


The Swedish Covered Bond Corporation (SBAB) - Mortgage Covered Bonds

Covered Bonds / Sweden

Contacts Monitoring Client Service Desk	Hogan, John - +44 (207) 772-5260 - John.Hogan@moody's.com Bhattacharya, Atri - +91 (806) 113-3560 - Atri.Bhattacharya@moody's.com Monitor.CB@moody's.com London: +44 20 7772-5454, csdlondon@moody's.com	 Click on the icon to download data into Excel & to see Glossary of terms used Click here to access the covered bond programme webpage on moody's.com
--	---	--

Reporting as of: 30/09/2018 All amounts in SEK (unless otherwise specified)

For information on how to read this report, see the latest
 Moody's Global Covered Bond Monitoring Overview

Data as provided to Moody's Investors Service (note 1)

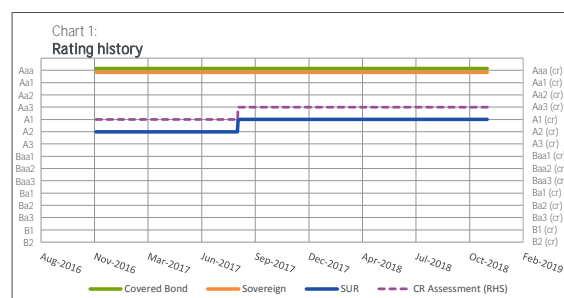
I. Programme Overview

Overview

Year of initial rating assignment:	2006
Total outstanding liabilities:	SEK 232,932,271,590
Total assets in the Cover Pool:	SEK 302,160,642,108
Issuer name / CR Assessment:	The Swedish Covered Bond Corporation / Unrated
Group or parent name / CR Assessment:	SBAB Bank AB (publ) / Aa3(cr)
Main collateral type:	Residential

Ratings

Covered bonds rating:	Aaa
Entity used in Moody's EL & TPI analysis:	SBAB Bank AB (publ)
CB anchor:	CR Assessment + 1 notch
CR Assessment:	Aa3(cr)
SUR:	A1
Unsecured claim used for Moody's EL analysis:	No



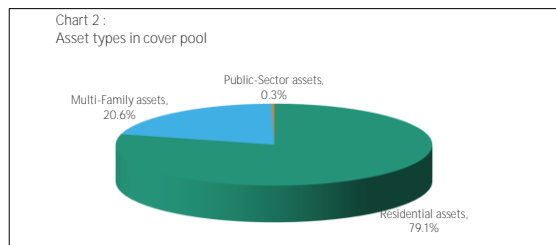
II. Value of the Cover Pool

Collateral quality

Collateral Score:	5.0%
Collateral Score excl. systemic risk:	n/a

Cover Pool losses

Collateral Risk (Collateral Score post-haircut):	3.4%	29%
Market Risk:	8.3%	71%
	11.6%	(100%)



III. Over-Collateralisation Levels

(notes 2 & 3)

Over-Collateralisation (OC) figures presented below can include Eligible and Non-Eligible collateral. Over-Collateralisation levels are provided on nominal basis

Current situation

Committed OC (Nominal):	2.0%
Current OC:	29.7%
OC consistent with current rating (note 4)	1.5%

Sensitivity scenario CB anchor

	OC consistent with current rating	
Scenario 1: CB anchor is lowered by	1 notch	6.5%

IV. Timely Payment Indicator & TPI Leeway

Timely Payment Indicator (TPI):	Probable-High
TPI Leeway:	4

Extract from TPI table - CB anchor is CR Assessment + 1 notch

CR Assessment	Probable-High
Aaa(cr)	Aaa
Aa1(cr)	Aaa
Aa2(cr)	Aaa
Aa3(cr)	Aaa
A1(cr)	Aaa
A2(cr)	Aaa
A3(cr)	Aaa
Baa1(cr)	Aaa
Baa2(cr)	Aa1

Legal framework

Does a specific covered bond law apply for this programme:	Yes
Main country in which collateral is based:	Sweden
Country in which issuer is based:	Sweden

Timely payment

Refinancing period for principal payments of 6 months or greater:	No
Liquidity reserve to support timely payments on all issuances:	No

(note 1) The data reported in this PO is based on information provided by the issuer and may include certain assumptions made by Moody's. Moody's accepts no responsibility for the information provided to it and, whilst it believes the assumptions it has made are reasonable, cannot guarantee that they are or will remain accurate. Although Moody's encourages all issuers to provide reporting data in a consistent manner, there may be differences in the way that certain data is categorised by issuers. The data reporting template (which Issuers are requested to use) is available on request.

(note 2) This assumes the Covered Bonds rating is not constrained by the TPI. Also to the extent rating assumptions change following a downgrade or an upgrade of the Issuer, the necessary OC stated here may also change. This is especially significant in the case of CR assessments of A3(cr) or Baa1(cr), as the necessary OC following a 1 notch downgrade may then be substantially higher than the amount suggested here as market risks are considered more critically by Moody's at this time. In any event, the necessary OC amounts stated here are subject to change at anytime at Moody's discretion.

(note 3) This is the minimum OC calculated to be consistent with the current rating under Moody's expected loss model. However, the level of OC consistent with a given rating level may differ from this amount where ratings are capped under the TPI framework and, for example, where committee discretion is applied.

