14%	4%	0%	0%	0%	0%	0%	15%	1%
B3	59	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	2%	66%	15%	2%	2%	0%	0%	0%	7%	0%
Caa1	47	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	4%	4%	53%	2%	2%	2%	2%	0%	23%	0%
Caa2	48	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	63%	4%	8%	0%	0%	17%	6%
Caa3	58	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	7%	0%	72%	2%	2%	2%	14%	0%
Ca	43	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	2%	0%	0%	2%	0%	2%	0%	0%	56%	5%	0%	28%	2%
C	86	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	90%	0%	7%	3%
Total	5,040																								

Other ABS - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	2,331	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	0%
Aa1	221	10%	42%	0%	1%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	0%
Aa2	238	11%	3%	35%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	47%	0%
Aa3	288	16%	3%	3%	35%	2%	2%	1%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%
A1	250	16%	4%	4%	3%	17%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	51%	0%
A2	407	3%	1%	5%	4%	3%	29%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%	1%
A3	447	1%	1%	6%	2%	4%	1%	10%	0%	1%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	72%	0%
Baa1	200	7%	1%	3%	5%	5%	4%	6%	26%	2%	1%	1%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%
Baa2	287	5%	1%	1%	0%	1%	0%	6%	5%	17%	4%	2%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	52%	2%
Baa3	145	2%	0%	6%	0%	6%	0%	2%	3%	5%	12%	6%	2%	1%	0%	0%	0%	1%	0%	0%	0%	0%	1%	52%	3%
Ba1	137	0%	1%	2%	1%	3%	1%	0%	1%	1%	9%	12%	1%	0%	4%	1%	1%	0%	1%	3%	0%	0%	0%	56%	1%
Ba2	128	0%	0%	2%	2%	3%	0%	3%	2%	0%	5%	2%	28%	7%	5%	1%	2%	0%	0%	0%	0%	1%	0%	36%	1%
Ba3	206	0%	0%	0%	0%	0%	0%	1%	1%	2%	0%	1%	1%	8%	3%	1%	1%	0%	0%	1%	0%	0%	0%	78%	0%
B1	115	0%	0%	0%	0%	0%	0%	0%	1%	5%	0%	1%	1%	4%	17%	4%	3%	3%	0%	2%	0%	1%	2%	57%	0%
B2	92	0%	0%	0%	0%	0%	0%	1%	1%	0%	3%	0%	1%	1%	2%	26%	17%	5%	0%	2%	0%	1%	2%	36%	0%
B3	98	0%	0%	4%	1%	1%	1%	0%	1%	0%	1%	2%	1%	1%	3%	2%	24%	11%	2%	2%	1%	0%	1%	35%	5%
Caa1	87	0%	0%	0%	0%	1%	0%	2%	0%	0%	0%	0%	1%	1%	3%	1%	5%	20%	6%	6%	6%	2%	9%	36%	1%
Caa2	71	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	1%	1%	1%	0%	0%	24%	7%	6%	8%	10%	34%	4%
Caa3	73	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	3%	1%	0%	1%	0%	23%	4%	8%	7%	47%	3%
Ca	86	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	2%	0%	1%	0%	1%	13%	42%	10%	22%	5%
C	70	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	1%	0%	37%	16%	33%	9%
Total	5,977																								

