

CREDIT OPINION

20 January 2022

Update

✓ Rate this Research

RATINGS

Bausparkasse Schwäbisch Hall AG

Domicile	Germany
Long Term CRR	Aa2
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
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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 Japan 81-3-5408-4100
 EMEA 44-20-7772-5454

Bausparkasse Schwäbisch Hall AG

Update following rating affirmation

Summary

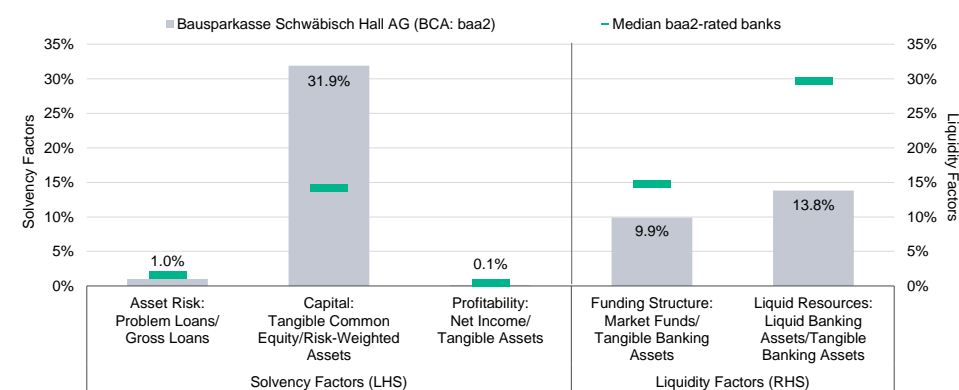
On 18 January 2022, we affirmed [Bausparkasse Schwäbisch Hall AG's](#) (BSH) Aa2 deposit and issuer ratings. We also affirmed the bank's baa2 Baseline Credit Assessment (BCA), a3 Adjusted BCA, Aa2/P-1 Counterparty Risk Ratings (CRRs), and P-1 short-term deposit and issuer ratings.

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 [G-Finanzgruppe]), the application of our Advanced Loss Given Failure (LGF) analysis to its liabilities that 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 the systemically relevant G-Finanzgruppe.

BSH's baa2 BCA reflects the bank's strong ties with its parent, [DZ BANK AG](#) (DZ BANK, Aa2/Aa2 stable, baa2)¹, including a profit-and-loss transfer agreement and sizeable 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.

Exhibit 1

Rating Scorecard - Key financial ratios



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, which the bank will gradually complement with 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 the intrinsic strength of DZ BANK, which caps the BCA of BSH at baa2, to remain broadly unchanged over the 12 to 18 months outlook horizon. Similarly, we do not anticipate a change in its affiliate support or in the liability structure of DZ BANK uplift during this time frame.

Factors that could lead to an upgrade

- » An upgrade of BSH's ratings could be triggered by an upgrade of the bank's BCA, or by an improvement in the cooperative sector's financial strength. Please refer to the latest [Credit Opinion](#) of DZ BANK for detailed factors that could lead to an upgrade or downgrade of the parent's BCA. BSH's ratings already benefit from the highest possible uplift under our Advanced LGF analysis.
- » An upgrade of BSH's BCA would require an upgrade of DZ BANK's BCA which caps BSH's BCA at baa2 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.

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 DZ BANK, or if DZ BANK significantly reduced its liabilities designed to absorb losses in bail-in compared with its tangible banking assets.
- » BSH's BCA could be downgraded in the case of a downgrade of DZ BANK's BCA, because it caps BSH's BCA. BSH's unconstrained BCA could be downgraded if the bank's gradual funding structure transformation resulted in a significantly higher dependence on market funding or if BSH 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.moody's.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	6.6 ⁴
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	0.2 ⁵
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

[–] Further to the publication of our revised methodology in July 2021, only ratios from annual 2020 onwards included in this report reflect the change in analytical treatment of the "high-trigger" Additional Tier 1 instruments. [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, with a market share of around 30% and additional Bauspar activities in [Hungary](#) (Baa2 stable), [Slovakia](#) (A2 stable) and [China](#) (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 constituted 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 close to 90% of BSH's total exposures.

Recent developments

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 signed 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.

On 12 January, German banking supervisory authority BaFin announced its intention to [implement a countercyclical capital buffer \(CCyB\) requirement](#) of 0.75% of domestic risk-weighted assets (RWAs) and an additional 2.0% buffer specific to RWAs from domestic loans backed by residential properties. We expect these measures to have no material impact on BSH's ample capital cushions. Because BSH applies internal models to determine credit risk weights of its mortgage loans, we expect it to rather gain market share in new

mortgage business. This is because a large share of banks in Germany apply the standardized risk measurement approach that typically results in higher risk weights which will attract greater additional capital requirements from February 2023 on.

