MOODY'S INVESTORS SERVICE

CREDIT OPINION

7 October 2021

Update

Rate this Research

RATINGS

Bausparkasse Schwaebisch Hall AG

Domicile	Germany
Long Term CRR	Aa2
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	Aa2
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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Bausparkasse Schwaebisch Hall AG

Update following downgrade of issuer and deposit ratings to Aa2, outlook stable

Summary

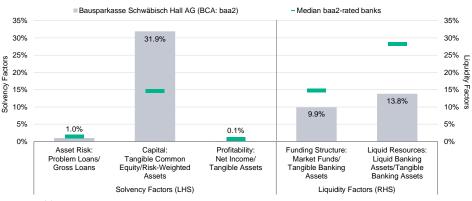
On 1 October, we downgraded <u>Bausparkasse Schwaebisch Hall AG</u>'s (BSH) deposit and issuer ratings to Aa2 (stable) from Aa1 (negative). We also downgraded the bank's Adjusted Baseline Credit Assessment (BCA) to a3 from a2 and its Counterparty Risk Ratings (CRRs) to Aa2 from Aa1, and affirmed its P-1 short-term deposit and issuer ratings, and CRRs. We further assign a baa2 BCA to BSH.

BSH's Aa2 deposit and issuer ratings reflect the bank's baa2 BCA, two notches of rating uplift from its membership in the institutional protection scheme of the German cooperative banking association (Genossenschaftliche FinanzGruppe), the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities, 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 its membership in systemically relevant Genossenschaftliche FinanzGruppe.

BSH's baa2 BCA reflects the bank's strong ties with its parent <u>DZ BANK AG</u> (DZ BANK, Aa2/ Aa2 stable, baa2)¹, including a profit-and-loss transfer agreement and sizable investments in DZ BANK's liabilities; the entity's sound asset quality, very strong capitalisation and defensive market funding profile; and the very narrow focus of its business model as prescribed by the special legal framework for German building societies (Bausparkassen), which requires BSH and its peers to focus closely on residential mortgage lending products.

Rating Scorecard - Key financial ratios

Exhibit 1



Source: Moody's Investors Service

Credit strengths

- » Exceptionally strong and high-quality risk-weighted capitalisation
- » Low-risk granular residential mortgage lending portfolio, with a clear focus on Germany (Aaa stable)
- » High-quality, long-term retail deposit funding profile, with very limited use of market funding

Credit challenges

- » Exposure to the low interest rate environment requires significant adjustments to the traditional building and loan association business model.
- » Expensive fixed-rate deposit funding weighs on profitability in the low interest rate environment.
- » Limited earnings diversification, which results from its narrow business focus within the specific building and loan association legal framework.

Outlook

We expect BSH's and the cooperative banking sector's financial profiles to remain stable over the 12-to-18-month outlook horizon. We also expect DZ BANK's liability structure to result in unchanged notching outcomes for the deposit and issuer ratings of BSH and of its parent.

Factors that could lead to an upgrade

- » An upgrade of BSH's ratings could be triggered by an upgrade of DZ BANK's BCA, or by an improvement in the cooperative sector's financial strength. Please refer to the latest <u>Credit Opinion</u> for DZ BANK for detailed factors that could lead to an upgrade or downgrade of the parent's BCA.
- » An upgrade of BSH's BCA would be subject to an upgrade of DZ BANK's BCA, which caps BSH's BCA and at the same time to BSH at least maintaining its own financial profile. An upgrade of BSH's unconstrained BCA could be prompted by a sustained improvement in the bank's profitability, particularly by successfully stabilising its net interest income against downward pressures in the current low interest rate environment.
- » Under our Advanced LGF analysis, BSH's deposit and issuer ratings already benefit from the highest possible LGF results, leading to three notches of uplift to its Adjusted BCA.

Factors that could lead to a downgrade

- » A downgrade of BSH's ratings could result from a joint weakening of the financial strength of G-Finanzgruppe and of the BCA of DZ BANK which caps BSH's own BCA, or if DZ BANK issued less debt designed to absorb losses in bail-in compared with its tangible banking assets than we currently anticipate.
- » BSH's BCA could be downgraded in the case of a downgrade of DZ BANK's BCA, because it is capped by DZ BANK's BCA. BSH's unconstrained BCA could be downgraded if it fails to overcome the pressure exerted by the low interest rate environment on its business model.

