Landesbank Hessen-Thueringen GZ - Public-Sector Covered Bonds Covered Bonds / Germany Contacts Widmayer, Patrick - +49 (697) 073-0715 - Patrick.Widmayer@moodys.com

30/09/2019

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All amounts in EUR (unless otherwise specified)

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

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

I. Programme Overview

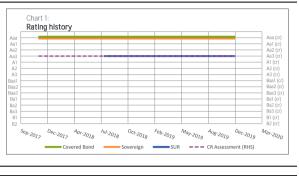
Monitoring

Client Service Desk

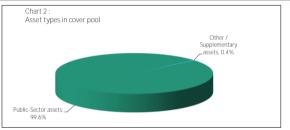
Reporting as of:

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

Year of initial rating assignment:		1995
Total outstanding liabilities:	EUR	28,172,384,348
Total assets in the Cover Pool:	EUR	34,197,392,444
Issuer name / CR Assessment:	Landesbank Hessen	-Thueringen 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:	Landesbar	nk Hessen-Thueringen 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:		3.0%
Collateral Score excl. systemic risk:		n/a



II. Value of the Cover Pool		
Collateral quality		
Collateral Score:	3.0%	
Collateral Score excl. systemic risk:	n/a	
Cover Pool losses		
Collateral Risk (Collateral Score post-haircut):	1.6%	17%
Market Risk:	8.3%	83%
	9.9%	(100%)



III. Over-Collateralisation Levels (notes 2 & 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):	20.9%
OC consistent with current rating (note 4)	0.0%

Sensitivity scenario CB anchor

Scenario 1: CB anchor is lowered by	1 notch	2.0%	

IV. Timely Payment Indicator & TPI Leeway

Timely Payment Indicator (TPI):	
TPI Leeway:	
Extract from TPI table - CB anchor Is CR Assessment	+ 1 notch
CR Assessment	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)	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 Dfandbrief 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 thas made are reasonable, cannot (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

High

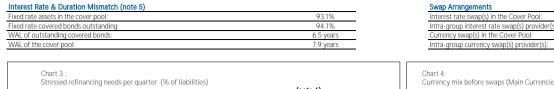
Moody's discretion.

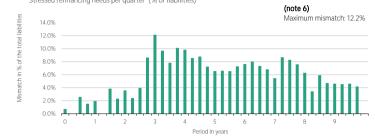
(mode) 3 Units tools. (mode) 3 Units the minimum OC calculated to be consistent with the current rating under Moody's expected loss model. However, the level of OC consistent with a given rating level may differ from this amount where ratings are capped under the TPI framework and, for example, where

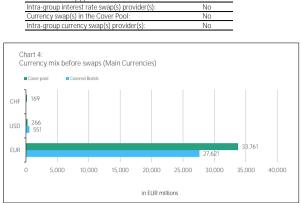
(note 3) This is the minimum OC calculated to be consistent with the current rating when how a second state of the covered bond rating at its current level on the basis of the pool as per the cut-off date. The sensitivity run is based on certain assumptions, including that the Covered Bonds rating is 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 show. 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.
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29 November 20 Page 1

V. Asset Liability Profile

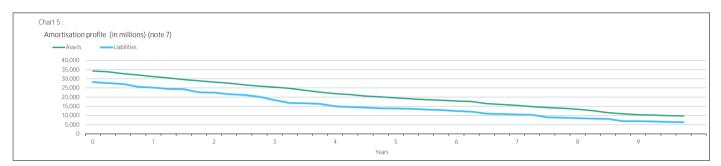
Interest Rate & Duration Mismatch (note 5)



