### Creditreform Covered Bond Rating DZ HYP AG

#### Public Sector Covered Bond Program

## Creditreform ⊆ Rating

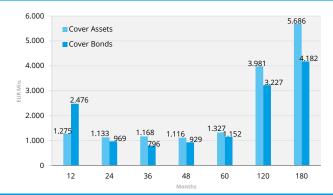
Rating Object			
Country Issuer	Germany	Repayment method	Hard Bullet
Cover pool asset class	Public Sector		Min (2,00%)
Legal framework	German Pfandbrief Act	Overcollateralization	Current (14,25%)
Nominal value	EUR 13.730,27 m.		Committed (2,00% )
Cover pool value	EUR 15.686,18 m.		Fix (95,58%)
WAL maturity covered bonds	7,50 (Years)	Covered bonds coupon type	Floating (4,42%)
WAL maturity cover pool	8,70 (Years)		Other (0,00%)
Cut-off date Covered Pool Information:	30.06.2020		
Rating Overview			

0				
Rating Summary		Credit Risk Metrics		
lssuer	DZ HYP AG	Metrics date	20.12.2019	
LT Issuer Rating	AA-	Rating Case Default Rate	19,92%	
ST Issuer Rating	L1	Rating Case Recovery Rate	40,87%	
+Legal and regulatory framework analysis	+4 Notches	Expected Loss	11,78%	
+Liquidity and refinancing risk	+1 Notch	Rating Case Breakeven OC	14,05%	
= Rating after 1st uplift	AAA	Program Key Counterparties		
Cover Pool & cash flow analysis	AAA	Servicer	NA	
+ 2nd rating uplift	+3 Notches	Account Bank	NA	
Rating covered bond program / Outlook	AAA "Watch Negative"	Sponsor	NA	

Cover Assets Composition				
General Information		Breakdown by type of Assets		
Cover Pool Balance	EUR 15.686,18 m.	Loans	EUR 13.044,76 m.	
Average Seasoning	NA	Bonds	EUR 2.576,14 m.	
Total number of exposures	18.216	Other	EUR 0,00 m.	
Distribution by type of asset		Distribution by Debtor size		
Mortgages	EUR 0,00 m.	Average Size Loans (EUR k.)	858	
Public Sector	EUR 15.686,18 m.	Sovereigns (EUR m.)	1.621	
Shipping	EUR 0,00 m.	Regional/federal authorities (EUR m.)	3.411	
Substitute Assets	EUR 65,28 m.	Local/municipal authorities (EUR m.)	9.961	
Other	EUR 0,00 m.	Others (EUR m.)	694	

Months

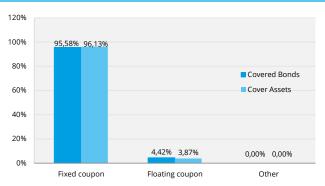




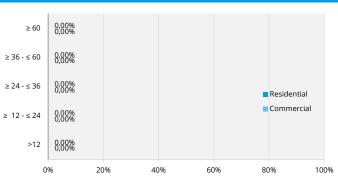
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Unindexed LTV Distribution Commercial Loans			Unindexed LTV Distribution Residential Loans		
LTV	Nominal	% Loans	LTV	Nominal	% Loans
>0 - <=40 %	NA	NA	>0 - <=40 %	NA	NA
>40 - <=50 %	NA	NA	>40 - <=50 %	NA	NA
>50 - <=60 %	NA	NA	>50 - <=60 %	NA	NA
>60 - <=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	13.152,10 m.	14.969,07 m.	Baden-Württemberg	13,08%	
AUD	0,00 m.	0,00 m.	Bavaria	11,33%	
BRL	0,00 m.	0,00 m.	Berlin	1,50%	
CAD	0,00 m.	29,11 m.	Brandenburg	0,41%	
CHF	206,55 m.	215,36 m.	Bremen	0,80%	
CZK	0,00 m.	0,00 m.	Hamburg	0,62%	
DKK	0,00 m.	0,00 m.	Hesse	17,78%	
GBP	5,48 m.	21,92 m.	Lower Saxony	12,82%	
НКД	0,00 m.	0,00 m.	Mecklenburg-Western Pomerania	1,86%	
JPY	0,00 m.	33,15 m.	North Rhine-Westphalia	22,87%	
KRW	0,00 m.	0,00 m.	Rhineland-Palatinate	8,27%	
NOK	0,00 m.	0,00 m.	Saarland	3,45%	
PLN	0,00 m.	0,00 m.	Saxony	0,68%	
SEK	0,00 m.	0,00 m.	Saxony-Anhalt	0,23%	
SGD	0,00 m.	0,00 m.	Schleswig-Holstein	2,66%	
USD	366,14 m.	417,58 m.	Thuringia	1,65%	
Other	0,00 m.	0,00 m.			

