MOODY'S INVESTORS SERVICE

CREDIT OPINION
5 March 2019

Update

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RATINGS

Deutsche Hypothekenbank (Actien-Gesellschaft)

Domicile	Germany
Long Term CRR	Baa2 , Possible Upgrade
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Baa2 , Possible Upgrade
Type	Senior Unsecured - Dom Curr
Outlook	Rating(s) Under Review
Long Term Deposit	Baa2 , Possible Upgrade
Type	LT Bank Deposits - Fgn Curr
Outlook	Rating(s) Under Review

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Katharina Barten +49.69.7073.0765
Senior Vice President
katharina.barten@moodys.com

Alexander Hendricks, CFA +49.69.7073.0779
Associate Managing Director
alexander.hendricks@moodys.com

Carola Schuler +49.69.7073.0766
MD-Banking
carola.schuler@moodys.com

Deutsche Hypothekenbank AG

Update following direction change to review for upgrade from direction uncertain for the BCA and all long-term ratings

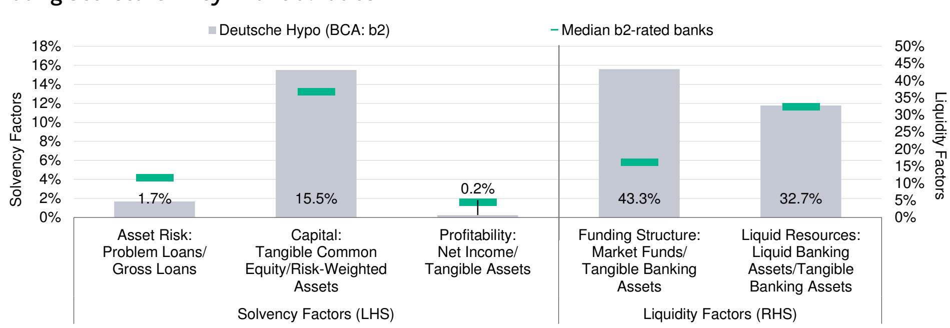
Summary

On 14 February 2019, we changed the direction of the ongoing review of Deutsche Hypothekenbank (Actien-Gesellschaft)'s (Deutsche Hypo) long-term ratings and rating inputs to review for upgrade from review direction uncertain, and confirmed its P-2 short-term ratings. The rating actions followed an ad hoc announcement by its parent bank, Norddeutsche Landesbank GZ's (NORD/LB) on 2 February 2019, stating the decisions of its owners to focus on capital strengthening and a realignment of the bank with Sparkassen-Finanzgruppe (S-Finanzgruppe, Aa2 stable, a2)[1], and not to proceed with an alternative option of a joint bid received from two private financial investors for now.

Deutsche Hypo's ratings reflect (1) its b2 Baseline Credit Assessment (BCA); (2) its ba3 Adjusted BCA, incorporating our assessment that the bank will benefit from affiliate backing from its sole owner, NORD/LB, in case of need; (3) the result of the application of our Loss Given Failure (LGF) analysis, which provides three notches of uplift for the deposit and senior unsecured debt ratings; and (4) our assumption of moderate government support for the bank's deposit and senior unsecured debt ratings, equivalent to one notch of rating uplift.

Deutsche Hypo's BCA of b2 is capped at the level of the BCA of its parent NORD/LB, reflecting the close interlinks between the two banks. Deutsche Hypo's financial profile is principally superior to that of NORD/LB Group, given the bank's sound asset quality and lower vulnerability to market shocks. That said, Deutsche Hypo's BCA is constrained by its high concentration in the commercial real estate (CRE) market, high leverage and modest earnings capacity. In addition, the bank's monoline business model implies limited earnings diversification.

Exhibit 1
Rating Scorecard - Key financial ratios



Source: Moody's Financial Metrics

Credit strengths

» Deutsche Hypo's asset quality is sound, as illustrated by its lower share of nonperforming loans relative to gross loans.

» The funding structure benefits from the bank's well-established covered bond franchise.

