

## CREDIT OPINION

1 August 2023

Update



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### RATINGS

#### Berlin Hyp AG

Domicile	Germany
Long Term CRR	Aa3
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aa3
Type	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	Aa3
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

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.

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## Berlin Hyp AG

### Update to credit analysis

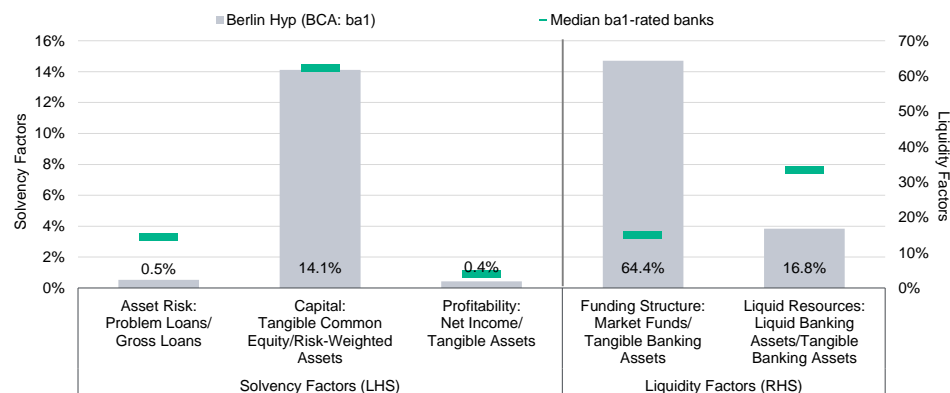
#### Summary

Berlin Hyp AG's (Berlin Hyp) Aa3 deposit and senior unsecured ratings are based on the bank's ba1 BCA and three notches of rating uplift from joint affiliate support of its parent and Sparkassen-Finanzgruppe (S-Finanzgruppe, Aa2 stable, a2<sup>1</sup>), reflecting our assumption that Berlin Hyp will be included in the resolution perimeter of Landesbank Baden-Wuerttemberg (LBBW, Aa3/Aa3 stable, baa2<sup>2</sup>), implying that the two issuer's probability of default is the same, resulting in an alignment of the bank's Adjusted BCAs. The ratings also reflect the application of our Advanced Loss Given Failure (LGF) analysis to the new group consisting of LBBW and Berlin Hyp, which incorporates the relative loss severity of a liability class and results in three notches of rating uplift; and a one-notch rating uplift resulting from government support because of the group's membership in the systemically relevant S-Finanzgruppe.

Berlin Hyp's ba1 BCA reflects the bank's exposure to very high concentration risk in commercial real estate (CRE) lending because of its highly focused business model, which is mitigated by good and improved capital ratios. It also incorporates the bank's profitability, which provides sufficient buffer to absorb higher risk costs; and high reliance on confidence-sensitive market funding and substantial asset encumbrance, although Berlin Hyp has good access to stable funding sources within S-Finanzgruppe.

Exhibit 1

#### Rating Scorecard - Key financial ratios



Source: Moody's Investors Service

## Credit strengths

- » Sound risk-adjusted capitalisation
- » Improved profitability and efficiency, which allowed the buildup of contingency reserves that provide an increased buffer
- » Good asset-quality metrics
- » Joint support from its parent LBBW and its membership in Institutional Protection Scheme (IPS) of S-Finanzgruppe, in case of need

## Credit challenges

- » Extremely high risk concentration in CRE, exposing the bank to tail risks from dislocations in CRE markets
- » High reliance on confidence-sensitive market funding and high asset encumbrance
- » Maintenance of adequate capital ratios in the long run, as regulatory requirements become more stringent

## Outlook

The outlook on Berlin Hyp's long-term deposit, issuer and senior unsecured debt ratings is stable and aligned with the outlook on LBBW's ratings.

## Factors that could lead to an upgrade

Upward pressure on Berlin Hyp's ratings could develop if LBBW's fundamental credit profile improves or higher sector support becomes available.

Upward pressure on Berlin Hyp's ba1 BCA could develop if there is an improvement in the bank's leverage ratio, particularly through higher capitalisation levels generated via reserve buildup; a substantial improvement in earnings; or a substantial decline in its dependence on market funding, for instance, via intragroup funding. However, an upgrade of the bank's BCA would not result in an upgrade of its Adjusted BCA or its long-term issuer ratings, because the effect of such an upgrade would be offset by lower affiliate support uplift as its baa1 Adjusted BCA is already aligned with its parent.

## Factors that could lead to a downgrade

Berlin Hyp's long-term deposit, issuer and senior unsecured debt ratings could be downgraded if there is downward pressure on LBBW's ratings or the likelihood of parental support decreases, or if our assumption of group resolution is not implemented. A change in the joint liability structure with LBBW, resulting in higher loss given failure in resolution and, therefore, fewer notches of rating uplift derived from our Advanced LGF analysis could exert downward rating pressure.