(note 4) The OC consistent with the current rating is the minimum level of over-collateralisation which is necessary to support the covered bond rating at its current level on the basis of the pool as per the cut-off date. The sensitivity run is based on certain assumptions, including that the Covered Bonds rating is not constrained by the TPI. Further, this sensitivity run is a model output only and therefore a simplification as it does not take into account certain assumptions that may change as an issuer is downgraded, and as a result the actual OC number consistent with the current rating may be higher than shown. The OC required may also differ from the model output in situations when committee discretion is applied. In any event, the OC amounts stated here are subject to change at any time at Moody's discretion.

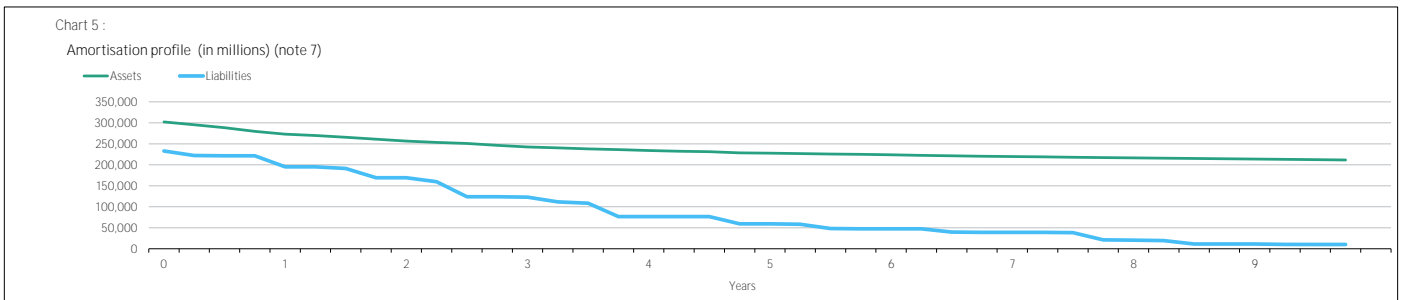
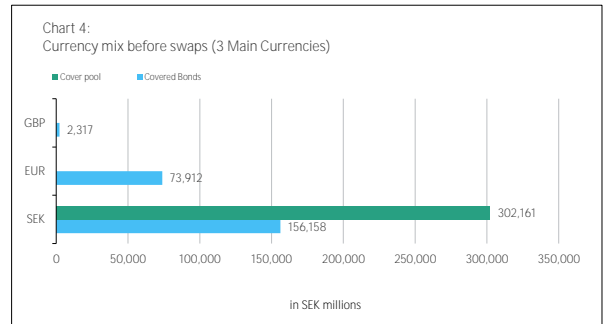
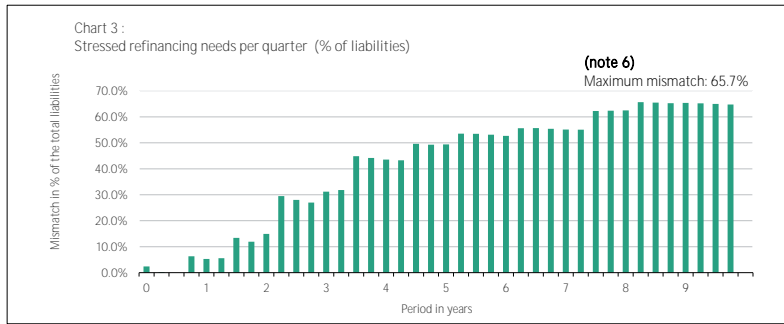
V. Asset Liability Profile

Interest Rate & Duration Mismatch (note 5)

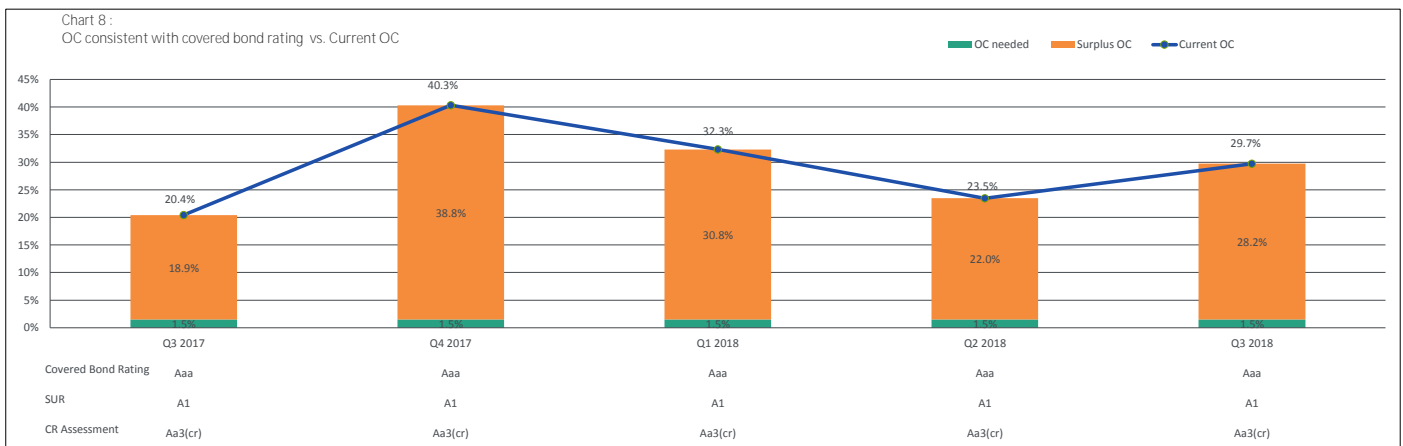
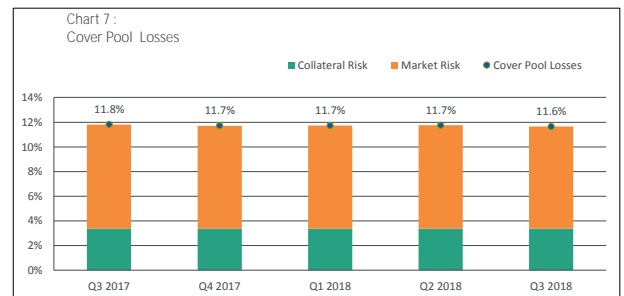
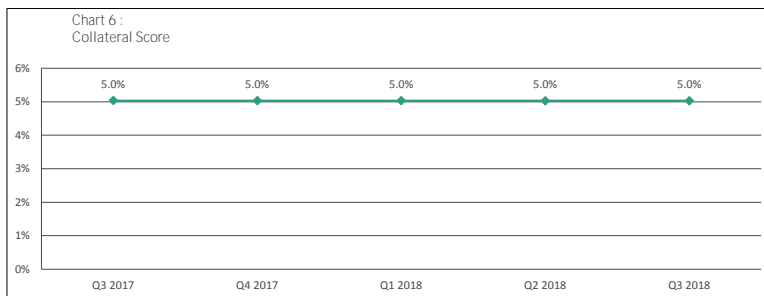
Fixed rate assets in the cover pool:	33.1%
Fixed rate covered bonds outstanding:	92.8%
WAL of outstanding covered bonds:	3.9 years
WAL of the cover pool:	25.6 years

