

CREDIT OPINION

18 December 2020

Update

 Rate this Research

RATINGS

Berlin Hyp AG

Domicile	Germany
Long Term CRR	Aa2
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aa2
Type	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	Aa2
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

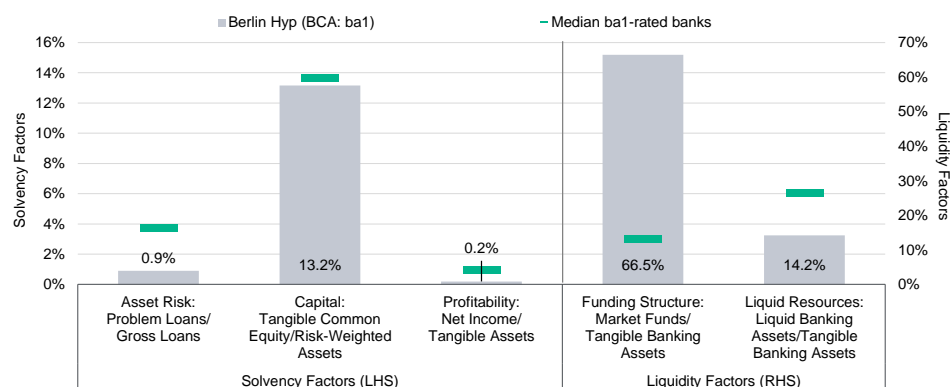
We assign Aa2(stable)/P-1 deposit ratings and Aa2(stable) senior unsecured debt ratings to [Berlin Hyp AG](#) (Berlin Hyp). We further assign a ba1 Baseline Credit Assessment (BCA), an a3 Adjusted BCA and an A2 junior senior unsecured debt rating, as well as Aa2/P-1 Counterparty Risk Ratings (CRRs) to Berlin Hyp.

The ratings reflect the bank's ba1 BCA; four notches of rating uplift, reflecting both parental support from Erwerbgsellschaft der S-Finanzgruppe mbH & Co. KG (SEG) and cross-sector support from [Sparkassen-Finanzgruppe](#) (S-Finanzgruppe, Aa2 negative, a2¹); and the application of our Advanced Loss Given Failure (LGF) analysis to SEG's liabilities, which yields three notches of rating uplift and one notch of government support uplift given Berlin Hyp's membership in Sparkassen-Finanzgruppe.

Berlin Hyp's ba1 BCA reflects the bank's extremely high concentration in commercial real estate (CRE) lending, which is partly mitigated by adequate capital ratios. It also incorporates the bank's improving, but still somewhat elevated leverage, as well as high reliance on confidence-sensitive market funding and substantial asset encumbrance. Our view on Berlin Hyp's BCA could change if the coronavirus pandemic-induced credit shock leads to a sustained erosion of its solvency.

Exhibit 1

Rating Scorecard - Key financial ratios



Source: Moody's Investors Service

Credit strengths

- » Adequate risk-adjusted capitalisation
- » Improved profitability and efficiency, which allowed the buildup of contingency reserves that provide a buffer against the ongoing economic downturn
- » Good asset-quality metrics
- » Strong contractual links within the SEG group, which provide downside protection in an adverse scenario

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 elevated asset encumbrance
- » Maintenance of adequate capital ratios in the long run, as regulatory requirements become more onerous

Outlook

The stable outlook reflects our expectation that the combined credit profiles of Berlin Hyp and its sister company [Landesbank Berlin AG](#) (LBB, Aa2 stable, baa2⁺) (measured through the consolidated accounts of both banks' ultimate parent SEG) will remain broadly unchanged and that the liability structure of SEG will remain stable.

Factors that could lead to an upgrade

- » An upgrade of Berlin Hyp's ratings will be subject to an uplift of its ba1 BCA and a3 Adjusted BCA. In addition, an upgrade of the bank's junior senior unsecured debt rating could be driven by an improved result from our Advanced LGF analysis, if sufficient amounts of subordinated or junior senior unsecured debt were to be issued by Berlin Hyp or LBB, or both, which would provide an additional buffer or lower the loss severity for junior senior debt at the consolidated level of SEG.
- » An upgrade of Berlin Hyp's Adjusted BCA would require an improvement in the intrinsic strengths of both Berlin Hyp and LBB, as reflected in the consolidated accounts of SEG, which would be subject to a significant increase in the group's diversification of its lending book.
- » Upward pressure on Berlin Hyp's ba1 BCA could develop as a combination of an improvement in the bank's leverage ratio, particularly through higher capitalisation levels generated via a further reserve buildup; substantially improving earnings; and a significant reduction in short-term interbank funding, resulting in a more balanced liability maturity profile.

