



Exhibit 1. Credit ratings performance measurement statistics

Transition/Default Matrices

The Transition/Default Matrices presented below was produced by following the instructions regarding “Sample Matrix” required as a part of Form NRSRO.

1. Financial Institutions, Brokers, or Dealers

Financial Institutions, Brokers, or Dealers - 1-Year Transition and Default Rates (December 31, 2021 through December 31, 2022)

Credit Ratings as of 12/31/2021		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2021-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	7	100%																					
AA+	3		100%																				
AA	20		5%	95%																			
AA-	24			4%	96%																		
A+	24				17%	83%																	
A	30				3%	23%	73%																
A-	32						19%	78%															3%
BBB+	21							5%	90%														5%
BBB	11								9%	55%	18%												18%
BBB-	4									100%													
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	176																						

Financial Institutions, Brokers, or Dealers - 3-Year Transition and Default Rates (December 31, 2019 through December 31, 2022)

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2019-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	7	100%																					
AA+	3		100%																				
AA	20		5%	95%																			
AA-	20			5%	95%																		
A+	28				21%	61%	7%																11%
A	31				3%	23%	65%	3%															6%
A-	30						20%	70%															10%
BBB+	18							17%	78%														6%
BBB	12								42%	50%													8%
BBB-	6									83%													17%
BB+	1									100%													
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	176																						

Financial Institutions, Brokers, or Dealers - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2012-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	7	86%																					14%
AA+	3		100%																				
AA	11			100%																			
AA-	22		5%	14%	59%	5%	5%																14%
A+	22			9%	23%	41%	14%																14%
A	34				6%	21%	35%	9%	3%														26%
A-	29			3%	3%	3%	21%	38%	3%														28%
BBB+	18				6%		11%	39%	17%	6%													22%
BBB	23							4%	52%	22%													22%
BBB-	7									57%													43%
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	176																						

2. Insurance Companies

Insurance Companies - 1-Year Transition and Default Rates (December 31, 2021 through December 31, 2022)

Credit Ratings as of 12/31/2021		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2021-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	2	100%																					
AA+	7		100%																				
AA	7			100%																			
AA-	9			44%	56%																		
A+	2					100%																	
A	3						100%																
A-	0																						
BBB+	2							50%	50%														
BBB	0																						
BBB-	0																						
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	32																						

Insurance Companies - 3-Year Transition and Default Rates (December 31, 2019 through December 31, 2022)

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2019-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	2	100%																					
AA+	5		100%																				
AA	7		14%	71%																			
AA-	10			50%	50%																		14%
A+	3			33%		67%																	
A	1						100%																
A-	0																						
BBB+	1							100%															
BBB	0																						
BBB-	1								100%														
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	30																						

Insurance Companies - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2012-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	2	100%																					
AA+	3		100%																				
AA	6		50%	17%																			33%
AA-	0																						
A+	8			50%	38%	13%																	
A	4				25%																		
A-	1							100%															75%
BBB+	1								100%														
BBB	1																						100%
BBB-	0																						
BB+	0																						
BB	0																						
BB-	1								100%														
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	27																						

3. Corporate Issuers

Corporate Issuers - 1-Year Transition and Default Rates

(December 31, 2021 through December 31, 2022)

Credit Ratings as of 12/31/2021		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2021-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	14	100%																					
AA+	16	6%	88%																				6%
AA	53		4%	96%																			
AA-	70		1%	7%	91%																		
A+	95				14%	83%	2%																1%
A	97				1%	13%	85%																1%
A-	103					3%	17%	77%															4%
BBB+	63							24%	71%														5%
BBB	44						5%		16%	70%													9%
BBB-	18								6%	17%	61%										6%		11%
BB+	12											58%	8%	8%			8%						17%
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	585																						

Corporate Issuers - 3-Year Transition and Default Rates

(December 31, 2019 through December 31, 2022)

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2019-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	8	88%																					13%
AA+	15		87%	13%																			4%
AA	46		4%	89%	2%																		6%
AA-	63			14%	78%	2%																	2%
A+	86		1%	1%	22%	70%	3%																6%
A	101				2%	23%	65%	4%															11%
A-	99					5%	23%	60%						1%									9%
BBB+	69					1%	6%	29%	48%	4%	1%						1%						21%
BBB	52						4%	4%	17%	44%	8%	2%											13%
BBB-	15								7%	33%	40%										7%		
BB+	7											86%	14%										
BB	2								50%														50%
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	563																						

