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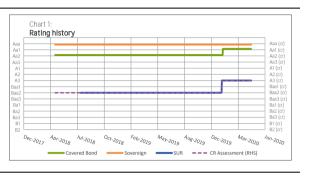
Deutsche Hypothekenbank (Actien-Gesellschaft) - Public-Sector Covered Bonds Covered Bonds / Germany

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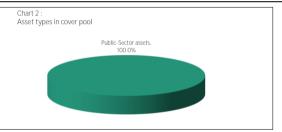
Data as provided to Moody's Investors Service (note 1)

I. Programme Overview

Year of initial rating assignment:	20
Total outstanding liabilities:	EUR 3,215,137,85
Total assets in the Cover Pool:	EUR 3,482,722,60
Issuer name / CR Assessment:	Deutsche Hypothekenbank (Actien-Gesellschaft) / A3(
Group or parent name / CR Assessment:	Norddeutsche Landesbank GZ / A3(
Main collateral type:	Public Sect
	A.
Covered bonds rating:	Action Cocollado
Covered bonds rating: Entity used in Moody's EL & TPI analysis:	Deutsche Hypothekenbank (Actien-Gesellscha
Covered bonds rating:	Deutsche Hypothekenbank (Actien-Gesellscha CR Assessment + 1 not
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Covered bonds rating: Entity used in Moody's EL & TPI analysis: CB anchor: CR Assessment:	Deutsche Hypothekenbank (Actien-Gesellscha CR Assessment + 1 not A3(r



Collateral quality		
Collateral Score:	7.5%	
Collateral Score excl. systemic risk:	n/a	
Cover Pool losses		
Collateral Risk (Collateral Score post-haircut):	3.7%	29%
Market Risk:	9.0%	71%
	12.7%	(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):	13.0%
OC consistent with current rating (note 4)	1.5%

Sensitivity scenario CB anchor

Scenario 1: CB anchor is lowered by	1 notch	6.5%	

IV. Timely Payment Indicator & TPI Leeway

Baa2(cr)

Fimely Payment Indicator (TPI):	
TPI Leeway:	
Extract from TPI table - CB anchor Is CR Assessment +	1 notch
CR Assessment	High
Aa3(cr)	Aaa
A1(cr)	Aaa
A2(cr)	Aaa
A3(cr)	Aaa
Baa1(cr)	Aaa

Lenal fram

Logaritanovorit	
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 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 OL calculated to be consistent with the current rating under Moody's expected loss model. However, the level of OL consistent with a given rating level may differ from this amount where ratings are capped under the LPI transmot 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 target 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. Deutsche Hypothekenbank (Actien-Gesellschaff) - Public-Sector Covered Bonds

973 3,080

3.000

3.500

Yes

Yes

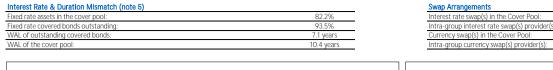
Yes

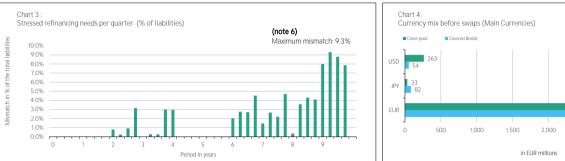
No

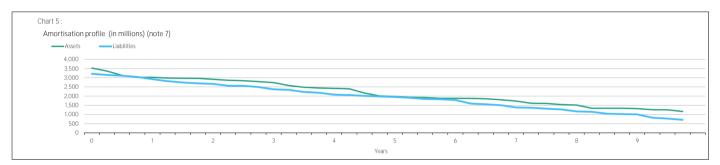
2.500

V. Asset Liability Profile

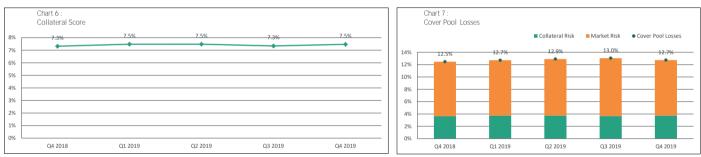
Interest Rate & Duration Mismatch (note 5)

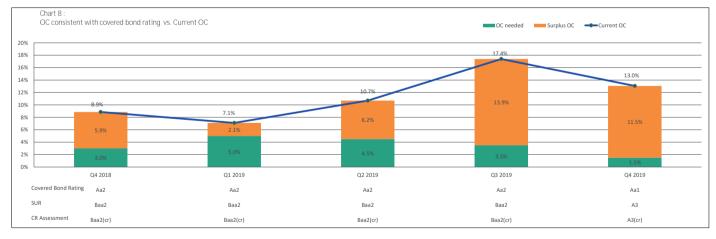






VI. Performance Evolution





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(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. Deutsche Hypothekenbank (Actien-Gesellschaft) - Public-Sector Covered Bonds