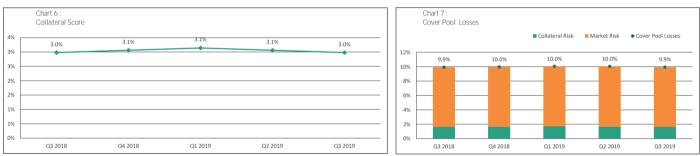


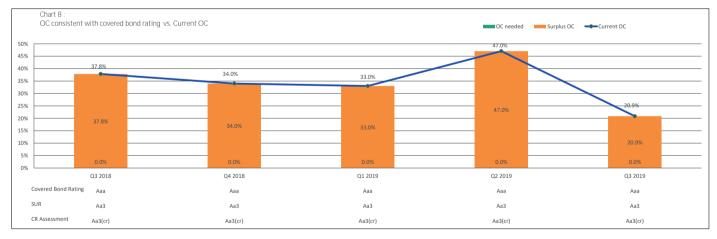


No



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 <u>www.moodys.com</u> 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. Landesbank Hessen-Thueringen GZ - Public-Sector Covered Bonds

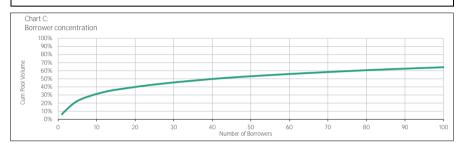
VII. Cover Pool Information - Public Sector Assets

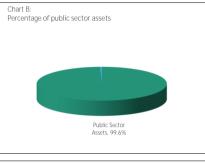
Overvlew	
Asset type:	Public Sector
Asset balance:	34,045,033,347
WA remaining Term (in months):	134
Number of borrowers:	6,140
Number of loans / bonds:	22,590
Exposure to the 10 largest borrowers:	31.3%
Average exposure to borrowers:	5,544,794

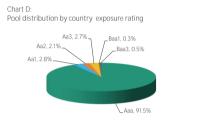
Specific Loan and Borrower characteristics	
Repo eligible loans / bonds:	
Percentage of fixed rate loans / bonds:	9
Percentage of bullet loans/ bonds:	3
Loans / bonds in non-domestic currency:	
Performance	
Loans / bonds in arrears (≥ 2months - < 6months):	(
Loans / bonds in arrears (≥ 6months - < 12months):	(
Loans / bonds in arrears (≥ 12months):	(
Loans / bonds in a foreclosure procedure:	(

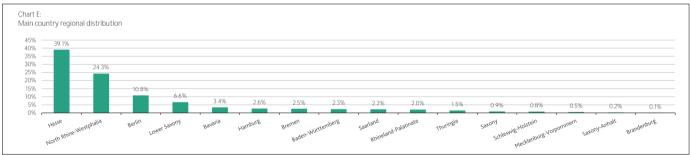
pecific Loan and borrower characteristics	
Repo eligible loans / bonds:	2.1%
Percentage of fixed rate loans / bonds:	93.0%
Percentage of bullet loans/ bonds:	36.5%
Loans / bonds in non-domestic currency:	1.2%
Performance	
Loans / bonds in arrears (≥ 2months - < 6months):	0.0%
Loans / bonds in arrears (≥ 6months - < 12months):	0.0%
Loans / bonds in arrears (≥ 12months):	0.0%
Loans / bonds in a foreclosure procedure:	0.0%

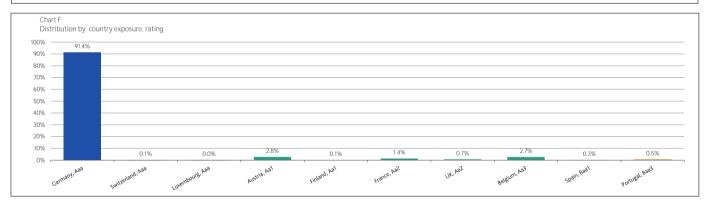
	Germany	Belgium	Austria	Other	Totals
Direct claim against supranational	0.0%	0.0%	0.0%	0.0%	0.0%
Direct claim against sovereign	0.2%	0.0%	0.2%	0.0%	0.3%
Loan with guarantee of sovereign	0.0%	0.1%	0.0%	2.8%	2.9%
Direct claim against region/federal state	33.4%	0.0%	0.0%	0.0%	33.4%
Loan with guarantee of region/federal state	2.8%	2.7%	2.6%	0.4%	8.5%
Direct claim against municipality	49.0%	0.0%	0.0%	1.7%	50.7%
Loan with guarantee of municipality	3.3%	0.0%	0.0%	0.2%	3.5%
Others	0.7%	0.0%	0.0%	0.0%	0.7%
	89.2%	2.8%	2.8%	5.2%	









