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CREDIT OPINION

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Update

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Contacts

Swen Metzler, CFA +49.69.70730.762 VP-Sr Credit Officer swen.metzler@moodys.com

Alexander Hendricks, +49.69.70730.779 CFA Associate Managing Director alexander.hendricks@moodys.com

Carola Schuler +49.69.70730.766 MD-Banking carola.schuler@moodys.com

Sparkassen-Finanzgruppe

Update to credit analysis

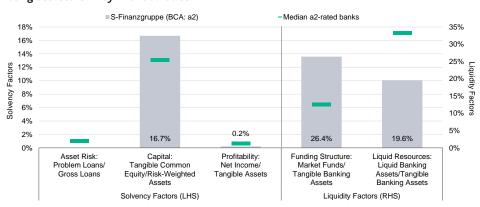
Summary

On 13 October, we affirmed <u>Sparkassen-Finanzgruppe</u>'s (S-Finanzgruppe) Corporate Family Rating (CFR) at Aa2 and changed the outlooks to stable from negative. The stable outlook reflects our expectation that Germany's largest financial institutions group will maintain stable fundamental credit profiles with broadly unchanged key financial ratios over the 12 to 18 months outlook horizon.

S-Finanzgruppe's Aa2 Corporate Family Rating (CFR) reflects the group's a2 BCA and Adjusted BCA; two notches of rating uplift from our Advanced Loss Given Failure (LGF) analysis which results in a very low loss-given-failure; and one notch of rating uplift from our assumption of moderate government support reflecting the size and high relevance of S-Finanzgruppe to Germany's financial stability.

S-Finanzgruppe's a2 BCA reflects its strong and improved asset quality, its very strong and stable capitalization, as well as its defensive, deposit-focused funding profile and sufficient balance-sheet liquidity. The BCA also takes into account the group's overall robustness given its leading market shares in Germany and the agency's expectation of an economic recovery in Germany which should keep credit risk at benign levels and allows for a moderate level of profitability.

Exhibit 1 Rating Scorecard - Key financial ratios*



Note: The financial ratios for S-Finanzgruppe are as of year-end 2020. Source: Moody's Financial Metrics In assigning the BCA and CFR to S-Finanzgruppe, we assess the group as if it operates as a single entity. This approach considers group member institutions' cohesion, solidarity - particularly between the savings banks - as well as their high level of co-operation. However, the members of S-Finanzgruppe do not constitute a single economic entity that functions with centralised management and control at the group level. The BCA and CFR apply only to the creditworthiness of the group as a whole rather than to individual members of the group.

Credit strengths

- » Strong cohesion among member institutions of S-Finanzgruppe, codified in institutional protection schemes (IPS).
- » Sound capital provides ample cushion for unexpected shocks.
- » Sizeable liquidity benefits from prime access to German depositors and balances the market funding dependence of Landesbanks.

Credit challenges

- » Profitability is under pressure from low interest rates, compounded by negative economic repercussion from the coronavirus pandemic
- » Moderate tail risks from German Landesbanks' international exposures persists and mainly relate to commercial real estate lending.

Outlook

» The stable outlook reflects our expectation that the German savings banks sector and its member banks will maintain stable fundamental credit profiles with broadly unchanged key financial ratios over the 12 to 18 months outlook horizon.

Factors that could lead to an upgrade

» Upward pressure on S-Finanzgruppe's CFR could only arise from upward pressure on its BCA driven by a significantly and sustainably higher profitability of the sector together with improvements of its asset risk profile through reduced concentration risks in combination with sustained levels of capitalisation.

Factors that could lead to a downgrade

- » Downward pressure on S-Finanzgruppe's CFR could originate from pressure on its BCA, in particular if the group's overall solvency gets more burdened by its low profitability, or if the <u>Strong+ Macro Profile of Germany</u> were to be deteriorate.
- » A support scenario for a number of member banks, in which necessary funds significantly compress the sector's overall capitalisation, could also exert downward pressure on the rating.

