

## Landesbank Hessen-Thüringen GZ - Public-Sector Covered Bonds

## Covered Bonds / Germany

## Contacts

Widmayer, Patrick - +49 (697) 073-0715 - Patrick.Widmayer@moodys.com  
Ritzka, Stefan - +49 (697) 073-0947 - Stefan.Ritzka@moodys.com



## Monitoring

## Client Service Desk

Monitor CB@moodys.com  
London: +44 20 7772-5454, csdlondon@moodys.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 moodys.com

## Reporting as of:

30/06/2020

All amounts in EUR (unless otherwise specified)

For information on how to read this report, see the latest  
Moody's Covered Bonds Sector Update

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

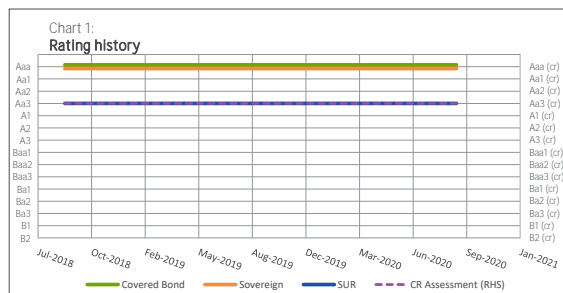
## I. Programme Overview

## Overview

Year of initial rating assignment:	1995	
Total outstanding liabilities:	EUR	28,914,675,359
Total assets in the Cover Pool:	EUR	34,946,519,021
Issuer name / CR Assessment:	Landesbank Hessen-Thüringen GZ / Aa3(cr)	
Group or parent name / CR Assessment:	n/a	
Main collateral type:	Public Sector	

## Ratings

Covered bonds rating:	Aaa	
Entity used in Moody's EL & TPI analysis:	Landesbank Hessen-Thüringen GZ	
CB anchor:	CR Assessment + 1 notch	
CR Assessment:	Aa3(cr)	
SUR:	Aa3	
Unsecured claim used for Moody's EL analysis:	Yes	



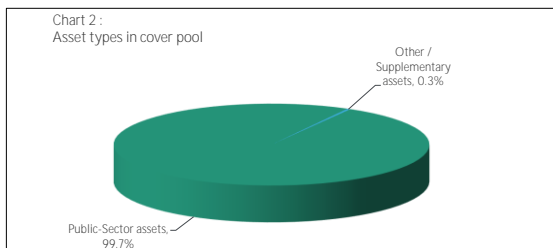
## II. Value of the Cover Pool

## Collateral quality

Collateral Score:	2.8%	
Collateral Score excl. systemic risk:	n/a	

## Cover Pool losses

Collateral Risk (Collateral Score post-haircut):	1.6%	16%
Market Risk:	8.3%	84%
	9.9%	100%



## III. Over-Collateralisation Levels

(notes 2 &amp; 3)

Over-Collateralisation (OC) figures presented below include Eligible only collateral. Over-Collateralisation levels are provided on any of the following: nominal basis or unstressed NPV basis or on stressed NPV basis. NPV stress assumptions applied as required by the legal framework for German Pfandbriefe.

## Current situation

Committed OC (Stressed NPV):	2.0%
Current OC (Unstressed NPV):	24.2%
OC consistent with current rating (note 4)	0.0%

## Sensitivity scenario CB anchor

OC consistent with current rating		
Scenario 1: CB anchor is lowered by	1 notch	2.0%

## IV. Timely Payment Indicator &amp; TPI Leeway

Timely Payment Indicator (TPI):	High
TPI Leeway:	5

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

CR Assessment	High
Aaa(cr)	Aaa
Aa1(cr)	Aaa
Aa2(cr)	Aaa
<b>Aa3(cr)</b>	<b>Aaa</b>
A1(cr)	Aaa
A2(cr)	Aaa
A3(cr)	Aaa
Baa1(cr)	Aaa
Baa2(cr)	Aaa
Baa3(cr)	Aa1

## Legal framework

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

## Timely payment

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

Please refer to section 4 of the Pfandbrief Act.

(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. Credit ratings, TPI and TPI Leeway shown in this PO are as of publication date.

(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 any time 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.