» Senior creditors will benefit from low loss severity in resolution provided by NORD/LB Group's large volume of outstanding junior senior debt and subordinated instruments.

Credit challenges

» Tight integration into NORD/LB may remain a limiting factor for the bank's ratings for some time yet.

» The bank's CRE-focused business model weighs on our assessment of its solvency.

» Deutsche Hypo strongly relies on market funding.

Outlook

Deutsche Hypo's long-term debt and deposit ratings are on review for upgrade, mirroring the upgrade potential of the b2 BCA of its parent, NORD/LB, which reflects, in turn, that NORD/LB's poor asset quality, inadequate provisioning of distressed assets and weak capital ratios have good prospects of being addressed in the next few quarters through a capital injection, other non-cash capital measures and a thorough realignment of the bank's risk profile.

Factors that could lead to an upgrade

» An upgrade of Deutsche Hypo's ratings would be conditional upon an upgrade of NORD/LB's ratings during the review period. A BCA upgrade will likely be prompted, when (1) NORD/LB and its (new) owners successfully execute the measures that have been agreed upon, specifically the recapitalisation that needs to be sufficiently sized to yield a Common Equity Tier 1 (CET1) capital ratio of 13%-14%, and the selling of nonperforming loans (NPLs) relating to ship finance; and (2) the required regulatory approvals have been obtained.

» The result of our Advanced LGF analysis already yields the best possible outcome for Deutsche Hypo's senior ratings, and bears no further upside for deposits and senior unsecured debt.

Factors that could lead to a downgrade

» We may downgrade the ratings of Deutsche Hypo if NORD/LB's ratings are downgraded during the review period.

» We may also downgrade Deutsche Hypo's BCA if its financial profile were to weaken significantly. However, we do not expect a downgrade of Deutsche Hypo's BCA to translate into lower long-term ratings, unless its Adjusted BCA is also lowered as a result of a BCA downgrade of its parent.

» In addition, we may downgrade the long-term ratings of Deutsche Hypo because of an increase in the expected loss severity at the level of its parent NORD/LB, owing to changes in the bank's liability structure, which could result in fewer notches of rating uplift as a result of our Advanced LGF analysis.

Key indicators

Exhibit 2

Deutsche Hypothekenbank (Actien-Gesellschaft) (Consolidated Financials) [1]

	6-18[2]	12-17[2]	12-16[2]	12-15[2]	12-14[2]	CAGR/Avg.[3]
Total Assets (EUR billion)	21	24	25	27	30	-9.4[4]
Total Assets (USD billion)	25	28	27	29	36	-10.3[4]
Tangible Common Equity (EUR billion)	0.9	0.9	0.9	0.9	0.9	-0.0[4]
Tangible Common Equity (USD billion)	1.0	1.0	0.9	0.9	1.0	-1.0[4]
Problem Loans / Gross Loans (%)	-	1.2	1.4	2.6	1.8	1.8[5]
Tangible Common Equity / Risk Weighted Assets (%)	15.5	15.4	13.6	13.5	11.6	13.9[6]
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	-	20.6	24.6	44.9	32.6	30.7[5]
Net Interest Margin (%)	0.8	0.8	0.8	0.8	0.7	0.8[5]
PPI / Average RWA (%)	1.3	1.9	2.0	2.1	2.0	1.9[6]
Net Income / Tangible Assets (%)	0.2	0.2	0.2	0.2	0.1	0.2[5]
Cost / Income Ratio (%)	59.4	46.6	39.4	38.7	36.5	44.1[5]
Market Funds / Tangible Banking Assets (%)	40.0	43.3	48.4	45.1	48.0	45.0[5]
Liquid Banking Assets / Tangible Banking Assets (%)	29.1	32.7	32.9	35.7	38.3	33.7[5]
Gross Loans / Due to Customers (%)	-	192.9	229.3	191.7	194.2	202.0[5]

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully-loaded or transitional phase-in; LOCAL GAAP. [3] May include rounding differences due to scale of reported amounts. [4] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime. [5] Simple average of periods presented for the latest accounting regime. [6] Simple average of Basel III periods presented.