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

Factors that could lead to a downgrade

- » A downgrade of Berlin Hyp's debt and deposit ratings will be subject to a lowering of its a3 Adjusted BCA. In addition, changes in SEG's liability structure, resulting in higher loss given failure in resolution and, therefore, fewer notches of rating uplift derived from our Advanced LGF analysis, could lead to a rating downgrade.
- » Downward rating pressure on Berlin Hyp's a3 Adjusted BCA could develop from a significant weakening in Berlin Hyp's and LBB's financial fundamentals to the extent that the combined credit strength of SEG is adversely affected, particularly if higher asset risks at both banks deplete the group's capital resources.
- » Berlin Hyp's BCA could be downgraded if capital ratios weaken in case of a sustained and significant deterioration in asset quality, or if profitability declines sustainably from historical levels.

Key indicators

Exhibit 2

Berlin Hyp AG (Consolidated Financials) [1]

	09-20 ²	12-19 ²	12-18 ²	12-17 ²	12-16 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	32.7	27.0	27.2	27.1	26.4	6.0 ⁴
Total Assets (USD Billion)	38.4	30.3	31.1	32.6	27.8	9.0 ⁴
Tangible Common Equity (EUR Billion)	1.4	1.3	1.2	1.1	1.1	6.7 ⁴
Tangible Common Equity (USD Billion)	1.6	1.5	1.4	1.4	1.1	9.7 ⁴
Problem Loans / Gross Loans (%)	0.7	0.8	0.9	1.2	2.3	1.2 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	13.2	13.2	13.5	12.5	13.5	13.2 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	11.7	11.7	12.6	18.7	33.2	17.6 ⁵
Net Interest Margin (%)	1.1	1.2	1.1	1.0	0.9	1.1 ⁵
PPI / Average RWA (%)	1.5	1.6	1.8	1.5	2.0	1.7 ⁶
Net Income / Tangible Assets (%)	0.2	0.4	0.5	0.5	0.3	0.4 ⁵
Cost / Income Ratio (%)	53.6	54.4	50.3	59.5	49.3	53.4 ⁵
Market Funds / Tangible Banking Assets (%)	64.0	66.5	64.8	64.1	51.6	62.2 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	26.2	14.2	21.6	20.7	24.1	21.4 ⁵
Gross Loans / Due to Customers (%)	781.7	7986.6	4598.4	2778.9	358.6	3300.8 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 September 2020, it reported total assets of €32.7 billion and employed 600 full-time equivalent staff members. 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).

In January 2015, Berlin Hyp was spun off from LBB and set up as a sister company of LBB under the SEG umbrella. Berlin Hyp's remit encompasses national and international CRE lending, while LBB focuses on local CRE lending in the Berlin-Brandenburg region. Despite the full operational separation, both Berlin Hyp and LBB remain closely tied via a profit and loss transfer agreement (PLTA) set up between each bank and Landesbank Berlin Holding AG (LBBH), a holding entity fully owned by SEG. The PLTA implies that losses at Berlin Hyp would have to be offset by LBBH, thereby enabling Berlin Hyp to benefit from the stronger standalone credit profile of its sister company LBB, which would effectively have to cover the losses. This potential parental support is reflected in our Adjusted BCA.

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](#). Our recent downgrade of the German [Macro Profile](#) to Strong (+) from Very Strong (-) did not have an effect on Berlin Hyp's credit ratings because the overall Weighted Macro Profile for the bank remained unchanged.

Recent developments

[Nascent economic rebound takes hold globally but recovery will remain fragile](#). We expect the G-20 advanced economies as a group to contract by 5.1% in 2020 and the euro area by 7.7%, followed by a gradual recovery in 2021. The recession in 2020 will weigh on banks' asset quality and profitability. In the current pandemic-induced recession and its aftermath, capital levels will be a key differentiator of credit profiles among banks. Generally, banks are facing a sharp deterioration in asset quality and reduction in profitability from already-low levels, while central banks are providing extraordinary levels of liquidity and governments have strong incentives to support banking systems to foster an eventual recovery. Thus, when comparing a bank with its peers, the [level of capital](#) with which it entered this recession and its ability to retain capital throughout the next several years take on particular importance.