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

Sparkassen-Finanzgruppe (Consolidated Financials) [1]

12-20 ²	12-19 ²	12-18 ²	12-17 ²	12-16 ²	CAGR/Avg. ³
2,383.3	2,273.5	2,178.2	2,129.5	2,118.8	3.04
2,916.1	2,552.0	2,490.0	2,557.1	2,234.8	6.9 ⁴
177.9	173.0	167.8	161.5	157.9	3.04
217.7	194.2	191.9	193.9	166.6	6.9 ⁴
16.7	16.4	16.6	16.7	16.4	16.6 ⁵
1.2	1.3	1.3	1.4	1.5	1.3 ⁵
1.0	1.0	1.1	1.3	1.4	1.2 ⁵
0.2	0.3	0.2	0.4	0.3	0.3 ⁵
71.3	73.5	70.8	68.7	66.8	70.2 ⁵
26.4	25.7	26.6	26.8	27.1	26.5 ⁵
19.6	17.2	17.1	16.8	14.9	17.1 ⁵
94.9	97.4	98.0	97.5	99.5	97.5 ⁵
	2,383.3 2,916.1 177.9 217.7 16.7 1.2 1.0 0.2 71.3 26.4 19.6	2,383.3 2,273.5 2,916.1 2,552.0 177.9 173.0 217.7 194.2 16.7 16.4 1.2 1.3 1.0 1.0 0.2 0.3 71.3 73.5 26.4 25.7 19.6 17.2	2,383.3 2,273.5 2,178.2 2,916.1 2,552.0 2,490.0 177.9 173.0 167.8 217.7 194.2 191.9 16.7 16.4 16.6 1.2 1.3 1.3 1.0 1.0 1.1 0.2 0.3 0.2 71.3 73.5 70.8 26.4 25.7 26.6 19.6 17.2 17.1	2,383.3 2,273.5 2,178.2 2,129.5 2,916.1 2,552.0 2,490.0 2,557.1 177.9 173.0 167.8 161.5 217.7 194.2 191.9 193.9 16.7 16.4 16.6 16.7 1.2 1.3 1.3 1.4 1.0 1.0 1.1 1.3 0.2 0.3 0.2 0.4 71.3 73.5 70.8 68.7 26.4 25.7 26.6 26.8 19.6 17.2 17.1 16.8	2,383.32,273.52,178.22,129.52,118.82,916.12,552.02,490.02,557.12,234.8177.9173.0167.8161.5157.9217.7194.2191.9193.9166.616.716.416.616.716.41.21.31.31.41.51.01.01.11.31.40.20.30.20.40.371.373.570.868.766.826.425.726.626.827.119.617.217.116.814.9

[-] Further to the publication of our revised methodology in July 2021, for issuers that have "high trigger" additional Tier 1 instruments outstanding, not all ratios included in this report reflect the change in treatment of these instruments. [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. Simple average of Basel III periods. [6] Simple average of periods for the latest accounting regime. Sources: Moody's Investors Service and company filings

Profile

S-Finanzgruppe is a German financials institutions group that consists of more then 500 independent enterprises, including 370 savings banks¹, as well as six Landesbanks, including <u>Bayerische Landesbank</u> (BayernLB, Aa3 stable/Aa3 stable, baa2)², <u>Landesbank Baden-</u><u>Wuerttemberg</u> (LBBW, Aa3 stable/Aa3 stable, baa2), <u>Landesbank Berlin AG</u> (LBB, Aa2 stable/Aa2 stable, baa2), <u>Landesbank Hessen-</u><u>Thueringen GZ</u> (Helaba, Aa3 stable/Aa3 stable, baa2), <u>Landesbank Saar</u> (SaarLB, A1 stable/A1 stable, ba1), <u>Norddeutsche Landesbank</u> <u>GZ</u> (NORD/LB, A3 stable/A3 stable, ba3), the asset manager <u>DekaBank Deutsche Girozentrale</u> (DekaBank, Aa2 stable/Aa2 stable, baa2), eight Landesbausparkassen (regional building societies) and 9 primary insurance groups and a number of other financial service companies. Aggregate data for S-Finanzgruppe includes these entities, as well as <u>Hamburg Commercial Bank AG</u> (HCOB, Baa1 stable/Baa1 stable, ba1) which is still affiliated with the group via the institutional protection scheme (Haftungsverbund).

As Germany's largest banking group, S-Finanzgruppe commands a market share for lending to domestic corporates and self-employed of around 40%, as well as around 35% for mortgage lending to private households. As of 31 December 2020, S-Finanzgruppe reported total aggregated assets of €2.38 trillion (2019: €2.27 trillion, 2018: €2.18 trillion), of which around 61% relate to the group of savings banks (2019: 59%, 2018: 58%).

The German Savings Banks Association (*Deutscher Sparkassen- und Giroverband*, DSGV) is the umbrella organisation of S-Finanzgruppe. Entities of S-Finanzgruppe are independent and managed on a decentralised basis. Most of the group's savings banks are institutions incorporated under public law and operated under municipal trusteeship.