Source: Moody's Financial Metrics

Profile

Deutsche Hypothekenbank (Actien-Gesellschaft) (Deutsche Hypo) is a German covered bond bank as defined by the Pfandbrief Act.[2] Since 2008, the bank has been a wholly owned subsidiary of NORD/LB, a commercial bank in northern Germany, and acting as NORD/LB's centre of competence for the CRE finance business. Its three segments comprise commercial real estate finance, capital markets business and other business. As of June 2018, Deutsche Hypo reported unconsolidated total asset of €21.3 billion.

Although Deutsche Hypo operates mainly in Germany, it also conducts business in the UK, Spain, France, the Benelux countries[3] and Poland. The bank provides a range of banking products and services primarily related to real estate finance, including project development finance, leasing, acquisition finance, structuring and syndications. The bank's CRE lending is largely funded through the issuance of mortgage covered bonds. Deutsche Hypo maintains a public-sector finance portfolio, which it seeks to run down because it is no longer part of its core business.

For more information, please see Deutsche Hypo's Issuer profile and our German Banking System Profile.

Weighted Macro Profile of Strong (+)

Although Deutsche Hypo is focused on the German market, the bank's assigned Strong (+) Weighted Macro Profile is set one notch below the Very Strong (-) Macro Profile of Germany, reflecting the issuer's activities in other markets with a less benign operating environment.

Recent developments

Our 14 February rating actions followed NORD/LB's and Deutsche Hypo's ad hoc announcements on 2 February, which declared the chosen bidder, that is, three groups forming part of the savings bank sector, and the measures planned by the bank's new group of stakeholders, subject to various authorities' approvals. The key measures and clarifying information on NORD/LB included:

1. a €2.7 billion net loss for the year in the 2018 accounts under International Financial Reporting Standards (IFRS), caused by a €2.5 billion total charge of provisions for existing NPLs.

2. the sale of a €2.7 billion portfolio of ship finance loans, comprising 90% NPLs, to investors in the market.

3. €2.7 billion in fresh capital for NORD/LB, €1.2 billion (44%) of which will be borne by the three groups of new shareholders who all form part of the sector and who will inject €400 million each, specifically, (i) the regional savings banks that already are among the bank's owners, (ii) the group of German Landesbanken, and (iii) the nationwide group of savings banks.
4. an intermittent fall in NORD/LB's CET1 ratio to 6.0%-6.5% as per 31 December 2018 and beyond 31 March 2019, that is, until capital measures are effected in Q2 2019; the capital injections are to be accompanied by unspecified non-cash capital-strengthening measures.

The review for upgrade initiated in our rating actions on 14 February followed an approximately two-month period of a review with direction uncertain, which we had initiated on 18 December 2018.

NORD/LB's owners started the process of inviting a new investor into its group of stakeholders in late September 2018. The owners stated in December 2018 that they have received four offers, but required more time to decide on the varying offers.

Detailed credit considerations

Exposures to CRE lending may exert pressure on asset quality in an adverse scenario, although historical loan losses have been low

We assign Deutsche Hypo a baa3 Asset Risk score, five notches below the a1 initial score. The negative adjustment reflects the concentration risk related to Deutsche Hypo's almost exclusive focus on the cyclical CRE market, to which it had an exposure of €13.6 billion as of 30 June 2018. The portfolio is focused on the German market, which comprises 59% of the total CRE exposure. The bank's CRE lending exposure represents a rather high 16x its €853 million balance-sheet capital.

Even when compared with its strong historical data, Deutsche Hypo's problem loans and associated risk costs remained very low in the first half of 2018. Supported by a benign credit environment across its core markets and the bank's quality-focused lending policies, Deutsche Hypo reported a reduced nonperforming exposure of €127 million as of June 2018, down from €189 million as of 31 December 2017.