In March 2020, the European Central Bank (ECB) [announced a series of measures](#) to help the European Union (EU) economies weather the widening effects of the coronavirus pandemic, temporarily increasing banks' liquidity provisions, as well as lowering regulatory capital and liquidity requirements. As part of these temporary measures, the ECB increased its targeted long-term refinancing operations ([TLTRO III](#)) under more favourable terms, as well as its financial asset purchase programme, while refraining from lowering the ultralow interest rates further.

The temporary suspension of buffer requirements for regulatory capital and the liquidity coverage ratio (LCR) provides banks with greater flexibility and additional leeway to absorb the economic impact, such as asset-quality declines. Overall, the package aims to help banks continue to finance corporates and SMEs suffering from the effects of the pandemic. The ECB's measures will provide limited relief for banks and their borrowers, and significant fiscal policy measures by the EU and its member states will be required to avert higher default rates in banks' lending books.

Germany launched a large stimulus package and the government's support is crucial for corporate borrowers in industries immediately hurt by the coronavirus pandemic like airlines, tourism, retail and the shipping sector, as well as smaller companies experiencing weak liquidity and high leverage. The scale of the support package is unprecedented and is far larger than the support provided during the financial crisis. At the same time, the government made it easier to access its short-work scheme (Kurzarbeit) and extended it to a broader pool of workers, which will limit the spike in unemployment and the fall in domestic consumption. The measures, which are adapted according to the evolution of the economic effects of the pandemic, add to Germany's already expansionary fiscal policy stance as well as to automatic stabilisers that support household incomes when unemployment increases.

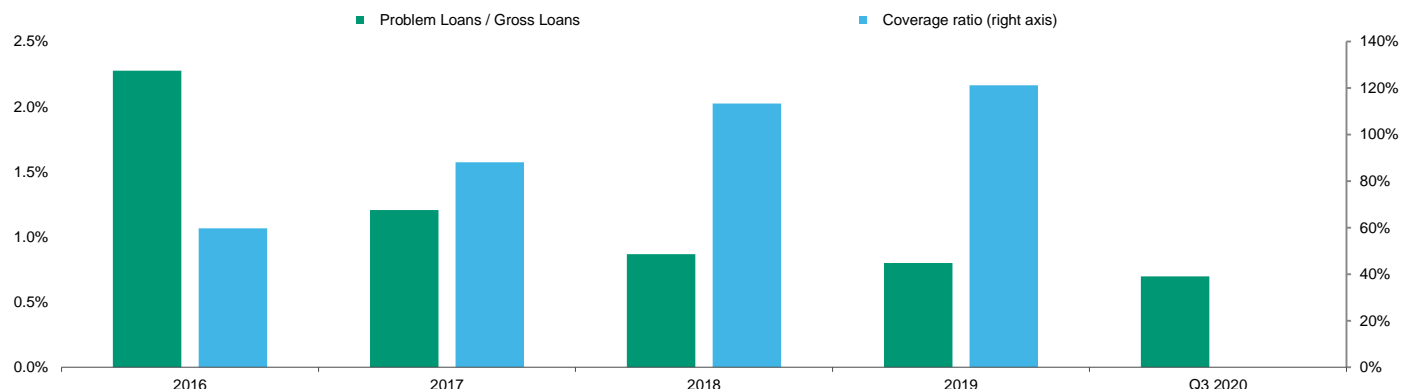
Detailed credit considerations

Good asset quality with extremely high risk concentration in commercial real estate

We assign a ba1 Asset Risk score, 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 concentrations. These concentration risks cap the assigned score at non-investment grade.

This is despite Berlin Hyp's sound asset quality with nonperforming loans of below 1%. Though the bank is the least exposed to high risk sub-sectors within commercial real estate given its low hotel and comparably limited retail exposures, we expect problem loans to return to a higher level again because the ongoing economic downturn. Particularly affected are the retail and tourism segments, but also could speed up structural shifts for office demand.