VII. Cover Pool Information - Public Sector Assets

Overvlew	
Asset type:	Public Sector
Asset balance:	3,482,722,600
WA remaining Term (in months):	125
Number of borrowers:	73
Number of loans / bonds:	139
Exposure to the 10 largest borrowers:	56.9%
Average exposure to borrowers:	47,708,529

Specific Loan and Borrower characteristics	
Repo eligible loans / bonds:	
Percentage of fixed rate loans / bonds:	
Percentage of bullet loans/ bonds:	
Loans / bonds in non-domestic currency:	

Eddis / Bonds in hor domestic currency.	14.070
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%

Public Sector Assets, 100.0%

Chart B: Percentage of public sector assets

Chart D: Pool distribution by country exposure rating

Baa1, 0.5%

Baa3, 8.2%

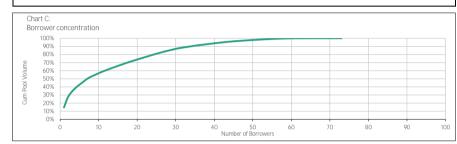
🖢 Aaa, 66.3%

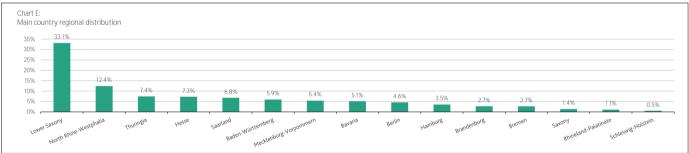
A3, 0.3%

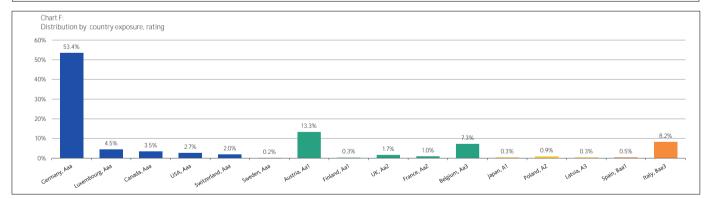
A2. 0.9% _ A1, 0.3%_ Aa3, 7.3%_

Aa2, 2.7% Aa1, 13.6%_

	Germany	Austria	Italy	Other	Totals
Direct claim against supranational	0.0%	0.0%	0.0%	4.6%	4.6%
Direct claim against sovereign	0.0%	13.1%	6.8%	0.9%	20.8%
Loan with guarantee of sovereign	0.0%	0.0%	0.2%	2.0%	2.2%
Direct claim against region/federal state	41.6%	0.0%	0.7%	10.8%	53.1%
Loan with guarantee of region/federal state	9.8%	0.0%	0.0%	5.7%	15.5%
Direct claim against municipality	1.0%	0.3%	0.4%	1.1%	2.8%
Loan with guarantee of municipality	0.0%	0.0%	0.0%	0.0%	0.0%
Others	0.9%	0.0%	0.0%	0.0%	0.9%
	53.4%	13.3%	8.2%	25.1%	







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VIII. Swap Information

Counterparty Total	Туре	Notional Amount	Collateral trigger	Replacement Trigger
Total	Total	n/d		
	Currency	n/d		
	Interest rate	n/d		
Norddeutsche Landesbank -Girozentrale-	Subtotal	n/d		
	Currency	n/d	n/d	n/d
	Interest rate	n/d	n/d	n/d

