

Creditreform Covered Bond Rating

Commerzbank AG

Mortgage Covered Bond Program



Rating Object

Country Issuer	Germany	Repayment method	Hard Bullet
Cover pool asset class	Mortgage	Overcollateralization	Min (2,00%)
Legal framework	German Pfandbriefe Act		Current (40,39%)
Nominal value	EUR 20.178,30 m.	Covered bonds coupon type	Committed (NA)
Cover pool value	EUR 28.327,50 m.		Fix (99,50%)
WAL maturity covered bonds	5,30 (Years)	Other (0,00%)	Floating (0,50%)
WAL maturity cover pool	6,10 (Years)		
Cut-off date Covered Pool Information:	31.03.2019		

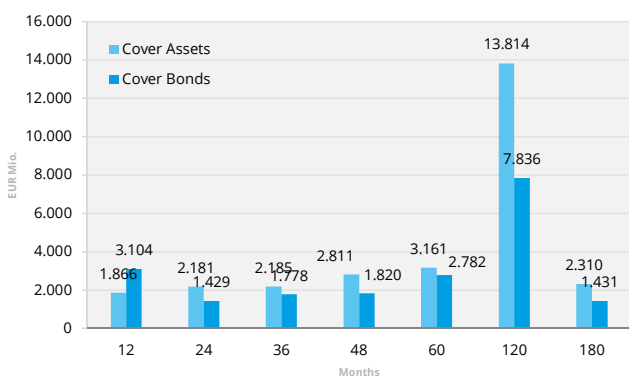
Rating Overview

Rating Summary		Credit Risk	
Issuer	Commerzbank AG	Metrics date	27.12.2018
LT Issuer Rating	BBB+	Rating Case Default Rate	46,09%
ST Issuer Rating	L2	Rating Case Recovery Rate	90,64%
+Legal and regulatory framework analysis	+4 Notches	Expected Loss	4,31%
+Liquidity and refinancing risk	+1 Notch	Rating Case Breakeven OC	13,14%
= Rating after 1st uplift	AA	Program Key Counterparties	
Cover Pool & cash flow analysis	AAA	Servicer	NA
+ 2nd rating uplift	+2 Notches	Account Bank	NA
Rating covered bond program	AAA	Sponsor	NA

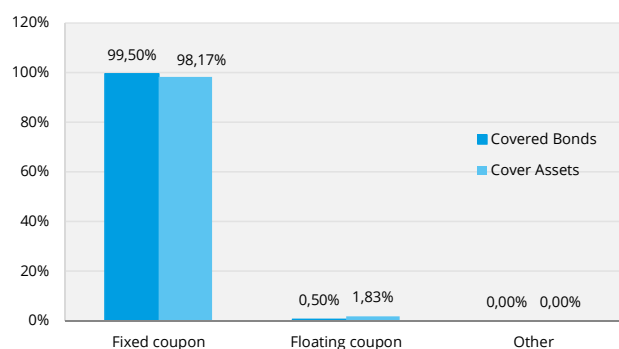
Cover Assets Composition

Cover Pool Balance	EUR 28.327,50 m.	Average size Commercial Loans	EUR 1.366,40 k.
Average Seasoning	56,40 Months	Average size Residential Loans	EUR 117,06 k.
Distribution by Type of Asset		Distribution by Loan Size	
Mortgages	EUR 26.049,00 m.	Total Number of Loans	217.224
Public Sector	EUR 0,00 m.	Number of Commercial Loans	497
Substitute Assets	EUR 2.278,40 m.	Number of Residential Loans	216.727
Other (Derivates)	EUR 0,00 m.		