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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Bausparkasse Schwaebisch Hall AG (Consolidated Financials) [1]

	12-20 ²	12-19 ²	12-18 ²	12-17 ²	12-16 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	81.7	77.5	71.7	68.3	65.9	5.5 ⁴
Total Assets (USD Billion)	99.9	87.0	81.9	82.1	69.5	9.5 ⁴
Tangible Common Equity (EUR Billion)	5.0	5.0	4.7	4.5	3.9	6.64
Tangible Common Equity (USD Billion)	6.1	5.6	5.3	5.4	4.1	10.7 ⁴
Problem Loans / Gross Loans (%)	0.9	1.0	1.1	1.2	1.5	1.1 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	31.9	34.4	32.5	33.3	28.3	32.1 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	10.4	10.4	10.9	11.2	15.0	11.6 ⁵
Net Interest Margin (%)	0.7	0.7	1.1	1.2	1.0	0.9 ⁵
PPI / Average RWA (%)	0.7	0.6	2.2	2.4	1.3	1.4 ⁶
Net Income / Tangible Assets (%)	0.1	0.1	0.3	0.4	0.2	0.25
Cost / Income Ratio (%)	82.5	85.3	61.5	59.0	73.3	72.3 ⁵
Market Funds / Tangible Banking Assets (%)	9.9	8.0	6.3	6.6	7.4	7.7 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	13.8	15.4	17.1	21.9	23.0	18.3 ⁵
Gross Loans / Due to Customers (%)	90.8	85.0	79.6	76.9	74.0	81.3 ⁵
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[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [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

Bausparkasse Schwaebisch Hall AG (BSH) is Germany's largest building and loan association (Bausparkasse), with a market share of around 30% and additional Bauspar activities in <u>Hungary</u> (Baa2 stable), <u>Slovakia</u> (A2 stable) and <u>China</u> (A1 stable) through joint ventures (JVs). DZ BANK owns 97.1% of BSH. The remaining shares are mostly held by primary banks in the German cooperative sector. BSH is a member of the German cooperative sector's institutional protection scheme.

As of year-end 2020, BSH had close to nine million clients, and it managed eight million Bauspar contracts worth €316 billion in Germany and two million contracts worth €40.1 billion outside Germany. As of year-end 2020, BSH's mortgage finance lending amounted to €53.8 billion (December 2019: €48.5 billion) in Germany and €4.9 billion (December 2019: €4.7 billion) outside Germany. BSH had around 6,600 employees as of year-end 2020, of which about half constitute its direct sales force.

Since its foundation in 1931, BSH's growth has focused on organic expansion, supported by successful cross-selling to the cooperative banks' client base based on an integrated sales approach in collaboration with the primary banks of the sector.

Weighted Macro Profile of Strong +

BSH is focused on the German market, but also engages in its core business in Hungary, Slovakia and China through JVs. The bank's assigned Strong + Weighted Macro Profile is derived from Germany's Strong + Macro Profile, which accounts for more than 90% of BSH's total exposures.

Recent developments

All G-20 countries sustained severe output losses in 2020, but the contraction in some economies was sharper than that in the others. We expect the pace of improvement to be asymmetric across countries. The recovery path is beset with uncertainty and will remain highly dependent on the distribution of vaccines, effective coronavirus pandemic management and government policy support.

The Government of Germany launched a large stimulus package, and its support has been crucial for corporate borrowers in industries immediately hurt by the pandemic, such as the airlines, tourism, retail and shipping sectors, as well as smaller companies with weak liquidity and high leverage. The scale of the support package is unprecedented and is far larger than the support provided during the 2008-09 financial crisis. At the same time, the government made it easier to access its furlough scheme 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 to the evolution of the economic effects of the pandemic, add to Germany's already expansionary fiscal policy stance, as well as to the automatic stabilisers that support household incomes when unemployment increases.

For the first half of 2021, DZ BANK reported pretax profit of ≤ 54 million (H1 2020: ≤ 75 million) for its BSH segment. BSH continues to experience a declining net interest margin, which it could not completely offset through new lending growth. New mortgage lending, which BSH partly underwrites on behalf of G-Finanzgruppe's primary banks, was up to ≤ 10.3 billion in the first six months of 2021, compared with ≤ 9.4 billion in H1 2020. In addition, BSH agreed new Bauspar contracts with a size of ≤ 14.7 billion in H1 2021, up from ≤ 11.9 billion in H1 2020, which helped BSH grow its domestic Bauspar business market share to 31.7% from 30.1% in H1 2020.

