

CREDIT OPINION

19 August 2022

Update



RATINGS

Berlin Hyp AG

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

Please see the <u>ratings section</u> 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 after rating downgrade

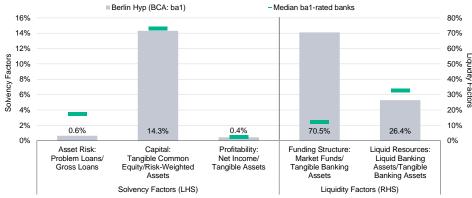
Summary

On 7 July 2022, we downgraded <u>Berlin Hyp AG</u>'s (Berlin Hyp) deposit and senior unsecured ratings to Aa3 from Aa2 and its Adjusted BCA to baa1 from a3. The rating action follows the closure of Berlin Hyp's acquisition by <u>Landesbank Baden-Wuerttemberg</u> (LBBW, Aa3/Aa3 stable, baa2¹), aligning the risks for investors for both entities, the new parent and Berlin Hyp.

The ratings are based on Berlin Hyp's ba1 BCA and three notches of rating uplift from joint affiliate support of its parent and <u>Sparkassen-Finanzgruppe</u> (S-Finanzgruppe, Aa2 stable, a2²), reflecting our assumption that Berlin Hyp will be included in the resolution perimeter of LBBW, implying that the two issuer's probability of default is the same, resulting in an alignment the bank's adjusted BCAs. The ratings also incorporate the application of our Advanced Loss Given Failure (LGF) analysis to the new group consisting of LBBW and Berlin Hyp, which indicates an extremely low loss given failure 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 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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2
Berlin Hyp AG (Consolidated Financials) [1]

	12-21 ²	12-20 ²	12-19 ²	12-18 ²	12-17 ²	CAGR/Avg.3
Total Assets (EUR Billion)	36.2	33.4	27.0	27.2	27.1	7.5 ⁴
Total Assets (USD Billion)	41.0	40.9	30.3	31.1	32.6	5.9 ⁴
Tangible Common Equity (EUR Billion)	1.6	1.4	1.3	1.2	1.1	8.1 ⁴
Tangible Common Equity (USD Billion)	1.8	1.7	1.5	1.4	1.4	6.6 ⁴
Problem Loans / Gross Loans (%)	0.6	0.6	0.8	0.9	1.2	0.85
Tangible Common Equity / Risk Weighted Assets (%)	14.3	13.4	13.2	13.5	12.5	13.4 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	7.7	8.3	11.7	12.6	18.7	11.8 ⁵
Net Interest Margin (%)	1.2	1.0	1.2	1.1	1.0	1.1 ⁵
PPI / Average RWA (%)	2.2	1.6	1.6	1.8	1.5	1.7 ⁶
Net Income / Tangible Assets (%)	0.6	0.3	0.4	0.5	0.5	0.55
Cost / Income Ratio (%)	44.6	53.2	54.4	50.3	59.5	52.4 ⁵
Market Funds / Tangible Banking Assets (%)	70.5	72.1	66.5	64.8	64.1	67.6 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	26.4	24.2	14.2	21.6	20.7	21.4 ⁵
Gross Loans / Due to Customers (%)	3574.4	3255.2	7986.6	4598.4	2778.9	4438.7 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 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 public-sector bank that offers real estate financing services mainly for commercial and residential properties. As of year-end 2021, it reported total assets of €36.2 billion and employed 596 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. Now, it operates as a subsidiary of its new owner.

For more information, please see Berlin Hyp's Issuer Profile and our German Banking System Profile.

Berlin Hyp's Weighted Macro Profile is Strong (+)

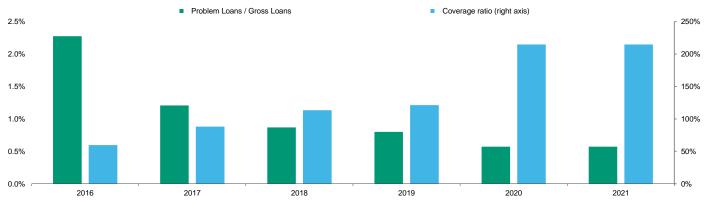
Berlin Hyp is focused on the German market, which accounts for almost two-thirds of the bank's exposure at default. As a result, the bank's assigned Strong (+) Weighted Macro Profile is set in line with the Strong (+) Macro Profile for Germany.

