

Creditreform Covered Bond Rating

Landesbank Hessen-Thüringen (Helaba)

Public Sector Covered Bond Program



Rating Object

Country Issuer	Germany	Repayment method	Hard Bullet
Cover pool asset class	Public Sector		Min (2,00%)
Legal framework	German Pfandbrief Act	Overcollateralization	Current (34,31%)
Nominal value	EUR 16.641,10 m.		Committed (NA)
Cover pool value	EUR 22.350,90 m.		Fix (96,20%)
WAL maturity covered bonds	6,20 (Years)	Covered bonds coupon type	Floating (3,80%)
WAL maturity cover pool	7,10 (Years)		Other (0,00%)
Cut-off date Covered Pool Information:	31.03.2019		

Rating Overview

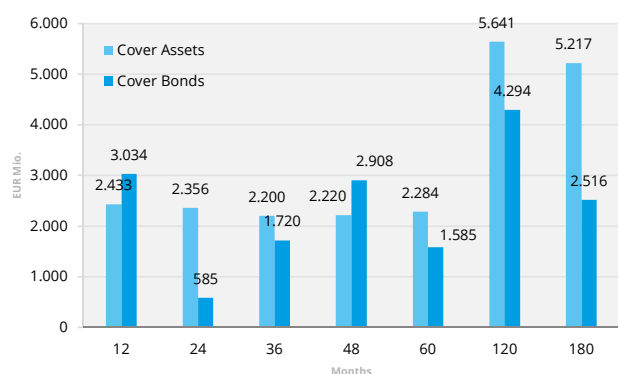
Rating Summary		Credit Risk	
Issuer	Landesbank Hessen-Thüringen Girozentrale	Metrics date	09.11.2018
LT Issuer Rating	A-	Rating Case Default Rate	11,69%
ST Issuer Rating	L2	Rating Case Recovery Rate	38,38%
+Legal and regulatory framework analysis	+4 Notches	Expected Loss	7,20%
+Liquidity and refinancing risk	+1 Notch	Rating Case Breakeven OC	16,07%
= Rating after 1st uplift	AA+	<i>Program Key Counterparties</i>	
Cover Pool & cash flow analysis	AAA	Servicer	NA
+ 2nd rating uplift	+1 Notch	Account Bank	NA
Rating covered bond program	AAA	Sponsor	NA

Cover Assets Composition

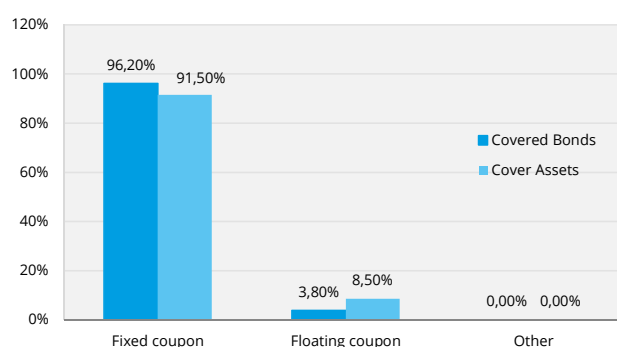
Cover Pool Balance	EUR 22.350,90 m.	Average size Loans	EUR 1.137,36 k.
Average Seasoning	72,10 Months		

Distribution by Type of Asset		Distribution by Loan Size	
Mortgages	EUR 0,00 m.	Total Number of Exposures	19.551
Public Sector	EUR 22.236,60 m.	Sovereigns (EUR m.)	971
Substitute Assets	EUR 114,30 m.	Regional/federal authorities (EUR m.)	6.335
Other (Derivates)	EUR 0,00 m.	Local/municipal authorities (EUR m.)	10.950
		Others (EUR m.)	3.981