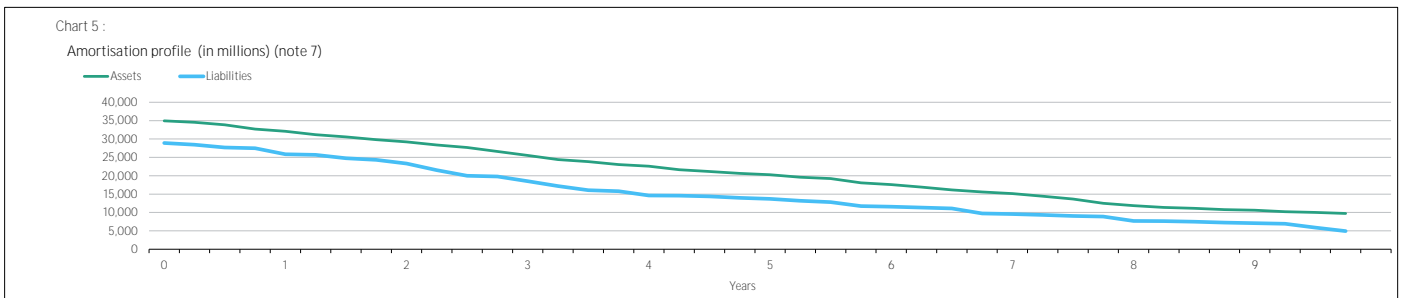
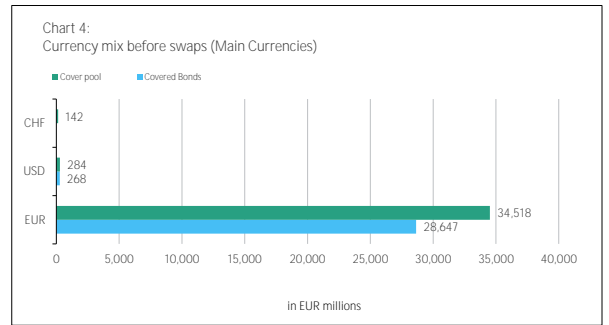
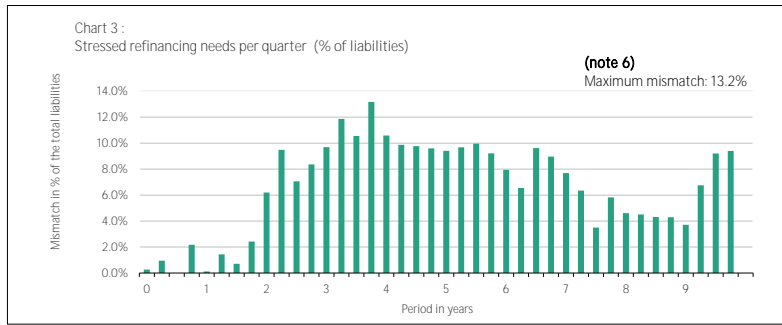
V. Asset Liability Profile

Interest Rate & Duration Mismatch (note 5)