Swap Counterparties		
Name	Type of arrangement	LEI
Example Bank	NA	NA
Swap Agreements		
Interest Rate Swap		NA
Currency Swap		NA

## **Creditreform Covered Bond Rating** DZ HYP AG Public Sector Covered Bond Program

# Creditreform ⊆ Rating

DC 1000/DXFAE1   Proting   Dot Not Not Not Not Not Not Not Not Not N	ISIN Lists					
YP YAG   DE000A113GG4   Fix   3.50   28.01.2011   28.01.2021     22 HYP AG   DE000A2GSP23   Roating   0.00   27.02.2018   27.02.2023     22 HYP AG   DE000A2GSP23   Roating   1.63   18.02.2014   18.02.2014     22 HYP AG   DE000A2TSD22   Fix   1.63   18.02.2014   18.02.2014     22 HYP AG   DE000A2TSD22   Fix   0.01   13.01.2020   13.01.2020     22 HYP AG   DE000A1SSR87   Fix   0.30   16.02.2015   16.02.2022     22 HYP AG   DE000A1SSR87   Fix   3.65   28.12.2005   28.12.2020     22 HYP AG   DE000A1SSR87   Fix   3.65   28.12.2005   28.12.2025     22 HYP AG   DE000A1SSR87   Fix   3.64   20.10.017   7.02.2021     22 HYP AG   DE000A1EWPE4   Fix   3.64   28.12.2025   28.12.2025     22 HYP AG   DE000A14GS29   Fix   3.59   20.10.2017   07.10.2022     22 HYP AG   DE000A1HJSC9   Fix   3.64	lssuer	ISIN	Coupon Type	Coupon Rate (%)	lssue date	Maturity date
D2 HYP AG   D600A2GSP23   Poating   0.0   27.02.2018   27.02.2018     D2 HYP AG   D600A1YCSE7   Fix   1.63   18.02.2014   18.02.2021     D2 HYP AG   D600A2BPJ11   Fix   1.13   22.11.2016   2.11.034     D2 HYP AG   D600A2BPJ1   Fix   0.01   18.01.2020   10.1020     D2 HYP AG   D600A15887   Fix   3.25   3.11.2010   30.11.2020     D2 HYP AG   D600A015887   Fix   3.65   2.12.2005   16.02.2015     D2 HYP AG   D600A04DEUPP4   Fix   3.00   2.02.0217   2.02.0207     D2 HYP AG   D600A2EUPF4   Fix   3.82   0.61.2017   7.02.2037     D2 HYP AG   D600A2EUPF3   Fix   3.82   0.10.2017   7.02.2037     D2 HYP AG   D600A2EUPF3   Fix   3.84   3.01.12005   2.02.0215     D2 HYP AG   D600A14ESP   Fix   1.03   2.01.2017   7.02.2037     D2 HYP AG   D600A14ESP   Fix   3.84   3.01.12005   <	DZ HYP AG	DE000A0XFAE1	Floating	0,00	23.02.2009	23.02.2024
D2 HYP AG   DE000A1YC8E7   Fix   1,63   18.02.2014   18.02.2014   18.02.2024     D2 HYP AG   DE000A2BPJ11   Fix   1,13   22.11.2016   22.11.2034     D2 HYP AG   DE000A1TSD22   Fix   0.01   15.01.2020   13.01.2020     D2 HYP AG   DE000A1TSB27   Fix   0.30   16.02.2015   16.02.2022     D2 HYP AG   DE000A1TSB47   Fix   0.30   16.02.2015   16.02.2022     D2 HYP AG   DE000A1TSB47   Fix   0.30   16.02.2017   28.12.2005     D2 HYP AG   DE000A1TM64A   Fix   3.00   26.04.2013   26.04.2013     D2 HYP AG   DE000A1TM64A   Fix   3.82   08.12.2005   08.12.2025     D2 HYP AG   DE000A2DEUPJ7   Fix   3.84   3.01.2017   0.71.0202     D2 HYP AG   DE000A12GEZ   Fix   3.84   3.01.2016   27.02.2037     D2 HYP AG   DE000A1HEXC7   Fix   3.84   3.01.2016   27.01.2022     D2 HYP AG   DE000A1HEXC7   Fix	DZ HYP AG	DE000A1H3GG4	Fix	3,50	28.01.2011	28.01.2021
P2 HYP AGDE000A2BPJ11Fix1.132.21.120162.21.12034D2 HYP AGDE000A1ESWS2Fix0.0113.01.020.013.01.202.0D2 HYP AGDE000A1ESWS3Fix3.250.11.2010.00.11.2020.0D2 HYP AGDE000A1ESWS7Fix3.628.12.200.028.12.202.0D2 HYP AGDE000A1TMGA44Fix3.628.02.01727.02.037D2 HYP AGDE000A1TMGA44Fix3.8208.12.005.08.12.202.0D2 HYP AGDE000A2BPJS2Fix3.8208.12.005.08.12.202.0D2 HYP AGDE000A2BSMB6Fix3.590.10.2017.07.10.202.0D2 HYP AGDE000A2BPJS2Fix3.843.01.12.005.08.12.202.0D2 HYP AGDE000A1TMG20Fix3.443.01.12.005.03.01.12.02D2 HYP AGDE000A1EVESFix3.843.01.12.005.03.01.202.0D2 HYP AGDE000A1TME20Fix1.237.01.2016.02.11.2032D2 HYP AGDE000A1TME20Fix1.337.05.013.01.05.2021D2 HYP AGDE000A1TME20Fix1.337.01.2016.03.03.20173.03.2017D2 HYP AGDE000A1TME20Fix1.347.01.2016.01.01.2034D2 HYP AGDE000A1TME20Fix1.347.01.2016.01.01.2034D2 HYP AGDE000A1TME20Fix1.341.01.2010.01.01.2021D2 HYP AGDE000A12FSPTFix3.843.03.2017.03.03.2017.0 <t< td=""><td>DZ HYP AG</td><td>DE000A2GSP23</td><td>Floating</td><td>0,00</td><td>27.02.2018</td><td>27.02.2023</td></t<>	DZ HYP AG	DE000A2GSP23	Floating	0,00	27.02.2018	27.02.2023