Swap Arrangements

Interest rate swap(s) in the Cover Pool:	Yes
Intra-group interest rate swap(s) provider(s):	Yes
Currency swap(s) in the Cover Pool:	Yes
Intra-group currency swap(s) provider(s):	Yes



VI. Performance Evolution



This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody.com for the most updated credit rating action information and rating history.

(note 5) This assumes no prepayment.

(note 6) Based on principal flows only. Assumptions include no prepayments, principal collections limited to the portion of assets that make up the amount of the liabilities plus committed OC, no further CB issuance and no further assets added to the cover pool.

(note 7) Assumptions include no swap in place in Cover Pool, no prepayment and no further CB issuance.

VII. Cover Pool Information - Single Family Housing

Overview

Asset type:	Single Family
Asset balance:	123,148,750,288
Average loan balance:	556,114
Number of loans:	221,445
Number of borrowers:	83,497
Number of properties:	80,355
WA remaining term (in months):	377
WA seasoning (in months):	59

Details on LTV

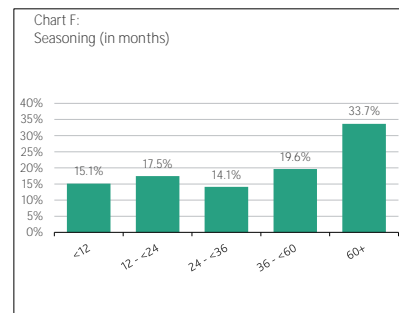
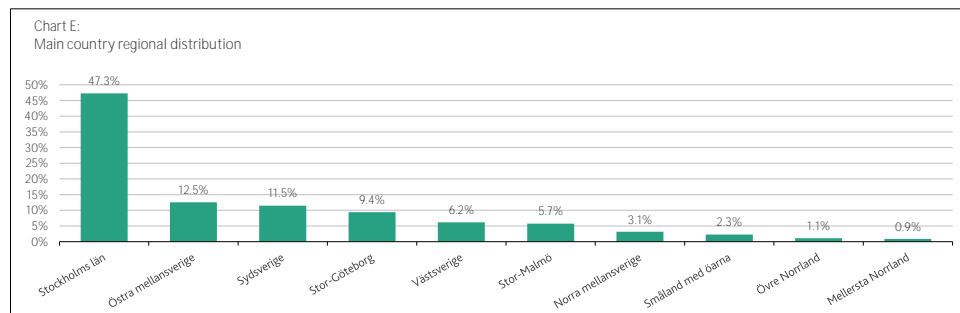
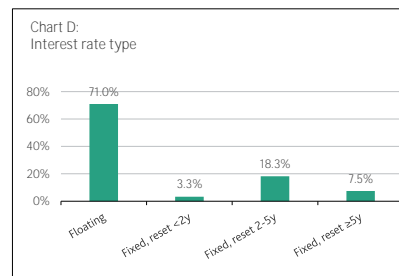
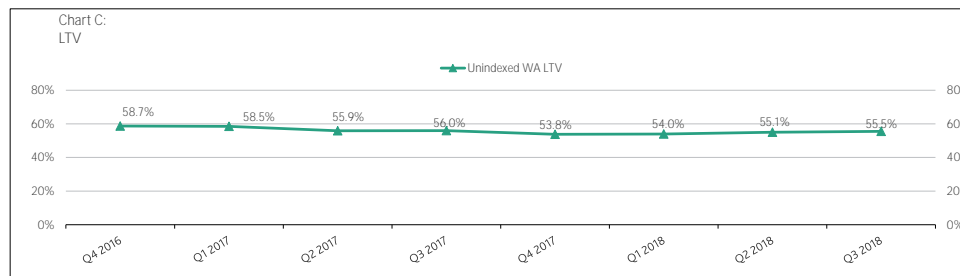
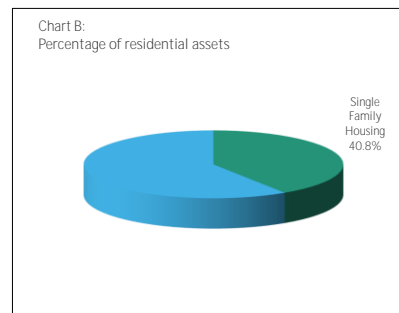
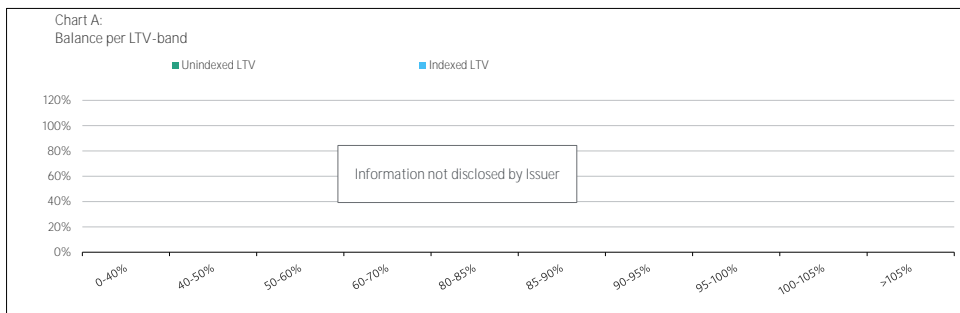
WA unindexed LTV (*)	55.5%
WA Indexed LTV:	n/d
Valuation type:	Market Value
LTV threshold:	75.0%
Junior ranks:	n/d
Prior ranks:	2.5%