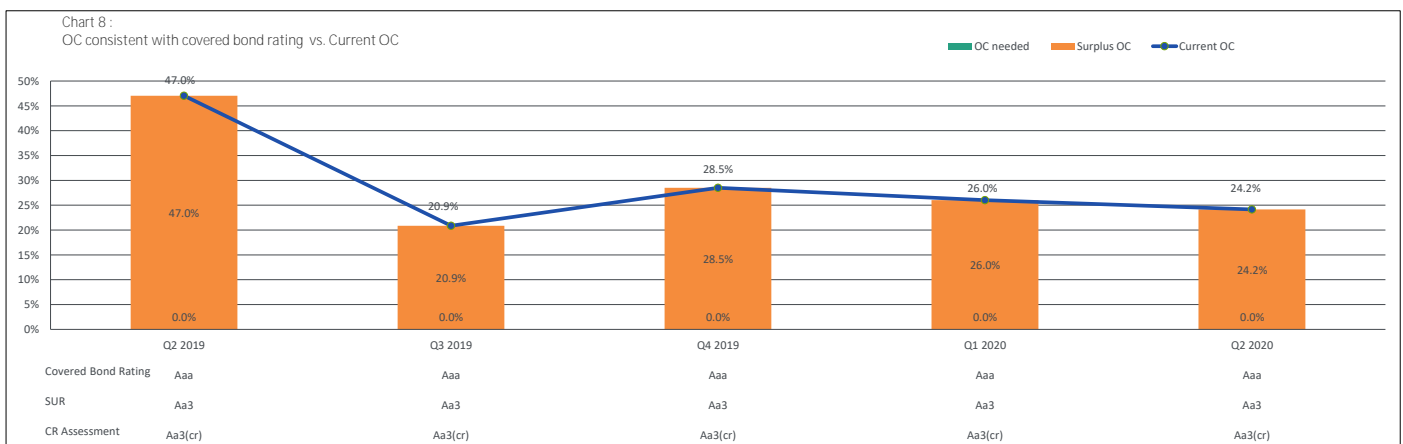
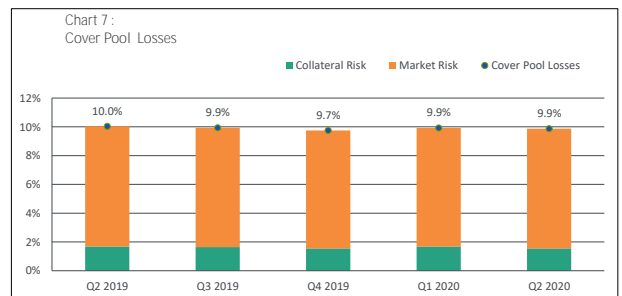
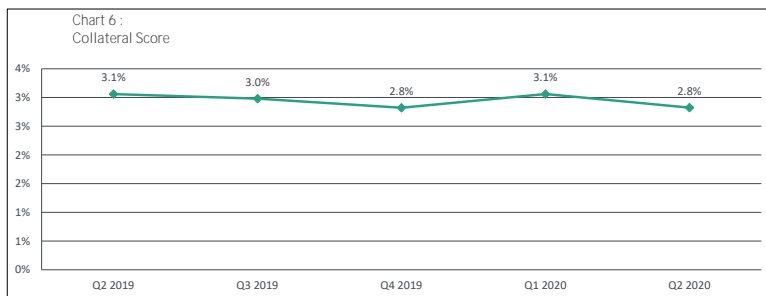
Fixed rate assets in the cover pool:	94.9%
Fixed rate covered bonds outstanding:	89.2%
WAL of outstanding covered bonds:	6.3 years
WAL of the cover pool:	7.7 years

Swap Arrangements

Interest rate swap(s) in the Cover Pool:	No
Intra-group interest rate swap(s) provider(s):	No
Currency swap(s) in the Cover Pool:	No
Intra-group currency swap(s) provider(s):	No



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.moodys.com](http://www.moodys.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 swaps in place in Cover Pool, no prepayment and no further CB issuance.

VII. Cover Pool Information - Public Sector Assets

Overview

Asset type:	Public Sector
Asset balance:	34,837,696,245
WA remaining Term (in months):	92
Number of borrowers:	5,490
Number of loans / bonds:	20,911
Exposure to the 10 largest borrowers:	35.6%
Average exposure to borrowers:	6,345,664

Specific Loan and Borrower characteristics

Repo eligible loans / bonds:	2.2%
Percentage of fixed rate loans / bonds:	94.9%
Percentage of bullet loans / bonds:	35.2%
Loans / bonds in non-domestic currency:	1.1%
<b>Performance</b>	
Loans / bonds in arrears ( ≥ 2months - < 6months):	0.0%
Loans / bonds in arrears ( ≥ 6months - < 12months):	0.0%
Loans / bonds in arrears ( ≥ 12months):	0.0%
Loans / bonds in a foreclosure procedure:	0.0%