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.

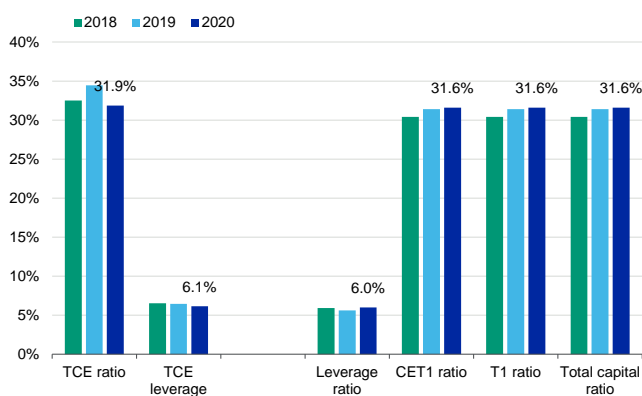
The building and loan association benefits from strong capital

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, which we expect to result in a decrease of risk-weighted capital ratios over time.

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. Over time, we expect risk-weighted assets to continue to grow because of BSH's mortgage loan book growth in the near term and because the phase-in of an output floor for internal models will raise capital requirements in the medium term. In absolute terms, BSH's leverage ratio, measured as 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 have improved in 2021 and to exceed the TCE leverage ratio, mainly as a result of the future regulatory exclusion of BSH's intra-sector exposures from the denominator.

Exhibit 3

BSH's capital ratios clearly exceed regulatory requirements

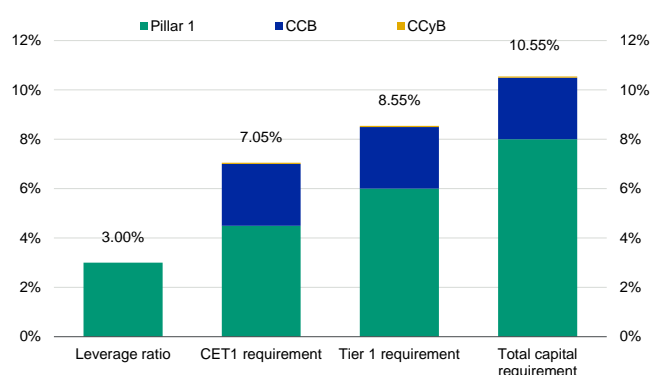


TCE = Tangible common equity (Moody's-calculated); CET1 = Common Equity Tier 1.

Sources: Company and Moody's Investors Service

Exhibit 4

BSH's total capital requirements in 2020



Source: Company

Low-risk residential mortgage lending limits asset risks

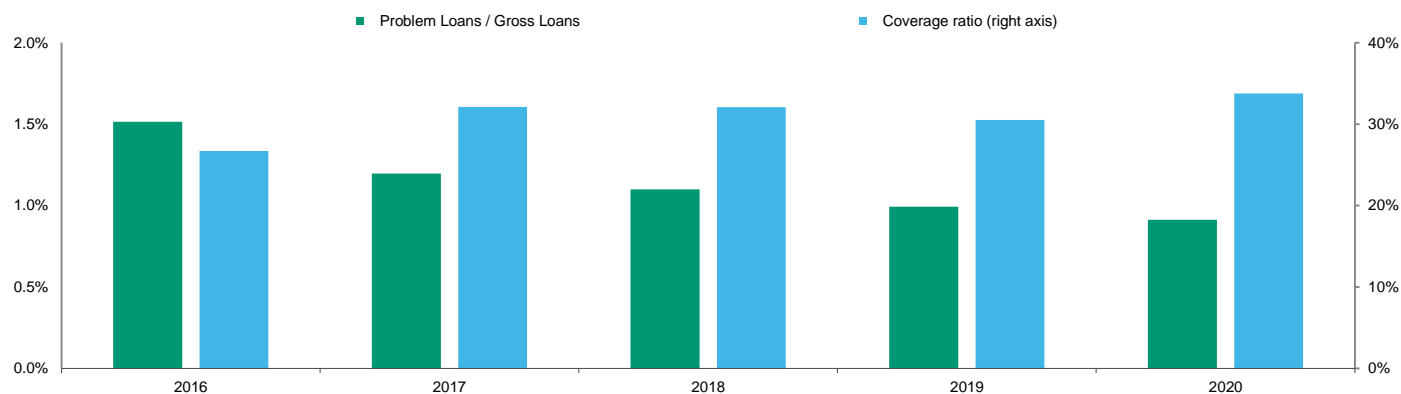
We assign an a2 Asset Risk score to BSH, two notches below the aa3 initial score. The assigned score reflects very low problem loans and very high recoveries that BSH has historically obtained from these loans. At the same time, the score incorporates a negative adjustment driven by BSH's sensitivity to the interest rate environment, primarily the strain 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 buffers 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 extended period of negative interest rates in Germany incentivises Bauspar clients to extend the savings periods for their fixed-rate deposits and increase deposit balances further, while BSH and its peers have been challenged to reinvest such additional funds at a profit. Conversely, unexpectedly rapid and pronounced rate increases would expose the sector to deposit outflow and to rising demand for loans at previously agreed fixed interest rates under the Bauspar product.