Corporate Issuers - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2012-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	9	56%																					44%
AA+	15	7%	67%	13%																			13%
AA	30		3%	67%	10%	7%																	13%
AA-	45		7%	33%	38%	9%	2%																11%
A+	60			2%	28%	38%	13%	2%															17%
A	89			2%	12%	31%	31%	4%													1%		17%
A-	82				4%	16%	24%	37%	1%														18%
BBB+	65						18%	23%	25%	3%	2%	3%					2%				3%		22%
BBB	63					3%	3%	22%	21%	13%	6%	2%											30%
BBB-	31							6%	10%	26%	6%										3%		48%
BB+	11				9%					18%	18%	27%	9%										18%
BB	2							50%															50%
BB-	1																						100%
B+	0																						
B	0																						
B-	0																						
CCC	1								100%														
CC	0																						
C	0																						
Total	504																						

4. Sovereign Issuers

Sovereign Issuers - 1-Year Transition and Default Rates (December 31, 2021 through December 31, 2022)

Credit Ratings as of 12/31/2021		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2021-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	13	100%																					
AA+	2	50%	50%																				
AA	4		25%	75%																			
AA-	2				100%																		
A+	4				25%	75%																	
A	5					20%	80%																
A-	2							100%															
BBB+	2								100%														
BBB	2									50%											50%		
BBB-	0																						
BB+	0																						
BB	1													100%									
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	37																						

Sovereign Issuers - 3-Year Transition and Default Rates (December 31, 2019 through December 31, 2022)

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2019-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	13	100%																					
AA+	2	50%	50%																				
AA	4		25%	75%																			
AA-	2				100%																		
A+	4				25%	75%																	
A	4					25%	75%																
A-	1						100%																
BBB+	4							50%	50%														
BBB	2									50%											50%		
BBB-	1										100%												
BB+	0											100%											
BB	0												100%										
BB-	0													100%									
B+	0														100%								
B	0															100%							
B-	0																100%						
CCC	0																	100%					
CC	0																		100%				
C	0																			100%			
Total	37																						

Sovereign Issuers - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2012-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	13	100%																					
AA+	2	50%	50%																				
AA	1			100%																			
AA-	3		33%		33%		33%																
A+	4			25%	25%	50%																	
A	3					67%	33%																
A-	0																						
BBB+	4						25%		25%	25%											25%		
BBB	2							50%	50%														
BBB-	1							100%															
BB+	0											100%											
BB	1												100%										
BB-	0													100%									
B+	0														100%								
B	0															100%							
B-	0																100%						
CCC	0																	100%					
CC	0																		100%				
C	0																			100%			
Total	34																						

5. U.S. Public Finance

U.S. Public Finance - 1-Year Transition and Default Rates (December 31, 2021 through December 31, 2022)

Not Applicable, since no credit rating was determined during the period shown above.

U.S. Public Finance - 3-Year Transition and Default Rates (December 31, 2019 through December 31, 2022)

Not Applicable, since no credit rating was determined during the period shown above.

U.S. Public Finance - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Not Applicable, since no credit rating was determined during the period shown above.

6. International Public Finance

International Public Finance - 1-Year Transition and Default Rates

(December 31, 2021 through December 31, 2022)

Credit Ratings as of 12/31/2021		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2021-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	9	100%																					
AA+	4		100%																				
AA	4		50%	50%																			
AA-	0																						
A+	0																						
A	1						100%																
A-	1							100%															
BBB+	2								100%														
BBB	0																						
BBB-	0																						
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	21																						

International Public Finance - 3-Year Transition and Default Rates

(December 31, 2019 through December 31, 2022)

Credit Ratings as of 12/31/2019		Credit Ratings as of 12/31/2022(Percent)																		Other Outcomes During 12/31/2019-12/31/2022 (Percent)			
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	8	100%																					
AA+	2		100%																				
AA	6		67%	33%																			
AA-	0																						
A+	1																						100%
A	0																						
A-	1						100%		33%	67%													
BBB+	3																						
BBB	0																						
BBB-	0																						
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	21																						

International Public Finance - 10-Year Transition and Default Rates (December 31, 2012 through December 31, 2022)