NP AGDE000A715022HX0.0113.01.20213.01.202D2 HYP AGDE000A1E8WS8Fix3.2530.11.201030.11.2010D2 HYP AGDE000A1S2R37Fix3.0581.2.20528.12.2020D2 HYP AGDE000A11M64AFix3.0026.04.201326.04.2013D2 HYP AGDE000A2EUPP1Fix3.0226.02.201727.02.2037D2 HYP AGDE000A2EUPJ7Fix3.2628.02.201727.02.2037D2 HYP AGDE000A2EUPJ7Fix3.2620.10.201707.10.3022D2 HYP AGDE000A14JSC9Fix3.5920.10.201707.10.3022D2 HYP AGDE000A14JSC9Fix3.8430.11.200530.11.2020D2 HYP AGDE000A14JSC9Fix1.7828.02.201425.10.2023D2 HYP AGDE000A1HZX7Fix1.7828.02.201425.10.2023D2 HYP AGDE000A1HZX7Fix1.330.30.5.20123.03.5.2014D2 HYP AGDE000A1HZX7Fix1.330.30.5.20142.01.2031D2 HYP AGDE000A1HZX7Fix1.341.30.10141.10.204D2 HYP AGDE000A1TSD27Fix1.330.30.5.20141.01.2024D2 HYP AGDE000A1EXFXFix1.341.01.20141.11.2014D2 HYP AGDE000A1EXFXFix1.342.01.20162.01.2017D2 HYP AGDE000A1EXFXFix1.341.01.20141.01.2024D2 HYP AGDE000A1EXFXFix1.34<	DZ HYP AG	DE000A1YC8E7	Fix	1,63	18.02.2014	18.02.2022
D2 HYP AG   DE000A1E8WS8   Fix   3,25   30.11.2010   30.11.2020     D2 HYP AG   DE000A13SR87   Fix   0.30   16.02.2015   16.02.2022     D2 HYP AG   DE000A1SR87   Fix   3.65   28.12.2005   26.12.2020     D2 HYP AG   DE000A2BPJ52   Fix   1.30   26.04.2013   26.04.2028     D2 HYP AG   DE000A2BPJ52   Fix   3.82   08.12.205   08.12.2025     D2 HYP AG   DE000A2BPJ52   Fix   3.99   20.10.2017   07.10.2022     D2 HYP AG   DE000A14JSC9   Fix   0.63   26.02.2015   26.02.2015     D2 HYP AG   DE000A14JSC9   Fix   0.63   20.2014   25.10.2023     D2 HYP AG   DE000A14JSC9   Fix   1.78   28.02.2014   25.10.2023     D2 HYP AG   DE000A11LSC7   Fix   1.23   20.12.016   29.11.2032     D2 HYP AG   DE000A11LSC7   Fix   1.38   20.30.2017   20.30.2017     D2 HYP AG   DE000A21SDZ7   Fix   1.38   21.0	DZ HYP AG	DE000A2BPJ11	Fix	1,13	22.11.2016	22.11.2034
S2 HYP AGDE000A13SR87Fix0.3016.02.201516.02.2022D2 HYP AGDE000A0EUPP4Fix3.6528.12.200528.12.2020D2 HYP AGDE000A1TM6A4Fix2.0026.04.201326.04.2018D2 HYP AGDE000A2BPJS2Fix1.3028.02.201727.02.2037D2 HYP AGDE000A2BPJS2Fix3.8208.12.205508.12.2025D2 HYP AGDE000A2GSM66Fix3.9920.10.201707.10.2022D2 HYP AGDE000A14SC92Fix0.6326.02.201526.02.2015D2 HYP AGDE000A1VC862Fix3.8430.11.20053.11.2020D2 HYP AGDE000A1VC862Fix1.7828.02.201425.10.2027D2 HYP AGDE000A1VC862Fix1.0029.11.201629.11.2032D2 HYP AGDE000A1VC862Fix1.380.05.20120.05.2012D2 HYP AGDE000A11NE20Fix1.3820.30.01720.20337D2 HYP AGDE000A11NE20Fix1.3820.30.201720.30.2037D2 HYP AGDE000A2EPE60Fix1.3820.30.201720.30.2037D2 HYP AGDE000A1CSDK7Fix3.8410.10.201410.10.2022D2 HYP AGDE000A1CSDK7Fix3.8421.01.201610.10.2022D2 HYP AGDE000A1CSDK7Fix3.8421.01.201721.01.2022D2 HYP AGDE000A1CSDK7Fix3.803.11.20253.11.2020D2 HYP AGDE000A1CSDK7F	DZ HYP AG	DE000A2TSD22	Fix	0,01	13.01.2020	13.01.2022
D2 HYP AGDE000A0EUPP4Fix3.6528.12.20528.12.202D2 HYP AGDE000A1TM6A4Fix2.0026.04.201326.04.201326.04.2013D2 HYP AGDE000A0EUPJ7Fix3.8288.12.20568.12.205D2 HYP AGDE000A0EUPJ7Fix3.820.81.2.2050.10.20170.10.2022D2 HYP AGDE000A14J5C9Fix3.5926.02.201526.02.20	DZ HYP AG	DE000A1E8WS8	Fix	3,25	30.11.2010	30.11.2020
DECUMATINGAMFX2,0026.04.201326.04.2028DECUMATENESFX1,3026.02.0177.02.2037DECUMATENESFX3.8208.12.20508.12.205DECUMATENESFX3.590.10.20177.10.2022DECUMATENESFX0.5326.02.201526.02.2015DECUMATENESFX3.8430.11.200531.1.2020DECUMATENESFX3.8430.11.200531.1.2022DECUMATENESFX1.0028.02.201425.02.2015DECUMATENESFX3.8430.11.200531.1.2022DELUMATENESFX3.8430.11.201625.10.2023DELUMATENESFX1.0028.02.201425.10.2023DELUMATENESFX1.0030.5.201230.5.2012DELUMATENESFX1.0030.5.201230.5.2012DELUMATENESFX1.2330.3.201230.5.2012DELUMATENESFX1.631.7.6.201311.1.2034DELUMATENESFX1.381.3.2.01130.3.2017DELUMATENESFX1.841.611.0.2.2014DELUMATENESFX1.841.0.2.20141.0.2.2014DELUMATENESFX1.841.0.2.20141.0.2.2014DELUMATENESFX1.841.0.2.20141.0.2.2014DELUMATENESFX1.841.0.2.20141.0.2.2014DELUMATENESFX1.841.8.3.2.0141.0.2.2.2.1.1.2.1.2.1.2.1.2.1.2.1.2.1.2.	DZ HYP AG	DE000A13SR87	Fix	0,30	16.02.2015	16.02.2022