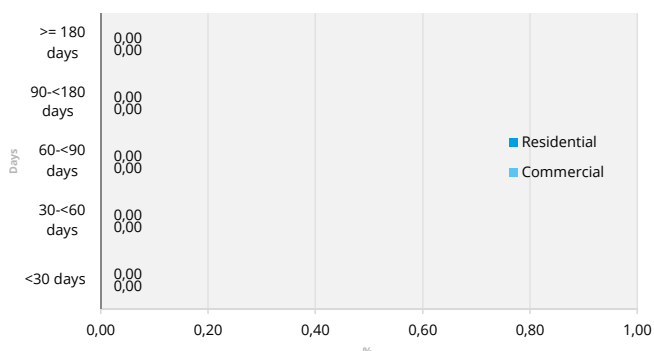
Asset-liability Profile



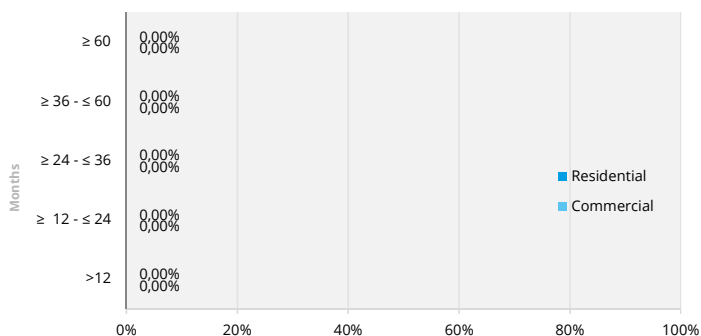
Interest Rate



Arrears Distribution



Seasoning Distribution



Creditreform Covered Bond Rating

Landesbank Hessen-Thüringen (Helaba)

Public Sector Covered Bond Program

Creditreform 
Rating

LTV Distribution Commercial Loans			LTV Distribution Residential Loans		
LTV	Nominal	% Loans	LTV	Nominal	% Loans
>0 - <=40 %	NA	NA	>0 - <=40 %	NA	NA
>40 - <=50 %	NA	NA	>40 - <=50 %	NA	NA
>50 - <=60 %	NA	NA	>50 - <=60 %	NA	NA
>60 - <=70 %	NA	NA	>60 - <=70 %	NA	NA
>70 - <=80 %	NA	NA	>70 - <=80 %	NA	NA
>80 - <=90 %	NA	NA	>80 - <=90 %	NA	NA
>90 - <=100 %	NA	NA	>90 - <=100 %	NA	NA
>100%	NA	NA	>100%	NA	NA

Currency Distribution			Loan Distribution by Regions (as % of total Public Sector assets)		
Currency	Covered Bonds	Cover Assets	Region	% of Public Sector assets	
EUR	16.107,00 m.	21.904,80 m.	Baden-Württemberg	1,40%	
AUD	0,00 m.	0,00 m.	Bayern	0,80%	
BRL	0,00 m.	0,00 m.	Berlin	5,80%	
CAD	0,00 m.	0,00 m.	Brandenburg	0,20%	
CHF	0,00 m.	164,00 m.	Bremen	1,30%	
CZK	0,00 m.	0,00 m.	Hamburg	1,80%	
DKK	0,00 m.	0,00 m.	Hessen	47,60%	
GBP	0,00 m.	0,00 m.	Mecklenburg-Vorpommern	0,90%	
HKD	0,00 m.	0,00 m.	Niedersachsen	2,60%	
JPY	0,00 m.	2,10 m.	Nordrhein-Westfalen	28,20%	
KRW	0,00 m.	0,00 m.	Rheinland-Pfalz	3,20%	
NOK	0,00 m.	0,00 m.	Saarland	1,60%	
PLN	0,00 m.	0,00 m.	Sachsen-Anhalt	0,30%	
SEK	0,00 m.	0,00 m.	Sachsen	1,10%	
SGD	0,00 m.	0,00 m.	Schleswig-Holstein	0,80%	
USD	534,00 m.	279,60 m.	Thüringen	2,40%	
Other	0,00 m.	0,00 m.			

Swap Counterparties

Name	Type of arrangement	LEI
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
NA	NA	NA
Swap Agreements		
Interest Rate Swap		NA
Currency Swap		NA