Exhibit 5

BSH's problem loan ratio remains very low



The problem loan ratio is in accordance with our definition; since 2018, according to IFRS 9 reporting standards.

Sources: Company 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 strain on BSH's net interest income. We positively reflect in the b2 score the bank's ability to consistently maintain a moderate level of profitability within a difficult operating environment for the building and loan associations sector.

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. We expect gradually declining pressure from interest bonus provisioning together with positive mix effects through a replacement of maturing securities with new residential mortgage loans to increasingly outweigh the drag on net interest income from the maturity of higher-yielding fixed rate mortgages underwritten in the past decade. However, BSH's net interest margin remains burdened by the limited pricing flexibility of BSH's Bauspar deposit base.

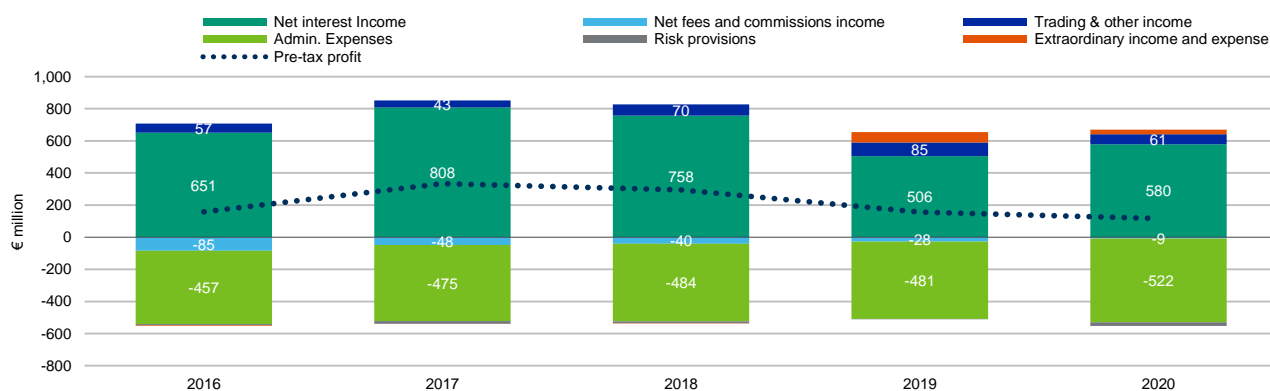
BSH's declining net interest margin has strained its moderate profitability. Recent vintage fixed-rate mortgage loans have been originated at significantly lower rates than the maturing back book, but their pricing remains more attractive than BSH's securities portfolio, which has been rolled over at 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: €4 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 BSH's Czech joint venture.

Exhibit 6

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



Sources: Company and Moody's Investors Service

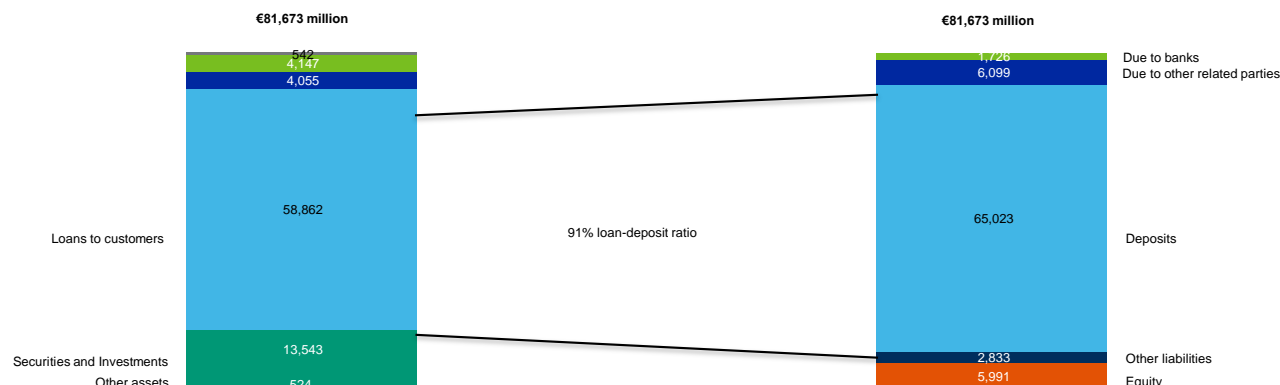
Strong focus on retail deposit funding results in a stable funding structure