Specific Loan and Borrower characteristics

Loans with an external guarantee in addition to a mortgage:	n/a
Interest only Loans	52.0%
Loans for second homes / Vacation:	0.0%
Buy to let loans / Non owner occupied properties:	0.0%
Limited income verified:	0.0%
Adverse credit characteristics (**)	0.0%

Performance

Loans in arrears (≥ 2months - < 6months):	0.0%
Loans in arrears (≥ 6months - < 12months):	0.0%
Loans in arrears (≥ 12months):	0.0%
Loans in a foreclosure procedure:	0.0%



(note *) may be based on property value at time of origination or further advance or borrower refinancing
 (note **) Typically borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination.

VIII. Cover Pool Information - Tenant Owner Rights

Overview

Asset type:	Tenant Owner
Asset balance:	115,835,634,970
Average loan balance:	646,494
Number of loans:	179,175
Number of borrowers:	77,865
Number of properties:	76,818
WA remaining term (in months):	392
WA seasoning (in months):	41

Details on LTV

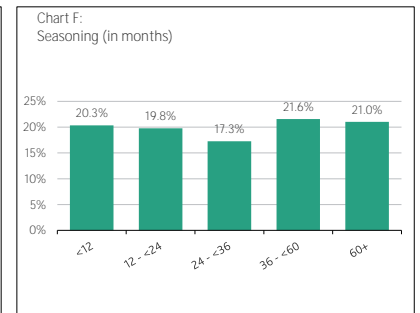
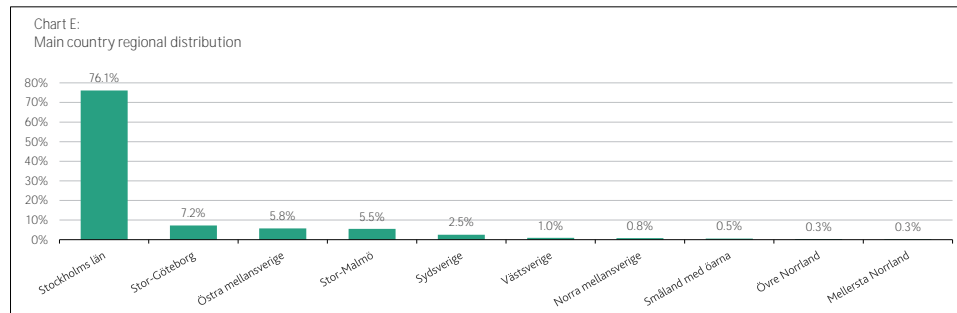
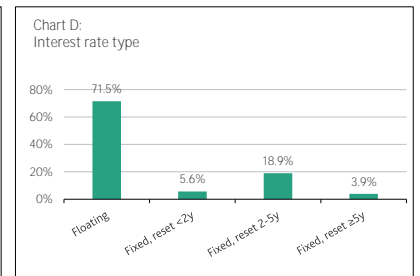
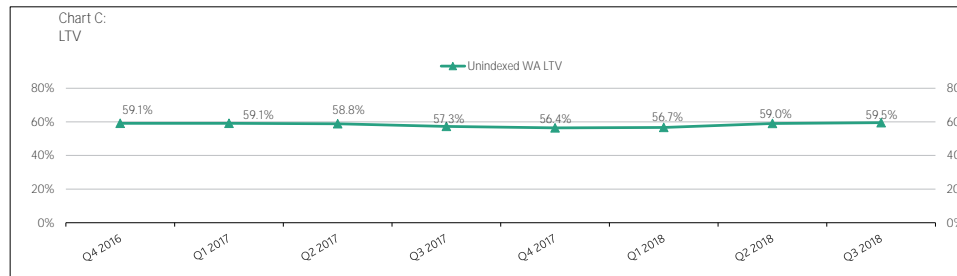
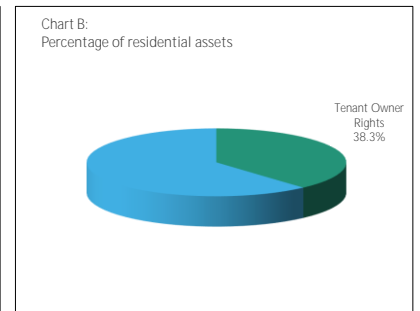
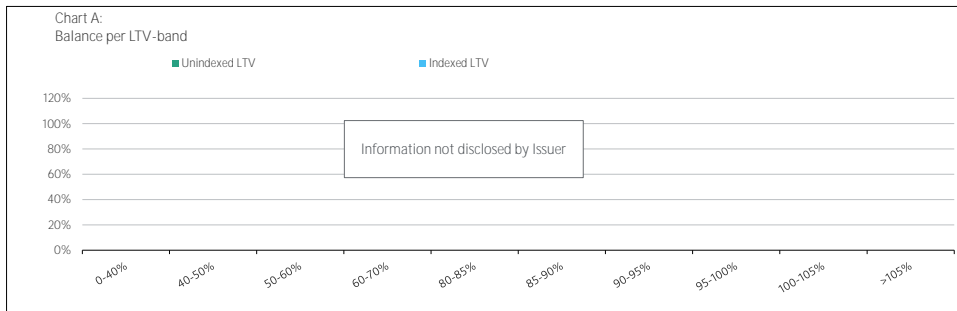
WA unindexed LTV (*)	59.5%
WA Indexed LTV:	n/d
Valuation type:	Market Value
LTV threshold:	75.0%
Junior ranks:	n/d
Prior ranks:	0.0%