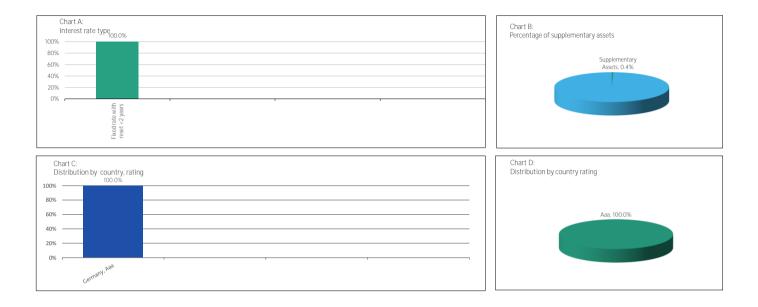


MOODY'S INVESTORS SERVICE

VIII. Cover Pool Information - Supplementary Assets

verview				
Asset type:	Supplementary Assets			
Asset balance:	152,359,097			
WA remaining Term (in months):	3			
Number of assets:	48			
Number of borrowers:	10			
Average assets size:	3,174,148			
Average exposure to borrowers:	15,235,910			

Repo eligible assets:	n/d
Percentage of fixed rate assets:	100.0%
Percentage of bullet assets:	100.0%
Assets in non-domestic currency:	27.1%
erformance	
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 XS20564848899 XF0000HEYSB1 XF0000HEYSB1 XF0000HEYSB1 XF0000HEYSB1 XF0000HEYRS9 XF0000HEYRS1 XF0000HEYRZ2 XF0000HEYQ33 XF0000HEYQ33 XF0000HEYQU5 XF0000HEYQU5 XF0000HEYN77 XF0000HEYN89 XF0000HEYN80 XF0000HEYN80 XF0000HEYN81 XF0000HEYN82 XF0000HEYM9 XF0000HEYM9 XF0000HEYM9 XF0000HEYM9 XF0000HEYM37 DE000HEX477 XF0000HEYM4 XF0000HEYM4 XF0000HEYM4 XF0000HEYM4 XF0000HEYM4 XF0000HEYM4	Number n/d n/d	Currency EUR EUR	Amount 1,000,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 5,000,000 20,000,000 27,000,000 75,000,000 100,000,000 1,000,000 10,	Date 26/09/2019 20/09/2019 20/09/2019 06/09/2019 06/09/2019 14/08/2019 14/08/2019 14/08/2019 19/07/2019 19/07/2019 09/07/2019 06/04/2019 08/04/2019 08/04/2019 08/04/2019	Maturity 26/09/2029 19/09/2049 06/09/2041 06/09/2041 03/09/2052 14/08/2041 19/07/2049 09/07/2049 09/07/2049 04/07/2049 26/11/2043 29/12/2023	Maturity 26/09/2029 19/09/2049 19/09/2049 06/09/2041 03/09/2052 14/08/2041 14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 26/17/2049 26/17/2043 29/12/2023	Type Fixed rate Fixed rate	Coupon 0.010% 1.060% 1.060% 0.740% 0.740% 0.740% 0.835% 0.835% 1.300% 1.350% 1.350% 1.070% 1.030% 1.420% 0.000%	Payment BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET
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XF0000HEYRY5 XF0000HEYRY1 XF0000HEYR12 XF0000HEYR12 XF0000HEYR12 XF0000HEYR12 XF0000HEYR23 XF0000HEYQ25 XF0000HEYQ33 XF0000HEYQ33 XF0000HEYQ15 XF0000HEYQ15 XF0000HEYQ15 XF0000HEYN44 XF0000HEYN56 XF0000HEYN86 XF0000HEYN87 XF0000HEYN86 XF0000HEYN87 XF0000HEYN86 XF0000HEYN87 XF0000HEYN86 XF0000HEYN86 XF0000HEYN86 XF0000HEYN87 XF0000HEYN87 XF0000HEYM92 XF0000HEYM94 XF0000HEYM9 XF0000HEYL87 DE000HEA4V96 DE000HEA4V96 DE000HEX120 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL26 XF0000HEYL27	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 500,000 15,000,000 5,000,000 5,000,000 5,000,000 5,000,000	06/09/2019 06/09/2019 03/09/2019 14/08/2019 14/08/2019 19/07/2019 19/07/2019 09/07/2019 04/07/2019 06/04/2019 08/04/2019	06/09/2041 06/09/2041 03/09/2052 14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	06/09/2041 06/09/2041 03/09/2052 14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate	0.740% 0.740% 0.835% 0.835% 1.300% 1.350% 1.070% 1.030% 1.420%	BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET