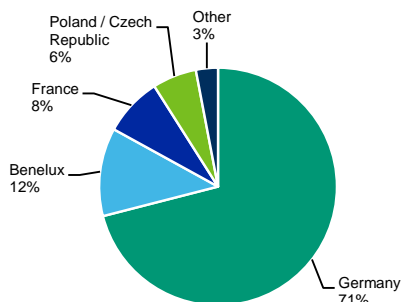
Exhibit 3
Berlin Hyp's asset quality is expected to deteriorate from a strong starting point



Problem loan ratio as per Moody's definition.
 Sources: Company reports and Moody's Investors Service

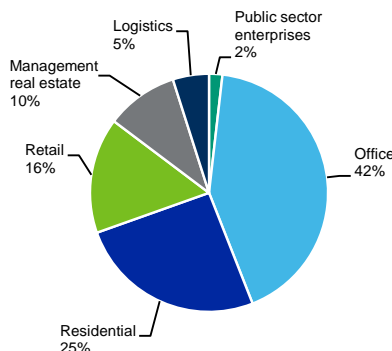
As of September 2020, Berlin Hyp had extended €22.6 billion of real estate loans (against €1.4 billion in tangible common equity [TCE]), amounting to around two-thirds of the balance sheet and thus representing the bank's main asset-risk driver. Berlin Hyp's overall gross real estate exposure³ amounted to €26.5 billion as of September 2020 and comprised offices (42%), residential real estate (25%), retail (16%), logistics (5%) and other buildings used for commercial purposes. The portfolio was largely focused on Germany (71%), thus resulting in less exposure from international CRE markets than its peers, though it has grown its portfolio faster than those.

Exhibit 4
Berlin Hyp's portfolio composition by country based on end-September 2020 data



Excludes loans to the public sector.
 Source: Company presentation

Exhibit 5
Berlin Hyp's portfolio composition by segment based on end-September 2020 data



Source: Company presentation

During H1 2020, Berlin Hyp originated new loans of €2.5 billion, including prolongations. New loans were mostly extended to investors (64%), with the remainder mainly attributed to developers and contractors (26%). In terms of regional split, 46% of new loans were derived from German A cities, 37% from German B cities and other German regions, and 17% from abroad.

In addition to its real estate business, the bank held legacy €0.4 billion low-margin public-sector loans as of September 2020, down from €8.0 billion as of year-end 2008. The bank's €6.1 billion investment and liquidity portfolio is low risk. German public law bodies and German financial institutions represented 21% and 8% of the investment portfolio, respectively, while the remaining 71% of foreign exposures were sourced from supranational, Scandinavian, French, North American, Benelux, UK, Austrian, Spanish and Eastern European issuers.

Berlin Hyp's problem loans amounted to €161 million as of September 2020 (December 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 Eastern German property bubble after Germany's reunification. Apart from the benign credit environment in recent years, one of the key drivers of the reduction in nonperforming loans was the bank's effective workout management of legacy loans. New problem loan formation should increase, reflecting the impact of the coronavirus pandemic. Berlin Hyp's coverage ratio (loan-loss reserves/problem loans) was a solid 121% as of December 2019.

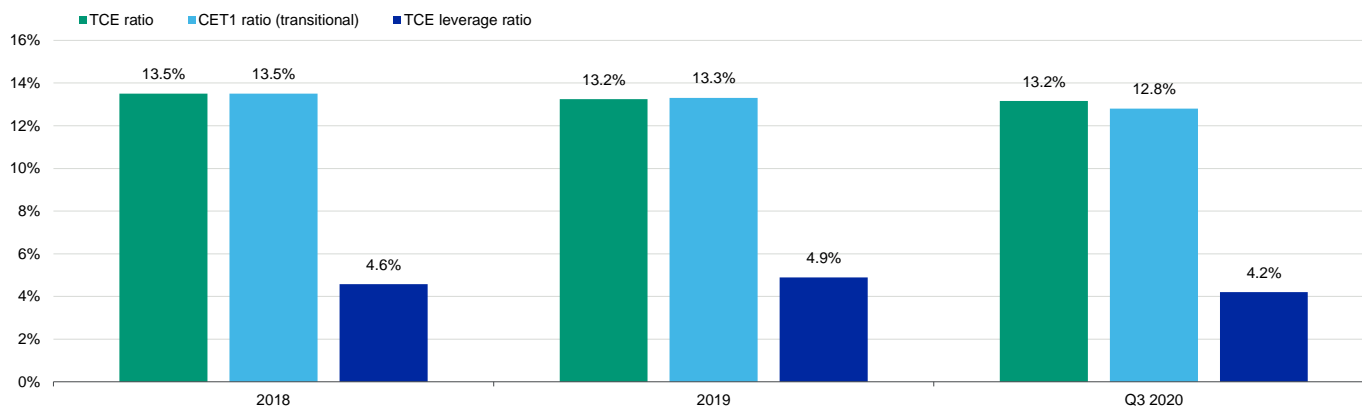
Adequate risk-adjusted capital levels, although regulatory changes and the economic downturn will challenge capital formation

We assign an a3 Capital score, one notch below the a2 initial score, taking into account future changes to the Basel capital framework and the expected impact of the current economic downswing that will strain both the bank's capital levels and its undisclosed 340f⁴ reserves, which provide additional loss-absorbing capacity.