Detailed credit considerations

Close integration with DZ BANK limits BSH's BCA

We cap BSH's BCA at baa2, at the level of its parent DZ BANK's BCA. BSH is one of the specialised financial institutions that belong to DZ BANK, the central institution of G-Finanzgruppe. BSH's customer base has a significant overlap with that of G-Finanzgruppe's primary institutions, and the building and loan association has a product offering that complements the range offered by G-Finanzgruppe's member banks. A mutual interest in cross-selling fee-generating products and the membership in a well-established and effective institutional protection scheme ensure a solid alignment of economic interests within G-Finanzgruppe.

In addition to the profit-and-loss transfer agreement, BSH maintains strong financial ties with DZ BANK, through investments of excess deposits in securities issued by group members. Additional nonfinancial ties exist because of the integration of BSH's bank management within the group framework, for example, in the area of risk policy and as DZ BANK's centre of excellence for retail property finance.

The building and loan association benefits from strong capital

We assign a Capital score of aa2 to BSH, one notch below the aa1 initial score. The assigned score reflects the bank's very strong coverage of its risk-weighted assets by its regulatory Common Equity Tier 1 (CET1) capital and tangible common equity (TCE), our central metrics for assessing capital strength. The adjustment also reflects BSH's limited ability to retain earnings in the low interest rate environment and under its earnings transfer agreement with DZ BANK.

BSH's very strong TCE ratio of 31.9% as of December 2020, down from 34.4% as of December 2019, benefits from the low risk weights assigned to its conservatively underwritten German residential mortgage portfolio under the internal ratings-based approach that it employs. In absolute terms, BSH's leverage ratio, TCE/tangible banking assets, was 6.1% as of year-end 2020, slightly down from 6.5% a year earlier. We expect the bank's regulatory Tier 1 leverage ratio to improve in 2021 and exceed the TCE leverage ratio, mainly as a result of the future regulatory exclusion of BSH's intra-sector exposures from the denominator.

Our TCE metric excludes a €226 million technical security reserve that BSH treats as retained earnings in its IFRS accounts, which is also excluded from regulatory capital. Following a change in the German special law for building and loan associations in 2015, building and loan associations have been allowed to use this reserve more flexibly to offset the net interest margin pressure. As a result, among Germany's building and loan associations, a significant portion of such reserves has been converted into CET1-eligible capital components. This supported BSH's TCE increase in 2017, when it reduced its technical security reserve from €703 million as of year-end 2016 to build additional core capital.

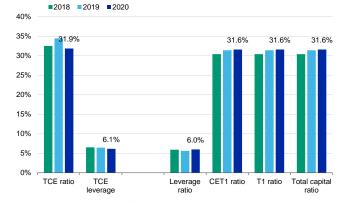
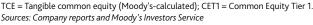


Exhibit 3

BSH's capital ratios clearly exceed regulatory requirements



Low-risk residential mortgage lending limits asset risks

We assign an a2 Asset Risk score to BSH, two notches below the aa3 initial score. The assigned score reflects very low problem loans and the very high recoveries that BSH has historically obtained from these loans. At the same time, the score incorporates a negative adjustment, driven by BSH's sensitivity to the interest rate environment, primarily the pressure that an extended period of low rates would exert on its business model and returns.

BSH's problem loans amounted to €539 million as of 31 December 2020, slightly up from €537 million as of year-end 2019. We consider BSH's higher year-end 2020 coverage of nonperforming loans by loan loss reserves of 33.8% (30.5% as of December 2019) adequate in light of the tight loan-to-value (LTV) limits set by the German special law for building and loan associations, which previously limited sector entities' capacity of taking LTV on their books at no higher than 80%. As a result of the owner equity cushions embedded in BSH's residential mortgage loans, the bank's recovery rates have traditionally been very high. Since late 2015, the Bausparkassen sector has been allowed to increase the lending-value-based LTV limit to 100% for owner-occupied homes only; however, the increase has had no visible negative effect on BSH's asset quality or recovery rates to date.