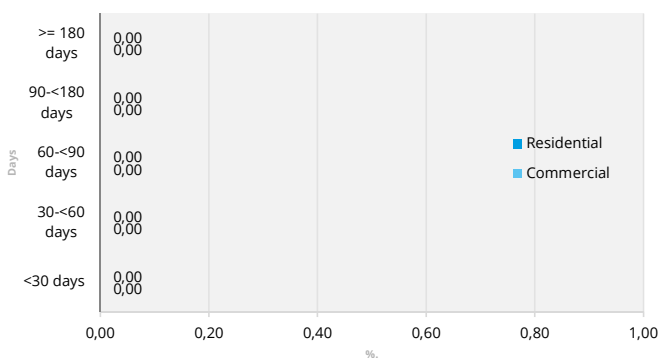
Asset-liability Profile



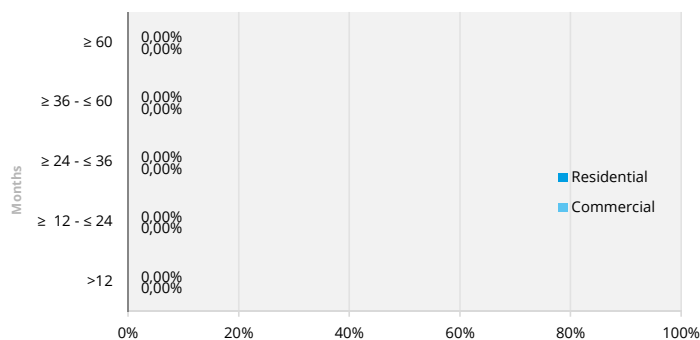
Interest Rate



Arrears Distribution



Seasoning Distribution



Creditreform Covered Bond Rating

Commerzbank AG

Mortgage 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 %	3.909,60	15,01%
>40 - <=50 %	NA	NA	>40 - <=50 %	3.088,90	11,86%
>50 - <=60 %	NA	NA	>50 - <=60 %	19.050,70	73,13%
>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 Mortgages)		
Currency	Covered Bonds	Covered Assets	Region	% Residential Loans	% Commercial Loans
EUR	20.178,30 m.	28.327,50 m.	NA	NA	NA
AUD	0,00 m.	0,00 m.	NA	NA	NA
BRL	0,00 m.	0,00 m.	NA	NA	NA
CAD	0,00 m.	0,00 m.	NA	NA	NA
CHF	0,00 m.	0,00 m.	NA	NA	NA
CZK	0,00 m.	0,00 m.	NA	NA	NA
DKK	0,00 m.	0,00 m.	NA	NA	NA
GBP	0,00 m.	0,00 m.	NA	NA	NA
HKD	0,00 m.	0,00 m.	NA	NA	NA
JPY	0,00 m.	0,00 m.	NA	NA	NA
KRW	0,00 m.	0,00 m.	NA	NA	NA
NOK	0,00 m.	0,00 m.	NA	NA	NA
PLN	0,00 m.	0,00 m.	NA	NA	NA
SEK	0,00 m.	0,00 m.	NA	NA	NA
SGD	0,00 m.	0,00 m.	NA	NA	NA
USD	0,00 m.	0,00 m.	NA	NA	NA
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
Commerzbank AG	DE000EH1ABH7	Fix	2,88	05.10.2010	05.10.2020
Commerzbank AG	DE000EH1A3P2	Floating	EIEUR3M + 0.8	03.06.2009	03.06.2024
Commerzbank AG	DE000CZ40KX5	Fix	0,25	23.07.2015	23.07.2020
Commerzbank AG	DE000CZ40MJ0	Fix	0,13	11.12.2017	12.06.2023
Commerzbank AG	DE000CZ40NP5	Fix	1,25	09.01.2019	09.01.2034
Commerzbank AG	DE000EH1ACA0	Fix	4,13	07.04.2011	07.04.2021
Commerzbank AG	DE000CZ40JW9	Fix	1,63	17.10.2013	19.10.2020
Commerzbank AG	DE000CZ40LM6	Fix	0,05	11.07.2016	11.07.2024
Commerzbank AG	DE000CZ40MU7	Fix	0,63	28.05.2018	28.05.2025
Commerzbank AG	DE000EH1ABB0	Fix	3,25	29.07.2010	29.07.2020
Commerzbank AG	DE000CZ40KK2	Fix	0,30	06.02.2015	07.02.2022
Commerzbank AG	DE000CZ40MB7	Fix	0,63	24.08.2017	24.08.2027
Commerzbank AG	DE000CZ40NB5	Fix	0,05	28.09.2018	01.08.2022
Commerzbank AG	DE000EH1ABL9	Fix	2,63	08.10.2010	08.10.2019
Commerzbank AG	DE000CZ40KZ0	Fix	0,88	07.09.2015	08.09.2025
Commerzbank AG	DE000CZ40MN2	Fix	0,63	13.03.2018	13.03.2025
Commerzbank AG	DE000CZ40KE5	Fix	0,38	29.09.2014	30.09.2019
Commerzbank AG	DE000CZ40LQ7	Fix	0,13	30.08.2016	15.12.2026
Commerzbank AG	DE000CZ40MV5	Fix	0,88	06.06.2018	06.06.2028
Commerzbank AG	DE000EH1A311	Fix	4,38	02.07.2009	02.07.2019
Commerzbank AG	DE000CZ40KL0	Fix	0,25	02.03.2015	02.03.2021
Commerzbank AG	DE000CZ40MH4	Fix	0,27	11.12.2017	11.06.2024
Commerzbank AG	DE000CZ40NN0	Fix	0,13	09.01.2019	09.01.2024
Commerzbank AG	DE000CZ40J26	Fix	2,00	26.11.2013	27.11.2023
Commerzbank AG	DE000CZ40LG8	Fix	0,50	09.06.2016	09.06.2026
Commerzbank AG	DE000CZ40MQ5	Fix	0,88	16.04.2018	18.04.2028
Commerzbank AG	DE000CZ40KG0	Fix	0,25	26.01.2015	26.01.2022
Commerzbank AG	DE000CZ40LS3	Fix	0,13	23.11.2016	23.02.2023
Commerzbank AG	DE000CZ40MW3	Fix	0,25	13.06.2018	13.09.2023

