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**DBRS Credit Rating Performance Measurement Statistics**

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This Exhibit includes the 2018 DBRS transition and default rates for a 1-year, 3-year, and 10-year time period in each class of ratings for which DBRS is registered as an NRSRO through the most recent calendar year end.

Following the transition and default rates are: (1) descriptions of each symbol, number, or score in the rating scale used to denote a credit rating category and notches within a category for each class and subclass of credit ratings in the transition/default matrices, (2) an explanation of the conditions under which DBRS classifies obligors, securities, or money market instruments as being in default, and (3) the uniform resource locator (URL) of DBRS's corporate Internet website where the credit rating histories required to be disclosed pursuant to 17 CFR 17g-7(b) are located.

**DBRS**

Financial Institutions - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

[illegible]

**DBRS**

## Financial Institutions - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)

[illegible]

**DBRS**

## Financial Institutions - 10-Year Transition and Default Rates (December 31, 2008 through December 31, 2018)

[illegible]

**DBRS**

Insurance Companies - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

[illegible]

**DBRS**

**Insurance Companies - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)**

[illegible]

**DBRS**

Insurance Companies - 10-Year Transition and Default Rates (December 31, 2008 through December 31, 2018)

[illegible]

**DBRS**

Corporate Issuers - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

[illegible]



**DBRS**

Corporate Issuers - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)

[illegible]

**DBRS**

Corporate Issuers - 10-Year Transition and Default Rates (December 31, 2008 through December 31, 2018)

[illegible]

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[illegible]

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Credit Ratings as of 12/31/2018		CDO One Year Transition December 31,2017 -- December 31,2018																				Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA(high)	AA	AA(low)	A(high)	A	A(low)	BBB(high)	BBB	BBB(low)	BB(high)	BB	BB(low)	B(high)	B	B(low)	CCC(high)	CCC	CCC(low)	CC	C	Default	Paid Off	Withdrawn-Other
AAA	16	88%																						12%	
AA(high)	4		100%																						
AA	11		9%	64%																				27%	
AA(low)	8			75%																				25%	
A(high)	5			20%	60%																			20%	
A	38			92%			5%																	3%	
A(low)	18		6%	44%			6%	39%																6%	
BBB(high)	2				50%			50%																	
BBB	2								100%																
BBB(low)	0																								
BB(high)	1											100%													
BB	0																								
BB(low)	0																								
B(high)	0																								
B	0																								
B(low)	0																								
CCC(high)	0																								
CCC	0																								
CCC(low)	0																								
CC	1																								
C	2																				100%				
																					100%				
Total	108																								

DBRS

Credit Ratings as of 12/31/2018		CDO Three Year Transition December 31,2015 -- December 31,2018																				Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA(high)	AA	AA(low)	A(high)	A	A(low)	BBB(high)	BBB	BBB(low)	BB(high)	BB	BB(low)	B(high)	B	B(low)	CCC(high)	CCC	CCC(low)	CC	C	Default	Paid Off	Withdrawn-Other
AAA	26	50%																						50%	
AA(high)	5		20%																					80%	
AA	10	10%		30%																				50%	10%
AA(low)	3																							100%	
A(high)	3				33%																			67%	
A	5						40%																	60%	
A(low)	63		6%	46%			2%	10%																36%	
BBB(high)	0																								
BBB	13									15%														77%	
BBB(low)	16				6%																			88%	6%
BB(high)	5																							100%	
BB	5																							100%	
BB(low)	1											100%													
B(high)	0																								
B	0																								
B(low)	0																								
CCC(high)	0																								
CCC	0																								
CCC(low)	0																								
CC	1																								
C	5																				100%				
																						40%			
Total	161																								60%

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Credit Ratings as of 12/31/2018		Other One Year Transition December 31,2017 -- December 31,2018																				Other Outcomes			
Credit Rating	Number of Outstanding Ratings	AAA	AA(high)	AA	AA(low)	A(high)	A	A(low)	BBB(high)	BBB	BBB(low)	BB(high)	BB	BB(low)	B(high)	B	B(low)	CCC(high)	CCC	CCC(low)	CC	C	Default	Paid Off	Withdrawn-Other
AAA	40	97%																						3%	
AA(high)	6		100%																						
AA	39	49%	3%	38%																			10%		
AA(low)	8	12%		12%	76%																				
A(high)	13	8%		8%	8%	53%																	23%		
A	58	2%		5%	2%	3%	63%																22%	3%	
A(low)	18			6%			6%	71%															11%	6%	
BBB(high)	18					6%			88%															6%	
BBB	47			2%			6%		2%	75%													11%	4%	
BBB(low)	32									6%	56%												38%		
BB(high)	6											100%													
BB	9								11%	11%			34%										22%	22%	
BB(low)	1													100%											
B(high)	0																								
B	2												100%												
B(low)	0																								
CCC(high)	0																								
CCC	0																								
CCC(low)	0																								
CC	1																								
C	0																					100%			
Total	298																								