Table A : Borrower type by country

	Germany	Belgium	Austria	Other	Totals
Direct claim against supranational	0.0%	0.0%	0.0%	0.0%	0.0%
Direct claim against sovereign	0.1%	0.0%	0.2%	0.0%	0.3%
Loan with guarantee of sovereign	0.0%	0.1%	0.0%	2.6%	2.7%
Direct claim against region/federal state	37.2%	0.0%	0.0%	0.0%	37.2%
Loan with guarantee of region/federal state	3.1%	0.0%	0.0%	0.0%	3.1%
Direct claim against municipality	46.5%	0.0%	0.0%	1.5%	48.0%
Loan with guarantee of municipality	3.1%	2.6%	2.3%	0.4%	8.3%
Others	0.5%	0.0%	0.0%	0.0%	0.5%
	<b>90.5%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>4.5%</b>	

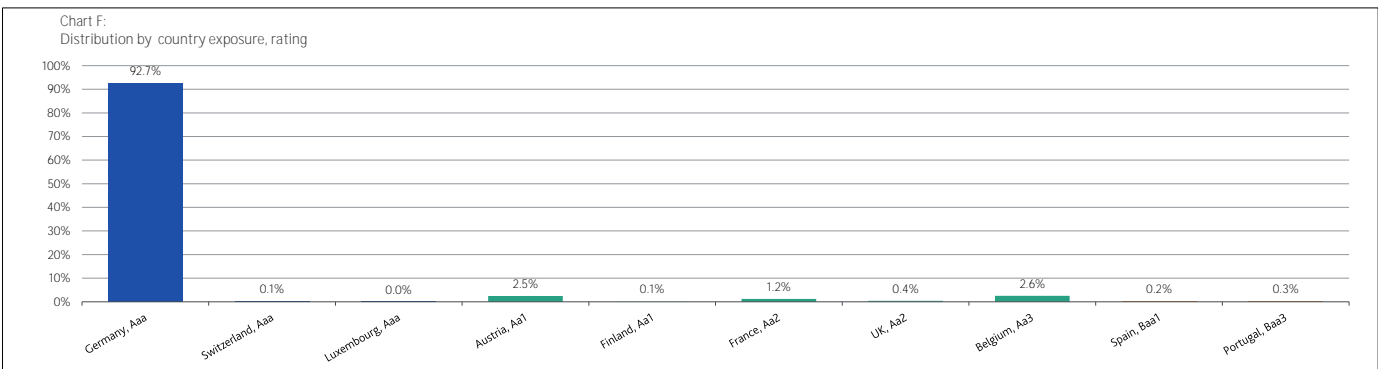
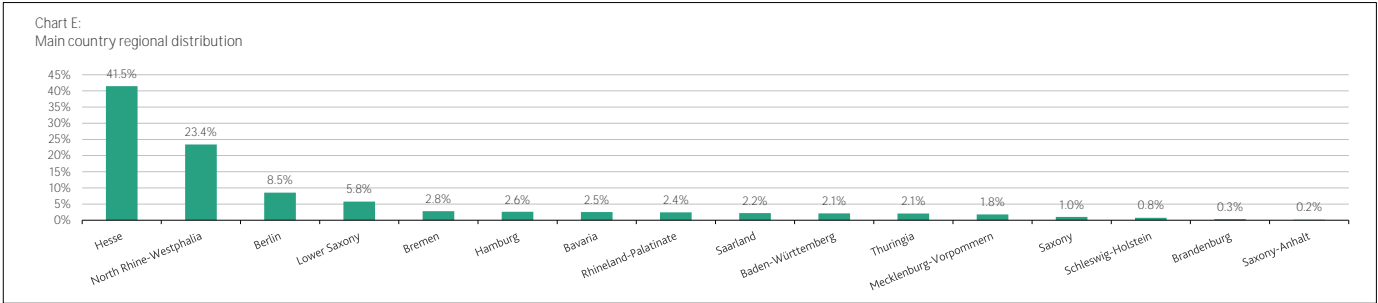
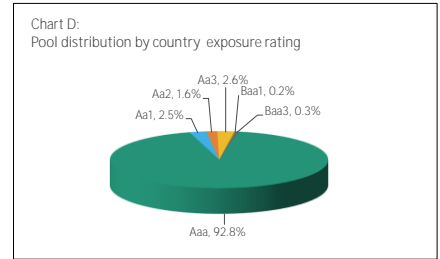
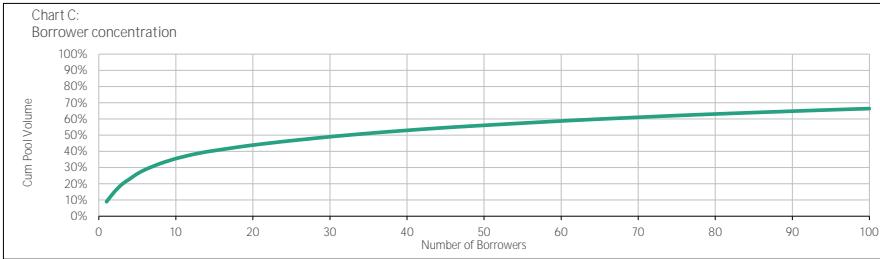
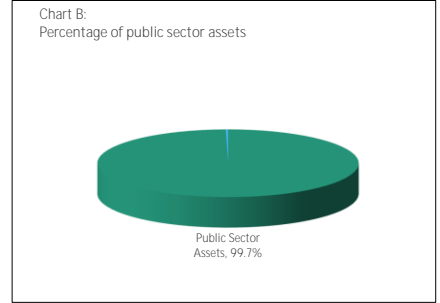