Berlin Hyp's BCA could be downgraded if capital ratios weaken as a result of a sustained and significant deterioration in asset quality, or if profitability declines from historical levels on a sustained basis.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Berlin Hyp AG (Consolidated Financials) [1]

	12-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	12-18 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (EUR Billion)	34.4	36.2	33.4	27.0	27.2	6.1 <sup>4</sup>
Total Assets (USD Billion)	36.7	41.0	40.9	30.3	31.1	4.3 <sup>4</sup>
Tangible Common Equity (EUR Billion)	1.7	1.6	1.4	1.3	1.2	7.7 <sup>4</sup>
Tangible Common Equity (USD Billion)	1.8	1.8	1.7	1.5	1.4	5.9 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.4	0.6	0.6	0.8	0.9	0.6 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	14.1	14.3	13.4	13.2	13.5	13.7 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	6.4	7.7	8.3	11.7	12.6	9.4 <sup>5</sup>
Net Interest Margin (%)	1.3	1.2	1.0	1.2	1.1	1.2 <sup>5</sup>
PPI / Average RWA (%)	2.3	2.2	1.6	1.6	1.8	1.9 <sup>6</sup>
Net Income / Tangible Assets (%)	0.4	0.6	0.3	0.4	0.5	0.4 <sup>5</sup>
Cost / Income Ratio (%)	46.0	44.6	53.2	54.4	50.3	49.7 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	64.4	70.5	72.1	66.5	64.8	67.6 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	16.8	26.4	24.2	14.2	21.6	20.6 <sup>5</sup>
Gross Loans / Due to Customers (%)	2118.0	3574.4	3255.2	7986.6	4598.4	4306.5 <sup>5</sup>

[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 because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

## Profile

Berlin Hyp AG (Berlin Hyp) is a German bank that offers real estate financing services mainly for commercial and residential properties. As of year-end 2022, it reported total assets of €34.4 billion and employed 550 full-time equivalent staff. Berlin Hyp offers a range of financial products and services to small and medium-sized enterprises (SMEs), commercial investors, municipal housing associations, housing co-operatives and property developers through a network of six branches in Germany. Internationally, it operates through representative offices in Amsterdam (the Netherlands), Warsaw (Poland) and Paris (France).

As of 1 July 2022, Berlin Hyp was acquired by LBBW and operates as a LBBW subsidiary.

For more information, please see Berlin Hyp's [Issuer Profile](#) and our [German Banking System Profile](#).

### Berlin Hyp's Weighted macro profile is Strong (+)

Berlin Hyp is focused on the German market, which accounts for almost two-thirds of the bank's exposure at default. As a result, the bank's assigned Strong (+) weighted macro profile is set in line with the Strong (+) [macro profile for Germany](#).

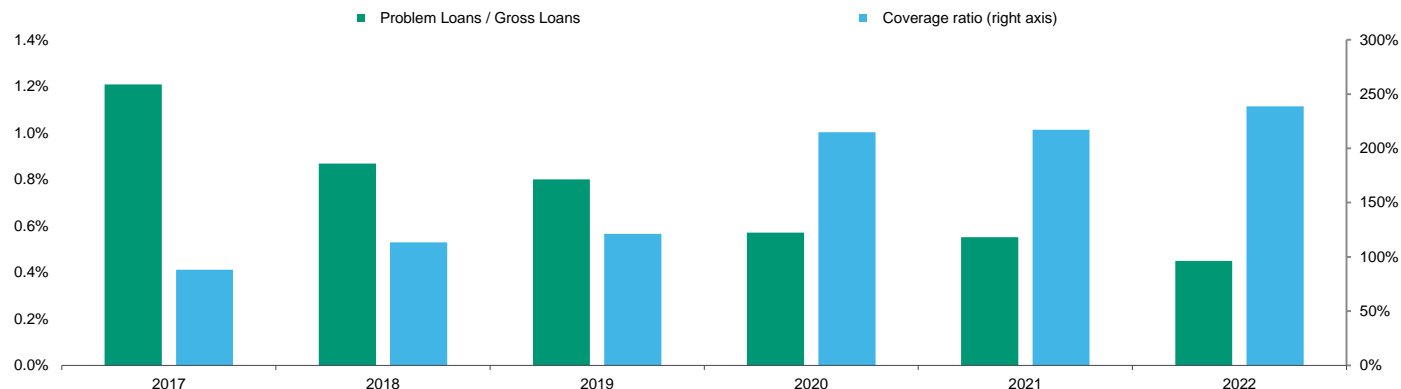
## Detailed credit considerations

### Good asset quality with extremely high risk concentration in CRE

We assign an Asset Risk score of ba1, eight notches below the aa2 initial score, to reflect Berlin Hyp's cyclical and higher-risk CRE lending activities and its concomitant large single-borrower concentration. The concentration risk caps the assigned score at non-investment grade. This is despite Berlin Hyp's very sound asset quality with nonperforming loans of well below 1%. The bank's nonperforming loans continued to decline in 2022, though higher rates, lower valuations, increasing re-financing risks for CRE property companies <sup>3</sup> and subdued economic growth prospects will lead to an increase from the current very low levels, accompanied with higher risk costs.