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

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Credit Ratings as of 12/31/2018		Other Three Year Transition December 31,2015 -- December 31,2018																				Other Outcomes				
Credit Rating	Number of Outstanding Ratings	AAA	AA(high)	AA	AA(low)	A(high)	A	A(low)	BBB(high)	BBB	BBB(low)	BB(high)	BB	BB(low)	B(high)	B	B(low)	CCC(high)	CCC	CCC(low)	CC	C	Default	Paid Off	Withdrawn-Other	
AAA	21	86%																						14%		
AA(high)	0																									
AA	5	20%		20%																				40%	20%	
AA(low)	2				50%																				50%	
A(high)	2																							100%		
A	33	9%		3%	3%		42%																	34%	9%	
A(low)	8							75%																	25%	
BBB(high)	7								86%																14%	
BBB	25			8%		4%				52%														20%	16%	
BBB(low)	4										75%												25%			
BB(high)	1											100%														
BB	6								17%				17%												33%	33%
BB(low)	0																									
B(high)	0																									
B	0																									
B(low)	0																									
CCC(high)	0																									
CCC	0																									
CCC(low)	0																									
CC	0																									
C	0																									
Total	114																									

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

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Credit Ratings as of 12/31/2018		Other Ten Year Transition    December 31,2008 -- December 31,2018																					Other Outcomes		
Credit Rating	Number of Outstanding Ratings	AAA	AA(high)	AA	AA(low)	A(high)	A	A(low)	BBB(high)	BBB	BBB(low)	BB(high)	BB	BB(low)	B(high)	B	B(low)	CCC(high)	CCC	CCC(low)	CC	C	Default	Paid Off	Withdrawn-Other
AAA	8																							100%	
AA(high)	0																								
AA	1																							100%	
AA(low)	0																								
A(high)	2																							50%	
A	4						25%																	50%	
A(low)	2																							100%	
BBB(high)	1																							100%	
BBB	2																							50%	
BBB(low)	1																							100%	
BB(high)	1																							100%	
BB	2																							50%	
BB(low)	0																								
B(high)	0																								
B	0																								
B(low)	0																								
CCC(high)	0																								
CCC	0																								
CCC(low)	0																								
CC	0																								
C	0																								
Total	24																								

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

**DBRS**

## Sovereign Issuers - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

[illegible]



**DBRS**

## Sovereign Issuers - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)

[illegible]

**DBRS**

Sovereign Issuers - 10-Year Transition and Default Rates (December 31, 2008 through December 31, 2018)

[illegible]

**DBRS**

## United States Public Finance - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

Credit Ratings as of 12/31/2017		Credit Ratings as of 12/31/2018 (Percent)																										Other Outcomes During 12/31/2017-12/31/2018 (Percent)		
Credit Rating	Number of Ratings Outstanding	AAA	AA (high)	AA	AA (low)	A (high)	A	A (low)	BBB (high)	BBB	BBB (low)	BB (high)	BB	BB (low)	B (high)	B	B (low)	CCC (high)	CCC	CCC (low)	CC (high)	CC	CC (low)	C (high)	C	C (low)	Default	Paid Off	Withdrawn (other)	
AAA																														
AA (high)																														
AA																														
AA (low)																														
A (high)																														
A																														
A (low)																														
BBB (high)	1								100%																					
BBB	3									67%	33%																			
BBB (low)	1										100%																			
BB (high)																														
BB																														
BB (low)																														
B (high)																														
B																														
B (low)																														
CCC (high)																														
CCC																														
CCC (low)																														
CC (high)																														
CC																														
CC (low)																														
C (high)																														
C																														
C (low)																														
Total	5																													

**DBRS**

## United States Public Finance - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)

[illegible]

[illegible]

**DBRS**

## International Public Finance - 1-Year Transition and Default Rates (December 31, 2017 through December 31, 2018)

[illegible]

**DBRS**

International Public Finance - 3-Year Transition and Default Rates (December 31, 2015 through December 31, 2018)

[illegible]

[illegible]



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

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

**AAA**

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

**AA**

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

**A**

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

**BBB**

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

**BB**

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

**B**

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

**CCC / CC / C**

Very highly speculative credit quality. In danger of defaulting on financial obligations. There is little difference between these three categories, although CC and C ratings are normally applied to obligations that are seen as highly likely to default, or subordinated to obligations rated in the CCC to B range. Obligations in respect of which default has not technically taken place but is considered inevitable may be rated in the C category.

## **D**

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

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

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DBRS issues a default rating when:

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

The preceding categories and subcategories are publicly available at:

[dbrs.com/research/236754/long-term-obligations-rating-scale.pdf](https://dbrs.com/research/236754/long-term-obligations-rating-scale.pdf)

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

[dbrs.com/ratingPolicies/list/name/rating+scales](https://dbrs.com/ratingPolicies/list/name/rating+scales)

### **URL Page:**

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Please note that the uniform resource locator (URL) of the DBRS website which provides the credit rating histories required to be disclosed pursuant to 17 CFR 17g-7(b) is:

[dbrs.com/about/historyAgree/](https://dbrs.com/about/historyAgree/)