Although we consider the bank's risk-adjusted capitalisation to be adequate under the current Basel rule book, 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. To keep its current buffers intact, the bank will have to create further reserves because the reported net income has to be passed on to LBBH under the PLTA with the parent. While this arrangement limits profit retention, the potential for coverage of losses under an adverse scenario represents an offsetting factor, subject to LBBH's financial capacity.

Exhibit 6

Berlin Hyp's capitalisation remains adequate



TCE = Tangible common equity (Moody's calculation), CET1 = Common Equity Tier 1 capital (fully loaded).

Sources: Company reports and Moody's Investors Service

As of September 2020, Berlin Hyp's leverage (measured as TCE/tangible assets) was 4.2%, down from 4.9% as of year-end 2019 (the regulatory leverage ratio was 4.0% and 4.6% as of both dates). The bank's TCE ratio (TCE/RWA) has remained within the 13%-14% range, standing at 13.2% as of September 2020, unchanged from December 2019, despite a 5% increase in RWA⁵, while TCE increased to €1.4 billion as of the same date. The regulatory Common Equity Tier 1 (CET1) capital ratio decreased to 12.8% from 13.3% during the same period.

Berlin Hyp's leverage has improved significantly from 3.3% as of year-end 2014 as a result of a 36% increase in TCE, partly offset by an 8% increase in tangible assets. RWA, on the other hand, rose by 29% during the period, as Berlin Hyp reduced its lower-yielding public-sector exposures and its investment portfolio while it built out its mortgage book. As a result of this shift in its business mix, Berlin Hyp's risk density (RWA/tangible assets) rose to 32% from 27%, which also bolstered the bank's earnings generation capacity.

Improved profitability and efficiency challenged by the economic downturn

For Profitability, we assign a ba1 score, above the b1 initial score, which is derived from the 0.19% net income reported during Q3 2020, representing one of the lowest level for years, because of higher provisioning needs. Overall, and supported by our expectation of a

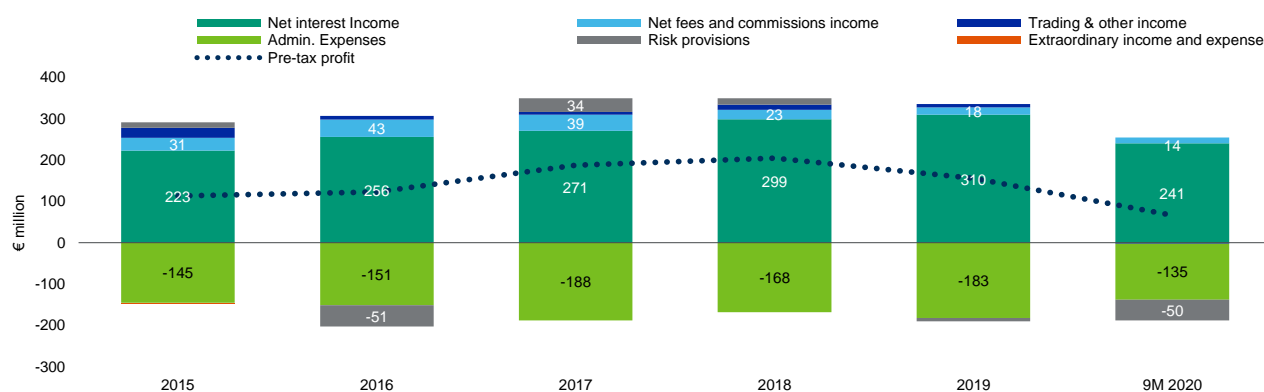
contained increase in risk costs and further taking into account the bank's continued , we expect profitability to drop in 2020, driven by higher loan-loss provisions, but to sustainably recover again to a level within the ba1 Profitability score range (0.375%-0.49%).