Other ABS - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	5,122	7%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	64%	
Aa1	126	0%	26%	2%	1%	0%	1%	2%	0%	1%	0%	1%	1%	1%	2%	0%	0%	0%	0%	0%	0%	1%	0%	0%	18%	44%
Aa2	307	1%	1%	3%	0%	1%	1%	1%	1%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	1%	0%	16%	71%
Aa3	130	0%	0%	0%	4%	0%	2%	1%	0%	0%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	1%	0%	16%	75%
A1	280	0%	0%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	15%	76%
A2	834	0%	1%	1%	0%	0%	6%	1%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	60%
A3	113	1%	0%	0%	0%	1%	1%	1%	7%	3%	0%	1%	1%	1%	0%	1%	1%	1%	0%	2%	1%	4%	1%	14%	58%	
Baa1	191	1%	1%	0%	1%	1%	0%	0%	2%	1%	1%	1%	0%	1%	0%	0%	1%	1%	1%	2%	0%	1%	4%	30%	55%	
Baa2	454	0%	0%	0%	0%	0%	0%	0%	1%	2%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	24%	66%	
Baa3	322	1%	0%	0%	0%	1%	0%	1%	2%	0%	3%	1%	1%	1%	0%	2%	2%	0%	0%	0%	0%	0%	2%	25%	58%	
Ba1	132	2%	0%	0%	0%	4%	0%	2%	5%	2%	2%	1%	0%	2%	3%	0%	0%	0%	0%	0%	0%	2%	1%	28%	49%	
Ba2	93	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	6%	0%	1%	2%	3%	1%	0%	0%	0%	0%	2%	24%	59%	
Ba3	39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	3%	8%	15%	72%	
B1	31	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	6%	0%	26%	6%	58%	
B2	39	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	5%	0%	3%	5%	5%	21%	10%	46%	
B3	31	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	3%	0%	0%	0%	0%	6%	19%	6%	61%	
Caa1	20	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	65%	20%	5%	
Caa2	23	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	4%	4%	30%	4%	43%	
Caa3	23	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	4%	74%	0%	17%	
Ca	23	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	17%	65%	4%	9%	
C	41	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	71%	10%	10%	
Total	8,374																									

Other Structured Finance Products (SPFs)

Other SFPs - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)			
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	310	91%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
Aa1	40	45%	40%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%
Aa2	28	25%	29%	36%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%
Aa3	92	2%	3%	60%	29%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
A1	74	0%	1%	22%	1%	70%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%
A2	132	0%	0%	6%	2%	6%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
A3	119	3%	2%	3%	12%	12%	8%	55%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%
Baa1	75	0%	0%	3%	4%	9%	15%	15%	37%	0%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%
Baa2	40	0%	0%	0%	0%	0%	13%	8%	5%	48%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Baa3	40	0%	0%	0%	0%	3%	5%	0%	10%	18%	45%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%
Ba1	20	0%	0%	0%	0%	0%	15%	0%	10%	5%	5%	55%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Ba2	18	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	33%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	22%	0%
Ba3	32	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	56%	22%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%
B1	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	60%	0%	0%	0%	0%	20%	0%
B2	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	25%	25%	0%	0%	0%	0%	0%	0%	25%	0%
B3	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	20%	40%
Caa1	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	25%	0%	50%	0%	0%	0%	13%	0%
Caa2	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Caa3	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	60%	0%
Ca	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	78%	0%	0%	11%	0%
C	13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	92%	0%	8%	0%
Total	1,077																								

Other SFPs - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	315	73%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	2%	
Aa1	43	33%	33%	12%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	0%	
Aa2	36	22%	14%	31%	3%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	28%	0%	
Aa3	87	13%	1%	16%	10%	24%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	
A1	100	5%	0%	1%	10%	12%	51%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	1%	
A2	99	0%	0%	6%	1%	3%	46%	9%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	2%	
A3	157	3%	0%	13%	8%	7%	7%	32%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	2%	
Baa1	94	1%	0%	1%	5%	11%	11%	7%	23%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	0%	
Baa2	62	0%	0%	0%	0%	2%	3%	3%	2%	29%	13%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	42%	5%	
Baa3	61	0%	5%	0%	0%	2%	0%	3%	3%	13%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	59%	0%	
Ba1	31	0%	0%	0%	0%	0%	10%	0%	3%	0%	16%	32%	3%	3%	0%	3%	0%	0%	0%	0%	0%	0%	0%	29%	0%	
Ba2	26	0%	0%	0%	0%	0%	4%	0%	4%	0%	8%	23%	15%	12%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	
Ba3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	10%	
B1	29	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	62%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	31%	0%	
B2	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	9%	0%	0%	0%	0%	0%	36%	0%	0%	0%	45%	0%	
B3	16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%	13%	0%	0%	0%	0%	0%	81%	0%	
Caa1	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	33%	0%	
Caa2	9	0%	0%	0%	0%	0%	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	11%	0%	0%	0%	11%	0%	
Caa3	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	80%	0%	
Ca	33	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	21%	6%	0%	70%	3%	
C	22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	45%	0%	45%	5%	
Total	1,258																									