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 sound asset quality with nonperforming loans of well below 1%. The bank has low exposures to higher risk hotel and comparably limited retail assets; however, we expect structural shifts for office demand to have an impact on demand in the medium term. The bank's nonperforming loans will continue to decline, though higher rates and subdued economic growth prospects will likely 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 Moody's definition.
Sources: Company reports and Moody's Investors Service

As of year-end 2021, Berlin Hyp had extended €25.6 billion of real estate loans (against €1.6 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 exposure³ amounted to €30.1 billion as of year-end 2021 and comprised offices (42%), residential real estate (28%), retail (14%), logistics (6%) and other buildings used for commercial purposes. The portfolio was largely focused on Germany (71%), thus resulting in less exposure to international CRE markets than its peers, though it has grown its portfolio faster than its peers.

Exhibit 4

Berlin Hyp's portfolio composition by country based on year-end 2021 data

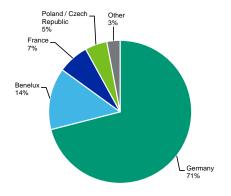
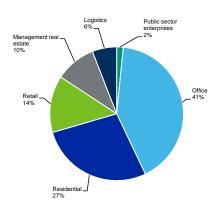


Exhibit 5

Berlin Hyp's portfolio composition by segment based on year-end 2021 data



Source: Company presentation

Excludes loans to the public sector. Source: Company presentation

In 2021, Berlin Hyp originated new loans of \in 7.1 billion, including prolongations. New loans were mostly extended to investors (75%), with the remainder mainly attributed to developers and contractors (22%). In terms of regional split, 56% of new loans were derived from German A cities, 17% from German B cities and other German regions, and 25% from outside Germany. In addition to its real estate business, the bank held legacy \in 0.4 billion low-margin public-sector loans as of year-end 2021, down from \in 8.0 billion as of year-end 2008. The bank's \in 6.8 billion investment and liquidity portfolio is low risk.

Berlin Hyp's problem loans amounted to €146 million as of year-end 2021 (December 2020: €141 million, 2019: €181 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 217% as of December 2021.

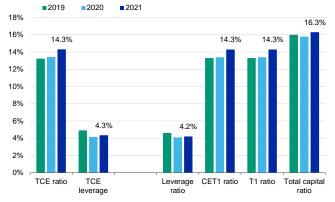
Sound risk-adjusted capital levels, although regulatory changes and the future contractual agreements with its parent will affect capital formation

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 340f⁴ reserves, which provide additional loss-absorbing capacity.

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 and a 10.6% total capital requirement, respectively, upcoming changes to the regulatory framework that will be phased-in from 2022 and the current economic downturn that will lead to higher risk-weighted assets (RWA) will hurt capital levels in future. From 2023, capital requirements will include additional sectorwide capital requirements announced by the German banking supervisor BaFin to rein in dynamic growth in the domestic residential property market.

To keep its current buffers intact, the bank will have to create further reserves. Until 2021, the reported net income had to be passed on to its former parent. Future contractual links with its new parent LBBW will likely determine the bank's capital accumulation capacity, though the details are unknown for now.

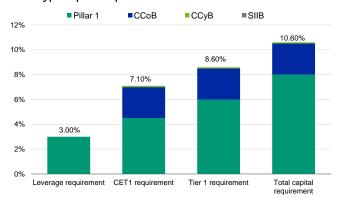
Exhibit 6
Berlin Hyp's capitalisation remains solid



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**



 ${\tt CCOB = Capital\ conservation\ buffer.\ CCyB = Countercyclical\ capital\ buffer.\ SIIB = Systemically\ important\ institutions\ buffer.}$

The capital requirements are Berlin Hyp's solo capital requirements Source: Company reports