Because Berlin Hyp operates under a PLTA, it only has to pay de minimis taxes for its foreign operations, but has to upstream its entire net profit to its parent LBBH, where domestic taxes are paid, utilising remaining tax loss carry forwards generated by the former Bankgesellschaft Berlin. As a result of this setup, the reported net profit of Berlin Hyp is zero. Hence, to gauge the underlying earnings power of the bank, we assume a normalised tax rate of 30% that we apply to the Moody's-adjusted pretax income, which resulted in an adjusted net profit of €46 million for 9M 2020 and €109 million in 2019, which represented an adjusted return on assets of 0.1%.

While provisioning needs have started to increase in 2020 (€50 million for 9M 2020), we nonetheless forecast that Berlin Hyp's earnings will remain sustainably above the levels we have seen in the years before 2014, reflecting the bank's asset-mix shift and the workout of its legacy problem loan portfolio. An average 0.4% return on assets should, therefore, be achievable for Berlin Hyp through the cycle.

Exhibit 7

Berlin Hyp's improved profitability challenged by the deterioration in the operating environment



Sources: Company reports and Moody's Financial Metrics

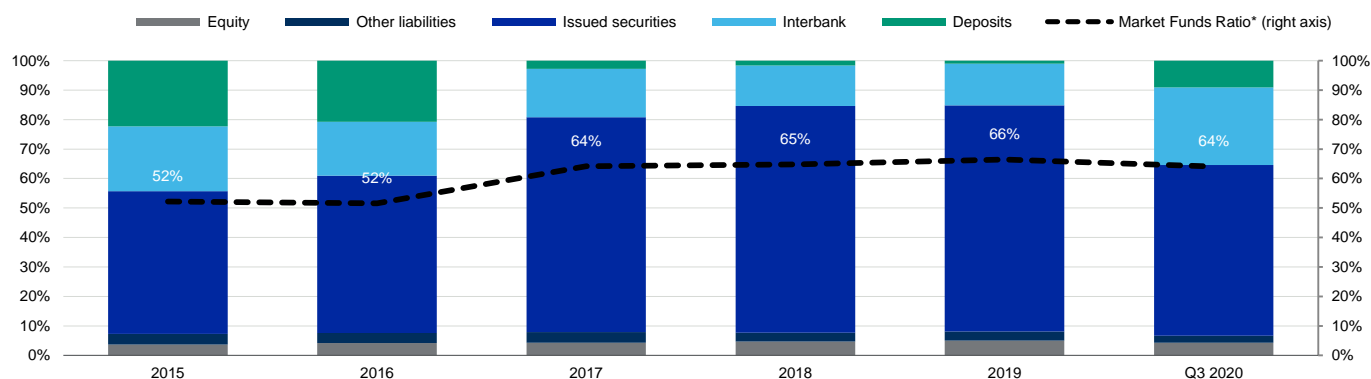
During the first nine months of 2020, Berlin Hyp's net interest income of €241 million, which accounted for 96% of the bank's revenue, increased by 1% from yoy because of the growth in the average mortgage loan portfolio. The bank's net commission income of €14 million, meanwhile, rose by 9% yoy during 9M 2020 despite the unchanged volume of new loan business. Admin expenses of €134 million were up 8% compared with the same period last year. The bank reported other operating result of -€0.5 million, compared with -€3.6 million in the previous year. Finally and responsible for the deterioration in the bank's profitability, Berlin Hyp's combined provisions for loan losses and the investment portfolio totalled €50 million in the first nine months of 2020 (9M 2019: charge of €7 million).

Established covered bond franchise, complemented by sector funding access

Our assigned ba3 Funding Structure score is three notches above the b3 initial score. The three-notch uplift reflects Berlin Hyp's strong covered bond franchise and its close integration into the German savings bank sector, which provides access to less confidence-sensitive sector funding, thus providing a stabilising factor for the bank's wholesale-driven refinancing profile.

As of September 2020, €15.4 billion of Berlin Hyp's €32.7 billion total assets were funded through mortgage covered bonds and the remainder through €5.0 billion in junior senior unsecured and €3.1 billion in senior unsecured debt, €8.7 billion interbank loans and repos (including temporary recourse to the TLTRO), as well as €0.2 billion in subordinated debt. Within covered bonds, the mix has almost completely shifted to mortgage covered bonds as Berlin Hyp retreats from the lower-margin public finance business. The secured funding base is complemented with unsecured bond issues, 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 also become a prolific issuer of green bonds. The bank's MREL-eligible instruments made up 18.8% of its balance sheet as of September 2020 (2019: 23.4%).