Other SFPs - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	543	8%	2%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	21%	62%	
Aa1	61	3%	5%	5%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	18%	66%	
Aa2	112	0%	1%	3%	0%	0%	0%	0%	1%	0%	0%	6%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	23%	64%	
Aa3	182	0%	2%	1%	1%	1%	0%	2%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%	16%	75%	
A1	115	0%	0%	1%	4%	0%	0%	2%	0%	3%	1%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	54%	
A2	176	0%	0%	0%	0%	7%	5%	10%	0%	1%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	16%	60%	
A3	112	0%	0%	0%	0%	0%	0%	0%	2%	0%	1%	0%	0%	0%	0%	1%	0%	0%	0%	1%	0%	1%	0%	22%	72%	
Baa1	68	0%	0%	0%	0%	0%	1%	1%	6%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	1%	16%	69%	
Baa2	118	0%	0%	0%	0%	0%	0%	2%	3%	0%	3%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	3%	4%	14%	70%	
Baa3	96	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	31%	64%	
Ba1	43	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	40%	53%	
Ba2	39	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	51%	
Ba3	45	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	2%	0%	0%	0%	0%	7%	89%	
B1	30	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	83%	
B2	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	17%	50%	
B3	18	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	0%	0%	0%	0%	28%	61%	
Caa1	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	
Caa2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	67%	
Caa3	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Ca	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
C	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Total	1,787																									

Other SFPs includes the following Moody's rated long-term product lines:

- » ABCP - Fully Supported
- » ABCP - Fully Supported LOC
- » ABCP - Mortgage Warehouse
- » ABCP - MTN
- » ABCP - Other ABCP - Partially Supported
- » CDO - Repackaged Securities
- » CDO - Repackaged Securities - CBO
- » CDO - Repackaged Securities - CLO
- » Covered Bonds *
- » Other - CAPCO
- » Other - Collateralized GICs
- » Other - Credit Derivatives
- » Other - DPC
- » Other - DPC (FS)
- » Other - Insurance Linked
- » Other - Other
- » Other - Preferred Stock
- » Other - Repackaged Securities
- » Other - Structured Covered Bonds
- » Other - Structured Notes
- » Other - Tax Credit Linked Structured Notes
- » Structured Investment Vehicles - ABCP
- » Structured Investment Vehicles - CDO

* Please note that single-issuer covered bonds are reported on deal level instead of on series level. The rationale is that ratings of a covered bond deal are almost always unambiguously the same as ratings of such deal's underlying series. Given a covered bond deal could have as many as 300 series issued under it, reporting on series level would introduce great amount of redundancy. In the rare cases where a covered bond deal has different ratings on its concurrently outstanding series, the rating for a covered bond deal is generally taken as the rating of the highest rated series.

Sovereign Issuers

Sovereign Issuers - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	14	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa1	4	0%	75%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa2	5	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa3	7	0%	0%	14%	86%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
A1	6	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
A2	3	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
A3	5	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Baa1	7	0%	0%	0%	0%	0%	0%	29%	57%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Baa2	13	0%	0%	0%	0%	0%	0%	0%	0%	77%	15%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Baa3	7	0%	0%	0%	0%	0%	0%	0%	0%	14%	86%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ba1	7	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	86%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ba2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	33%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ba3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
B1	15	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	80%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%
B2	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	75%	25%	0%	0%	0%	0%	0%	0%	0%	0%
B3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	10%	70%	10%	0%	0%	0%	0%	0%	0%	0%
Caa1	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	50%	0%	0%	0%	0%	0%
Caa2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
Caa3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	50%	0%	0%
Ca	-																								
C	-																								
Total	128																								

Sovereign Issuers - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	16	88%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa1	2	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa2	5	0%	0%	80%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa3	9	0%	0%	22%	67%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A1	4	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A2	3	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A3	2	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa1	10	0%	0%	0%	0%	0%	0%	20%	30%	30%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa2	7	0%	0%	0%	0%	0%	0%	14%	0%	57%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa3	13	0%	0%	0%	0%	0%	0%	8%	0%	31%	38%	15%	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ba1	7	0%	0%	0%	0%	0%	0%	0%	14%	14%	14%	43%	0%	0%	0%	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	
Ba2	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ba3	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	11%	78%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
B1	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	58%	25%	8%	0%	0%	0%	0%	0%	0%	0%	0%	
B2	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	17%	50%	0%	0%	17%	0%	0%	0%	0%	0%	
B3	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	25%	13%	0%	0%	0%	0%	50%	0%	0%	
Caa1	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	33%	0%	0%	0%	0%	0%	0%	
Caa2	-																									
Caa3	-																									
Ca	-																									
C	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	
Total	119																									