In the context of the United Kingdom's (UK, Aa2 stable) planned exit from the EU on 29 March 2019, Deutsche Hypo decreased its new CRE business generation in the UK in 2018, which accounted for only 3% of its total new CRE underwriting in H1 2018 compared with 12% in 2017. Although the relatively unseasoned exposures underwritten prior to the Brexit vote may expose the bank to increased credit and loan extension risks, its focus on the primary locations in London, its prudent loan-to-value ratios and the resulting adequate stress tolerance of this portfolio duly mitigate the UK market risk. The bank has its 5th largest city concentration in London, after Hamburg, Berlin, Amsterdam and Paris.

Deutsche Hypo does not have to comply with minimum regulatory capital requirements

We assign Deutsche Hypo a b3 Capital score, in line with the capital score of its parent NORD/LB. This reflects the regulatory capital waiver under which the bank is not obliged to meet the regulatory minima at the bank level.

Deutsche Hypo has been exempt from complying with the regulatory solvency requirements since 2013 as a result of a waiver granted initially by the German Federal Financial Supervisory Authority (BaFin) which was confirmed by the European Central Bank. The capital waiver is the most important of several links connecting Deutsche Hypo with NORD/LB, which led us to align the mortgage bank's BCA and ratings with those of its parent bank. For details on the group's capitalisation, please refer to the latest published Credit Opinion on NORD/LB.

Profits are under pressure due to the challenges posed by the highly competitive operating environment

We assign Deutsche Hypo a b1 Profitability score, which is in line with the initial score. The b1 score reflects the bank's stable but modest net profit generation capacity of around 0.2% of tangible assets[4]. Although Deutsche Hypo's profit is automatically upstreamed to NORD/LB under the existing profit and loss transfer agreement, the bank can retain profit through transfers to its reserves.

Deutsche Hypo reported a €33 million net income (before profit transfer) in H1 2018, slightly up from the €31 million reported in the year-earlier period. However, its result from normal operations was €1.2 million lower year-on-year at €33.9 million (-3.5%).

Deutsche Hypo continued to experience margin pressure in H1 2018. The bank's net interest income decreased by 9.8% to €89 million, reflecting margin pressure in CRE finance, among other effects, despite a broadly unchanged €12.1 billion mortgage lending volume. The net interest income from CRE finance was down at €79 million in H1 2018, from €87 million in the one year-earlier period, illustrating the highly competitive market pressures in a benign risk environment. Moreover, the capital markets portfolio, which has run off in line with the bank's strategy, contributed a net loss due to higher risk cost, adding to the overall profit decline. The negative fee and commission result of -€0.4 million for the six months to 30 June 2018 illustrates that the bank fully relies on its net interest income for revenue. The bank's costs were 9% higher at €50 million in H1 2018, although mostly because of a higher bank levy and investments included in this amount. Given these headwinds, our measure of the bank's pre-provision income declined to €37 million in H1 2018, from €55 million in the year-earlier period.

The decrease in loan-loss provisions to €3 million in H1 2018 (which we understand to be overstated because this amount includes transfers to fully taxed undisclosed reserves under local GAAP) from €19 million a year earlier, was possible due to a €12 million net release of risk provisions in the CRE finance segment, which compares with a net charge of €2 million in H1 2017. As a consequence, Deutsche Hypo was able to maintain a broadly stable pre-tax profit.

For the period 2018-19, we expect a stable performance. While investments included in total costs may remain elevated for a while, the bank will save on interest costs following the redemption of a silent participation in 2017 and may not reiterate moderate losses willingly taken on the repurchase of covered bonds. In addition, a further reduction in the low-yield capital markets portfolio, combined with the bank's strategy to expand its CRE lending more strongly in its international core markets, will stabilise or even gradually improve its net interest income and return on assets.