Specific Loan and Borrower characteristics

Loans with an external guarantee in addition to a mortgage:	n/a
Interest only Loans	45.0%
Loans for second homes / Vacation:	0.0%
Buy to let loans / Non owner occupied properties:	0.0%
Limited income verified:	0.0%
Adverse credit characteristics (**)	0.0%

Performance

Loans in arrears (≥ 2months - < 6months):	0.0%
Loans in arrears (≥ 6months - < 12months):	0.0%
Loans in arrears (≥ 12months):	0.0%
Loans in a foreclosure procedure:	0.0%



(note *) may be based on property value at time of origination or further advance or borrower refinancing
 (note **) Typically borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination.

IX. Cover Pool Information - Co-Operative Assets

Overview

Asset type:	Co-operative
Asset balance:	40,151,113,619
Average loan balance:	7,432,639
Number of loans:	5,402
Number of borrowers:	1,751
Number of properties:	2,169
WA remaining term (in months):	21
WA seasoning (in months):	96

Details on LTV

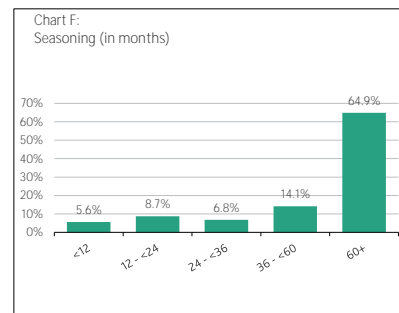
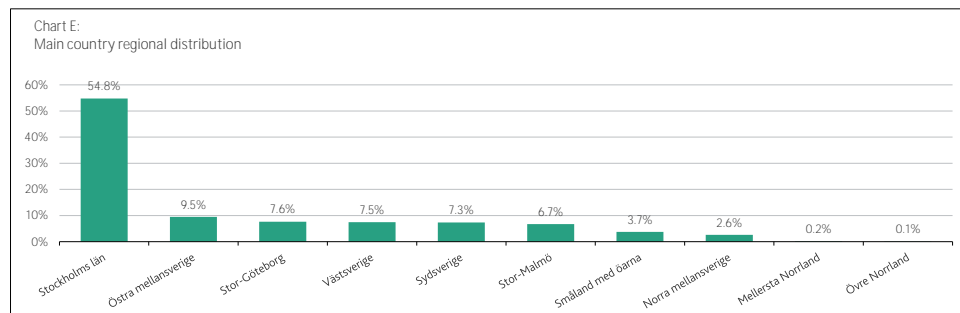
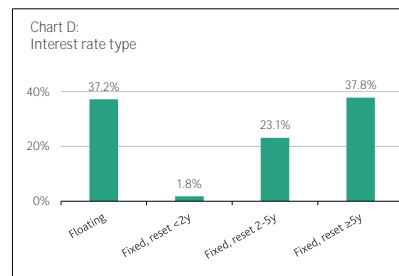
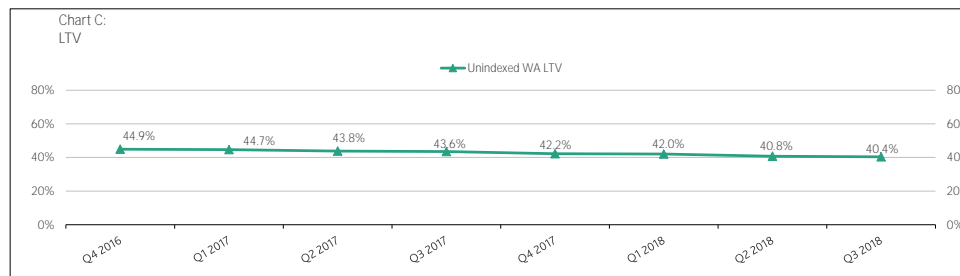
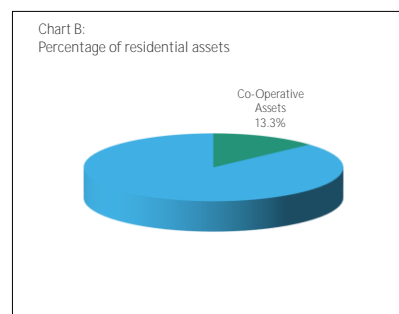
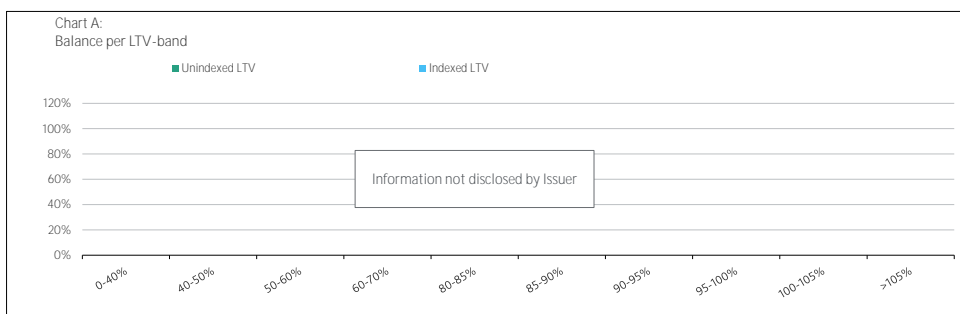
WA unindexed LTV (*)	40.4%
WA Indexed LTV:	n/d
Valuation type:	Market Value
LTV threshold:	75.0%
Junior ranks:	n/d
Prior ranks:	15.0%