Sovereign Issuers - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																					Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)
Aaa	20	70%	10%	5%	0%	0%	0%	0%	5%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa1	2	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa2	2	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Aa3	3	0%	0%	0%	67%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
A1	8	0%	13%	38%	0%	25%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%
A2	9	0%	0%	11%	11%	22%	33%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	0%	0%
A3	6	0%	0%	17%	17%	0%	0%	50%	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Baa1	6	0%	0%	0%	17%	17%	0%	17%	17%	17%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Baa2	5	0%	0%	0%	0%	0%	0%	0%	20%	20%	0%	20%	0%	20%	0%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%
Baa3	3	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	33%	0%	33%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ba1	6	0%	0%	0%	0%	0%	0%	0%	0%	33%	17%	33%	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%
Ba2	5	0%	0%	0%	0%	0%	0%	0%	0%	20%	20%	20%	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ba3	4	0%	0%	0%	0%	0%	0%	25%	0%	0%	50%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
B1	6	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	17%	17%	17%	0%	0%	0%	0%	0%	0%	33%	0%	0%
B2	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%	40%	0%	0%	20%	0%	0%	0%	0%	20%
B3	6	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	17%	17%	17%	17%	0%	0%	0%	0%	0%	17%	0%	0%
Caa1	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	25%	0%	25%
Caa2	-																								
Caa3	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Ca	-																								
C	-																								
Total	101																								

United States Public Finance

United States Public Finance - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	657	91%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	
Aa1	917	3%	93%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	
Aa2	2,829	0%	3%	92%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%	
Aa3	2,490	0%	0%	3%	88%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	
A1	2,768	0%	0%	0%	3%	84%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	6%	
A2	1,238	0%	0%	0%	1%	4%	84%	4%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	4%	
A3	608	0%	0%	0%	0%	1%	4%	80%	6%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	
Baa1	322	0%	0%	0%	0%	0%	1%	6%	75%	5%	3%	1%	1%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	2%	6%	
Baa2	232	0%	0%	0%	0%	0%	2%	1%	5%	73%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	8%	
Baa3	174	0%	0%	0%	0%	0%	2%	2%	2%	5%	71%	3%	2%	3%	0%	0%	1%	0%	0%	0%	0%	0%	0%	2%	7%	
Ba1	78	0%	0%	0%	0%	0%	4%	5%	13%	6%	3%	41%	5%	1%	0%	1%	0%	4%	0%	0%	0%	0%	0%	0%	17%	
Ba2	34	0%	0%	0%	0%	0%	0%	0%	6%	6%	12%	3%	41%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	
Ba3	24	0%	0%	0%	0%	0%	4%	0%	0%	4%	4%	4%	17%	50%	0%	0%	0%	4%	0%	8%	0%	0%	0%	0%	4%	
B1	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	
B2	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
B3	9	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	33%	22%	0%	0%	22%	0%	0%	0%	11%	
Caa1	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	33%	33%	0%	0%	0%	0%	
Caa2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	33%	0%	0%	0%	33%	
Caa3	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	33%	
Ca	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	
C	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	33%	0%	
Total	12,407																									