ISIN Lists

Issuer	ISIN	Coupon Type	Coupon Rate (%)	Issue date	Maturity date
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P49	Fix	1,75	28.03.2013	28.03.2023
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1C27	Fix	0,25	22.07.2016	22.07.2026
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2K18	Fix	0,04	24.11.2016	24.11.2021
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4J76	Floating	EIEUR6M + 0.04	09.07.2014	09.07.2024
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JR2	Fix	1,75	28.01.2014	28.01.2022
Landesbank Hessen-Thüringen Girozentrale	DE000WLB29G0	Fix	2,70	17.09.2010	17.09.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4V96	Fix	0,14	19.02.2019	19.02.2024
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P98	Floating	EIEUR3M + 0.17	08.08.2013	08.08.2023
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2CG4	Floating	EIEUR6M + 0.17	22.03.2012	22.03.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2ND8	Fix	0,66	30.11.2017	30.11.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JE0	Fix	3,50	06.09.2013	06.09.2023
Landesbank Hessen-Thüringen Girozentrale	DE000WLB44U0	Fix	2,75	11.01.2012	11.01.2022
Landesbank Hessen-Thüringen Girozentrale	XS1936190021	Fix	0,00	16.01.2019	18.07.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P07	Floating	EIEUR6M + 0.05	23.08.2012	23.08.2019
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1A52	Fix	0,28	21.01.2016	21.01.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2HU4	Fix	0,00	20.01.2017	20.01.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB3M56	Fix	2,75	20.07.2010	20.07.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JM3	Floating	EIEUR6M + 0.05	22.01.2014	22.01.2024
Landesbank Hessen-Thüringen Girozentrale	DE000WLB28H0	Fix	3,50	24.02.2010	24.02.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4U71	Fix	1,25	19.09.2018	19.09.2033
Landesbank Hessen-Thüringen Girozentrale	DE000WLB9BN8	Fix	4,13	30.04.2009	30.04.2019
Landesbank Hessen-Thüringen Girozentrale	XS1196862889	Fix	0,10	04.03.2015	04.03.2020
Landesbank Hessen-Thüringen Girozentrale	XS1793273092	Fix	0,88	20.03.2018	20.03.2028
Landesbank Hessen-Thüringen Girozentrale	XS1587900843	Fix	1,38	29.03.2017	28.03.2042
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P56	Fix	2,00	26.04.2013	26.04.2028
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1C43	Fix	0,61	11.08.2016	11.08.2031
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2L33	Fix	1,50	01.09.2017	01.09.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4J84	Fix	1,55	15.08.2014	28.12.2029
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JS0	Fix	1,50	28.01.2014	28.08.2020
Landesbank Hessen-Thüringen Girozentrale	DE000WLB29J4	Fix	3,25	25.11.2010	25.11.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4VB1	Fix	1,35	04.10.2018	04.10.2033
Landesbank Hessen-Thüringen Girozentrale	XS1548773982	Fix	0,63	12.01.2017	12.01.2027
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2CK6	Fix	2,00	18.06.2012	17.06.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2NE6	Fix	1,00	30.11.2017	30.11.2027
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JF7	Fix	2,25	12.09.2013	12.09.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4LZ1	Floating	EIEUR6M	14.04.2014	14.04.2022
Landesbank Hessen-Thüringen Girozentrale	DE000WLB8ET1	Floating	EIEUR3M	12.10.2007	12.10.2027
Landesbank Hessen-Thüringen Girozentrale	XS0775280166	Fix	2,00	26.04.2012	26.04.2019
Landesbank Hessen-Thüringen Girozentrale	DE0002677572	Fix	5,50	28.07.1998	28.07.2028
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P23	Fix	1,25	12.03.2013	12.03.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1BZ8	Fix	0,38	10.01.2017	12.01.2026
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1JX6	Fix	1,20	02.09.2014	02.09.2024
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2JK1	Fix	0,25	23.03.2017	23.03.2021
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4J01	Floating	EIEUR3M + 0.05	23.04.2014	23.04.2019
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JN1	Fix	2,00	24.01.2014	24.07.2023
Landesbank Hessen-Thüringen Girozentrale	DE000WLB29F2	Fix	3,27	27.07.2010	01.07.2019
Landesbank Hessen-Thüringen Girozentrale	DE000WLB9CY3	Fix	4,50	12.06.2009	12.06.2019
Landesbank Hessen-Thüringen Girozentrale	XS1071847245	Fix	1,13	27.05.2014	27.05.2021
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0P64	Fix	1,88	28.06.2013	17.10.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB1C84	Fix	1,00	03.07.2014	28.12.2020

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Creditreform 
Rating

Issuer	ISIN	Coupon Type	Coupon Rate (%)	Issue date	Maturity date
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2LC4	Fix	0,38	10.01.2017	11.01.2027
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JU6	Fix	1,38	25.02.2014	30.04.2021
Landesbank Hessen-Thüringen Girozentrale	DE000WLB4240	Fix	3,63	02.08.2011	02.08.2021
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4WA1	Fix	0,00	19.02.2019	21.02.2022
Landesbank Hessen-Thüringen Girozentrale	XS1936186425	Fix	0,50	16.01.2019	16.01.2026
Landesbank Hessen-Thüringen Girozentrale	XS0946693834	Fix	1,88	26.06.2013	26.06.2023
Landesbank Hessen-Thüringen Girozentrale	DE000HLB0TY5	Fix	1,75	26.08.2013	26.08.2020
Landesbank Hessen-Thüringen Girozentrale	DE000HLB2HF5	Fix	0,00	11.01.2017	11.02.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB3E80	Floating	0.725 * EURSWE20Y	08.06.2012	08.06.2022
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4JK7	Fix	2,25	30.10.2013	30.10.2023
Landesbank Hessen-Thüringen Girozentrale	DE000HLB4U48	Fix	1,45	17.09.2018	17.09.2038
Landesbank Hessen-Thüringen Girozentrale	DE000WLB9AF6	Floating	EIEUR3M + 0.72	08.04.2009	08.04.2019
Landesbank Hessen-Thüringen Girozentrale	XS1382379318	Fix	0,13	21.03.2016	21.11.2022

Data Definitions

The data is presented with a cut-off date. Following the clarification regarding the source of information:
 Issuer: Issuer source of information are all available public information, i.e. Investor Reports, Harmonised Transparency Templates "HTT", National Transparency Templates "NTT", Prospectus etc. Not reported or non available information will be labeled as "NA".