APP AGDE000A2BPJ52Fix3.0A.0.2.037P.0.2.20372 HYP AGDE000AGEUPJ7Fix3.820.81.2.0050.81.2.0252 HYP AGDE000A2GSMB6Fix3.592.0.0.0170.70.02222 HYP AGDE000A14JSC9Fix0.632.0.2.0152.0.2.0152 HYP AGDE000A14JSC9Fix3.843.01.1.2050.11.20222 HYP AGDE000A14VG82Fix1.02.0.2.0142.0.2.0142 HYP AGDE000A14VG82Fix1.02.0.2.0142.0.2.0142 HYP AGDE000A112F5Fix1.03.0.5.0123.0.5.0122 HYP AGDE000A117B20Fix1.232.0.1.20162.0.2.0152 HYP AGDE000A117B20Fix1.382.0.3.0.172.0.3.2.0172 HYP AGDE000A12TSDZ7Fix1.382.0.3.2.0172.0.3.2.0372 HYP AGDE000A2TSDZ7Fix3.841.0.2.0051.1.2.0202 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.0171.0.2.0222 HYP AGDE000A2TSDZ7Fix3.841.0.2.017 <td< td=""><td>DZ HYP AG</td><td>DE000A0EUPP4</td><td>Fix</td><td>3,65</td><td>28.12.2005</td><td>28.12.2020</td></td<>	DZ HYP AG	DE000A0EUPP4	Fix	3,65	28.12.2005	28.12.2020
D2 HYP AGDE000AUEUPI7Fix8.228.2.20058.12.2025D2 HYP AGDE000A2GSMBGFix5.90.10.20170.10.2022D2 HYP AGDE000A14J5C9Fix0.630.60.2.20156.02.2015D2 HYP AGDE000A12CBQ2Fix3.840.11.20050.11.2020D2 HYP AGDE000A1YCBQ2Fix1.002.91.20162.91.2016D2 HYP AGDE000A1MLZYTFix1.230.30.5.20120.05.2017D2 HYP AGDE000A1TNB20Fix1.232.70.120162.70.12016D2 HYP AGDE000A1TNB20Fix1.382.30.20171.01.2034D2 HYP AGDE000A1TNB20Fix1.382.30.20172.30.32037D2 HYP AGDE000A2TSDZTFix1.382.01.20101.01.2024D2 HYP AGDE000A1CSDK7Fix3.842.01.20171.01.2024D2 HYP AGDE000A1CSDK7Fix3.842.01.20171.01.2024D2 HYP AGDE000A1CSDK7Fix3.842.01.20171.01.2024D2 HYP AGDE000A1CSDK7Fix3.842.01.20171.01.2024D2 HYP AGDE000A1CSDK4Fix3.803.01.20173.01.2024D2 HYP AGDE000A1CSDK4Fix3.803.01.20173.01.2024D2 HYP AGDE000A14JSB1Fix3.803.01.20141.02.2024D2 HYP AGDE000A14JSB1Fix3.813.12.20183.12.2030D2 HYP AGDE000A14JSB1Fix3.81 <td< td=""><td>DZ HYP AG</td><td>DE000A1TM6A4</td><td>Fix</td><td>2,00</td><td>26.04.2013</td><td>26.04.2028</td></td<>	DZ HYP AG	DE000A1TM6A4	Fix	2,00	26.04.2013	26.04.2028
D2 HYP AGDE000A2GSMB6Fix3,5920.10.201707.10.2022D2 HYP AGDE000A14JSC9Fix0.6326.02.201526.02.2025D2 HYP AGDE000A0EUPE8Fix3.8430.11.200530.11.2020D2 HYP AGDE000A14JSC9Fix1.0029.11.201629.11.2032D2 HYP AGDE000A1MLZX7Fix2.380.05.20120.30.5.2012D2 HYP AGDE000A11NE20Fix1.2327.01.201627.01.2016D2 HYP AGDE000A11NE20Fix1.6317.06.201317.06.2013D2 HYP AGDE000A11NE20Fix0.3812.11.201910.11.2034D2 HYP AGDE000A11NE20Fix0.3820.30.201723.03.2017D2 HYP AGDE000A11NE20Fix0.3812.11.201910.11.2034D2 HYP AGDE000A11NE20Fix0.3812.11.201910.11.2034D2 HYP AGDE000A11NE20Fix3.7016.12.200516.12.2007D2 HYP AGDE000A11NE20Fix3.8421.01.201021.01.2012D2 HYP AGDE000A12TYS2Floating0.0019.02.201419.02.2019D2 HYP AGDE000A12TYS2Fix3.800.11.200531.12.003D2 HYP AGDE000A11SDK7Fix3.800.11.200530.11.2007D2 HYP AGDE000A12TYS2Floating0.0019.02.201430.20214D2 HYP AGDE000A12TSCFix3.800.11.200531.12.0203D2 HYP AGDE000A11SB1	DZ HYP AG	DE000A2BPJ52	Fix	1,30	28.02.2017	27.02.2037
APP AGDE00014j5C9Fix0.6326.02.201526.02.202522 HYP AGDE000A0EUPE8Fix3.8430.11.200530.11.202022 HYP AGDE000A1VC8G2Fix1.7828.02.201425.10.202322 HYP AGDE000A1ML2X7Fix3.8430.50.201230.50.201222 HYP AGDE000A1612P5Fix1.2330.50.201230.50.201224 HYP AGDE000A11NB20Fix1.2327.01.201627.01.201625 HYP AGDE000A1512P5Fix1.6317.06.201317.06.201326 HYP AGDE000A2BPJ02Fix0.3812.11.201910.11.203427 HYP AGDE000A2BPJ04Fix3.7016.12.200510.12.202627 HYP AGDE000A12SDZ7Fix3.8421.01.201410.12.202727 HYP AGDE000A2BPJ04Fix3.8421.01.201410.12.202727 HYP AGDE000A12SDZ7Fix3.8421.01.201410.12.202727 HYP AGDE000A2BPJ04Fix3.8421.01.201410.12.202727 HYP AGDE000A12TSZFix3.8421.01.201410.2029127 HYP AGDE000A2BPHAFix3.8430.11.201410.2029127 HYP AGDE000A2BPHAFix3.8430.11.201430.11.202927 HYP AGDE000A2BPHAFix3.8430.11.201430.202427 HYP AGDE000A2BPHAFix3.8430.11.201430.202427 HYP AGDE000A2BPHAFix3	DZ HYP AG	DE000A0EUPJ7	Fix	3,82	08.12.2005	08.12.2025