Exhibit 3

**Berlin Hyp's asset quality remains solid**



Problem loan ratio per our definition.

Sources: Company reports and Moody's Investors Service

As of year-end 2022, Berlin Hyp had extended €27.5 billion of real estate loans (against €1.7 billion in tangible common equity [TCE]), amounting to around two-thirds of the balance sheet and thus representing the bank's main asset-risk driver. Berlin Hyp's overall gross real estate exposure<sup>4</sup> amounted to €31.7 billion as of year-end 2022 and comprised offices (41%), residential real estate (28%), retail (14%), logistics (6%) and other buildings used for commercial purposes. The portfolio was largely focused on Germany (68%), thus resulting in less exposure to international CRE markets than its peers, though it grew its portfolio faster than that of its peers until 2022. The LTV's for the exposures vary between 48.7% in France to 63.7% in Poland/CZ, with the bank's buffers vs market values ranging between 40-80%, depending on the asset classes, providing significant leeway with regards to declining prices.

Exhibit 4

**Berlin Hyp's portfolio composition by country based on year-end 2022 data**

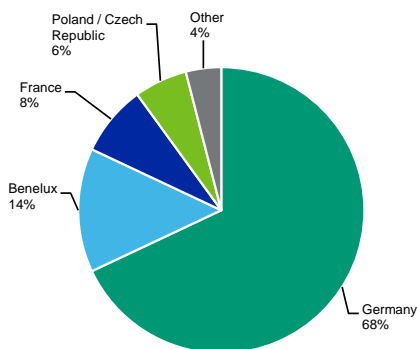
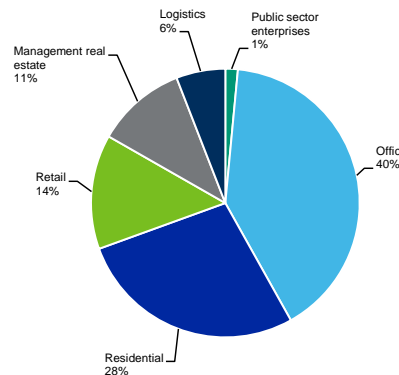


Exhibit 5

**Berlin Hyp's portfolio composition by segment based on year-end 2022 data**



Source: Company presentation

Excludes loans to the public sector.

Source: Company presentation

In 2022, Berlin Hyp originated new loans of €6.9 billion, including prolongations. New loans were mostly extended to investors (76%), with the remainder mainly attributed to developers and contractors (21%). In terms of regional split, 47% of new loans were derived from German A cities, 20% from German B cities and other German regions, and 33% from outside Germany. In addition to its real estate business, the bank held legacy €0.4 billion low-margin public-sector loans as of year-end 2022, down from €8.0 billion as of year-end 2008. The bank's €5.6 billion investment and liquidity portfolio is low risk.

Berlin Hyp's problem loans amounted to €127 million as of year-end 2022 (December 2021: €146 million, 2020: €141 million), reflecting a fraction of its historical peak levels dating back to the late 1990s, when the bank experienced a crisis because of an East German property bubble after Germany's reunification. One of the key drivers of the reduction in nonperforming loans was the bank's effective workout management of legacy loans, along with its improved track record of risk management in its loan book. Berlin Hyp's coverage ratio (measured as loan loss reserves/problem loans) was a solid 239% as of December 2022.

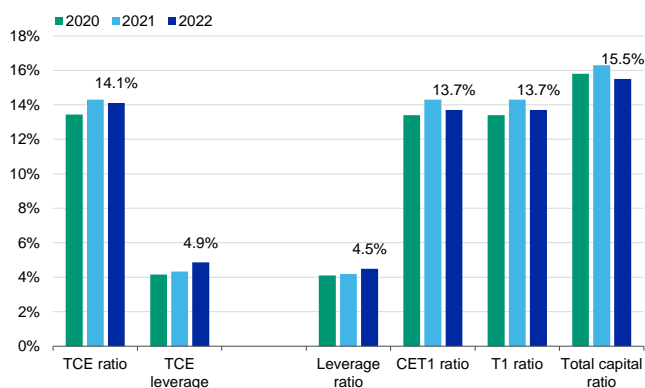
### Sound risk-adjusted capital levels, although regulatory changes and the future contractual agreements with its parent will affect capital formation

We assign an a2 Capital score, one notch below the a1 initial score, taking into account future changes to the capital regulation and the bank's undisclosed 340f<sup>5</sup> reserves, which provide additional loss-absorbing capacity, but also the bank's leverage ratio of below 5%.