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XF0000HEYRL2 XF0000HEYRL2 XF0000HEYRL2 XF0000HEYQ25 XF0000HEYQ23 XF0000HEYQ33 XF0000HEYQ15 XF0000HEYQ15 XF0000HEYQ15 XF0000HEYD4 XF0000HEYD4 XF0000HEYN7 XF0000HEYL2 XF0000HEYL2 XF0000HEYL2 XF0000HEYL2 XF0000HEYL2 XF0000HEYL2 XF0000HEYL2 <t< td=""><td>n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d</td><td>EUR EUR EUR EUR EUR EUR EUR EUR EUR EUR</td><td>5,000,000 500,000 5,000,000 5,000,000 5,000,000</td><td>14/08/2019 14/08/2019 19/07/2019 19/07/2019 09/07/2019 04/07/2019 26/04/2019 08/04/2019</td><td>14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023</td><td>14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023</td><td>Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate</td><td>0.835% 0.835% 1.300% 1.350% 1.070% 1.030% 1.420%</td><td>BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET</td></t<>	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 500,000 5,000,000 5,000,000 5,000,000	14/08/2019 14/08/2019 19/07/2019 19/07/2019 09/07/2019 04/07/2019 26/04/2019 08/04/2019	14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	14/08/2041 14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate	0.835% 0.835% 1.300% 1.350% 1.070% 1.030% 1.420%	BULLET BULLET BULLET BULLET BULLET BULLET BULLET BULLET
XF0000HEYRM0 XF0000HEYQ25 XF0000HEYQ33 XF0000HEYQ33 XF0000HEYQ33 XF0000HEYQ33 XF0000HEYQ15 XF0000HEYQ15 XF0000HEYPH4 XF0000HEYN4 XF0000HEYN4 XF0000HEYN77 XF0000HEYN77 XF0000HEYN72 XF0000HEYN73 XF0000HEYN74 XF0000HEYN75 XF0000HEY12 XF0000HEY120 XF0000HEYL06 XF0000HEYL05 XF0000HEYL65 XF0000HEYL65	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR EUR EUR	500,000 5,000,000 20,000,000 5,000,000 5,000,000 27,000,000 75,000,000 100,000,000 1,000,000	14/08/2019 19/07/2019 19/07/2019 09/07/2019 04/07/2019 26/04/2019 08/04/2019 08/04/2019	14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	14/08/2041 19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate	0.835% 1.300% 1.350% 1.070% 1.030% 1.420%	BULLET BULLET BULLET BULLET BULLET BULLET
XF0000HEYQ25 XF0000HEYQ25 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYNB9 XF0000HEYN77 XF0000HEYNX6 XF0000HEYNX7 XF0000HEYNX7 XF0000HEYNX7 XF0000HEYNN7 XF0000HEYNN2 XF0000HEYMQ2 XF0000HEYMP4 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL65	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 5,000,000 5,000,000 27,000,000 75,000,000 100,000,000 1,000,000	19/07/2019 19/07/2019 09/07/2019 04/07/2019 26/04/2019 08/04/2019 08/04/2019	19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate	1.300% 1.350% 1.070% 1.030% 1.420%	BULLET BULLET BULLET BULLET BULLET