Credit Ratings as of 12/31/2012		Credit Ratings as of 12/31/2022(Percent)																			Other Outcomes During 12/31/2012-12/31/2022 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+	BB	BB-	B+	B	B-	CCC	CC	C	Default	Paid Off	Withdrawn (other)
AAA	4	75%																					25%
AA+	3	33%		33%																			33%
AA	3		67%																				33%
AA-	5		60%																				40%
A+	0																						
A	2																						100%
A-	0																						
BBB+	3						33%		67%														
BBB	0																						
BBB-	0																						
BB+	0																						
BB	0																						
BB-	0																						
B+	0																						
B	0																						
B-	0																						
CCC	0																						
CC	0																						
C	0																						
Total	20																						

Rating Symbols and Definitions

(1) Long-term Issuer Rating Scale

AAA	The highest level of certainty of an obligor to honor its financial obligations
AA	A very high level of certainty to honor the financial obligations
A	A high level of certainty to honor the financial obligations
BBB	An adequate level of certainty to honor the financial obligations. However, this certainty is more likely to diminish in the future than with the higher rating categories.
BB	Although the level of certainty to honor the financial obligations is not currently considered problematic, this certainty may not persist in the future.
B	A low level of certainty to honor the financial obligations, giving cause for concern
CCC	There are factors of uncertainty that the financial obligations will be honored, and there is a possibility of default.
CC	A high default risk
C	A very high default risk
LD	JCR judges that while an obligor does not honor part of the agreed to financial obligations, but it honors all its other agreed to financial obligations.
D	JCR judges that all the financial obligations are, in effect, in default.

A plus (+) or minus (-) sign may be affixed to the rating symbols from AA to B to indicate relative standing within each of those rating scales.

- A Long-term Issuer Rating Scale enables comparison of the overall capacity of an obligor (issuer) to honor its entire financial obligations with such overall capacity of others.
- The same Definitions of Rating Symbols and Scales shall be applied to the Ability to Pay Insurance Claims Rating.

(2) Long-term Issue Rating Scale

AAA	The highest level of certainty of an obligor to honor its financial obligations
AA	A very high level of certainty to honor the financial obligations
A	A high level of certainty to honor the financial obligations
BBB	An adequate level of certainty to honor the financial obligations. However, this certainty is more likely to diminish in the future than with the higher rating categories.
BB	Although the level of certainty to honor the financial obligations is not currently considered problematic, this certainty may not persist in the future.
B	A low level of certainty to honor the financial obligations, giving cause for concern
CCC	There are factors of uncertainty that the financial obligations will be honored, and there is a possibility of default.
CC	A high default risk
C	A very high default risk
D	JCR judges that the obligation is in default.

A plus (+) or minus (-) sign may be affixed to the rating symbols from AA to B to indicate relative standing within each of those rating scales.

- A Long-term Issue Rating Scale enables comparison of certainty that the obligations of more than a year will be honored.
- In light of attempting to call investors' attention to this matter, JCR may make notch differences between a Long-term Issue Rating and Long-term Issuer Rating when it considers there is a difference in terms of probability of recovery between the two as a result of assessing the degree of certainty that the obligation will be honored as agreed.
- A Long-term Issue Rating includes an issuer's specific obligations it owes such as bonds and issue programs (e.g., medium-term note program).
- The same Definitions of Rating Symbols and Scales shall be applied to ratings for hybrid securities such as preferred stock.

Definition of "Default"

For the purpose of producing the Transition/Default Matrix shown in this exhibit, "Default" is defined as a state, in which principal or interest payments of financial obligations cannot be honored as initially agreed. This includes the following cases: (i) JCR judges that all the financial obligations are, in effect, in default. (ii) JCR judges that while an obligor does not honor part of the agreed to financial obligations, but it honors all its other agreed to financial obligations. Usually, when cases fall under the former, "D" ratings are assigned, and "LD" ratings are assigned when cases fall under the latter. Commencement of legal bankruptcy proceedings is a typical example of the former situation, and a situation where specific creditor grants debt forgiveness or DES for debt relief is a typical example of the latter situation. JCR counts a case where "JCR judges that while an obligor does not honor part of the agreed to financial obligations, but it honors all its other agreed to financial obligations" as a "Default" for producing the Transition/Default Matrix even prior to its introduction of "LD" to the rating symbol on August 28, 2012.



Credit Ratings Subject to the Disclosure Requirement

The following is the uniform resource locator (URL) of JCR's corporate Internet Web site where the credit rating histories required to be disclosed pursuant to 17 CFR 240.17g-7(b) effective from June 15, 2015.

<https://www.jcr.co.jp/en/service/company/regu/nrsro/>