As of year-end 2021, Berlin Hyp's leverage (measured as TCE/tangible assets) was 4.3%, relatively stable compared with 4.2% as of year-end 2020 but down from 4.9% as of year-end 2019. The regulatory leverage ratio was 4.2% as of year-end 2021 compared with 4.1% as of year-end 2020 and 4.6% as of year-end 2019. The bank's TCE ratio (measured as TCE/RWA) has increased beyond 13%-14%, standing at 14.3% as of year-end 2021. RWA has increased by 6% to €11.0 billion as of year-end 2021 compared with the level as of year-end 2020⁵, and TCE has increased by 13% to €1.6 billion during the same period. The regulatory Common Equity Tier 1 (CET1) capital ratio increased to 14.3% from 13.4% during the same period.

Berlin Hyp's leverage has improved significantly from 3.3% as of year-end 2014 as a result of a 55% increase in TCE, partly offset by a 19% increase in tangible assets. On the other hand, RWA rose by 35% during the period, 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 30% as of year-end 2021 from 27% as of year-end 2014, which also bolstered the bank's earnings generation capacity.

Profitability returned to pre-pandemic levels in 2021

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 2021. Though we expect a contained 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 2022.

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 €222.7 million for 2021 (2020: €87.7 million), with an adjusted return on assets of 0.6%.

We expect Berlin Hyp's earnings to decline from the observed levels in 2021, driven by higher provisioning needs and reflecting the bank's asset-mix shift in a more difficult operating environment. An average 0.4% return on assets should, therefore, be achievable for Berlin Hyp through the cycle.

Exhibit 8
Berlin Hyp's profitability recovered in 2021



Sources: Company reports and Moody's Financial Metrics

In 2021, Berlin Hyp's net interest income of €406 million, which accounted for 94% of the bank's revenue, increased by 30% year on year because of the growth in the average mortgage loans portfolio of €2.8 billion and the bank' recourse to TLTRO. The bank's net commission income of €25 million rose by 24% year on year in 2021. Administrative expenses of €184 million were up 6% compared with the same period a year earlier. For 2021, the bank booked limited risk provisions of €17.4 million (2020: €81.4 million), supporting the strong result.

Established covered bond franchise, complemented by sector funding access

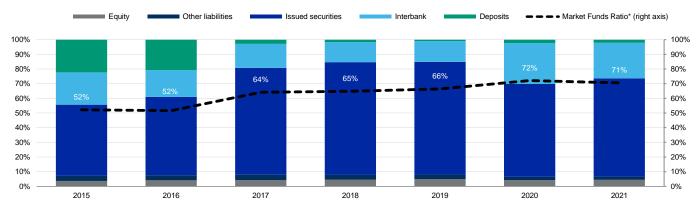
Our assigned ba3 Funding Structure score is significantly above the caa3 initial score. The uplift reflects Berlin Hyp's strong covered bond franchise and its integration into the German savings bank sector, which provides access to less confidence-sensitive sector funding, thus stabilising the bank's wholesale-driven refinancing profile. We expect the TLTRO-induced increase in market funding will not be sustained and will return to the pre-pandemic level.

As of year-end 2021, €14.5 billion of Berlin Hyp's €36.2 billion total assets were funded through mortgage covered bonds and the remainder through €4.0 billion in junior senior unsecured debt, €3.9 billion in senior unsecured debt, €8.8 billion in interbank loans and repos (including temporary recourse to TLTRO), and €0.2 billion in subordinated debt. 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 23% of its balance sheet as of year-end 2021, 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 26.4% of tangible assets as of year-end 2021. Encumbrance of liquid assets is offset by adequate regulatory liquidity metrics and additional access to liquidity through covered bonds. The increased liquidity compared with the previous years is related to ECB measures, including TLTRO, and will therefore be temporary, reflecting no structural improvement of the liquid resources.