XF0000HEYQ25 XF0000HEYQ25 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYQW1 XF0000HEYNB XF0000HEYNA XF0000HEYNX6 XF0000HEYNX7 XF0000HEYNN7 XF0000HEYNN2 XF0000HEYNN2 XF0000HEYNA2 XF0000HEYMQ2 XF0000HEYMQ3 XF0000HEYMP4 XF0000HEYMP3 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP3 XF0000HEYL04 XF0000HEYL20 XF0000HEYL06 XF0000HEYL05 XF0000HEYLG5 XF0000HEYLF7	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 5,000,000 5,000,000 27,000,000 75,000,000 100,000,000 1,000,000	19/07/2019 19/07/2019 09/07/2019 04/07/2019 26/04/2019 08/04/2019 08/04/2019	19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	19/07/2049 19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate Fixed rate	1.300% 1.350% 1.070% 1.030% 1.420%	BULLET BULLET BULLET BULLET BULLET
XF0000HEYQW1 XF0000HEYQU5 XF0000HEYPH4 XF0000HEYNF7 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN72 XF0000HEYN72 XF0000HEYN72 XF0000HEYN72 XF0000HEYN72 XF0000HEYN72 XF0000HEYN72 XF0000HEYN73 DE000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYM74 XF0000HEYL72 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL65	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 20,000,000 5,000,000 27,000,000 75,000,000 100,000,000 1,000,000	09/07/2019 04/07/2019 26/04/2019 08/04/2019 08/04/2019	09/07/2049 04/07/2041 26/11/2043 29/12/2023	19/07/2049 09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate	1.070% 1.030% 1.420%	BULLET BULLET BULLET
XF0000HEYQW1 XF0000HEYQU5 XF0000HEYN4 XF0000HEYN4 XF0000HEYN69 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN72 XF0000HEYN02 XF0000HEYN02 XF0000HEYM02 XF0000HEYMN9 XF0000HEYM94 XF0000HEYM87 DE000HLB4V96 DE000HLB4V96 DE000HLB4V96 DE000HLB4V96 DE000HLB4V96 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL65	n/d n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR EUR	5,000,000 27,000,000 75,000,000 100,000,000 1,000,000	09/07/2019 04/07/2019 26/04/2019 08/04/2019 08/04/2019	09/07/2049 04/07/2041 26/11/2043 29/12/2023	09/07/2049 04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate Fixed rate	1.070% 1.030% 1.420%	BULLET BULLET
XF0000HEYQU5 XF0000HEYPH4 XF0000HEYNF4 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN77 XF0000HEYN72 XF0000HEYN72 XF0000HEYM02 XF0000HEYM02 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYM87 DE000HEMP4 XF0000HEYM87 DE000HE84V96 DE000HE84V96 DE000HE84V96 DE000HEV127 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL65 XF0000HEYL65	n/d n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR EUR EUR	27,000,000 75,000,000 100,000,000 1,000,000	04/07/2019 26/04/2019 08/04/2019 08/04/2019	04/07/2041 26/11/2043 29/12/2023	04/07/2041 26/11/2043 29/12/2023	Fixed rate Fixed rate Fixed rate	1.030% 1.420%	BULLET BULLET
XF0000HEYN69 XF0000HEYN77 XF0000HEYN77 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYM02 XF0000HEYM02 XF0000HEYM04 XF0000HEYM9 XF0000HEYM9 XF0000HEYM87 DE000HL84V96 DE000HL84V96 DE000HL84V96 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL26 XF0000HEYL27	n/d n/d n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR	75,000,000 100,000,000 1,000,000	08/04/2019 08/04/2019	29/12/2023	29/12/2023	Fixed rate		