D2 HYP AGDE000A0EUPE8Fix3.840.11.20050.11.2020D2 HYP AGDE000A1YC8G2Fix1.782.80.2.0142.51.0.2023D2 HYP AGDE000A2BPJ29Fix0.002.911.20162.911.2032D2 HYP AGDE000A1MLZX7Fix2.380.30.5.20120.30.5.2012D2 HYP AGDE000A1TNB20Fix1.631.06.20131.06.2013D2 HYP AGDE000A1TNB20Fix0.381.1.201910.1.2034D2 HYP AGDE000A2BPJ60Fix0.382.30.3.20172.30.3.2017D2 HYP AGDE000A2BPJ60Fix3.842.01.201610.1.2024D2 HYP AGDE000A1CSDK7Fix3.842.10.201010.1.2024D2 HYP AGDE000A12TS2Fix3.841.01.201710.1.2029D2 HYP AGDE000A12TS2Fix3.801.1.201710.2.0219D2 HYP AGDE000A12TS2Fix3.803.01.201710.2.0219D2 HYP AGDE000A12TS2Fix3.803.01.201710.2.0219D2 HYP AGDE000A12TS2Fix3.803.01.201710.2.0219D2 HYP AGDE000A12TS2Fix3.803.01.201710.2.0219D2 HYP AGDE000A112SHFix3.803.01.201710.2.0214D2 HYP AGDE000A112SHFix3.803.01.201710.2.0214D2 HYP AGDE000A112SHFix3.813.0.2.011410.2.0214D2 HYP AGDE000A112SHFix3.813.	DZ HYP AG	DE000A2GSMB6	Fix	3,59	20.10.2017	07.10.2022
D2 HYP AGDE000A1YC8G2Fix1,788.02.201425.10.2023D2 HYP AGDE000A2BPJ29Fix1,0029.11.201629.11.203D2 HYP AGDE000A1MLZX7Fix2,380.305.20120.305.2012D2 HYP AGDE000A161ZP5Fix1,2327.01.201627.01.2031D2 HYP AGDE000A1TNB20Fix1,6317.06.201317.06.2013D2 HYP AGDE000A2BPJ60Fix0.3821.1.20190.11.2034D2 HYP AGDE000A2BPJ60Fix3,7016.12.20516.12.2020D2 HYP AGDE000A1CSDK7Fix3.4421.01.20116.12.2029D2 HYP AGDE000A12TS2Floating0.001.01.201410.12.2029D2 HYP AGDE000A12TS2Fix3.8421.01.20110.12.2029D2 HYP AGDE000A12TS2Fix3.800.11.201410.2029D2 HYP AGDE000A12TS2Fix3.800.11.201410.12.2029D2 HYP AGDE000A12TS2Fix3.800.11.201410.12.2029D2 HYP AGDE000A12TS2Fix3.800.11.201510.12.2014D2 HYP AGDE000A12TS2Fix3.803.01.20172.40.2015D2 HYP AGDE000A14JS61Fix3.8013.02.01418.03.2014D2 HYP AGDE000A14JS61Fix3.813.12.20183.12.2018D2 HYP AGDE000A14JS61Fix3.813.12.20183.12.2018	DZ HYP AG	DE000A14J5C9	Fix	0,63	26.02.2015	26.02.2025
DE1 HYP AGDE000A2BPJ29Fix1,0029.11.201629.11.2032DE000A1MLZX7Fix2,3803.05.201203.05.2021DE100A161ZPSFix1,2327.01.201627.01.2031DE100A1TNB20Fix1,6317.06.201317.06.2021DE100A2TSDZ7Fix0,3812.11.201910.11.2034DE100A2EDPJ4DE000A2EDPJ60Fix1,3823.03.201723.03.2037DE14YP AGDE000A2EDPM1Fix3,7016.12.200516.12.2020DE14YP AGDE000A1CSDK7Fix3,8421.01.20121.01.2022DE14YP AGDE000A12TSZFloating0,0019.02.201419.02.2029DE14YP AGDE000A12TSZFloating0,0019.02.201419.02.2029DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2039DE14YP AGDE000A12TSZFloating1,5424.10.201724.10.2017DE14YP AGDE000A12TSZFloating1,5424.00.201724.10.2017DE14YP AGDE000A12TSZFloating1,54<	DZ HYP AG	DE000A0EUPE8	Fix	3,84	30.11.2005	30.11.2020
DE HYP AGDE000A1MLZX7Fix2,3803.05.201203.05.2021DE 000A161ZP5Fix1,2327.01.201627.01.2031DE 000A1TNB20Fix1,6317.06.201317.06.2021DE 000A2TSDZ7Fix0,3812.11.20190.11.2034DE 000A2ESDZ7Fix1,3823.03.201723.03.2037DE 000A2ESDZ7Fix3,7016.12.200516.12.2020DE 000A2EDPI60Fix3,8421.01.201010.12.2020DE 000A0EUPM1Fix3,8421.01.201010.12.2029DE 14YP AGDE000A1CSDK7Fix1,5424.00.201724.10.2039DE 14YP AGDE000A12TSDZFix1,543.01.120053.01.12029DE 14YP AGDE000A12TSSZFix3,803.01.120513.01.2029DE 14YP AGDE000A0EUPG3Fix3.803.01.201724.10.2039DE 14YP AGDE000A142SB1Fix1,8818.03.201418.03.2014DE 14YP AGDE000A14JSB1Fix1,3819.12.201819.12.2028DE 14YP AGDE000A2G9HG9Fix1,3819.12.201819.12.2028DE 14YP AGDE000A2G9HG9Fix1,3819.12.201819.12.2028DE 14YP AGDE000A2G9HG9Fix1,3819.12.201819.12.2038DE 14YP AGDE000A2G9HG9Fix1,3819.12.201819.12.2038DE 14YP AGDE000A2G9HG9Fix1,3419.12.201819.12.2038DE 14YP AGDE000A2G9HG9	DZ HYP AG	DE000A1YC8G2	Fix	1,78	28.02.2014	25.10.2023