Although BSH's exposure to interest rate risk in its banking book is low and it does not run a trading book, its business model's key sensitivity is to future interest rate levels and client behaviour. An aggravated and extended period of negative interest rates in Germany would incentivise Bauspar clients to extend the savings periods for their fixed-rate deposits and increase deposit balances further, while BSH and its peers would be challenged to reinvest such additional funds at a profit. Conversely, unexpectedly rapid and pronounced rate increases would expose the sector to deposit outflow and the rising demand for loans at previously agreed fixed interest rates under the Bauspar product.

Exhibit 4 BSH's total capital requirements in 2020

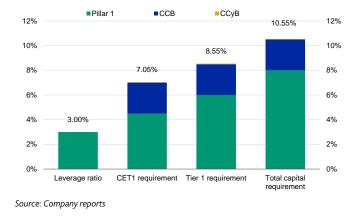
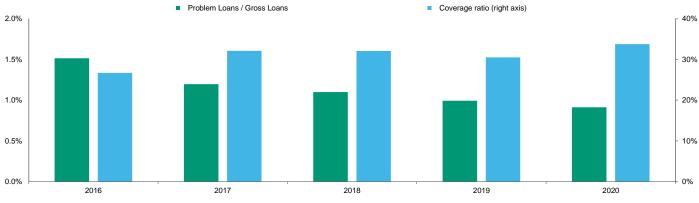


Exhibit 5 BSH's problem loan ratio remains verv low



The problem loan ratio is in accordance with our definition; since 2018, according to IFRS 9 reporting standards. Sources: Company reports and Moody's Investors Service

Profit remains strained as a result of a declining net interest margin

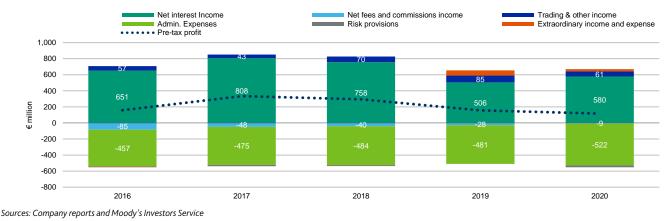
We assign a b2 Profitability score to BSH, one notch above the b3 initial score. The assigned score reflects the bank's stable results in 2020, which demonstrate its capacity to remain moderately profitable in an adverse economic environment, as well as the likelihood of continued pressure on BSH's net interest income. In addition, the score reflects our expectation that administrative costs will remain high because of the investment needed to implement the bank's digitalisation strategy.

BSH's cost-to-income ratio will remain high in the short term. Initial investments in cost initiatives and IT implementation will gradually be recovered through a declining operating cost base. Over the next couple of years, we expect positive mix effects through a replacement of maturing securities with new residential mortgage loans to be broadly offset by the declining net interest margin. The margin remains burdened by the limited pricing flexibility of BSH's Bauspar deposit base.

BSH's declining net interest margin has strained its moderate profitability. Recent vintage fixed-rate mortgage loans have been originated at significantly lower rates than the maturing back book, but their pricing remains more attractive than BSH's securities portfolio, which has been rolled over at much lower coupon rates. Although BSH's overhang of high-coupon legacy Bauspar deposits is manageable overall, the fixed-rate promise and loyalty bonuses associated with most Bauspar deposit contracts result in an unfavourably priced liability structure. Low conversion rates of costly deposits into Bauspar loans limit BSH's ability to stabilise its net interest margin, which fell to 0.7% in 2020 from 1.6% in 2014, a trend that is likely to continue over the next 12-18 months. In addition, BSH's net interest income will be burdened by rising annual amortisation expenses for deferred client acquisition costs booked under IFRS.

BSH reported a net income of €59 million in 2020, down from €166 million as of year-end 2019. The bank's earnings are highly dependent on its net interest income, which increased to €531 million as of year-end 2020 (2019: €462 million), because of significantly lower extraordinary additions to interest bonus reserves of €115 million (2019: €280 million), in addition to regular interest expenses on bonus reserves of €203 million (2019: €193 million). The improvement in its net interest income was partly offset by higher loan loss provisions of €29 million (2019: €486 million) and higher administrative expenses of €526 million (2019: €486 million) in 2020, which included €29 million in expenses for a cost management programme launched in 2020. Additionally, BSH realised only €57 million of net gain on sales of investment securities in 2020, significantly below the €151 million in 2019, which was driven mainly by the sale of its stake in the Czech JV CMSS.