Deutsche Hypo is strongly dependent on wholesale funding, but unsecured funding needs are manageable

We assign Deutsche Hypo a Funding Structure score of ba2, two notches above the b1 initial score. Our assessment reflects the bank's high dependence on wholesale funding, as well as several mitigating factors, specifically its good access to funds from the savings bank sector and strong covered bond franchise. At €2.1 billion, its senior unsecured bonds and notes outstanding as of June 2018 represented less than 10% of total assets, which we consider a manageable amount considering that the bank can issue these in the form of private placements with comparatively short maturities. The bank pursues a strategy of largely matched funding, facilitated through an independent funding franchise that is well diversified both regionally and in terms of funding products and currencies.

Deutsche Hypo's access to cost-efficient funding is a key requirement for its business model. The bank's funding structure is generally geared towards confidence-sensitive wholesale funding sources, which renders the bank susceptible to changes in investor sentiment and market risk appetite. At the same time, the bank's access to the deposit-rich savings bank sector, which includes material bond off-take by German Landesbanken, has proved to be an important mitigant to funding risk. In addition, Deutsche Hypo's own institutional clients are an important investor base for both its secured and unsecured bond issues.

The bank maintains ample liquidity buffers, as illustrated by its solid liquidity coverage

We assign Deutsche Hypo a ba1 Liquid Resources score, which is five notches below the initial score. The adjustment takes into consideration the encumbered liquid assets and balances our assessment of Deutsche Hypo's relatively modest unencumbered liquidity reserves relative to total assets and its limited liquidity requirements. The latter is a function of its long-dated asset base and, therefore, modest asset maturities (and cash outflows) per month. The bank's liquidity coverage ratio (LCR) was a solid 262% as of June 2018.

Deutsche Hypo's liquidity buffer allows it to meet all obligations over at least the next six months without a need to access debt capital markets; as of June 2018, however, the bank's distance to illiquidity was higher at 12 months. In case of an emergency, Deutsche Hypo has access to short-term liquidity lines with its parent bank.

The narrow business model of CRE lending constraints the BCA

The bank's high concentration in CRE lending and adjacent activities leads us to deduct a full notch from its ba3 Financial Profile score. This qualitative adjustment to the BCA reflects the bank's reliance on a single line of business (and market segment) for its revenue and profit.

With a reported pretax profit of €68 million in H1 2018, the CRE segment was the only profitable segment, while the capital markets business contributed a €5 million pretax loss and the other business a €29 million pretax loss.

Support and structural considerations

Affiliate support

We consider Deutsche Hypo to be affiliate backed by NORD/LB and, therefore, align its Adjusted BCA with the ba3 Adjusted BCA of NORD/LB. Our approach is based on Deutsche Hypo's high degree of integration into the NORD/LB Group, as reflected in the profit and loss transfer agreement between the parent and the subsidiary, and Deutsche Hypo's exemption from having to comply with regulatory capital requirements.

Our positioning of Deutsche Hypo's Adjusted BCA includes the benefits of the bank's membership in and support from Sparkassen-Finanzgruppe (S-Finanzgruppe, Aa2 stable, a2[5]), which effectively reduces the probability of default because this support would be available for stabilising a distressed member bank, and not just to compensate for losses in resolution. Our assumption of high cross-sector support provides two notches of rating uplift to NORD/LB's Adjusted BCA of ba3.

Loss Given Failure analysis

Deutsche Hypo is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider an operational resolution regime. We expect Deutsche Hypo to be included in the resolution perimeter of its parent entity NORD/LB, and we therefore apply our LGF analysis for NORD/LB, which considers the risks faced by the different debt and deposit classes across the liability structure at failure at the group level. We assume residual tangible common equity of 3%, post-failure losses of 8% of tangible banking assets, a 25% runoff in junior wholesale deposits and a 5% run-off in preferred deposits. These are in line with our standard assumptions.

Our Advanced LGF analysis follows the recently revised insolvency legislation in Germany that became effective on 21 July 2018. Following the change in law, the legal hierarchy of bank claims in Germany is now consistent with most other EU countries, where statutes do not provide full preference to deposits over senior unsecured debt. However, in our Advanced LGF analysis, we now consider not only the results of the formal legal position (pari passu or de jure scenario), to which we assign a 75% probability, but also an alternative liability ranking, reflecting the resolution authority's discretion to prefer deposits over senior unsecured debt (full depositor preference, or de facto scenario), to which we assign a 25% probability.