For more information, please see S-Finanzgruppe's <u>issuer profile</u>, the <u>German Banking System Profile</u>, as well as the <u>update</u> on the German banking system, published on 25 March 2021, and our comprehensive analysis which concludes that <u>German banks need large</u> <u>cost cuts to stay profitable</u>, published on 25 January 2021.

Recent developments

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

The <u>Government of Germany</u> (Aaa stable) 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 experiencing 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.

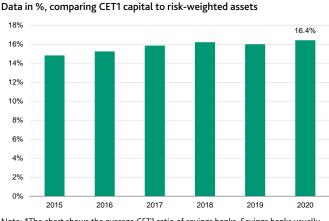
Detailed credit considerations

Sound capital provides ample cushion for unexpected shocks

Our assigned aa2 Capital score for S-Finanzgruppe reflects the group's sound capitalization which provides substantial buffer against a severe economic downturn. Our assessment takes into account additional capital-equivalent reserves and limitations around capital fungibility within members of the group. At end-2020, S-Finanzgruppe's reported Tier 1 ratio was 16.5%, compared with 16.1% in 2019 and 15.9% in 2018. The moderate increase reflects around 6% higher equity over that period, including the addition to capital reserves (*Fonds für allgemeine Bankrisiken*), which overcompensates rising risk-weighted assets, driven by loan growth.

We believe that the German savings banks have ample capital to absorb considerable adverse market developments, in particular in the context of the coronavirus shock. However, we expect stable capital ratios for member banks of S-Finanzgruppe during 2022 and beyond, reflecting moderately deteriorating asset quality, which leads to rising risk-weighted assets. In addition to equity and their reported capital ratios, German savings banks have additional fully taxed reserves, which are undisclosed and exist in accordance with local accounting rules (Handelgesetzbuch, HGB).

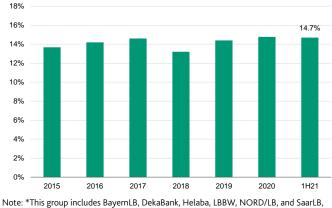
Further, savings banks usually apply the standard approach which leads to higher risk-weighted assets (RWA) compared to the internal rating based approaches, which prevail at Landesbanks. For savings banks, we estimate that RWA accounted for more than 50% of assets, while the average ratio for Landesbanks was around 30% at the end of 2020. At the same time, the savings banks' average Common Equity Tier 1 (CET1) ratio was 16.4% (2019: 16.0%).³ This compares with an average⁴ Tier 1 ratio of Landesbanks of 15.1% at end-September 2020 (2019: 15.4%), which ranged between 13.3%-16.6% at that time, and 13.4%-16.5% for 2019 (2018: 7.7%-17.0%).



Savings banks show increasing CET1 capital ratios

Note: *The chart shows the average CET1 ratio of savings banks. Savings banks usually apply the standard approach to calculate risk-weighted assets (RWA). Source: DSGV





Note: *This group includes BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB, similar to Deutsche Bundesbank's breakdown of "Landesbanks". *Source: Company reports*

Our favorable capital assessment for S-Finanzgruppe also takes into account the savings banks' high leverage ratio, because equity accounted for 8.7% of their assets at the end of June 2021 (2020: 8.7%, 2019: 9.1%). This compares to 5.2% for the group of Landesbanks (2020: 5.3%, 2019: 5.4%), which is broadly stable at the 5% level since 2013 but meaningfully lower than for savings banks.

Exhibit 3

Exhibit 5

Savings banks operate with much higher equity compared ... Data in %, comparing equity to assets (leverage ratio)



Exhibit 6

10% 9% 8% 7% 6% 5% 4%

... with the aggregate equity of Landesbanks* Data in %, comparing equity to assets (leverage ratio)

Note: *This group includes BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB. Source: Deutsche Bundesbank

2016

2017

2018

2019

2020

1H21

2015

Note: The chart shows aggregate equity of all German savings banks. Source: Deutsche Bundesbank

Our capital assessment for S-Finanzgruppe considers certain advantages which arise from their mutual support, codified in group's set of several institutional protection schemes (IPS).⁵ Member banks of S-Finanzgruppe benefit from the omission of large lending limits as well as lower regulatory capital requirements because intragroup exposures benefit from a 0% risk weight. Losing these sector-specific regulations, for example triggered by the absence of support for a troubled member bank, will have negative repercussions for their capital ratios. Although we regard such a scenario unlikely, the effect would be materially negative for creditors.