Exhibit 6



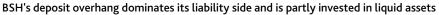
BSH's operating income highly depends on the net interest income

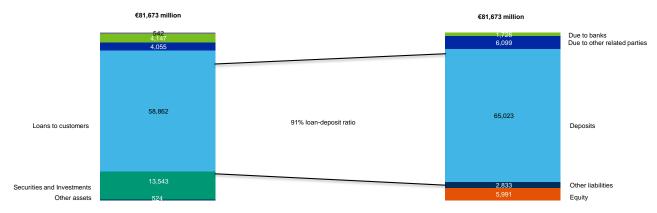
Successful covered bond issuance will diversify funding sources and introduce a moderate degree of market funding

We assign an aa3 Funding Structure score to BSH, one notch above the initial score. The strong score reflects its clear focus on deposit funding and the fact that most of the current interbank funding is from the cooperative banking sector. The adjustment to the initial score also reflects our expectation that the bank's use of market funding will rise moderately because BSH plans to expand its successfully launched mortgage covered bond issuance programme (Aaa stable), which will at least partly diversify its funding mix away from Bauspar deposits.

In October 2020, BSH issued its first benchmark-size mortgage covered bond with a 10-year tenor at a negative yield, followed by a second benchmark-size covered bond in April 2021. With a loan-to-deposit ratio of 91% as of year-end 2020 (December 2019: 85%), BSH's residential mortgage lending activities are comfortably funded with Bauspar deposits sourced from retail clients. Accordingly, interbank funding is only sourced on a very selective basis, including funds received from sector banks during the course of normal business interaction and a very limited amount of promotional funding passed through to clients as part of residential mortgage financing solutions.

Exhibit 7





Sources: Company reports and Moody's Investors Service

BSH's funding access is supported by its strong penetration of the cooperative sector's client base and its entrenched role as a mortgage specialist within the sector. BSH aims to diversify its funding sources through additional mortgage covered bond issuances, which we partly (50%) include in our market funding analysis.

Equity Deposits Other liabilities Issued securities Related parties Interbank —
—
Market Funds Ratio* (right axis) 100% 50% 45% 90% 40% 80% 70% 35% 60% 30% 50% 25% 40% 20% 30% 15% 10% 20% 10% 5% 0% 0% 2016 2017 2018 2019 2020 *Market funding ratio = Market funds/tangible banking assets

BSH has a strong deposit franchise

Exhibit 8

Sources: Company reports and Moody's Investors Service

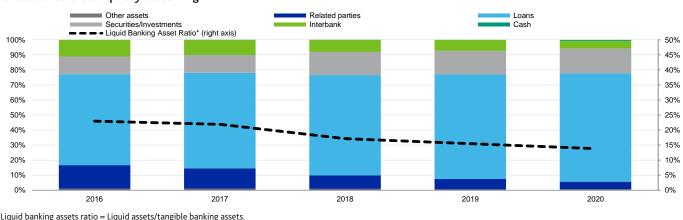
Strong liquidity buffer provides room for business growth

We assign a baa2 Liquidity score to BSH, two notches above the initial score, to reflect its sound liquidity buffer. Its liquidity buffer is supplemented by interbank assets and securities from the cooperative banking sector.

BSH operates with a steady portfolio of more than €8 billion of securities held as part of its liquidity buffer, predominantly from issuers outside the cooperative sector. The portfolio is designed to absorb any potential liquidity stress that could arise under adverse conditions and will likely remain at least constant while BSH grows its overall business volumes. BSH also holds a sizeable portfolio of intragroup claims and bonds that could be used at least in part to cover any liquidity shortfalls, if needed.

BSH has gradually been reducing the relative weight of its securities portfolio while increasing the weight of its mortgage book. We expect this increased focus of the bank's balance sheet on mortgage loans at the expense of liquid assets to be mitigated by the gradual inclusion of new mortgages into BSH's mortgage cover pool, allowing for a long-term funding of these assets and granting BSH access to additional liquidity through covered bond issuances, if needed. To comply with the regulatory liquidity coverage ratio, BSH maintains broad safety buffers to the regulator's minimum requirement of 100%.





BSH's balance-sheet liquidity is declining

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

Narrow business model of mortgage lending constrains the BCA

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.