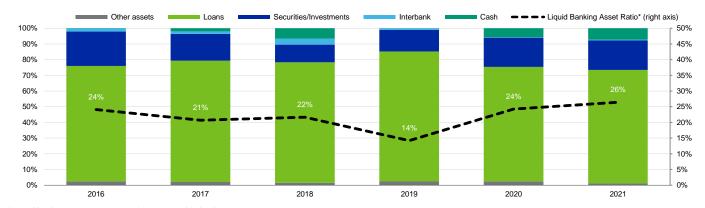
Berlin Hyp's liquid banking assets, comprising cash and balances with central banks, interbank lending, and investment portfolio amounted to €9.6 billion as of year-end 2021. However, a significant amount of liquid assets was encumbered, representing cover pool assets and liquid assets pledged for repo 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 March 2022 and based on an outstanding issuance of €16.8 billion, the over-collateralisation of Berlin Hyp's mortgage cover pool was at 6.4% 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 128% as of year-end 2021 (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 monoliner 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 knowhow, 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

In line with our general view on the banking sector, Berlin Hyp has a low exposure to environmental risks (see our <u>environmental risk</u> <u>heat map</u>⁶ for further information).

For social risks, we place Berlin Hyp in line with our general view for the banking sector, which indicates a moderate exposure (see our social risk heat map.²).

Corporate governance[§] is highly relevant for Berlin Hyp, as it is to all participants in the banking industry. Corporate governance weaknesses can lead to a deterioration in a bank's credit quality, while governance strengths can benefit its credit profile. Governance risks are largely internal rather than externally driven. For Berlin Hyp, we do not have any particular governance concern. Nonetheless, corporate governance remains a key credit consideration and requires ongoing monitoring.

Support and structural considerations

Affiliate support

Berlin Hyp benefits from parental support from LBBW and is a member of Sparkassen-Finanzgruppe's Institutional Protection Scheme (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 11

Berlin Hyp AG

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	0.6%	aa2	\leftrightarrow	ba1	Sector concentration	Single name concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	14.3%	a1	\leftrightarrow	a2	Nominal leverage	Expected trend
Profitability						
Net Income / Tangible Assets	0.4%	ba1	\leftrightarrow	ba1	Earnings quality	Expected trend
Combined Solvency Score		a2		baa2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	70.5%	caa3	\leftrightarrow	ba3	Extent of market funding reliance	Market funding quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	26.4%	a3	\leftrightarrow	ba1	Asset encumbrance	Additional liquidity resources
Combined Liquidity Score		Ь1		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 wa	terfal	l De Facto w	aterfall	Notching		LGF	Assigned	Additional Preliminary	
			Instrument on volume + o subordination	rdination	De Jure	De Facto	Notching Guidance vs. Adjusted BCA		Notching	Rating Assessment
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 12

ategory	Moody's Rating
ERLIN HYP AG	
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
RENT: LANDESBANK BADEN-WUERTTEMBERG	
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
ource: Moody's Investors Service	

Endnotes

- 1 The ratings shown are the bank's deposit and senior unsecured ratings and outlook, and its BCA.
- 2 The ratings shown are S-Finanzgruppe's corporate family rating and outlook, and its BCA.
- 3 Including off-balance-sheet commitments, derivatives and valuation adjustments.
- 4 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.
- 5 To derive its risk weights, Berlin Hyp uses the internal ratings-based approach for the bulk of its assets.
- 6 Environmental risks can be defined as environmental hazards encompassing the impacts of air pollution, soil/water pollution, water shortages, and natural and human-made hazards (physical risks). Additionally, regulatory or policy risks, such as the impact of carbon regulation or other regulatory restrictions, including the related transition risks such as policy, legal, technology and market shifts, which could impair the evaluation of assets, are important factors. Certain banks could face a higher risk from concentrated lending to individual sectors or exposure to the aforementioned risks.
- Z Social risk considerations represent a broad spectrum, including customer relations, human capital, demographic and societal trends, health and safety, and responsible production. The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are partially offset by sizeable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product mis-selling or other types of misconduct is a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology costs, ageing population concerns in several countries affecting demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue bases.
- 8 Corporate governance is a well-established key driver for banks and related risks are typically included in our evaluation of the banks' financial profile. Further, factors like specific corporate behaviour, key-person risk, insider and related-party risk, strategy and management risk factors, and dividend policy may be captured in individual adjustments to the BCA.

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