D2 HYP AGDE000A161ZP5Fix1.2327.01.201627.01.2031D2 HYP AGDE000A1TNB20Fix1.637.06.201317.06.2021D2 HYP AGDE000A2TSDZ7Fix0.381.21.120190.11.2034D2 HYP AGDE000A2BPJ60Fix3.706.12.20056.12.2020D2 HYP AGDE000A1CSDK7Fix3.841.01.20101.01.2022D2 HYP AGDE000A12TYS2Floating0.001.02.20149.02.2014D2 HYP AGDE000A2BPGMFix3.841.01.20172.10.2029D2 HYP AGDE000A12TYS2Floating0.001.02.20149.02.2029D2 HYP AGDE000A2BPGMFix3.813.01.20053.01.2029D2 HYP AGDE000A12TYS2Fix3.813.01.20174.10.2039D2 HYP AGDE000A12TSAFix3.813.01.20053.01.2029D2 HYP AGDE000A12TYS2Fix3.813.01.20174.10.2039D2 HYP AGDE000A12TSAFix3.813.01.20153.01.2029D2 HYP AGDE000A12TSAFix3.813.01.20154.02.2022D2 HYP AGDE000A12TSAFix3.813.01.20154.02.2022D2 HYP AGDE000A12TSAFix3.814.02.20154.02.2022D2 HYP AGDE000A12TSAFix3.814.02.20154.02.2022D2 HYP AGDE000A12TSAFix3.814.02.20154.02.2022D2 HYP AGDE000A12TSAFix3.81	DZ HYP AG	DE000A2BPJ29	Fix	1,00	29.11.2016	29.11.2032
DECHYP AG   DE000A1TNB20   Fix   1,63   17.06.2013   17.06.2021     DZ HYP AG   DE000A2TSDZ7   Fix   0,38   12.11.2019   10.11.2034     DZ HYP AG   DE000A2EDPG0   Fix   1,38   23.03.2017   23.03.2037     DZ HYP AG   DE000A0EUPM1   Fix   3,70   16.12.2005   16.12.2020     DZ HYP AG   DE000A1EXDK7   Fix   3,84   10.10.2010   10.02.2029     DZ HYP AG   DE000A1EXDK7   Fix   3,84   10.12.010   21.01.2022     DZ HYP AG   DE000A12TYS2   Fix   3,84   24.10.2017   24.10.2039     DZ HYP AG   DE000A2EUPG3   Fix   1,54   24.10.2017   24.10.2039     DZ HYP AG   DE000A2EUPG3   Fix   3,80   30.11.2005   30.11.2020     DZ HYP AG   DE000A17US84   Fix   1,88   18.03.2014   18.03.2024     DZ HYP AG   DE000A14J5B1   Fix   0,34   24.02.2015   24.02.2022     DZ HYP AG   DE000A2G9HG9   Fix   1,34 <td< td=""><td>DZ HYP AG</td><td>DE000A1MLZX7</td><td>Fix</td><td>2,38</td><td>03.05.2012</td><td>03.05.2021</td></td<>	DZ HYP AG	DE000A1MLZX7	Fix	2,38	03.05.2012	03.05.2021
DEP APP AG   DE000A2TSDZ7   Fix   0,88   12.11.2019   10.11.2034     DZ HYP AG   DE000A2BPJ60   Fix   1,88   23.03.2017   23.03.2037     DZ HYP AG   DE000A0EUPM1   Fix   3,70   16.12.2005   16.12.2020     DZ HYP AG   DE000A1CSDK7   Fix   3,84   21.01.2010   21.01.2022     DZ HYP AG   DE000A12TYS2   Floating   0,00   19.02.2014   19.02.2029     DZ HYP AG   DE000A12TYS2   Floating   1,54   24.10.2017   24.10.2039     DZ HYP AG   DE000A12TSDZ   Fix   3,80   30.11.2005   30.11.2029     DZ HYP AG   DE000A12TSSZ   Fix   1,88   30.11.2017   24.10.2039     DZ HYP AG   DE000A12TSSZ   Fix   1,88   30.11.2005   30.11.2020     DZ HYP AG   DE000A12TSSZ   Fix   1,88   40.20215   24.02.2022     DZ HYP AG   DE000A14JSB1   Fix   1,84   19.12.2018   19.12.2028     DZ HYP AG   DE000A2G9HG9   Fix   1,84	DZ HYP AG	DE000A161ZP5	Fix	1,23	27.01.2016	27.01.2031
DECHYP AGDE000A2BPJ60Fix1.382.03.20172.03.2037DE000A0EUPM1Fix3,7016.12.200516.12.2020DE 000A1CSDK7Fix3,8421.01.201021.01.2022DE 000A12TYS2Foating0,0019.02.201419.02.2029DE 000A0EUPG3Fix1,5424.10.201724.10.2039DE 000A0EUPG3Fix3,8030.11.200530.11.2020DE 000A0EUPG3Fix1,8818.03.201418.03.2024DE 000A12TSEFix1,8818.03.201414.02.2029DE 000A0EUPG3Fix0,3424.02.201524.02.2022DE 000A12TSEFix1,8819.12.201819.12.2028DE 000A12TSEFix1,3819.12.201819.12.2028DE 000A12TSEFix1,3819.12.201819.12.2028DE 000A12TSEFix1,3819.12.201819.12.2028DE 000A12TSEFix1,3819.12.201819.12.2028DE 14PP AGDE000A14JSE1Fix1,4419.12.201819.12.2028DE 14PP AGDE000A2G9HG9Fix1,4419.12.201819.12.2028DE 14PP AGDE000A2G9HF1Fix1,4414.0419.12.2018DE 14PP AGFix1,441,4419.12.201819.12.2038DE 14PP AGFix1,441,4419.12.201819.12.2018DE 14PP AGFixFix1,4414.12.11819.12.2038DE 14PP AGFixFixFixFix <td>DZ HYP AG</td> <td>DE000A1TNB20</td> <td>Fix</td> <td>1,63</td> <td>17.06.2013</td> <td>17.06.2021</td>	DZ HYP AG	DE000A1TNB20	Fix	1,63	17.06.2013	17.06.2021