» For Deutsche Hypo's deposits and senior unsecured debt, our group-level LGF analysis indicates an extremely low loss given failure, leading to a three-notch uplift from the bank's ba3 Adjusted BCA.

» For Deutsche Hypo's junior senior unsecured debt, our group-level LGF analysis indicates a very low loss given failure, leading to a two-notch uplift from the bank's ba3 Adjusted BCA.

» For Deutsche Hypo's subordinated debt instruments, our group-level LGF analysis indicates a high loss given failure, leading to a B1 rating, which is one notch below the bank's ba3 Adjusted BCA.

Government support

Given its size on a consolidated basis, we consider S-Finanzgruppe as domestically and systemically relevant. We, therefore, attribute a moderate probability of German government support for all members of the sector, in line with support assumptions for other systemically relevant banking groups in Europe. For Deutsche Hypo, this results in an additional one-notch government support uplift for its long-term senior unsecured debt and deposit ratings.

For junior senior unsecured debt, the legal changes to Germany's bank insolvency rank order in 2018 lowered the likelihood of government support being available for these instruments, because legally they rank pari passu with most of the outstanding (statutorily subordinated) senior unsecured instruments issued until 20 July 2018. As a result, we assign a Low probability of government support being available for these instruments, resulting in no rating uplift.

Counterparty Risk Ratings (CRRs)

CRRs are opinions of the ability of entities to honour the uncollateralised portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honoured. CRRs are distinct from ratings assigned to senior unsecured debt instruments and from issuer ratings because they reflect that, in a resolution, CRR liabilities might benefit from preferential treatment compared with senior unsecured debt. Examples of CRR liabilities include the uncollateralised portion of payables arising from derivatives transactions and the uncollateralised portion of liabilities under sale and repurchase agreements.

Deutsche Hypo's CRRs are positioned at Baa2/P-2

The CRRs, prior to government support, are positioned three notches above the Adjusted BCA of ba3, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities. Deutsche Hypo's CRRs benefit from a one-notch rating uplift based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Counterparty Risk (CR) Assessment

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than both the likelihood of default and the expected financial loss, and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (for example, swaps), letters of credit, guarantees and liquidity facilities.

Deutsche Hypo's CR Assessments are positioned at Baa2(cr)/P-2(cr)

The CR Assessment, prior to government support, is positioned three notches above the Adjusted BCA of ba3, based on the buffer against default provided to the senior obligations represented by the CR Assessment by more subordinated instruments, including junior deposits and senior unsecured debt. Deutsche Hypo's CR Assessment benefits from a one-notch rating uplift based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Methodology and scorecard

The principal methodology we use in rating Deutsche Hypo is Banks, published in August 2018.

About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 3

Deutsche Hypothekenbank (Actien-Gesellschaft)

Macro Factors		
Weighted Macro Profile	**Strong +**	**100%**

Factor	**Historic Ratio**	**Initial Score**	**Expected Trend**	**Assigned Score**	**Key driver #1**	**Key driver #2**
Solvency						
Asset Risk						
Problem Loans / Gross Loans	1.7%	a1	↓	baa3	Sector concentration	Unseasoned risk
Capital						
TCE / RWA	15.5%	aa3	←→	b3	Access to capital	Stress capital resilience
Profitability						
Net Income / Tangible Assets	0.2%	b1	←→	b1	Return on assets	Expected trend
Combined Solvency Score		a3		ba3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	43.3%	b1	←→	ba2	Extent of market funding reliance	Market funding quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	32.7%	a2	←→	ba1	Asset encumbrance	Stock of liquid assets
Combined Liquidity Score		ba1		ba2		
Financial Profile				ba3		
Business Diversification				-1		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint:				--		
Scorecard Calculated BCA range				b1-b3		
Assigned BCA				b2		
Affiliate Support notching				2		
Adjusted BCA				ba3		

Balance Sheet is not applicable.