United States Public Finance - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	843	68%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	17%	
Aa1	919	4%	81%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	5%	
Aa2	3,069	0%	4%	78%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	8%	
Aa3	2,643	0%	0%	6%	70%	7%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	10%	
A1	3,059	0%	0%	0%	7%	65%	6%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	13%	
A2	1,213	0%	0%	0%	2%	9%	61%	7%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	11%	
A3	528	0%	0%	0%	1%	4%	10%	56%	8%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	14%	
Baa1	340	0%	0%	0%	0%	0%	3%	13%	42%	10%	4%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	18%	
Baa2	201	0%	0%	0%	0%	1%	1%	2%	10%	47%	8%	3%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	
Baa3	148	0%	1%	0%	0%	0%	1%	2%	5%	7%	45%	6%	1%	3%	0%	0%	0%	1%	0%	0%	2%	0%	1%	5%	20%	
Ba1	132	0%	0%	1%	0%	0%	7%	6%	9%	5%	5%	11%	3%	1%	0%	0%	0%	1%	0%	1%	1%	0%	0%	0%	49%	
Ba2	28	0%	0%	0%	0%	0%	0%	0%	4%	7%	7%	7%	21%	7%	7%	0%	0%	0%	0%	4%	0%	0%	0%	0%	36%	
Ba3	19	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%	5%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	53%	
B1	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	30%	0%	0%	20%	10%	0%	0%	0%	10%	0%	10%	
B2	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	27%	9%	9%	0%	0%	0%	0%	0%	0%	0%	45%	
B3	10	0%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	60%	
Caa1	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	0%	33%	0%	50%	
Caa2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	0%	0%	0%	0%	33%	0%	33%	
Caa3	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Ca	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	50%	
C	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	67%	0%	33%	0%	
Total	13,188																									

United States Public Finance - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	1,249	28%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	22%	
Aa1	743	17%	48%	13%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	10%	
Aa2	2,302	2%	11%	50%	9%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	14%	
Aa3	2,405	0%	4%	23%	33%	8%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	12%	13%	
A1	2,787	0%	1%	12%	13%	30%	6%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	18%	
A2	1,627	0%	0%	5%	15%	16%	14%	4%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	24%	17%	
A3	1,189	0%	0%	2%	7%	16%	7%	9%	3%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	19%	
Baa1	701	0%	0%	0%	3%	11%	4%	5%	6%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	24%	
Baa2	481	0%	0%	0%	1%	4%	7%	3%	5%	6%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	1%	41%	26%	
Baa3	376	0%	0%	0%	0%	2%	3%	2%	3%	4%	5%	2%	1%	1%	0%	0%	1%	1%	0%	0%	0%	0%	1%	41%	35%	
Ba1	52	0%	0%	0%	0%	0%	2%	6%	0%	2%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	27%	56%	
Ba2	42	0%	0%	0%	0%	0%	0%	2%	5%	2%	5%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	0%	10%	19%	52%	
Ba3	22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	0%	0%	5%	0%	0%	0%	14%	45%	27%	
B1	12	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%	0%	0%	25%	25%	42%	
B2	13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%	0%	0%	0%	0%	0%	0%	0%	23%	38%	31%	
B3	7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	29%	29%	
Caa1	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	
Caa2	5	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	60%	20%	
Caa3	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	67%	
Ca	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
C	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	50%	
Total	14,023																									

International Public Finance

International Public Finance - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	19	95%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa1	16	0%	88%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa2	16	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa3	4	0%	0%	25%	50%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A1	16	0%	0%	0%	0%	94%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A2	4	0%	0%	0%	0%	0%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	
A3	5	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa1	8	0%	0%	0%	0%	0%	0%	0%	88%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa2	21	0%	0%	0%	0%	0%	0%	0%	5%	76%	10%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa3	21	0%	0%	0%	0%	0%	0%	0%	0%	0%	62%	19%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	
Ba1	19	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	79%	5%	5%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	
Ba2	33	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	73%	6%	15%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	
Ba3	22	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	77%	9%	9%	0%	0%	0%	0%	0%	0%	0%	0%	5%	
B1	8	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	63%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
B2	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	83%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
B3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	50%	
Caa1	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	83%	0%	17%	0%	0%	0%	0%	0%	
Caa2	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
Caa3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	50%	0%	0%	
Ca	-																									
C	-																									
Total	231																									