Decention   Decode   Fix   3,70   16.12.2005   16.12.2020     DE HYP AG   DE000A0EUPM1   Fix   3,84   21.01.2010   21.01.2022     DE HYP AG   DE000A1CSDK7   Fix   3,84   19.02.2014   19.02.2024     DE HYP AG   DE000A12TYS2   Floating   0,00   19.02.2014   19.02.2029     DE HYP AG   DE000A0EUPG3   Fix   1,54   24.10.2017   24.10.2039     DE HYP AG   DE000A0EUPG3   Fix   3,80   30.11.2005   30.11.2020     DE HYP AG   DE000A0EUPG3   Fix   1,88   18.03.2014   18.03.2024     DE HYP AG   DE000A1YC8K4   Fix   0,34   24.02.2015   24.02.2022     DE HYP AG   DE000A14J5B1   Fix   0,34   24.02.2015   24.02.2022     DE HYP AG   DE000A2G9HG9   Fix   1,38   19.12.2018   19.12.2028     DE HYP AG   DE000A2G9HF1   Fix   1,44   13.12.018   13.12.030	DZ HYP AG	DE000A2TSDZ7	Fix	0,38	12.11.2019	10.11.2034
DE HYP AGDE000A1CSDK7Fix3,8421.01.201021.01.2022DE HYP AGDE000A12TYS2Floating0,0019.02.201419.02.2029DE HYP AGDE000A2GSMC4Fix1,5424.10.201724.10.2039DE HYP AGDE000A1UPG3Fix3,8030.11.200530.11.2020DE HYP AGDE000A1YCSK4Fix1,8818.03.201418.03.2024DE HYP AGDE000A14J5B1Fix0,3424.02.201524.02.2022DE HYP AGDE000A2G9HG9Fix1,3819.12.201819.12.2028DE HYP AGDE000A2G9HF1Fix1,4413.12.201813.12.2030	DZ HYP AG	DE000A2BPJ60	Fix	1,38	23.03.2017	23.03.2037
DE AMPA GA   DE000A12TYS2   Floating   0.00   19.02.2014   19.02.2029     DE AMPA GA   DE000A2GSMC4   Fix   1.54   24.10.2017   24.10.2039     DE AMPA GA   DE000A0EUPG3   Fix   3.80   30.11.2005   30.11.2020     DE AMPA GA   DE000A1YC8K4   Fix   1.88   18.03.2014   18.03.2024     DE AMPA GA   DE000A14J5B1   Fix   0.34   24.02.2015   24.02.2022     DE AMPA GA   DE000A2G9HG9   Fix   1.38   19.12.2018   19.12.2028     DE AMPA GA   DE000A2G9HG9   Fix   1.38   19.12.2018   19.12.2028	DZ HYP AG	DE000A0EUPM1	Fix	3,70	16.12.2005	16.12.2020
DCZ   HYP AG   DE000A2GSMC4   Fix   1,54   24.10.2017   24.10.2039     DZ   HYP AG   DE000A0EUPG3   Fix   3,80   30.11.2005   30.11.2020     DZ   HYP AG   DE000A1YC8K4   Fix   1,88   18.03.2014   18.03.2024     DZ   HYP AG   DE000A14J5B1   Fix   0,34   24.02.2015   24.02.2022     DZ   HYP AG   DE000A2G9HG9   Fix   1,38   19.12.2018   19.12.2028     DZ   HYP AG   DE000A2G9HF1   Fix   1,04   13.12.2018   13.12.2030	DZ HYP AG	DE000A1CSDK7	Fix	3,84	21.01.2010	21.01.2022
DZ HYP AG   DE000A0EUPG3   Fix   3,80   30.11.2005   30.11.2020     DZ HYP AG   DE000A1YC8K4   Fix   1,88   18.03.2014   18.03.2024     DZ HYP AG   DE000A14J5B1   Fix   0,34   24.02.2015   24.02.2022     DZ HYP AG   DE000A2G9HG9   Fix   1,38   19.12.2018   19.12.2028     DZ HYP AG   DE000A2G9HF1   Fix   1,04   13.12.2018   13.12.2030	DZ HYP AG	DE000A12TYS2	Floating	0,00	19.02.2014	19.02.2029
DE DODA 1YC 8K4   Fix   1.88   18.03.2014   18.03.2024     DZ HYP AG   DE000A14J5B1   Fix   0,34   24.02.2015   24.02.2022     DZ HYP AG   DE000A2G9HG9   Fix   1,38   19.12.2018   19.12.2028     DZ HYP AG   DE000A2G9HF1   Fix   1,04   13.12.2018   13.12.2030	DZ HYP AG	DE000A2GSMC4	Fix	1,54	24.10.2017	24.10.2039
DE NOVA 14J5B1 Fix 0,34 24.02.2015 24.02.2022   DE NOVA 24 VP AG DE 000A2G9HG9 Fix 1,38 19.12.2018 19.12.2028   DE VP AG DE 000A2G9HF1 Fix 1,04 13.12.2018 13.12.2030	DZ HYP AG	DE000A0EUPG3	Fix	3,80	30.11.2005	30.11.2020
DZ HYP AG   DE000A2G9HG9   Fix   1,38   19.12.2018   19.12.2028     DZ HYP AG   DE000A2G9HF1   Fix   1,04   13.12.2018   13.12.2030	DZ HYP AG	DE000A1YC8K4	Fix	1,88	18.03.2014	18.03.2024
DZ HYP AG DE000A2G9HF1 Fix 1,04 13.12.2018 13.12.2030	DZ HYP AG	DE000A14J5B1	Fix	0,34	24.02.2015	24.02.2022
	DZ HYP AG	DE000A2G9HG9	Fix	1,38	19.12.2018	19.12.2028
DZ HYP AG   DE000A2TSD06   Fix   1,03   06.12.2019   06.12.2049	DZ HYP AG	DE000A2G9HF1	Fix	1,04	13.12.2018	13.12.2030
	DZ HYP AG	DE000A2TSD06	Fix	1,03	06.12.2019	06.12.2049