Table A and Chart C are based on debtor data. Charts D, E and F are based on guarantor data or, on unavailability of such information, on debtor data, as reported by the issuer.  
Landesbank Hessen-Thüringen GZ - Public-Sector Covered Bonds

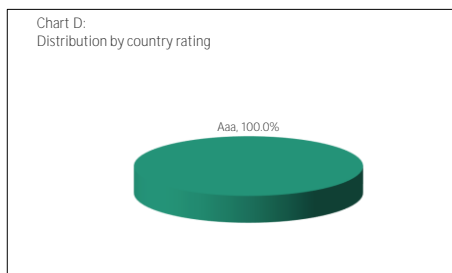
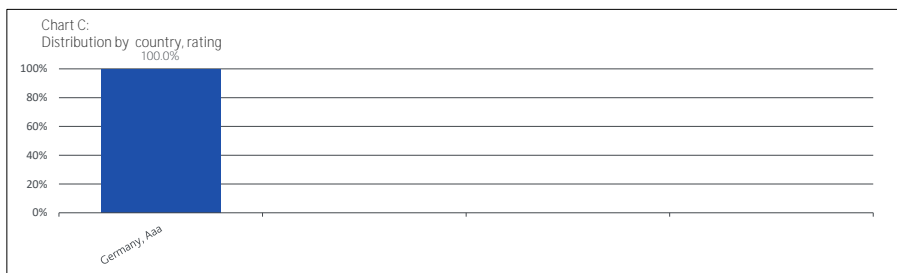
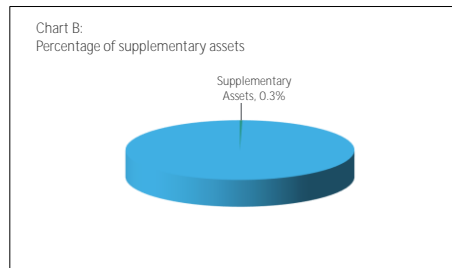
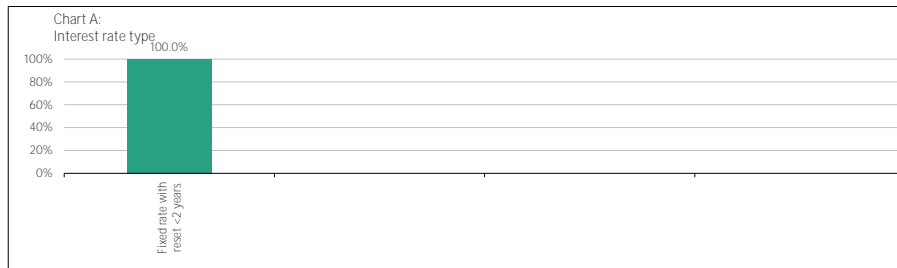
VIII. Cover Pool Information - Supplementary Assets

Overview

	Supplementary Assets
Asset type:	
Asset balance:	108,822,776
WA remaining Term (in months):	4
Number of assets:	41
Number of borrowers:	9
Average assets size:	2,654,214
Average exposure to borrowers:	12,091,420