Specific Loan and Borrower characteristics

Loans with an external guarantee in addition to a mortgage:	1.8%
Interest only Loans	33.6%
Loans for second homes / Vacation:	0.0%
Buy to let loans / Non owner occupied properties:	0.0%
Limited income verified:	0.0%
Adverse credit characteristics (**)	0.0%

Performance

Loans in arrears (≥ 2months - < 6months):	0.0%
Loans in arrears (≥ 6months - < 12months):	0.0%
Loans in arrears (≥ 12months):	0.0%
Loans in a foreclosure procedure:	0.0%



(note *) may be based on property value at time of origination or further advance or borrower refinancing
 (note **) Typically borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination.

X. Cover Pool Information - Multi Family Assets

Overview

Asset type:	Multi Family
Asset balance:	22,196,769,231
Average loan balance:	44,304,929
Number of loans:	501
Number of borrowers:	289
Number of properties:	794
WA remaining term (in months):	29
WA seasoning (in months):	40

Details on LTV

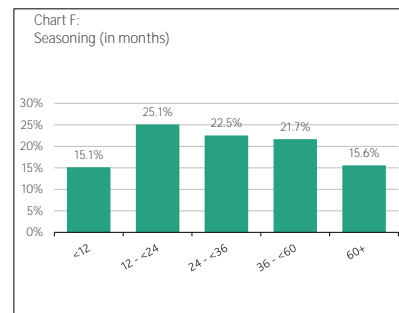
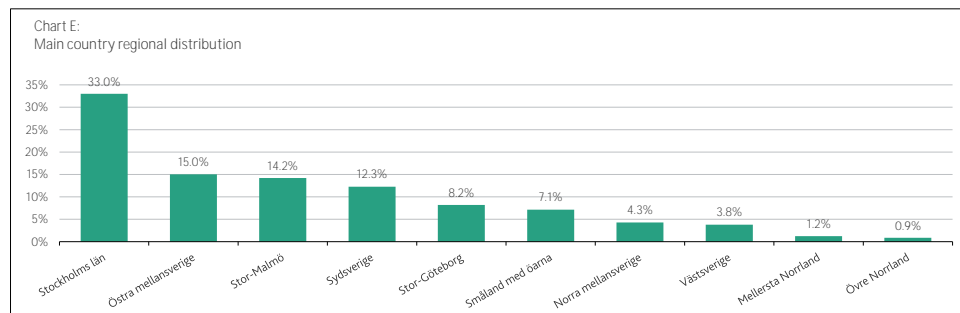
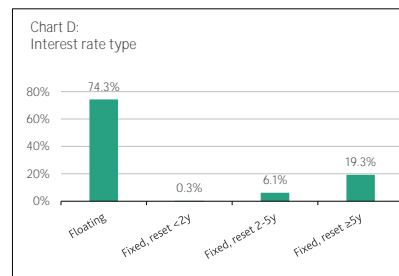
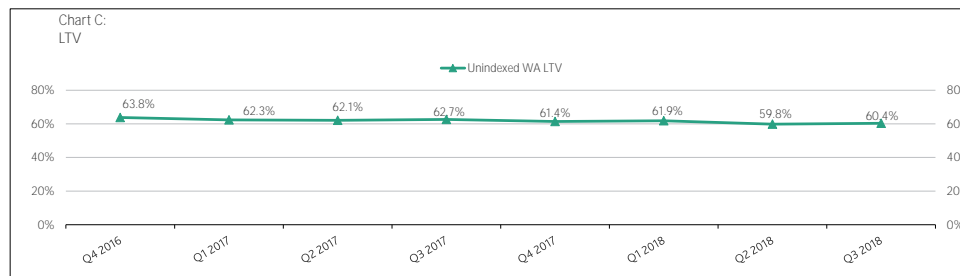
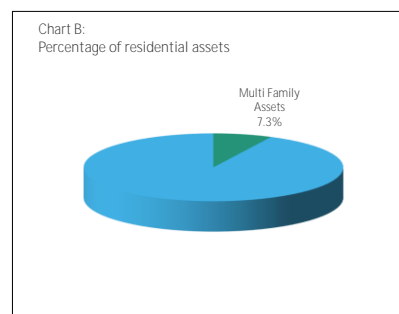
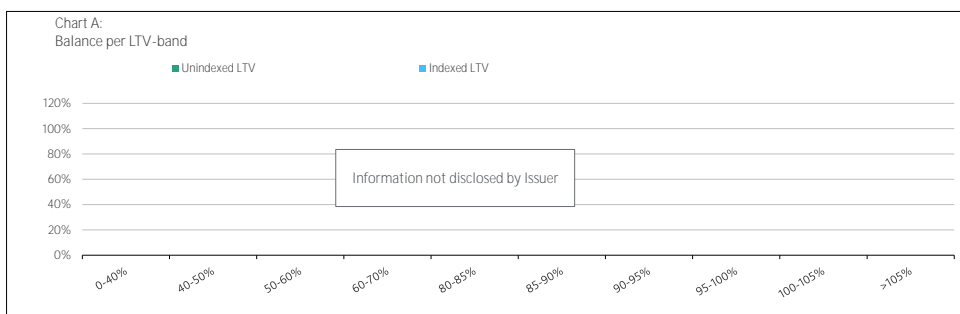
WA unindexed LTV (*)	60.4%
WA Indexed LTV:	n/d
Valuation type:	Market Value
LTV threshold:	75.0%
Junior ranks:	n/d
Prior ranks:	0.3%