XF0000HEYN69 XF0000HEYN77 XF0000HEYN77 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYN7 XF0000HEYM02 XF0000HEYM02 XF0000HEYM04 XF0000HEYM9 XF0000HEYM9 XF0000HEYM87 DE000HL84V96 DE000HL84V96 DE000HL84V96 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL26 XF0000HEYL27	n/d n/d n/d n/d n/d n/d	EUR EUR EUR EUR EUR	75,000,000 100,000,000 1,000,000	08/04/2019 08/04/2019	29/12/2023	29/12/2023	Fixed rate		
XF0000HEYN77 XF0000HEYNX6 XF0000HEYNX6 XF0000HEYNP2 XF0000HEYNP2 XF0000HEYMQ2 XF0000HEYMP4 XF0000HEYL87 DE000HL84V96 DE000HL84V96 DE000HL84V96 DE000HEYL21 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYLG5 XF0000HEYL77	n/d n/d n/d n/d n/d	EUR EUR EUR	100,000,000 1,000,000	08/04/2019					
XF0000HEYNN7 XF0000HEYNP2 XF0000HEYNP2 XF0000HEYMQ2 XF0000HEYMM1 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYL87 DE000HEAVA1 XF0000HEYL04 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL25 XF0000HEYL26	n/d n/d n/d n/d n/d	EUR	.10001000	27/03/2010		30/12/2024	Fixed rate	0.095%	BULLET
XF0000HEYNP2 XF0000HEYMP2 XF0000HEYMM2 XF0000HEYMM1 XF0000HEYMN9 XF0000HEYMN9 XF0000HEYL87 DE000HL84V96 DE000HL84V96 DE000HL84WA1 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYLG5 XF0000HEYF7	n/d n/d n/d n/d	EUR	10,000,000		27/03/2034	27/03/2034	Fixed rate	0.920%	BULLET
XF0000HEYNP2 XF0000HEYMP2 XF0000HEYMM2 XF0000HEYMM1 XF0000HEYMN9 XF0000HEYMN9 XF0000HEYL87 DE000HL84V96 DE000HL84V96 DE000HL84WA1 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYLG5 XF0000HEYF7	n/d n/d n/d n/d	EUR		21/03/2019	21/03/2039	21/03/2039	Fixed rate	1.223%	BULLET
XF0000HEYMO2 XF0000HEYMM1 XF0000HEYMM4 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 DE000HLB4V96 DE000HLB4V96 DE000HLP470 XF0000HEYL12 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYLG5 XF0000HEYL77	n/d n/d n/d		1.000.000	21/03/2019	21/03/2039	21/03/2039	Fixed rate	1.223%	BULLET
XF0000HEYMM1 XF0000HEYMP4 XF0000HEYMP4 XF0000HEYMP4 DE000HEYL87 DE000HEYL87 DE000HEYL87 XF0000HEYL87 XF0000HEYL04 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL06 XF0000HEYL05 XF0000HEYL25	n/d n/d		5.000.000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLET
XF0000HEYMP4 XF0000HEYMN9 XF0000HEYL87 DE000HL84V96 DE000HL84V96 XF0000HEYL04 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYL65 XF0000HEYLF7	n/d	EUR	20.000.000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLET
XF0000HEYMN9 XF0000HEYL87 DE000HLB4V96 DE000HLB4V96 XF0000HEYL04 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL25 XF0000HEYLG5 XF0000HEYL77		EUR	2,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLET
XF0000HEYL87 DE000HLB4V96 DE000HLB4V96 XF0000HEYL04 XF0000HEYL04 XF0000HEYL20 XF0000HEYL20 XF0000HEYL20 XF0000HEYL65 XF0000HEYLF7	n/d	EUR	3,000,000	25/02/2019	25/02/2039	25/02/2039	Fixed rate	1.287%	BULLET
DE000HLB4V96 DE000HLB4VVA1 XF0000HEYL04 XF0000HEYL12 XF0000HEYL20 XF0000HEYL20 XF0000HEYL05 XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	25,000,000	21/02/2019	22/02/2049	22/02/2049	Fixed rate	1.730%	BULLET