Although we consider the bank's risk-adjusted capitalisation to be solid, providing a good buffer against regulatory minima of 7.1% for Common Equity Tier 1 (CET1) and a 10.6% total capital requirement, respectively, changes to the regulatory framework such as the 2023 introduced [countercyclical buffer](#) in Germany, the phase-in of tighter capital requirements under Basel IV and the current economic downturn will lead to higher risk-weighted assets (RWA), straining available capital buffers. To keep its current levels of investor protection intact, the bank will have to create further reserves; its new parent LBBW will likely determine the bank's capital accumulation capacity.

Exhibit 6

#### Berlin Hyp's capitalisation remains solid

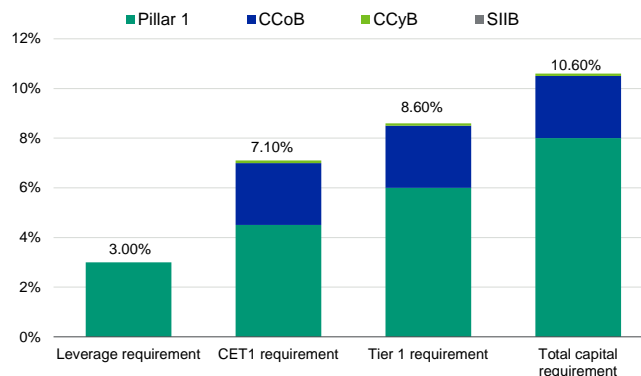


TCE = Tangible common equity (Moody's calculation). CET1 = Common Equity Tier 1 (after earnings appropriation). T1 = Tier 1 capital.

Sources: Company reports and Moody's Investors Service

Exhibit 7

#### Berlin Hyp's capital requirements in detail



CCoB = Capital conservation buffer. CCyB = Countercyclical capital buffer. SIIB = Systemically important institutions buffer.

The capital requirements are Berlin Hyp's solo capital requirements.

Source: Company reports

The bank's TCE ratio (measured as TCE/RWA) has increased beyond 13%-14%, standing at 14.1% as of year-end 2022. RWA increased by 8% to €11.9 billion as of year-end 2022 compared with the level as of year-end 2021<sup>6</sup>. The regulatory CET1 capital ratio decreased to 13.7% from 14.3% during the same period, because of an increase of risk weighted, reflecting business growth.

Berlin Hyp's leverage has improved significantly from 3.3% as of year-end 2014 as a result of a 65% increase in TCE, partly offset by a 13% increase in tangible assets. Current levels of 4.9% are more solid, with the regulatory leverage ratio of 4.5% (all as of year-end 2022) improving as well. RWA rose by 47% during the same time, as Berlin Hyp reduced its lower-yielding public-sector exposures and its investment portfolio while building its mortgage book. As a result of this shift in its business mix, Berlin Hyp's risk density (measured as RWA/tangible assets) rose to 35% as of year-end 2022 from 27% as of year-end 2014, which also bolstered the bank's earnings generation capacity.

### Profitability returned to pre-pandemic levels in 2022

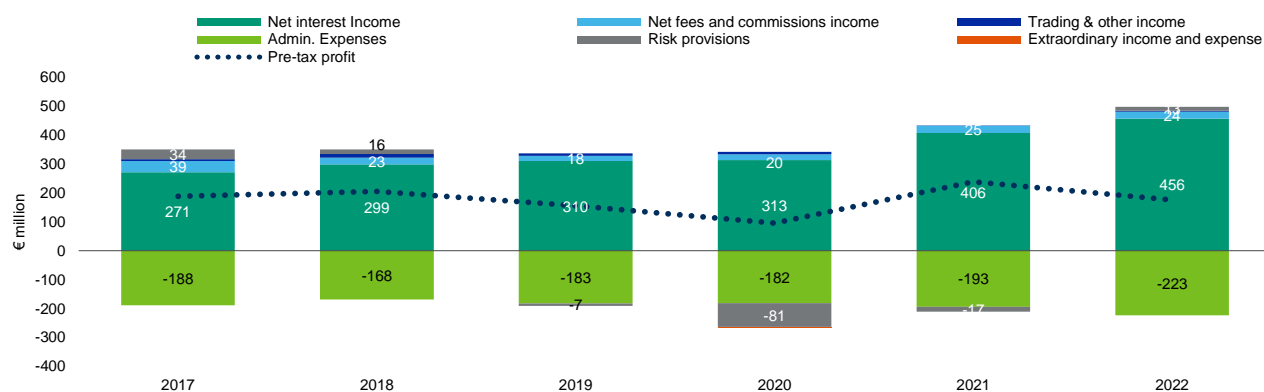
For Profitability, we assign a ba1 score, in line with the initial score, which is derived from the 0.4% net income reported as of December 2022. Though we expect an increase in risk costs because of the economic impact of the geopolitical tensions, we expect profitability to remain in line with the ba1 Profitability score range (0.375%-0.49%) in 2023, particularly as the bank has already

increased portfolio provisions and other reserves, which should smooth its profitability going forward, despite its exposure to highly cyclical CRE.