IX. Liabilities Information: Last 50 Issuances

ISIN	Serles Number	Currency	Outstanding Amount	Issuance Date	Expected Maturity	Legal Final Maturity	Interest Rate Type	Coupon	Principal Payment
n/d	n/d	EUR	15.000.000		24/10/2022	24/10/2022	Fixed rate	5.290%	BULLET
n/d	n/d	EUR	25.000.000		02/05/2028	02/05/2028	Fixed rate	5.000%	BULLET
n/d	n/d	EUR	25.000.000		19/09/2028	19/09/2028	Fixed rate	5.000%	BULLET
n/d	n/d	EUR	15.000.000		26/04/2021	26/04/2021	Fixed rate	4.775%	BULLET
n/d	n/d	EUR	5.000.000		24/02/2020	24/02/2020	Fixed rate	4.020%	BULLET
n/d	n/d	EUR	5.000.000		31/08/2020	31/08/2020	Fixed rate	3.515%	BULLET
n/d	n/d	EUR	5,000,000		31/08/2020	31/08/2020	Fixed rate	3.515%	BULLET
n/d	n/d	EUR	10.000.000		31/08/2020	31/08/2020	Fixed rate	3.515%	BULLET
n/d	n/d	EUR	5,000,000		06/10/2020	06/10/2020	Fixed rate	3.480%	BULLET
n/d	n/d	EUR	10,000,000		10/03/2026	10/03/2026	Fixed rate	4.000%	BULLET
n/d	n/d	EUR	10.000.000		08/09/2021	08/09/2021	Fixed rate	4.162%	BULLET
n/d	n/d	EUR	10.000.000		17/03/2026	17/03/2026	Fixed rate	4.545%	BULLET
n/d	n/d	EUR	5.000.000		29/09/2026	29/09/2026	Fixed rate	4.165%	BULLET
n/d	n/d	EUR	10,000,000		02/12/2022	02/12/2022	Fixed rate	3.454%	BULLET
n/d	n/d	EUR	20.000.000		10/12/2029	10/12/2029	Fixed rate	3.870%	BULLET
n/d	n/d	EUR	15,000,000		12/12/2025	12/12/2025	Fixed rate	3.870%	BULLET
n/d	n/d	EUR	10.000.000		31/03/2025	31/03/2025	Floating rate	n/d	BULLET
n/d	n/d	EUR	10.000.000		31/03/2025	31/03/2025	Floating rate	n/d	BULLET
n/d	n/d	EUR	20.000.000		04/11/2022	04/11/2022	Fixed rate	5.250%	BULLET
n/d	n/d	FUR	20.000.000		28/03/2028	28/03/2028	Fixed rate	5.030%	BULLET
n/d	n/d	EUR	5.000.000		31/03/2028	31/03/2028	Fixed rate	5.000%	BULLET
n/d	n/d	EUR	20.000.000		04/04/2028	04/04/2028	Fixed rate	5.000%	BULLET
n/d	n/d	EUR	25.000.000		07/04/2028	07/04/2028	Fixed rate	5.070%	BULLET
n/d	n/d	EUR	5,000,000		23/05/2028	23/05/2028	Fixed rate	4.640%	BULLET
n/d	n/d	EUR	10.000.000		23/05/2028	23/05/2028	Fixed rate	4.640%	BULLET
n/d	n/d	EUR	10.000.000		23/05/2028	23/05/2028	Fixed rate	4.640%	BULLET
n/d	n/d	EUR	5.000.000		16/06/2023	16/06/2023	Fixed rate	4.370%	BULLET
n/d	n/d	EUR	5.000.000		16/06/2023	16/06/2023	Fixed rate	4.370%	BULLET
n/d	n/d	EUR	10.000.000		16/06/2023	16/06/2023	Fixed rate	4.370%	BULLET
n/d	n/d	EUR	10.000.000		20/06/2028	20/06/2028	Fixed rate	4.525%	BULLET
n/d	n/d	EUR	10.000.000		03/07/2026	03/07/2026	Fixed rate	4.700%	BULLET
n/d	n/d	EUR	10,000,000		03/07/2026	03/07/2026	Fixed rate	4.700%	BULLET
n/d	n/d	EUR	15.000.000		15/12/2020	15/12/2020	Fixed rate	4.230%	BULLET
n/d	n/d	EUR	5.000.000		04/09/2020	04/09/2020	Fixed rate	4.860%	BULLET
n/d	n/d	EUR	500,000		04/09/2020	04/09/2020	Fixed rate	4.860%	BULLET
n/d	n/d	EUR	20.000.000		09/10/2023	09/10/2023	Fixed rate	4.900%	BULLET
n/d	n/d	EUR	10,000,000		24/10/2028	24/10/2028	Fixed rate	5.000%	BULLET
n/d	n/d	EUR	5.000.000		06/01/2020	06/01/2020	Fixed rate	4.760%	BULLET
n/d	n/d	EUR	10.000.000		06/01/2034	06/01/2034	Fixed rate	5.065%	BULLET
n/d	n/d	EUR	2,000,000		12/01/2021	12/01/2021	Fixed rate	4.760%	BULLET
n/d	n/d	EUR	1.000.000		19/02/2024	19/02/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	10.000.000		19/02/2024	19/02/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	5.000.000		19/02/2024	19/02/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	10.000.000		16/03/2034	16/03/2034	Fixed rate	4.805%	BULLET
n/d	n/d	EUR	13.000.000		16/03/2029	16/03/2029	Fixed rate	4.773%	BULLET
n/d	n/d	EUR	2,000,000		16/03/2029	16/03/2029	Fixed rate	4.730%	BULLET
n/d	n/d	EUR	3,000,000		08/04/2024	08/04/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	2.000.000		08/04/2024	08/04/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	20,000,000		08/04/2024	08/04/2024	Fixed rate	4.810%	BULLET
n/d	n/d	EUR	10.000.000		15/09/2034	15/09/2034	Fixed rate	4.980%	BULLET
1.12.00		LON	10,000,000		13/07/2034	10/12004	TIAGUTULO	4.70070	DOLLLI

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