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

Disclaimer

© Creditreform Rating AG, 2019. This report is protected by copyright. Any commercial use is prohibited without prior written permission from Creditreform Rating AG. Only the full report may be published in order to prevent distortion of the report's overall assessment. Excerpts may only be used with the express consent of Creditreform Rating AG. Publication of the report without the consent of Creditreform Rating AG is prohibited. Only ratings published on the Creditreform Rating AG web pages remain valid.

We have assumed that the publicly available information, and the documents and information provided to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Therefore, Creditreform does not and cannot independently verify or validate information in every instance during the rating process. Further, Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. The information in this report and in other types of credit opinions by Creditreform are provided "as is" without representation or warranty of any kind. This rating is therefore no statement of fact, but an opinion. No representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such information is made by Creditreform in any form or manner whatsoever. For this reason, Creditreform Rating AG or its directors, officers, employees, independent contractors, agents, representatives, licensors or suppliers cannot be held liable for the consequences of decisions made on the basis of any of their ratings or assumptions and assessments expressed in this report. Neither should ratings, assumptions or assessments expressed in this report, be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at corporate or investment decisions. Ratings or assumptions and assessments expressed in this report are not meant to be used as substitutes for one's own research, inquiries and own assessments.

ANY RATING PERFORMED BY CREDITREFORM RATING AG IS SUBJECT TO THE CREDITREFORM RATING AG CODE OF CONDUCT, WHICH HAS BEEN PUBLISHED ON THE WEB PAGES OF CREDITREFORM RATING AG. IN THIS CODE OF CONDUCT, CREDITREFORM RATING AG COMMITS ITSELF – SYSTEMATICALLY AND WITH DUE DILIGENCE – TO ESTABLISH ITS INDEPENDENT AND OBJECTIVE OPINION AS TO THE SUSTAINABILITY, RISKS AND OPPORTUNITIES CONCERNING THE ENTERPRISE OR THE ISSUE UNDER REVIEW.