To gauge Berlin Hyp's underlying earnings power, we adjusted reported earnings that were heavily influenced by the past contractual links ahead of the recent acquisition; this resulted in an adjusted net profit of €146.0 million for 2022 (2021: €222.7 million), in line with a return on assets of 0.4%.

Exhibit 8

### Berlin Hyp's profitability recovered in 2022



Sources: Company reports and Moody's Financial Metrics

In 2022, Berlin Hyp's net interest income of €456 million, which accounted for 94% of the bank's revenue, increased by 12% year on year because of slightly stronger margins combined with loan growth. The bank's net commission income of €24 million decreased by 4% year on year in 2022. Administrative expenses of €223 million were up 16% compared with the year-earlier period. For 2022, the bank released risk provisions of €13.2 million (2021: €17.4 million provisions booked), supporting the result, while negative evaluation effects for the securities portfolio strained profitability.

### Established covered bond franchise, complemented by sector funding access

Our assigned ba3 Funding Structure score is significantly above the caa1 initial score. The uplift reflects Berlin Hyp's strong covered bond franchise and its integration into the German savings bank sector, which provides access to less confidence-sensitive sector funding, thus stabilising the bank's wholesale-driven refinancing profile. We expect the TLTRO-induced increase in market funding ratio to ease and eventually return to the pre-pandemic level.

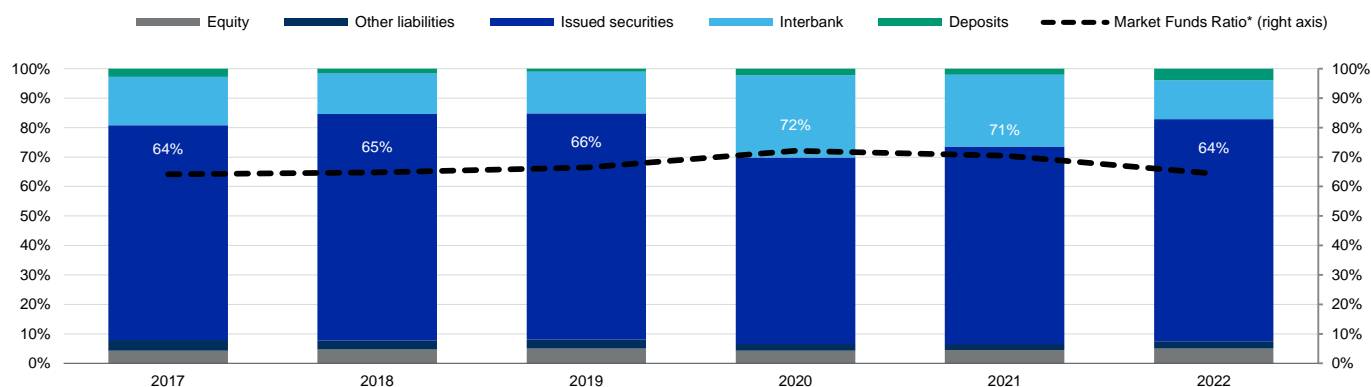
As of year-end 2022, €16.1 billion of Berlin Hyp's €34.4 billion total assets were funded through mortgage covered bonds and the remainder through €3.9 billion in junior senior unsecured debt, €4.2 billion in senior unsecured debt, €4.6 billion in interbank loans and repos (including temporary recourse to TLTRO), and €0.2 billion in subordinated debt. The bank has no deposit franchise.

Within covered bonds, the mix has almost completely shifted to mortgage covered bonds as Berlin Hyp retreated from the lower-margin public finance business. The secured funding base is complemented by the issuance of unsecured bonds, of which a significant share is placed with German savings banks, the indirect owners of Berlin Hyp. To diversify its investor base, Berlin Hyp has become a prolific issuer of green bonds. The bank's MREL-eligible liabilities made up 24% of its balance sheet as of year-end 2022, up from 13.3% as of year-end 2020.

Exhibit 9

**Berlin Hyp's funding is mainly covered bonds based**

Composition of market funding sources



\*Market funds ratio = Market funds/tangible banking assets.

Sources: Company reports and Moody's Investors Service

**Significant asset encumbrance, but sufficient liquidity**

The assigned ba1 Liquid Resources score is four notches below the a3 initial score, reflecting the bank's liquidity of 16.8% of tangible assets as of year-end 2022. Encumbrance of liquid assets is offset by adequate regulatory liquidity metrics and additional access to liquidity through covered bonds. The bank's recourse to TLTRO already declined significantly, and we expect available liquidity buffer to stabilise.