2%

1%

0%

2010

2012

2014

As a large, diverse group of independent financial institutions capital cannot be freely allocated within S-Finanzgruppe, and the risk of member banks requiring support cannot be ruled out. Following the announced balance sheet clean-up and capital strengthening measures for NORD/LB, we believe that the risk profiles for all Landesbanks are better aligned with their core banking activities, rendering them more robust to event risks or adverse economic conditions.

Profitability pressure from low interest rates and coronavirus pandemic

S-Finanzgruppe's assigned ba3 Profitability score is one notch above its initial score, the weakest individual factor that we assign to Germany largest financial institutions group. Our assessment is based on the combined results of all member banks and reflects the expectation that savings banks and Landesbanks are challenged by the low interest rate environment, which, more recently, is compounded by the negative economic repercussion from the coronavirus pandemic which will lead to rising credit provisions. Following the successful wind-down of non-core assets at the group's larger institutions, we believe that the absence of extra-ordinary losses will support S-Finanzgruppe's aggregate earnings.

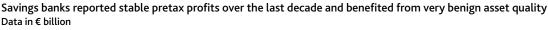
Until the breakout of the pandemic, savings banks benefited from the benign economic conditions in Germany. Benign asset quality and ample loan growth helped to balance declining interest margins and rising operating expenses, with the latter mostly driven by nonpersonnel related costs. Over the three-year period 2018-20, savings banks increased loans in aggregate by 17.6%. In 2020, for example, loans increased by 5.0% (2019: 4.5%), driven by +5.5% higher lending to corporates and self-employed (2019: +5.4%) and mortgages to private households and corporates which increased by 7.1% (2019: +6.4%).⁶ This trend continued during the first six month of 2021, as saving banks' loans grew by around 2.3% over this period.

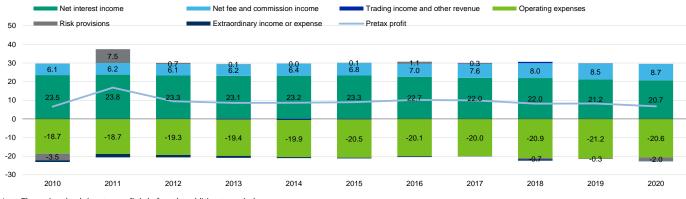
For 2021 and beyond, we expect continued pressure on interest income, reflecting further interest margin pressure balance by incremental loan growth, as well as the savings banks' decision to not introduce broad-based negative interest rates to their retail clientele. We expect that the savings banks will make gradual progress in cost management and non-interest income generation. However, given their public mandate to offer financial services through an intensive branch network countrywide, we expect moderate potential for achieving sizeable cost savings. The savings banks' cost pressure is somewhat mitigated by a gradual reduction in work

force, at around 1% in 2020 and around 2.6% in 2019, as a result of natural fluctuation, a development which is comparable to the years before.

Over the last five years, the savings banks' cost-to-income ratio somewhat deteriorated to 66.8% in 2020, compared with 65.5% in 2018 and 64.8% in 2016, which also reflects rising investments into digital solutions.⁷

Exhibit 7





Note: The savings banks' pretax profit is before the addition to capital reserves. Source: Deutsche Bundesbank

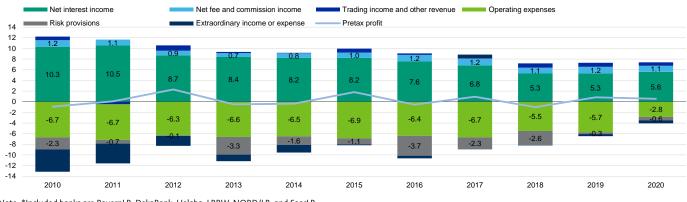
Pretax and net income figures published by Deutsche Bundesbank for savings banks somewhat differ from numbers disclosed by DSGV. This is mainly because the savings banks' association considers the addition to capital reserves (*Fonds für allgemeine Bankrisiken*) as provision expense, which reduces pretax profits. In contrast, the disclosures by Deutsche Bundesbank follow the breakdown of local accounting rules (HGB), where the fully taxed addition to capital reserves is reported "below the line", i.e. after net income.