Debt class	De Jure waterfall		De Facto waterfall		Notching		LGF Notching Guidance vs. Adjusted BCA	Assigned LGF notching	Additional notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	--	--	--	--	--	--	--	3	0	baa3
Counterparty Risk Assessment	--	--	--	--	--	--	--	3	0	baa3 (cr)
Deposits	--	--	--	--	--	--	--	3	0	baa3
Senior unsecured bank debt	--	--	--	--	--	--	--	3	0	baa3
Junior senior unsecured bank debt	--	--	--	--	--	--	--	2	0	ba1
Dated subordinated bank debt	--	--	--	--	--	--	--	-1	0	b1

Instrument class	Loss Given Failure notching	Additional Notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	baa3	1	Baa2 RUR Possible Upgrade	Baa2 RUR Possible Upgrade
Counterparty Risk Assessment	3	0	baa3 (cr)	1	Baa2(cr) RUR Possible Upgrade	--
Deposits	3	0	baa3	1	Baa2 RUR Possible Upgrade	Baa2 RUR Possible Upgrade
Senior unsecured bank debt	3	0	baa3	1	Baa2 RUR Possible Upgrade	--
Junior senior unsecured bank debt	2	0	ba1	0	Ba1 RUR Possible Upgrade	--
Dated subordinated bank debt	-1	0	b1	0	B1 RUR Possible Upgrade	--

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.
Source: Moody's Financial Metrics

Ratings

Exhibit 4

Category	Moody's Rating
DEUTSCHE HYPOTHEKENBANK (ACTIEN-GESELLSCHAFT)	
Outlook	Rating(s) Under Review
Counterparty Risk Rating	Baa2/P-2[1]
Bank Deposits	Baa2/P-2[1]
Baseline Credit Assessment	b2[2]
Adjusted Baseline Credit Assessment	ba3[2]
Counterparty Risk Assessment	Baa2(cr)/P-2(cr)[1]
Issuer Rating	Baa2[2]
Senior Unsecured -Dom Curr	Baa2[2]
Junior Senior Unsecured -Dom Curr	Ba1[3]
Subordinate -Dom Curr	B1[3]
ST Issuer Rating	P-2
Other Short Term -Dom Curr	(P)P-2
PARENT: NORDDEUTSCHE LANDESBANK GZ	
Outlook	Rating(s) Under Review
Counterparty Risk Rating	Baa2/P-2[1]
Bank Deposits	Baa2/P-2[1]
Baseline Credit Assessment	b2[2]
Adjusted Baseline Credit Assessment	ba3[2]
Counterparty Risk Assessment	Baa2(cr)/P-2(cr)[1]
Issuer Rating	Baa2[2]
Senior Unsecured -Dom Curr	Baa2[2]

Junior Senior Unsecured	Ba1[3]
Junior Senior Unsecured MTN -Dom Curr	(P)Ba1[2]
Subordinate	B1[2]
Commercial Paper	P-2
Other Short Term -Dom Curr	(P)P-2

[1] Rating(s) within this class was/were placed on review on February 14 2019 [2] Placed under review for possible upgrade on February 14 2019 [3] Placed under review on February 14 2019
Source: Moody's Investors Service

Endnotes

1 The ratings reflect S-Finanzgruppe's corporate family rating and BCA.

2 Pfandbrief Bank is the term used by the Pfandbrief Act for banks authorised to issue Pfandbriefe, which are debt securities covered by specific assets such as mortgages on property or loans to local authorities.

3 The Benelux countries are Belgium, the Netherlands and Luxembourg.

4 Considering that the bank does not pay taxes at the bank level, our net income/tangible assets includes a tax adjustment to make the bank's net income ratios more comparable with those of peers.

5 The ratings reflect S-Finanzgruppe's corporate family rating and outlook, and its BCA.

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CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

MOODY'S
INVESTORS SERVICE