Field Name	Source	Definition
Cover pool asset class	Issuer	The asset type in the cover pool (public sector assets or mortgage assets)
Legal framework	CRA	The set of legislative and regulatory rules of the respective jurisdiction that regulates the covered bonds (CB) program
Nominal value	Issuer	The total amount of outstanding covered bonds as of cut-off date expressed in millions
Cover pool value	Issuer	Aggregate value of all assets in the cover pool as of cut-off date expressed in millions
WAL maturity covered bonds	Issuer	The weighted average remaining maturity of all outstanding covered bonds in years
WAL maturity cover pool	Issuer	The weighted average remaining maturity of all outstanding covered assets in years
Repayment method	Issuer	Hard Bullet: Covered bonds are repaid on the maturity date which cannot be extended Soft Bullet: The maturity date of the covered bonds can be extended by a fixed period Conditional pass-through (CPT): Covered bonds with a scheduled maturity date, and an extension mechanism defined by certain conditions
Overcollateralization	Issuer	Current OC: The proportion of cover assets that exceeds the proportion of currently outstanding covered bonds, calculated as $(\text{Cover pool value} / \text{outstanding covered bonds} - 1) * 100$ Min OC: The OC level that the issuer must maintain according to the respective CB legislation Committed OC: The minimum OC level that the issuer has committed to maintain
Covered bonds coupon type	Issuer	Type of interest rate paid on covered bonds, expressed as a percentage of bond's face value
LT Issuer Rating	CRA	Long-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of more than one year
ST Issuer Rating	CRA	Short-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of less than one year
Legal and regulatory framework analysis	CRA	A qualitative assessment of legislative and regulatory rules of the covered bonds program
Liquidity and refinancing risk	CRA	A qualitative assessment of regulatory requirements for liquidity and refinancing risk of the covered bonds program
First rating uplift	CRA	The rating after adding up the notches from Legal and regulatory framework analysis and Liquidity and refinancing risk with LT Issuer rating
Cover pool and cash flow analysis	CRA	The quantitative assessment of the cover assets and covered bonds at different rating-level stressed scenarios
Second rating uplift	CRA	The rating after adding up the notches from cash-flow analysis with 1st rating uplift (only effective if the rating from cash-flow analysis is higher than the 1st rating uplift)
Metrics date	CRA	The date on which CRA assigned the initial / follow-up rating of the covered bond program
Rating Case Default Rate (RDR)	CRA	Stressed default rate of the cover assets represented by the base case stressed scenario
Rating Case Recovery Rate (RRR)	CRA	Stressed recovery rate of the defaulted assets represented by the base case stressed scenario
Expected Loss	CRA	Stressed loss rate of the cover assets represented by the base case stressed scenario. The expected loss rate has been calculated as $[\text{RDR} * (1 - \text{RRR})]$ [%]
Rating Case Breakeven OC	CRA	The required stressed OC level compatible with the base case rating
Average Seasoning	Issuer	Average length of the loans from the origination date to the cut-off date in months
Loan Size	Issuer	Average size of the loans (i.e. Total value of cover assets / Number of loans)
LTV	Issuer	The loan-to-value (LTV) is the ratio of a loan to the value of the property securing the loan
LEI	CRA	Legal Entity Identifier (LEI) enables unique identification of legal entities in financial transactions
Arrears Distribution	Issuer	The distribution of arrears of the cover assets with respect to each asset class
Seasoning Distribution	Issuer	The distribution of seasoning of the cover assets with respect to each asset class
Asset liability Profile	CRA	The maturity structure of the cover assets and liabilities
% Residential Loans	Issuer	Outstanding value of loans that are secured by the residential property expressed as % of total outstanding loans in the cover pool
% Commercial Loans	Issuer	Outstanding value of loans that are secured by the commercial property expressed as % of total outstanding loans in the cover pool
Fixed Coupon	Issuer	All assets and liabilities in the covered bond program that yield a fixed interest rate
Floating Coupon	Issuer	All assets and liabilities in the covered bond program that have variable interest rates
EIEURxM	Reuters	Euro x Month EURIBOR
EURSWEXY	Reuters	Euro x Year Interest Rate Swap Fixing

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