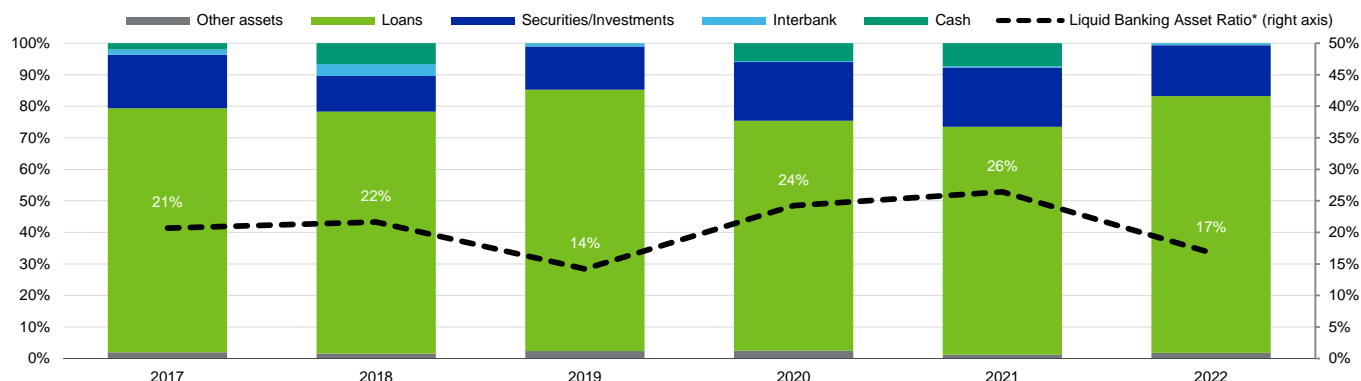
Berlin Hyp's liquid banking assets, comprising of only a small cash and central bank amount, limited interbank lending, and its more significant investment portfolio, amounted to €5.8 billion as of year-end 2022. However, a significant amount of its high quality liquid assets was encumbered, representing cover pool assets and liquid assets pledged for repo funding with the German Bundesbank and other market participants.

We also take into account the bank's potential to issue covered bonds from its over-collateralised cover pool at short notice to generate liquidity in case of need. As of December 2022 and based on an outstanding issuance of €16.0 billion, the over-collateralisation of Berlin Hyp's [mortgage cover pool](#) was at 12.5% on an unstressed present value basis. Thus, Berlin Hyp has leeway to use its existing cover pool to generate fresh liquidity through the issuance of covered bonds.

We also take into consideration the bank's adequate regulatory liquidity metrics, such as the LCR, for which Berlin Hyp has set a target ratio of at least 120% and which was 125% as of year-end 2022 (the minimum regulatory requirement is 100%), reflecting the effects of the TLTRO programmes, which are likely to be temporary.

Exhibit 10

**Berlin Hyp's adequate liquid resources**



\*Liquid banking assets ratio = Liquid assets/tangible banking assets.  
Sources: Company reports and Moody's Investors Service

**Limited earnings diversification reflected in BCA**

To reflect the risks stemming from Berlin Hyp's CRE monoline business model, we apply a one-notch negative qualitative adjustment for Business Diversification in our scorecard, which leads to a ba1 BCA from the bank's baa3 Financial Profile score.

Business diversification is an important gauge of a bank's sensitivity to stress in a single business line. It is related to earnings stability in the sense that earnings diversification across distinct and relatively uncorrelated lines of business increases the reliability of a bank's earnings streams and its potential to absorb shocks affecting a business line.

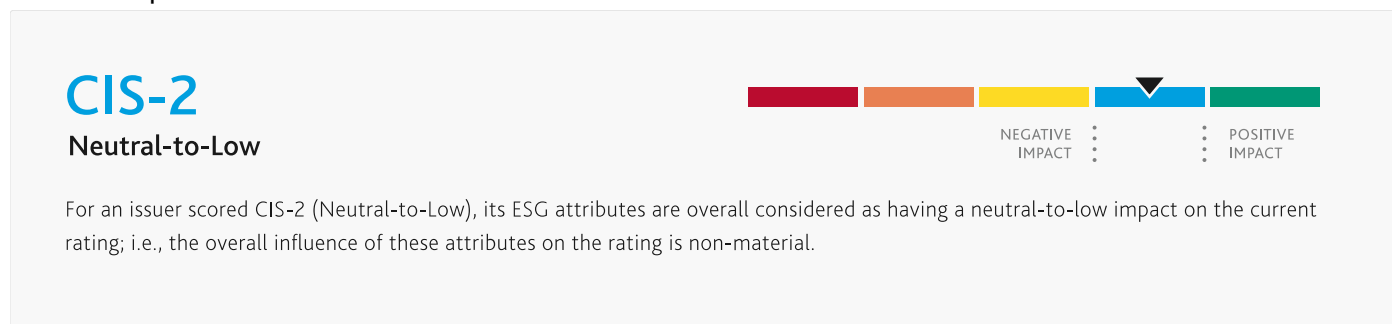
Being a CRE lending specialist, Berlin Hyp is exposed to a rather volatile banking business through the cycle. CRE lending is highly cyclical and, therefore, a higher-risk sector. Being a specialist CRE lender benefits the bank's sector-specific risk management know-how, but at the same time naturally limits the potential for (earnings) diversification within the bank. Because CRE exposures can cause high losses in times of financial market stress, Berlin Hyp's high reliability on CRE-related earnings streams exposes it to unexpected shocks that are likely to hurt its income statement, and potentially its capital base, in an adverse scenario. As a result, we classify Berlin Hyp as a monoline bank according to our methodological approach for business diversification.