Specific Loan and Borrower characteristics

Repo eligible assets:	n/d
Percentage of fixed rate assets:	100.0%
Percentage of bullet assets:	100.0%
Assets in non-domestic currency:	35.7%
<b>Performance</b>	
Assets in arrears (≥ 2months - < 6months):	0.0%
Assets in arrears (≥ 6months - < 12months):	0.0%
Assets in arrears (> 12months):	0.0%
Assets in a enforcement procedure:	0.0%



## IX. Liabilities Information: Last 50 Issuances

ISIN	Series Number	Currency	Outstanding Amount	Issuance Date	Expected Maturity	Legal Final Maturity	Interest Rate Type	Coupon	Principal Payment
DE000HLB4ZG1	n/d	EUR	750,000,000	29/04/2020	29/04/2024	29/04/2024	Floating rate	EURIBOR + 150 bps	BULLETT
DE000HLB4Y69	n/d	EUR	750,000,000	23/04/2020	23/10/2023	23/10/2023	Floating rate	EURIBOR + 115 bps	BULLETT
DE000HLB4Y36	n/d	EUR	1,000,000,000	14/04/2020	14/04/2023	14/04/2023	Floating rate	EURIBOR + 95 bps	BULLETT
XF0000HEYVJ8	n/d	EUR	3,000,000	26/03/2020	26/03/2060	26/03/2060	Fixed rate	1.220%	BULLETT
XF0000HEYVA7	n/d	EUR	5,000,000	09/03/2020	09/03/2040	09/03/2040	Fixed rate	0.645%	BULLETT
XF0000HEYUQ5	n/d	EUR	20,000,000	28/01/2020	28/01/2060	28/01/2060	Fixed rate	1.210%	BULLETT
XS2106579670	n/d	EUR	750,000,000	22/01/2020	22/01/2030	22/01/2030	Fixed rate	0.125%	BULLETT
XF0000HEYUG6	n/d	EUR	25,000,000	15/01/2020	14/01/2060	14/01/2060	Fixed rate	1.315%	BULLETT
XF0000HEYUC5	n/d	EUR	5,000,000	13/01/2020	13/01/2060	13/01/2060	Fixed rate	1.105%	BULLETT
XF0000HEYUD3	n/d	EUR	5,000,000	13/01/2020	13/01/2060	13/01/2060	Fixed rate	1.085%	BULLETT
DE000HLB4YE9	n/d	EUR	5,000,000	10/12/2019	10/12/2049	10/12/2049	Fixed rate	1.235%	BULLETT
XF0000HEYS07	n/d	EUR	10,000,000	02/12/2019	25/11/2049	25/11/2049	Fixed rate	1.050%	BULLETT
XS2086753204	n/d	EUR	50,000,000	29/11/2019	29/11/2021	29/11/2021	Fixed rate	0.010%	BULLETT
XF0000HEYTF0	n/d	EUR	5,000,000	28/11/2019	28/11/2044	28/11/2044	Fixed rate	1.065%	BULLETT
XF0000HEYTG8	n/d	EUR	1,000,000	28/11/2019	28/11/2044	28/11/2044	Fixed rate	1.065%	BULLETT
XF0000HEYSS5	n/d	EUR	10,000,000	04/11/2019	23/09/2049	23/09/2049	Fixed rate	0.955%	BULLETT
XF0000HEZL45	n/d	EUR	3,000,000	30/09/2019	30/09/2028	30/09/2028	Fixed rate	2.750%	Other amortising
XS2056484889	n/d	EUR	1,000,000,000	26/09/2019	26/09/2029	26/09/2029	Fixed rate	0.010%	BULLETT
XF0000HEYSB1	n/d	EUR	5,000,000	20/09/2019	19/09/2049	19/09/2049	Fixed rate	1.060%	BULLETT
XF0000HEYS9C	n/d	EUR	5,000,000	20/09/2019	19/09/2049	19/09/2049	Fixed rate	1.060%	BULLETT
XF0000HEYR5	n/d	EUR	5,000,000	06/09/2019	06/09/2041	06/09/2041	Fixed rate	0.740%	BULLETT
XF0000HEYRZ2	n/d	EUR	500,000	06/09/2019	06/09/2041	06/09/2041	Fixed rate	0.740%	BULLETT
XF0000HEYRV1	n/d	EUR	15,000,000	03/09/2019	03/09/2052	03/09/2052	Fixed rate	0.740%	BULLETT
XF0000HEYRL2	n/d	EUR	5,000,000	14/08/2019	14/08/2041	14/08/2041	Fixed rate	0.835%	BULLETT
XF0000HEYRMO	n/d	EUR	500,000	14/08/2019	14/08/2041	14/08/2041	Fixed rate	0.835%	BULLETT