Specific Loan and Borrower characteristics

Loans with an external guarantee in addition to a mortgage:	0.5%
Interest only Loans	72.5%
Loans for second homes / Vacation:	0.0%
Buy to let loans / Non owner occupied properties:	0.0%
Limited income verified:	0.0%
Adverse credit characteristics (**)	0.0%

Performance

Loans in arrears (≥ 2months - < 6months):	0.0%
Loans in arrears (≥ 6months - < 12months):	0.0%
Loans in arrears (≥ 12months):	0.0%
Loans in a foreclosure procedure:	0.0%



(note *) may be based on property value at time of origination or further advance or borrower refinancing
 (note **) Typically borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination.

XI. Swap Information

Counterparty	Type	Notional Amount	Collateral trigger	Replacement Trigger
Information not disclosed by Issuer				

XII. Liabilities Information: Last 50 Issuances

ISIN	Series Number	Currency	Outstanding Amount	Issuance Date	Expected Maturity	Legal Final Maturity	Interest Rate Type	Coupon	Principal Payment
XS1846731773	3111	SEK	300,000,000	03/07/2018	03/07/2030	03/07/2030	Fixed rate	1.704%	BULLETT
SE0011167428	SCBC-144	SEK	8,642,904,667	15/05/2018	21/06/2023	21/06/2023	Fixed rate	1.000%	BULLETT
XS1815437527	3110	SEK	250,000,000	03/05/2018	03/05/2030	03/05/2030	Fixed rate	1.868%	BULLETT
XS1808480377	3108	EUR	750,000,000	19/04/2018	19/04/2023	19/04/2023	Fixed rate	0.250%	BULLETT
XS1808480534	3109	EUR	500,000,000	19/04/2018	19/04/2033	19/04/2033	Fixed rate	1.250%	BULLETT
XS1807436008	3107	SEK	292,000,000	16/04/2018	25/01/2030	25/01/2030	Fixed rate	1.980%	BULLETT
XS1791586040	3106	SEK	250,000,000	14/03/2018	14/03/2028	14/03/2028	Fixed rate	1.758%	BULLETT
XS1759602953	3105	EUR	750,000,000	29/01/2018	29/01/2025	29/01/2025	Fixed rate	0.500%	BULLETT
XS1758629783	3104	SEK	819,000,000	25/01/2018	25/01/2030	25/01/2030	Fixed rate	1.980%	BULLETT
XS1703059730	3103	SEK	100,000,000	19/10/2017	19/10/2029	19/10/2029	Fixed rate	1.960%	BULLETT
XS1696419354	3102	SEK	800,000,000	09/10/2017	08/10/2027	08/10/2027	Fixed rate	1.800%	BULLETT
XS1608398563	3101	SEK	500,000,000	08/05/2017	08/05/2024	08/05/2024	Floating rate	STIB3M + 0.75 bps	BULLETT
XS1586702679	3100	EUR	750,000,000	29/03/2017	29/03/2027	29/03/2027	Fixed rate	0.875%	BULLETT
XS1580340187	3099	SEK	300,000,000	16/03/2017	16/03/2027	16/03/2027	Fixed rate	1.840%	BULLETT
XS1578209584	3097	SEK	1,000,000,000	15/03/2017	15/03/2022	15/03/2022	Fixed rate	0.748%	BULLETT
XS1579409290	3098	SEK	900,000,000	15/03/2017	15/12/2028	15/12/2028	Fixed rate	2.035%	BULLETT
XS1551508820	3096	GBP	200,000,000	18/01/2017	18/01/2022	18/01/2022	Floating rate	BP0003M + 0.36 bps	BULLETT
XS1550143421	3095	EUR	1,000,000,000	16/01/2017	16/02/2024	16/02/2024	Fixed rate	0.375%	BULLETT
SE0009383664	SCBC-147	SEK	18,418,507,013	11/01/2017	17/06/2026	17/06/2026	Fixed rate	2.000%	BULLETT
XS1538664902	3094	SEK	800,000,000	21/12/2016	21/12/2026	21/12/2026	Fixed rate	1.625%	BULLETT
XS1537559574	3093	SEK	1,100,000,000	19/12/2016	19/12/2031	19/12/2031	Fixed rate	2.250%	BULLETT
XS1524804231	3092	SEK	700,000,000	23/11/2016	01/12/2020	01/12/2020	Floating rate	STIB3M + 1 bps	BULLETT