## Creditreform Covered Bond Rating DZ HYP AG

### Public Sector Covered Bond Program

# Creditreform ⊆ Rating

#### 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
VAL maturity covered bonds	Issuer	The weighted average remaining maturity of all outstading covered bonds in years
NAL maturity cover pool	Issuer	The weighted average remaining maturity of all outstading covered assets in years
Repayment method	lssuer	Hard Bullet: Covered bonds are repaid on the maturiry 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 mechanist defined by certain conditions
Overcollateralization	lssuer	Current OC: The proportion of covel assets that exceeds the proportion of currrently outstanding covered bonds, calculated as ([Cover pool value]/[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 assessement of legislative and regulatory rules of the covered bonds program
iquidity and refinancing risk	CRA	A qualitative assessement 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 scenar
Second rating upflift	CRA	The rating after adding up the notches from cash-flow analysis with 1st rating uplift (only effective if the rati 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 rat has been calculated as [RDR*(1-RRR)] [%]
Rating Case Breakeven OC	CRA	The required stressed OC level compatible with the base case rating
werage Seasoning	Issuer	Average length of the loans from the origination date to the cut-off date in months
oan Size	Issuer	Average size of the loans (i.e. Total value of cover assets / Number of loans)
TV	Issuer	The loan-to-value (LTV) is the ratio of a loan to the value of the property securing the loan
.EI	CRA	Legal Entity Identifier (LEI) enables unique identification of legal entities in financial transactions
Arrears Distribution	Issuer	The distrbution of arrears of the cover assets with respect to each asset class
Seasoning Distribution	Issuer	The distrbution 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	lssuer	Outstanding value of loans that are secured by the residential property expressed as % of total outstadning loans in the cover pool
% Commercial Loans	lssuer	Outstanding value of loans that are secured by the commercial property expressed as % of total outstadnin 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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