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 [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

BSH's deposit overhang dominates its liability side and is partly invested in liquid assets

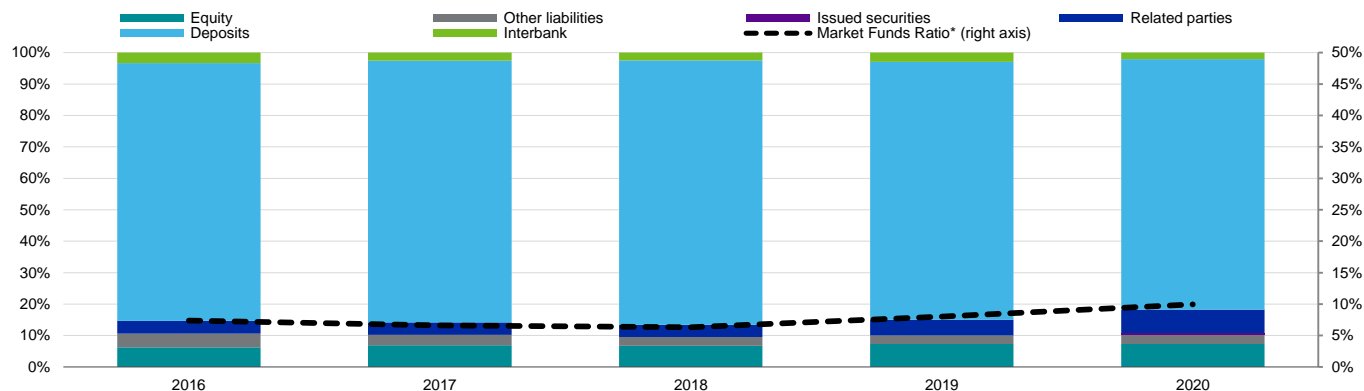


Data as of year-end 2020
Sources: Company and Moody's Investors Service

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.

Exhibit 8

BSH has a strong deposit franchise



*Market funding ratio = Market funds/tangible banking assets.
Sources: Company and Moody's Investors Service

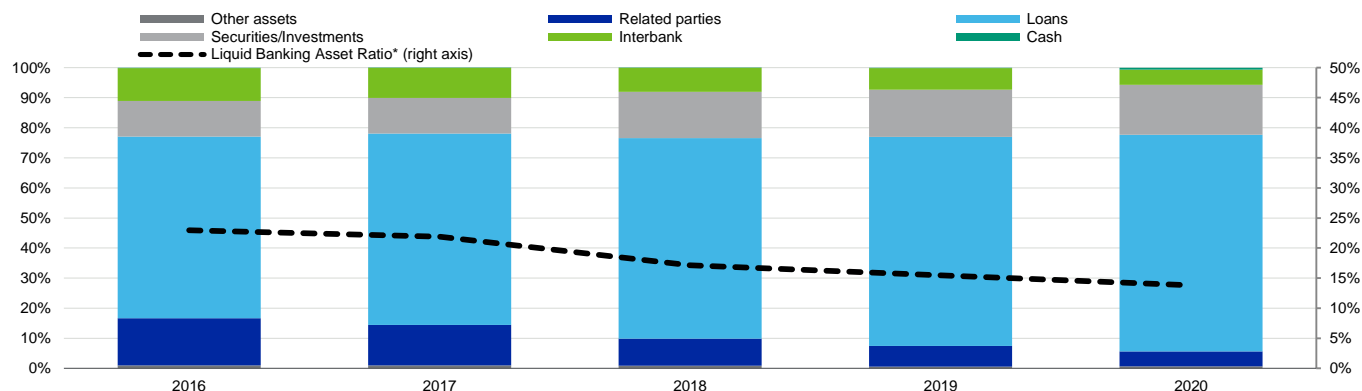
Strong liquidity buffer provides room for business growth

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%.

Exhibit 9

BSH's balance-sheet liquidity has been declining

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

Sources: Company 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 [environmental risk heat map](#)), 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.

BSH's social risks are 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 [social risk heat map](#)³. 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, benefiting 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							
Asset Risk							
Problem Loans / Gross Loans	1.0%	aa3	↔	a2	Interest rate risk	Collateral and provisioning coverage	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	31.9%	aa1	↔	aa2	Risk-weighted capitalisation	Capital retention	
Profitability							
Net Income / Tangible Assets	0.1%	b3	↔	b2	Return on assets	Expected trend	
Combined Solvency Score		a2		a3			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	9.9%	a1	↓	aa3	Extent of market funding reliance	Expected trend	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	13.8%	ba1	↔	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 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

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
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

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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