XF0000HEYQ25	n/d	EUR	5,000,000	19/07/2019	19/07/2049	19/07/2049	Fixed rate	1.300%	BULLETT
XF0000HEYQ33	n/d	EUR	5,000,000	19/07/2019	19/07/2049	19/07/2049	Fixed rate	1.350%	BULLETT
XF0000HEYQW1	n/d	EUR	20,000,000	09/07/2019	09/07/2049	09/07/2049	Fixed rate	1.070%	BULLETT
XF0000HEYQU5	n/d	EUR	5,000,000	04/07/2019	04/07/2041	04/07/2041	Fixed rate	1.030%	BULLETT
XF0000HEYPH4	n/d	EUR	27,000,000	26/04/2019	26/11/2043	26/11/2043	Fixed rate	1.420%	BULLETT
XF0000HEYN69	n/d	EUR	75,000,000	08/04/2019	29/12/2023	29/12/2023	Zero Bond	Zero	BULLETT
XF0000HEYN77	n/d	EUR	100,000,000	08/04/2019	30/12/2024	30/12/2024	Fixed rate	0.095%	BULLETT
XF0000HEYNX6	n/d	EUR	1,000,000	27/03/2019	27/03/2034	27/03/2034	Fixed rate	0.920%	BULLETT
XF0000HEYNN7	n/d	EUR	10,000,000	21/03/2019	21/03/2039	21/03/2039	Fixed rate	1.223%	BULLETT
XF0000HEYNP2	n/d	EUR	1,000,000	21/03/2019	21/03/2039	21/03/2039	Fixed rate	1.223%	BULLETT
XF0000HEYMM1	n/d	EUR	20,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLETT
XF0000HEYMN9	n/d	EUR	3,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLETT
XF0000HEYMP4	n/d	EUR	2,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLETT
XF0000HEYMQ2	n/d	EUR	5,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLETT
XF0000HEYL87	n/d	EUR	25,000,000	21/02/2019	22/02/2049	22/02/2049	Fixed rate	1.730%	BULLETT
DE000HLB4V96	n/d	EUR	5,000,000	19/02/2019	19/02/2024	19/02/2024	Fixed rate	0.143%	BULLETT
DE000HLB4WA1	n/d	EUR	20,000,000	19/02/2019	21/02/2022	21/02/2022	Zero Bond	Zero	BULLETT
XF0000HEYL04	n/d	EUR	5,000,000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLETT
XF0000HEYL12	n/d	EUR	1,000,000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLETT
XF0000HEYL20	n/d	EUR	100,000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLETT
XF0000HEYLU6	n/d	EUR	10,000,000	08/02/2019	08/02/2049	08/02/2049	Fixed rate	1.845%	BULLETT
XF0000HEYLG5	n/d	EUR	50,000,000	25/01/2019	25/01/2039	25/01/2039	Fixed rate	1.450%	BULLETT
XF0000HEYLF7	n/d	EUR	1,500,000	24/01/2019	24/01/2045	24/01/2045	Fixed rate	1.525%	BULLETT
XF0000HEYK70	n/d	EUR	40,000,000	18/01/2019	28/06/2045	28/06/2045	Fixed rate	1.535%	BULLETT
XF0000HEYK88	n/d	EUR	20,000,000	18/01/2019	18/01/2045	18/01/2045	Fixed rate	1.550%	BULLETT

© 2020 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/OR ITS CREDIT RATINGS AFFILIATES ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S INVESTORS SERVICE 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 OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S INVESTORS SERVICE CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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 CREDIT RATING, ASSESSMENT, 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service 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](http://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.

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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.