XS1490725519	3091	SEK	850,000,000	15/09/2016	15/09/2021	15/09/2021	Floating rate	STIB3M + 0.75 bps	BULLETT
SE0008586655	SCBC-143	SEK	24,405,283,945	30/06/2016	15/06/2022	15/06/2022	Fixed rate	1.250%	BULLETT
XS1384914716	3090	SEK	390,000,000	22/03/2016	23/03/2026	23/03/2026	Fixed rate	2.000%	BULLETT
XS1370780238	3089	SEK	250,000,000	01/03/2016	28/02/2020	28/02/2020	Floating rate	STIB3M + 0.75 bps	BULLETT
XS1355483162	3088	EUR	1,000,000,000	02/02/2016	20/01/2021	20/01/2021	Fixed rate	0.250%	BULLETT
XS1351927246	3086	SEK	350,000,000	01/02/2016	27/01/2020	27/01/2020	Floating rate	STIB3M + 0.54 bps	BULLETT
XS1353463141	3087	SEK	200,000,000	29/01/2016	29/01/2021	29/01/2021	Floating rate	STIB3M + 0.65 bps	BULLETT
XS1332261178	3085	SEK	375,000,000	10/12/2015	10/12/2020	10/12/2020	Floating rate	STIB3M + 0.67 bps	BULLETT
XS1303915083	3084	SEK	1,000,000,000	08/10/2015	08/10/2018	08/10/2018	Floating rate	STIB3M + 0.5 bps	BULLETT
XS1300812077	3083	EUR	750,000,000	05/10/2015	05/10/2020	05/10/2020	Fixed rate	0.375%	BULLETT
XS1293570021	3082	EUR	33,000,000	22/09/2015	22/09/2031	22/09/2031	Fixed rate	1.459%	BULLETT
XS1251915416	3079	SEK	200,000,000	25/06/2015	28/06/2027	28/06/2027	Fixed rate	2.250%	BULLETT
XS1248348721	3078	EUR	500,000,000	17/06/2015	17/06/2022	17/06/2022	Fixed rate	0.750%	BULLETT
XS1244085715	3077	EUR	75,000,000	10/06/2015	10/06/2025	10/06/2025	Fixed rate	0.929%	BULLETT
XS1238248816	3076	SEK	200,000,000	27/05/2015	27/05/2025	27/05/2025	Fixed rate	1.655%	BULLETT
XS1237523094	3075	SEK	200,000,000	25/05/2015	25/04/2019	25/04/2019	Floating rate	STIB3M + 0.5 bps	BULLETT
SE0006758561	SCBC-142	SEK	26,440,964,265	07/04/2015	17/03/2021	17/03/2021	Fixed rate	1.000%	BULLETT
XS1204610957	3074	SEK	3,400,000,000	18/03/2015	18/03/2020	18/03/2020	Floating rate	STIB3M + 0.3 bps	BULLETT
SE0006452900	SCBC-141	SEK	22,022,000,000	26/11/2014	17/06/2020	17/06/2020	Fixed rate	2.000%	BULLETT
XS117542412	3073	EUR	1,000,000,000	07/10/2014	07/10/2021	07/10/2021	Fixed rate	0.625%	BULLETT
XS1104585333	3072	SEK	900,000,000	01/09/2014	01/09/2026	01/09/2026	Fixed rate	2.300%	BULLETT
XS1083839503	3071	SEK	5,300,000,000	02/07/2014	02/07/2019	02/07/2019	Floating rate	STIB3M + 0.26 bps	BULLETT
XS1028253901	3070	SEK	1,000,000,000	05/02/2014	13/11/2023	13/11/2023	Fixed rate	3.200%	BULLETT
XS1027110250	3069	SEK	400,000,000	04/02/2014	04/02/2019	04/02/2019	Floating rate	STIB3M + 0.3 bps	BULLETT
XS1004566995	3068	EUR	50,000,000	13/12/2013	13/12/2020	13/12/2020	Floating rate	EURO03M + 0.21 bps	BULLETT
SE0005468022	SCBC-139	SEK	10,484,096,500	14/11/2013	19/12/2018	19/12/2018	Fixed rate	4.000%	BULLETT
SE0005468030	SCBC-140	SEK	20,833,000,000	14/11/2013	18/09/2019	18/09/2019	Fixed rate	4.000%	BULLETT
XS0992850528	3067	SEK	285,000,000	12/11/2013	12/11/2018	12/11/2018	Floating rate	STIB3M + 0.37 bps	BULLETT

(note) Includes bonds used by the issuer for shorter-dated repo transactions

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE. MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively. MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000. MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.