BSH's high concentration in mortgage lending and the Bauspar product in particular leads us to deduct a full notch from its a3 Financial Profile score. BSH depends almost exclusively on one business line, mortgage savings and loan contracts. Therefore, we classify it as a monoline bank. In terms of assets, BSH, like its building and loan association peers, has put strong emphasis on residential mortgage loan products marketed either along with Bauspar contracts or on a standalone basis. The scope of these activities is narrowly limited by the special law applicable for German Bausparkassen under which BSH operates.

Most of BSH's funding structure rests on retail deposits sourced under Bauspar contracts. Although BSH plans to partly diversify its funding structure by issuing covered bonds, we expect Bauspar deposits to continue to dominate its liability side.

ESG considerations

In line with our general view of the banking sector, BSH has low exposure to environmental risks² (for further information, see our <u>environmental risk heat map</u>), despite its large exposure to residential real estate, which represents a major source of carbon dioxide emissions. At the same time, ecological modernisation represents a significant part of BSH's new lending business.

For social risks, we also place BSH in line with our general view of the banking sector, which indicates moderate exposure. This includes considerations in relation to the pandemic because of the substantial implications for public health and safety, and the severe and extensive economic shock the pandemic has caused across many sectors, regions and markets. For further information, see our <u>social risk heat map³</u>. Bank-specific social risks for BSH could also be highlighted by consumer protection associations that target specialised residential mortgage lenders as they try to terminate costly legacy client relationships. BSH has taken a less aggressive approach to contract terminations and, therefore, we deem the bank less exposed to potential challenges in court than the vast majority of its peers.

Governance⁴ is highly relevant for BSH, as it is to all banks. BSH is integrated into DZ BANK's appropriate risk management framework related to its risk appetite, and we do not have any particular governance concern for the bank or apply any corporate behaviour adjustment for BSH. Nonetheless, corporate governance remains a key credit consideration because of new emerging risks and continues to be a subject of our ongoing monitoring.

Support and structural considerations

Affiliate support

BSH's a3 Adjusted BCA benefits from the strong fundamentals of and our assessment of a very high probability of support from the German cooperative banking association, G-Finanzgruppe, which provides support to all members through its institutional protection scheme.

As a member of the cooperative group of banks, BSH is highly likely to receive affiliate support in case of need. This support significantly reduces the probability of default because the cooperative group's cross-sector support mechanism aims to stabilise its members by avoiding any form of loss participation by creditors or bail-ins. Our affiliate support assumptions result in two notches of rating uplift from the baa2 BCA, benefitting the bank's issuer and deposit ratings, and CRRs.

Loss Given Failure (LGF) analysis

BSH is subject to the Bank Recovery and Resolution Directive, which we consider an operational resolution regime. Therefore, we apply our Advanced LGF analysis, under which we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter resolution. BSH is a domestic subsidiary of DZ BANK, and we include it in the resolution perimeter of the parent for the purpose of our Advanced LGF analysis, which is based on the liability structure at the DZ BANK level.

In line with our standard assumptions, we further assume a residual TCE of 3%, post-failure losses of 8% of tangible banking assets, a 25% runoff in junior wholesale deposits and a 5% runoff in preferred deposits. Because we use private data provided by DZ BANK to determine current amounts of senior unsecured and junior senior debt, as well as our future new issuance expectations, we do not disclose the underlying volumes of the liability tranches included in our Advanced LGF analysis for the group.

For BSH's deposit and issuer ratings, our LGF analysis indicates an extremely low loss given failure, leading to a three-notch uplift from its a3 Adjusted BCA.

Government support considerations

We incorporate one notch of uplift into our senior unsecured debt and deposit ratings for members of G-Finanzgruppe, reflecting our assumption of a moderate probability of support.

Our government support assumptions, which are included in BSH's ratings, reflect the size and high systemic relevance at the domestic level of the group of cooperative banks. Such support would probably not be provided to the bank directly but rather to G-Finanzgruppe, in the unlikely event that the group either cannot provide the required support or cannot provide it quickly enough, based on the sector's combined financial strength.