Exhibit 8

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 adequate regulatory liquidity metrics

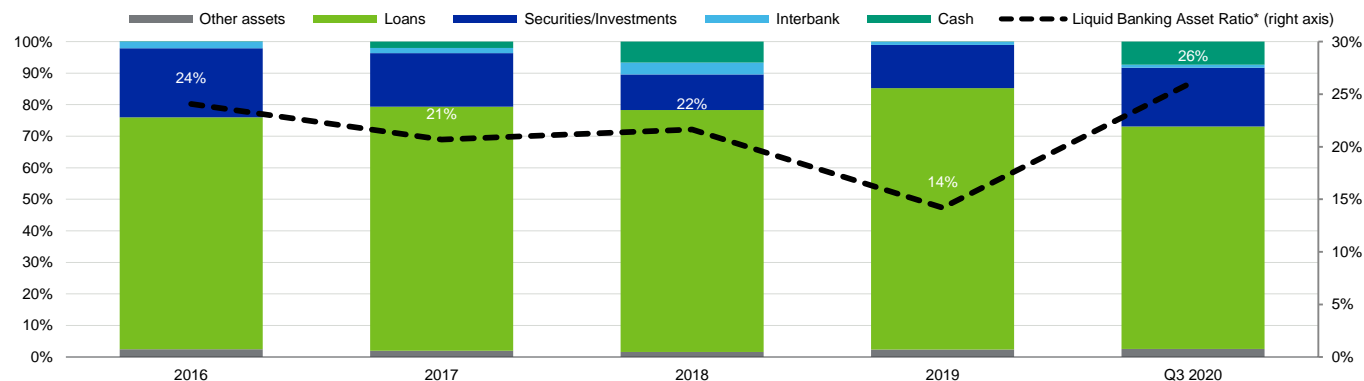
The assigned ba1 Liquid Resources score is in line with the initial score, reflecting the bank's liquidity of 14.2% of tangible assets. Encumbrance of liquid assets is offset by adequate regulatory liquidity metrics and additional access to liquidity through covered bonds.

Berlin Hyp's liquid banking assets, comprising cash and balances with central banks, interbank lending, as well as the bank's investment portfolio, amounted to €8.8 billion as of September 2020. However, a material amount of the a priori liquid assets was encumbered, representing cover pool assets and liquid assets pledged for repo funding with the German Bundesbank and other market participants.

However, in our assigned score, we also reflect 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 June 2020, and based on an outstanding issuance of €14.8 billion, the over-collateralisation of Berlin Hyp's [mortgage cover pool](#) stood at 7.7% on an unstressed present value basis. Berlin Hyp, therefore, has leeway for using its existing cover pool to generate fresh liquidity through the issuance of covered bonds.

Further, we take into consideration the bank's adequate regulatory liquidity metrics, such as the LCR, for which Berlin Hyp has set itself a target ratio of at least 120% and which was 251% as of half-year 2020 (the minimum regulatory requirement is 100%), reflecting the impact of the TLTRO programs, which we deem a temporary effect.

Exhibit 9

Berlin Hyp's adequate amount of liquid resources**Composition of liquid assets**

*Liquid banking assets ratio = liquid assets/tangible banking assets.

Sources: Company reports and Moody's Investors Service

Monoliner adjustment

To further reflect the risks stemming from Berlin Hyp's CRE monoliner business model, we also 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.

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: we consider CRE lending a highly cyclical and, therefore, 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.

Environmental, social and governance (ESG) considerations

In line with our general view on the banking sector, Berlin Hyp has a low exposure to environmental risks (see our [Environmental risk heat map⁶](#) for further information).

For social risks, we also place Berlin Hyp in line with our general view for the banking sector, which indicates a moderate exposure (see our [Social risk heat map⁷](#)).

Corporate governance⁸ 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, and 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 SEG, given the fact that losses at the bank would have to be offset by LBBH because of the PLTA in place. In addition, Berlin Hyp can rely on cross-sector support from S-Finanzgruppe. Both parental and cross-sector support reduce significantly the probability of default, as such support would be available to stabilise Berlin Hyp, and not just compensate for losses in resolution.

We continue to consider the readiness of the sector to support its core members to be very high. This particularly applies to Berlin Hyp, given its 100% indirect ownership by the sector's savings banks. Combined cross-sector and parental support provides four notches of rating uplift from the bank's ba1 BCA, resulting in an a3 Adjusted BCA.