**ESG considerations**

**Berlin Hyp AG's ESG Credit Impact Score is Neutral-to-Low CIS-2**

Exhibit 11

**ESG Credit Impact Score**



Source: Moody's Investors Service

Berlin Hyp AG's (Berlin Hyp) ESG **CIS-2** indicates that ESG considerations have no material impact on the current ratings. The bank's corporate governance risks are low, reflecting the bank's focused and clear strategy, its good controls and risk management and the management's strong track record.



Exhibit 12

**ESG Issuer Profile Scores**

Source: Moody's Investors Service

**Environmental**

Berlin Hyp faces moderate environmental risks, specifically in relation to carbon transition risks. This is because of the structure of its loan book, predominantly commercial real estate mortgages. In line with its peers, Berlin Hyp is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, Berlin Hyp is actively engaging in optimising its loan portfolio towards less carbon-intensive assets.

**Social**

Berlin Hyp faces moderate exposure to social risks related to regulatory and litigation risks, requiring the bank to meet high compliance standards. Customer relations risks related to mis-selling and mis-representation are lower than industry average because of the bank's focus on institutional customers combined with a strong conduct track record. The bank is also proactively adapting to changing customer preferences (such as digitalisation and sustainable products).

**Governance**

Berlin Hyp's governance risks are low. Berlin Hyp has delivered a track record on strategic and financial targets based on solid risk management, policies and procedures in recent years. Higher risk commercial real estate exposures, which arise from Berlin Hyp's business model, create tail risks, mitigated however by the bank's track record in managing these risks and its good financial fundamentals. Because Berlin Hyp is effectively controlled by its parent Landesbank Baden-Wuerttemberg through its 100% ownership, we have aligned the subsidiary's board structure, policies and procedures score with that of its parent, given the bank's strategic importance and public affiliation with the group, the parent's oversight of its subsidiary board and the regulated nature of both entities.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

**Support and structural considerations****Affiliate support**

Berlin Hyp benefits from parental support from LBBW and is a member of Sparkassen-Finanzgruppe's IPS. The combination of strong contractual links between the new parent and Berlin Hyp, the access to the IPS support scheme, plus our expectation of a joint resolution at group level LBBW are the key drivers to align the Adjusted BCA of both LBBW and Berlin Hyp at baa1.

**Loss Given Failure (LGF) analysis**

We expect Berlin Hyp to be included in the resolution perimeter of LBBW. Berlin Hyp's Stuttgart-based parent bank is subject to the EU Bank Recovery and Resolution Directive, which we consider an operational resolution regime. We, therefore, apply LBBW's LGF analysis to the group's consolidated liabilities, taking into account the risks faced by the different debt and deposit classes across the liability structure at failure.

In line with our standard assumptions, we assume that equity and asset losses are 3% and 8%, respectively, of tangible banking assets in a failure scenario. Moreover, we assume residual TCE of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits and a 5% run-off in preferred deposits. These ratios are in line with our standard assumptions. In addition, we assume that only a very small percentage (10%) of the deposit base can actually be considered junior and qualify as bail-in-able under the BRRD.

The results of our Advanced LGF analysis are as follows:

- » For deposits and senior unsecured debt, as well as CRR liabilities, our LGF analysis indicates an extremely low loss given failure, leading to the a1 Provisional Rating Assessment, three notches above the baa1 Adjusted BCA.
- » For junior senior unsecured debt, our LGF analysis indicates a very low loss given failure, leading to the a2 Provisional Rating Assessment, two notches above the baa1 Adjusted BCA.
- » For subordinated debt, our LGF analysis indicates a high loss given failure, leading to the baa2 Provisional Rating Assessment, one notch below the baa1 Adjusted BCA.

### Government support considerations

Because of its size on a consolidated basis, we consider S-Finanzgruppe as systemically relevant and, therefore, attribute a moderate probability of government support for all members of the sector, in line with support assumptions for other systemically relevant banking groups in Europe. We, therefore, still include one notch of government support uplift in our CRRs, senior unsecured debt and deposit ratings of S-Finanzgruppe member banks that are incorporated in Germany, including for LBBW and Berlin Hyp. For junior securities, the likelihood of government support is low, and these ratings do not include any related uplift.

### Counterparty Risk Ratings (CRRs)

#### Berlin Hyp's CRRs are Aa3/P-1

The CRRs, before government support, are three notches above the Adjusted BCA of a3, reflecting the extremely low loss given failure from the high volume of instruments, primarily junior senior unsecured debt, which are subordinated to CRR liabilities in our Advanced LGF analysis. Berlin Hyp's CRRs also benefit from one notch of rating uplift provided by government support, in line with our moderate support assumption on deposits and senior unsecured debt.