International Public Finance - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	23	74%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	
Aa1	15	7%	73%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa2	14	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Aa3	16	0%	0%	6%	13%	81%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A1	4	0%	0%	0%	0%	50%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	0%	
A2	4	0%	0%	0%	0%	25%	75%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
A3	5	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa1	8	0%	0%	0%	0%	0%	0%	0%	50%	13%	13%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa2	15	0%	0%	0%	0%	0%	0%	0%	13%	67%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	
Baa3	29	0%	0%	0%	0%	0%	0%	0%	7%	21%	28%	31%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	3%	
Ba1	20	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	30%	35%	5%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	
Ba2	23	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	39%	9%	17%	4%	0%	0%	0%	0%	0%	0%	0%	0%	26%	
Ba3	28	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	18%	54%	7%	7%	4%	0%	0%	0%	0%	0%	0%	0%	7%	
B1	16	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	13%	19%	6%	0%	0%	0%	0%	0%	0%	0%	0%	44%	
B2	6	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	17%	33%	0%	0%	0%	0%	0%	0%	0%	0%	33%	
B3	10	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	50%	0%	0%	0%	0%	20%	0%	20%	
Caa1	3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
Caa2	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	
Caa3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	
Ca	-																									
C	-																									
Total	242																									

International Public Finance - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)																						Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	Default	Paid Off	Withdrawn (other)	
Aaa	23	57%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	
Aa1	15	13%	13%	7%	7%	0%	0%	13%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	
Aa2	28	7%	11%	11%	0%	0%	0%	0%	0%	18%	4%	4%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	36%	
Aa3	30	0%	10%	7%	0%	3%	0%	0%	0%	10%	0%	3%	10%	0%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	53%	
A1	10	0%	0%	20%	0%	0%	0%	0%	0%	10%	10%	10%	10%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	
A2	14	0%	0%	14%	0%	7%	0%	0%	0%	14%	0%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	7%	36%	
A3	7	0%	0%	14%	0%	14%	29%	14%	0%	0%	0%	29%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa1	4	0%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Baa2	5	0%	0%	0%	0%	0%	0%	0%	0%	20%	0%	60%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	
Baa3	14	0%	0%	0%	0%	0%	0%	0%	7%	0%	50%	29%	7%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Ba1	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	64%	
Ba2	16	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	13%	13%	13%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	
Ba3	20	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	5%	30%	5%	0%	5%	0%	0%	0%	0%	0%	5%	0%	45%	
B1	11	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	27%	0%	0%	0%	9%	0%	0%	0%	0%	0%	0%	55%	
B2	4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	50%	0%	0%	
B3	2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%	
Caa1	-																									
Caa2	-																									
Caa3	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	
Ca	1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	
C	-																									
Total	216																									

Short Term Corporate Commercial Paper

Short Term Corporate Commercial Paper - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	620	96%	2%	0%	0%	0%	2%	1%
P-2	547	3%	89%	2%	1%	0%	3%	1%
P-3	75	0%	23%	56%	11%	0%	9%	1%
NP	110	0%	1%	5%	79%	0%	10%	5%
Total	1,352							

Short Term Corporate Commercial Paper - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	581	88%	5%	0%	0%	0%	6%	1%
P-2	522	8%	73%	4%	3%	0%	9%	3%
P-3	83	1%	34%	30%	8%	0%	16%	11%
NP	134	0%	4%	4%	55%	1%	15%	19%
Total	1,320							

Short Term Corporate Commercial Paper - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	789	44%	15%	1%	3%	1%	10%	27%
P-2	426	11%	38%	3%	3%	0%	12%	32%
P-3	52	4%	27%	15%	2%	0%	0%	52%
NP	63	3%	3%	3%	14%	3%	19%	54%
Total	1,330							

Short Term Municipal - P Scale

Short Term Municipal - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	74	100%	0%	0%	0%	0%	0%	0%
P-2	-							
P-3	-							
NP	-							
Total	74							

Short Term Municipal - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	59	98%	0%	0%	0%	0%	0%	2%
P-2	4	50%	0%	0%	0%	0%	0%	50%
P-3	-							
NP	-							
Total	63							

Short Term Municipal - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	P-1	P-2	P-3	NP	Default	Paid Off	Withdrawn (other)
P-1	33	48%	0%	0%	0%	0%	6%	45%
P-2	1	0%	0%	0%	0%	0%	0%	100%
P-3	-							
NP	-							
Total	34							

Short Term Municipal - MIG Scale

Short Term Municipal - 1-Year Transition and Default Rates

(December 31, 2014 through December 31, 2015)