Loss Given Failure analysis

Berlin Hyp is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider an operational resolution regime. We, therefore, apply our Advanced LGF analysis, where we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter resolution (the analysis is performed at the level of SEG, the consolidating entity of the group's key subsidiaries Berlin Hyp and LBB).

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:

- » For deposits and senior unsecured debt, as well as CRR liabilities, our LGF analysis indicates an extremely low loss given failure, leading us to position their Provisional Rating Assessments at aa3, three notches above the a3 Adjusted BCA.
- » For junior senior unsecured debt, our LGF analysis indicates a low loss given failure, leading us to position its Provisional Rating Assessment at a2, one notch above the a3 Adjusted BCA.
- » For subordinated debt, our LGF analysis indicates a high loss given failure, leading us to position its Provisional Rating Assessment at baa1, one notch below the a3 Adjusted BCA.

Government support considerations

Following the introduction of the BRRD, we have lowered our expectations about the degree of support that the government might provide to a bank in Germany in the event of need. Because of its size on a consolidated basis, we consider S-Finanzgruppe as systemically relevant and, 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. 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 Berlin Hyp. For junior securities, we continue to believe that the likelihood for government support is low, and these ratings do not include any related uplift.

Counterparty Risk Ratings (CRRs)

Counterparty Risk Ratings (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.

Berlin Hyp's CRRs are positioned at Aa2/P-1

The CRRs, before government support, are positioned 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

The CR Assessment is an opinion of how counterparty obligations are likely to be treated if a bank fails and is distinct from debt and deposit ratings in that it (1) considers only the risk of default rather than both the likelihood of default and the expected financial loss suffered in the event of default; and (2) applies 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.

Berlin Hyp's CR Assessment is positioned at Aa2(cr)/P-1(cr)

The bank's CR Assessment is positioned four notches above the a3 Adjusted BCA, incorporating (1) 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 (2) 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 November 2019.

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 10

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	0.9%	aa2	↔	ba1	Sector concentration	Single name concentration	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	13.2%	a2	↔	a3	Nominal leverage	Expected trend	
Profitability							
Net Income / Tangible Assets	0.2%	b1	↔	ba1	Earnings quality	Expected trend	
Combined Solvency Score		a3		baa2			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	66.5%	caa1	↔	ba3	Extent of market funding reliance	Market funding quality	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	14.2%	ba1	↔	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				4			
Adjusted BCA				a3			

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	aa3
Counterparty Risk Assessment	-	-	-	-	-	-	-	3	0	aa3 (cr)
Deposits	-	-	-	-	-	-	-	3	0	aa3
Senior unsecured bank debt	-	-	-	-	-	-	-	3	0	aa3
Junior senior unsecured bank debt	-	-	-	-	-	-	-	1	0	a2
Dated subordinated bank debt	-	-	-	-	-	-	-	-1	0	baa1

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	aa3	1	Aa2	Aa2
Counterparty Risk Assessment	3	0	aa3 (cr)	1	Aa2(cr)	
Deposits	3	0	aa3	1	Aa2	Aa2
Senior unsecured bank debt	3	0	aa3	1	Aa2	Aa2
Junior senior unsecured bank debt	1	0	a2	0	A2	
Dated subordinated bank debt	-1	0	baa1	0	(P)Baa1	

[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 11

Category	Moody's Rating
BERLIN HYP AG	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa2/P-1
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa2
Senior Unsecured	Aa2
Junior Senior Unsecured -Dom Curr	A2
Junior Senior Unsecured MTN -Dom Curr	(P)A2
Subordinate MTN -Dom Curr	(P)Baa1
Commercial Paper -Dom Curr	P-1

Source: Moody's Investors Service

Endnotes

- The ratings shown are S-Finanzgruppe's Corporate Family Rating and outlook, and its BCA.
- The ratings shown are Landesbank Berlin AG's long-term deposit rating and outlook, and its BCA.
- Including off-balance-sheet commitments, derivatives and valuation adjustments.
- 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.
- To derive its risk weights, Berlin Hyp uses the internal ratings-based approach for the bulk of its assets.
- Environmental risks can be defined as environmental hazards encompassing the impacts of air pollution, soil/water pollution, water shortages, and natural and man-made hazards (physical risks). Additionally, regulatory or policy risks, like the impact of carbon regulation or other regulatory restrictions, including the related transition risks like policy, legal, technology and market shifts, which could impair the evaluation of assets, are an important factor. Certain banks could face a higher risk from concentrated lending to individual sectors or operations exposed to the aforementioned risks.
- 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 partly mitigated 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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