DE000HLB4WA1 XF0000HEYL04 XF0000HEYL2 XF0000HEYL20 XF0000HEYL20 XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	5.000.000	19/02/2019	19/02/2024	19/02/2024	Fixed rate	0.143%	BULLET
XF0000HEYL04 XF0000HEYL12 XF0000HEYL20 XF0000HEYLU6 XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	20.000.000	19/02/2019	21/02/2022	21/02/2022	Fixed rate	0.000%	BULLET
XF0000HEYL12 XF0000HEYL20 XF0000HEYL06 XF0000HEYL65 XF0000HEYLF7	n/d	EUR	5.000.000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLET
XF0000HEYL20 XF0000HEYLU6 XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	1.000.000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLET
XF0000HEYLU6 XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	100.000	15/02/2019	15/02/2039	15/02/2039	Fixed rate	1.580%	BULLET
XF0000HEYLG5 XF0000HEYLF7	n/d	EUR	10.000.000	08/02/2019	08/02/2049	08/02/2049	Fixed rate	1.845%	BULLET
XF0000HEYLF7	n/d	EUR	50.000.000	25/01/2019	25/01/2039	25/01/2039	Fixed rate	1.450%	BULLET
	n/d	EUR	1.500.000	24/01/2019	24/01/2045	24/01/2045	Fixed rate	1.525%	BULLET
	n/d	FUR	40.000.000	18/01/2019	28/06/2045	28/06/2045	Fixed rate	1.535%	BULLET
XF0000HEYK88	n/d	EUR	20,000,000	18/01/2019	18/01/2045	18/01/2045	Fixed rate	1.550%	BULLET
XF0000HEYK96	n/d	EUR	20,000,000	18/01/2019	15/12/2039	15/12/2039	Fixed rate	1.500%	BULLET
XF0000HEYK62	n/d	EUR	40.000.000	17/01/2019	25/05/2045	25/05/2045	Fixed rate	1.540%	BULLET
X\$1936190021	n/d	EUR	1.500.000.000	16/01/2019	18/07/2022	18/07/2022	Fixed rate	0.000%	BULLET
X\$1936186425	n/d	EUR	750.000.000	16/01/2019	16/01/2022	16/01/2022	Fixed rate	0.500%	BULLET
XF0000HEYKT0	n/d	EUR	20.000.000	07/12/2018	07/12/2040	07/12/2040	Fixed rate	1.425%	BULLET
XF0000HEYKS2	n/d	EUR	10.000.000	04/12/2018	27/09/2049	27/09/2049	Fixed rate	2.030%	BULLET
XF0000HEYKR4	n/d	EUR	15,000,000	30/11/2018	30/11/2043	30/11/2043	Fixed rate	1.522%	BULLET
XF0000HEYKP8	n/d	FUR	30.000.000	28/11/2018	13/01/2039	13/01/2039	Fixed rate	1.461%	BULLET
XF0000HEYKP8	n/d	EUR	500.000	28/11/2018	13/01/2039	13/01/2039	Fixed rate	1.461%	BULLET
XF0000HEYKP8	n/d	EUR	2,000,000	28/11/2018	13/01/2039	13/01/2039	Fixed rate	1.461%	BULLET
XF0000HEYKP8	n/d	EUR	2,500,000	28/11/2018	13/01/2039	13/01/2039	Fixed rate	1.461%	BULLET
XF0000HEYKA0	n/d	EUR	4,000,000	13/11/2018	13/11/2043	13/11/2043	Fixed rate	1.574%	BULLET
XF0000HEYK88	n/d	EUR	2,000,000	13/11/2018	13/11/2043	13/11/2043	Fixed rate	1.574%	BULLET
XF0000HEYJ99	n/d	EUR	2,000,000	12/11/2018	12/11/2043	12/11/2043	Fixed rate	1.585%	BULLET
XF0000HEYJ39 XF0000HEYJ32	n/d	EUR	20,000,000	09/11/2018	11/11/2041	12/11/2041	Fixed rate	1.564%	BULLET
XF0000HEYJ24	11/ 4	EUR	20,000,000	09/11/2018	09/11/2040	09/11/2040	Fixed rate	1.558%	BULLET
XF0000HEYJ24 XF0000HEYJ73	n/d	EUR	20,000,000	09/11/2018	10/11/2040	10/11/2040	Fixed rate	1.565%	BULLET

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