Counterparty Risk Ratings (CRRs)

BSH's CRRs are Aa2/P-1

The CRRs are four notches above BSH's a3 Adjusted BCA, based on the extremely low loss given failure from the high volume of instruments at the DZ BANK level that are subordinated to CRR liabilities, reflected in three notches of uplift; and one notch of rating uplift based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Counterparty Risk (CR) Assessment

BSH's CR Assessment is Aa2(cr)/P-1(cr)

BSH's Aa2(cr) CR Assessment is four notches above the a3 Adjusted BCA, three notches of which are based on the buffer against default provided to the senior obligations represented by the CR Assessment by more subordinated instruments, primarily senior unsecured debt. Because the CR Assessment captures the probability of default on certain senior operational obligations, rather than expected loss, we focus purely on subordination and take no account of the volume of the instrument class.

Methodology and scorecard

Methodology

The principal methodology used in rating BSH was the **Banks Methodology**, published in July 2021.

About Moody's Bank Scorecard

Our 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

Bausparkasse Schwaebisch Hall AG

Macro Factors						
Weighted Macro Profile Strong +	100%					
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency	Nutio	50010	ireno			
Asset Risk						
Problem Loans / Gross Loans	1.0%	aa3	\leftrightarrow	a2	Interest rate risk	Collateral and provisioning coverage
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	31.9%	aa1	\leftrightarrow	aa2	Risk-weighted capitalisation	Capital retention
Profitability						
Net Income / Tangible Assets	0.1%	b3	\leftrightarrow	b2	Return on assets	Expected trend
Combined Solvency Score		a2		a3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	9.9%	a1	\downarrow	aa3	Extent of market funding reliance	Expected trend
Liquid Resources					0	
Liquid Banking Assets / Tangible Banking Assets	13.8%	ba1	\leftrightarrow	baa2	Stock of liquid assets	Additional liquidity resources
Combined Liquidity Score		baa1		a2		
Financial Profile				a3		
Qualitative Adjustments				Adjustment		
Business Diversification				-1		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				-1		
Sovereign or Affiliate constraint				Baa2		
BCA Scorecard-indicated Outcome - Range				baa1 - baa3		
Assigned BCA				baa2		
Affiliate Support notching				-		
Adjusted BCA				a3		

Balance Sheet is not applicable.

Debt Class	De Jure wa	aterfall	all De Facto waterfall		Notching		LGF	Assigned	Additional Preliminary	
	Instrument volume + or subordination		Instrument on volume + o subordination	rdination	De Jure	De Facto	Notching Guidance vs. Adjusted BCA		Notching	Rating Assessment
Counterparty Risk Rating	-	-	-	-	-	-	-	3	0	aa3
Counterparty Risk Assessment	-	-	-	-	-	-	-	3	0	aa3 (cr)
Deposits	-	-	-	-	-	-	-	3	0	aa3
Senior unsecured bank debt	-	-	-	-	-	-	-	3	0	aa3
Instrument Class	Loss Gi Failure no		Additional notching	Prelimina Asses	5 0		nment notching		Currency ting	Foreign Currency

	Tunture Hotening	notening	Assessment	Support notening	Nuting	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

[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
BAUSPARKASSE SCHWAEBISCH HALL AG	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa2/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa2
ST Issuer Rating	P-1
PARENT: DZ BANK AG	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa2/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa2
Senior Unsecured	Aa2
Junior Senior Unsecured	A3
Junior Senior Unsecured MTN -Dom Curr	(P)A3
Subordinate	Baa1
Commercial Paper	P-1
Other Short Term -Dom Curr	(P)P-1
Source: Moody's Investors Service	

Source: Moody's Investors Service

Endnotes

- 1 The ratings shown are DZ BANK's long-term deposit and senior unsecured ratings and outlook, and BCA.
- 2 Environmental risks can be defined as environmental hazards encompassing the effects of air pollution, soil or water pollution, water shortages and natural and human-made hazards (physical risks). Additionally, regulatory or policy risks, like the effect of carbon regulation or other regulatory restrictions, including the related transition risks such as policy, legal, technology and market shifts, that 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.
- 3 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 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 are further social risks. Social 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 the demand for financial services, or socially driven policy agendas translating into regulations that affect banks' revenue bases.
- 4 Corporate governance is a well-established key driver for banks and the related risks are typically included in our evaluation of the banks' financial profile. Furthermore, factors such as 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, if deemed applicable. Corporate governance weaknesses can lead to a deterioration in a bank's credit quality, while governance strengths can benefit its credit profile. When credit quality deteriorates because of poor governance, such as a breakdown in controls resulting in financial misconduct, it can take a long time to recover. Governance risks are also largely internal rather than externally driven.

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