Credit Ratings as of 12/31/2014		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2014 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	MIG 1	MIG 2	MIG 3	SG	Default	Paid Off	Withdrawn (other)
MIG 1	197	51%	0%	0%	0%	0%	42%	8%
MIG 2	11	18%	18%	9%	0%	0%	55%	0%
MIG 3	3	0%	0%	33%	0%	0%	33%	33%
SG	-							
Total	211							

Short Term Municipal - 3-Year Transition and Default Rates

(December 31, 2012 through December 31, 2015)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2012 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	MIG 1	MIG 2	MIG 3	SG	Default	Paid Off	Withdrawn (other)
MIG 1	307	19%	0%	0%	0%	0%	68%	13%
MIG 2	13	0%	0%	0%	0%	0%	85%	15%
MIG 3	-							
SG	1	0%	0%	0%	0%	0%	0%	100%
Total	321							

Short Term Municipal - 10-Year Transition and Default Rates

(December 31, 2005 through December 31, 2015)

Credit Ratings as of 12/31/2005		Credit Ratings as of 12/31/2015 (Percent)				Other Outcomes During 12/31/2005 - 12/31/2015 (Percent)		
Credit Ratings	Number of Ratings Outstanding	MIG 1	MIG 2	MIG 3	SG	Default	Paid Off	Withdrawn (other)
MIG 1	441	5%	0%	0%	0%	0%	90%	5%
MIG 2	2	0%	0%	0%	0%	0%	100%	0%
MIG 3	-							
SG	1	0%	0%	0%	0%	0%	100%	0%
Total	444							

Definition of Symbols

For definitions of the symbols, numbers and scores in the rating scales used by Moody's to denote credit rating categories and notches within those categories for the classes and subclasses of credit ratings shown in the Matrices, please refer to Moody's Investors Service Rating Symbols and Definitions guide, available at <https://www.moody's.com/Pages/amr002002.aspx>.

Definition of Default

Moody's definition of default is applicable only to debt or debt-like obligations (e.g., swap agreements). Four events constitute a debt default under Moody's definition:

- a) a missed or delayed disbursement of a contractually-obligated interest or principal payment (excluding missed payments cured within a contractually allowed grace period), as defined in credit agreements and indentures;
- b) a bankruptcy filing or legal receivership by the debt issuer or obligor that will likely cause a miss or delay in future contractually-obligated debt service payments;
- c) a distressed exchange whereby 1) an obligor offers creditors a new or restructured debt, or a new package of securities, cash or assets that amount to a diminished financial obligation relative to the original obligation and 2) the exchange has the effect of allowing the obligor to avoid a bankruptcy or payment default in the future;
or
- d) a change in the payment terms of a credit agreement or indenture imposed by the sovereign that results in a diminished financial obligation, such as a forced currency re-denomination (imposed by the debtor, himself, or his sovereign) or a forced change in some other aspect of the original promise, such as indexation or maturity.¹

Moody's definition of default does not include so-called "technical defaults," such as maximum leverage or minimum debt coverage violations, unless the obligor fails to cure the violation and fails to honor the resulting debt acceleration which may be required. For structured finance securities, technical defaults (such as breach of an overcollateralization test or certain other events of default as per the legal documentation of the issuer), or a temporary missed interest payment on a security whose terms allow for the deferral of such payments together with corresponding interest (such as PIKable securities) prior to its legal final maturity date do not constitute defaults. Also excluded are payments owed on long-term debt obligations which are missed due to purely technical or administrative errors which are 1) not related to the ability or willingness to make the payments and 2) are cured in very short order (typically, 1-2 business days). Finally, in select instances based on the facts and circumstances, missed payments on financial contracts or claims may be excluded if they are the result of legal disputes regarding the validity of those claims.

Credit Rating Histories

The credit rating histories required to be disclosed pursuant to 17 CFR 17g-7(b) are located on the corresponding issuer pages on Moody's website, www.moody's.com.

¹ Moreover, unlike a general tax on financial wealth, the imposition of a tax by a sovereign on the coupon or principal payment on a specific class of government debt instruments (even if retroactive) would represent a default. Targeted taxation on government securities would represent a default even if the government's action were motivated by fairness or other considerations, rather than inability or unwillingness to pay.