### Counterparty Risk (CR) Assessment

#### Berlin Hyp's CR Assessment is Aa3(cr)/P-1(cr)

The bank's CR Assessment is four notches above the a3 Adjusted BCA, incorporating three notches of LGF uplift derived from the buffer against default provided by more subordinated instruments, primarily junior senior unsecured debt, to the senior obligations represented by the CR Assessment; and one notch of government support uplift, assuming a moderate level of support. To determine the CR Assessment, we focus purely on subordination in our Advanced LGF analysis, taking no account of the volume of the instrument class.

## Methodology and scorecard

### Methodology

The principal methodology we used in rating Berlin Hyp was the [Banks Methodology](#), published in July 2021.

### About Moody's Bank Scorecard

Our Bank Scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement 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 13

### Berlin Hyp AG

<b>Macro Factors</b>							
<b>Weighted Macro Profile</b>		<b>Strong +</b>	<b>100%</b>				
<b>Factor</b>	<b>Historic Ratio</b>	<b>Initial Score</b>	<b>Expected Trend</b>	<b>Assigned Score</b>	<b>Key driver #1</b>	<b>Key driver #2</b>	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	0.5%	aa2	↔	ba1	Sector concentration	Single name concentration	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	14.1%	a1	↔	a2	Nominal leverage	Expected trend	
Profitability							
Net Income / Tangible Assets	0.4%	ba1	↔	ba1	Earnings quality	Expected trend	
Combined Solvency Score		a2		baa2			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	64.4%	caa1	↔	ba3	Extent of market funding reliance	Market funding quality	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	16.8%	baa2	↔	ba1	Asset encumbrance	Additional liquidity resources	
Combined Liquidity Score		b1		ba2			
Financial Profile				baa3			
Qualitative Adjustments				Adjustment			
Business Diversification				-1			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				-1			
Sovereign or Affiliate constraint				Aaa			
BCA Scorecard-indicated Outcome - Range				baa3 - ba2			
Assigned BCA				ba1			
Affiliate Support notching				3			
Adjusted BCA				baa1			

**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	a1
Counterparty Risk Assessment	-	-	-	-	-	-	-	3	0	a1 (cr)
Deposits	-	-	-	-	-	-	-	3	0	a1
Senior unsecured bank debt	-	-	-	-	-	-	-	3	0	a1
Junior senior unsecured bank debt	-	-	-	-	-	-	-	2	0	a2
Dated subordinated bank debt	-	-	-	-	-	-	-	-1	0	baa2

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	a1	1	Aa3	Aa3
Counterparty Risk Assessment	3	0	a1 (cr)	1	Aa3(cr)	
Deposits	3	0	a1	1	Aa3	Aa3
Senior unsecured bank debt	3	0	a1	1	Aa3	Aa3
Junior senior unsecured bank debt	2	0	a2	0	A2	
Dated subordinated bank debt	-1	0	baa2	0	(P)Baa2	

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## Ratings

Exhibit 14

Category	Moody's Rating
<b>BERLIN HYP AG</b>	
Outlook	Stable
Counterparty Risk Rating	Aa3/P-1
Bank Deposits	Aa3/P-1
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
Issuer Rating	Aa3
Senior Unsecured	Aa3
Junior Senior Unsecured -Dom Curr	A2
Junior Senior Unsecured MTN -Dom Curr	(P)A2
Subordinate MTN -Dom Curr	(P)Baa2
Commercial Paper -Dom Curr	P-1
<b>PARENT: LANDESBANK BADEN-WUERTTEMBERG</b>	
Outlook	Stable
Counterparty Risk Rating	Aa3/P-1
Bank Deposits	Aa3/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
Issuer Rating	Aa3
Senior Unsecured -Dom Curr	Aa3
Junior Senior Unsecured	A2
Junior Senior Unsecured MTN -Dom Curr	(P)A2
Subordinate	Baa2
Pref. Stock Non-cumulative -Dom Curr	Ba1 (hyb)
Commercial Paper -Dom Curr	P-1
Other Short Term -Dom Curr	(P)P-1

Source: Moody's Investors Service

## Endnotes

- [1](#) The ratings shown are S-Finanzgruppe's corporate family rating and outlook, and its BCA.
- [2](#) The ratings shown are the bank's deposit and senior unsecured ratings and outlook, and its BCA.
- [3](#) Credit quality erosion to continue as refinancing becomes more difficult.
- [4](#) Including off-balance-sheet commitments, derivatives and valuation adjustments.
- [5](#) The fully taxed 340f reserve under German GAAP enables companies to smooth their earnings over the cycle. For banks, it is created by booking provisions on loans and securities in excess of what is economically required, thereby understating reported profitability. Conversely, the release of 340f provisions overstates profitability.
- [6](#) To derive its risk weights, Berlin Hyp uses the internal ratings-based approach for the bulk of its assets.

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