Based on Deutsche Bundesbank data, German savings banks reported pretax profits (before the addition to capital reserves) of €6.7 billion in 2020, compared with €8.2 billion in 2019 and €8.2 billion in 2018. The gradual reduction of earnings was driven by declining pre-provision income to €8.8 billion in 2020 (2019: €8.5 billion, 2018: €9.7 billion), reflecting lower net interest income of €20.7 billion (2019: €21.2 billion, 2018: €22.0 billion), balanced by slightly higher fee income of €8.7 billion (2019: €8.5 billion, 2018: €8.0 billion), broadly stable operating expenses of €20.6 billion (2019: €21.2 billion, 2018: €20.9 billion). The weaker result for 2020 is largely driven by higher credit provisions, which increased to €2.0 billion in 2020 from €0.3 billion in 2019 (2018: €0.7 billion). In 2020, the savings banks added around €2.9 billion to capital reserves, compared with €4.4 billion in 2019 and €4.1 billion in 2018.

Since 2010, pretax profits for the group of German Landesbanks oscillated around break even, reflecting large swings in trading income and risk provisions, with the latter mostly driven by changing asset quality of ship loans. The sizeable reduction of revenues over the last decade from around €12.2 billion in 2010 to around €7.3 billion in 2019 reflects the reduction of assets by around 43% over the same period and a declining number of banks included in this group.⁸ During 2020, Landesbanks' assets remained stable at around €807 billion and increased by around 3% to €832 billion as of the end of June 2021, reflecting loan growth and the incremental participation in the ECB's refinancing programs.

Exhibit 8

Compared to savings banks, Landesbank's pretax profits are very low and volatile* Data in € billion



Note: *Included banks are BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB. Source: Deutsche Bundesbank

Based on aggregate data for S-Finanzgruppe, Germany's largest financial institutions group reported pre-tax profits of €4.2 billion in 2020, compared with €4.8 billion in 2019 and €3.1 billion in 2018 (2017: €5.7 billion). The lower result in 2020 reflects higher credit provisions, at €2.9 billion, compared with €0.3 billion in 2019 and €3.6 billion in 2018. The latter high level was largely due to restructuring measures, which NORD/LB announced in October 2018. In 2020, the group's aggregate pre-provision income increased by around 8% to €10.9 billion, compared with €10.2 billion in 2019 (2018: €11.3 billion).

The main drivers were stable revenues, at around \in 38.1 billion and moderately lower operating expenses of \notin 27.1 billion, around 3% lower than in 2019. Aggregate net interest and fee income for the group was broadly stable in 2020 at \notin 27.6 billion (2019: \notin 27.8 billion; 2018: \notin 28.7 billion) and \notin 9.8 billion (2019: \notin 9.6 billion, 2018: \notin 8.8 billion). In 2020, S-Finanzgruppe managed to reduce personnel expenses by around 2% to \notin 16.0 billion (2019: \notin 16.4 billion) and other administrative expenses, including regulatory charges, by around 4.6% to \notin 11.1 billion (2019: \notin 11.6 billion). At around 73%, S-Finanzgruppe's revenues remain highly dependent on net interest income (NII). However, because of a rising share of fee income, the group's dependence has somewhat softened, compared with an 80% NII share in 2015. During 2020, the group's aggregate net interest margin (calculated as net interest income compared with customer loans) further declined to 2.06%, compared with 2.12% in 2019 and 2.29% in 2018 (2017: 2.46%).

S-Finanzgruppe's sector efficiency metrics compare less favorably with those of its international peers, as reflected by a cost-to-income ratio of around 71% in 2020 (2019: 73%, 2018: 71%). We consider cost containment a key challenge for the group on back of the low interest-rate environment and investments into digitalization. To achieve a similar cost-to-income ratio of other highly-rated banks or group of banks, we believe S-Finanzgruppe needs to reduce operating expenses by around 20%, compared with its 2020 cost base.

Sound asset quality reflecting the focus of lending activities to the German economy

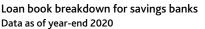
S-Finanzgruppe's Asset Risk score of a1 reflects very low risk profiles of its member savings banks and captures the business profiles of the group of Landesbanks which has successfully and sustainably been de-risked over several years. However, as Germany's largest financial institutions group, S-Finanzgruppe needs to manage risk concentrations in export-driven industries, such as the automotive and the cyclical construction sector, are a key feature of Germany's economic structure. Savings banks, in contrast, manage a very diversified loan book with usually low to medium loan sizes, a credit positive.

As of June 2021, the financially stronger savings banks accounted for around 65% of the aggregate assets of savings banks and Landesbanks, whereas a decade ago the financially weaker Landesbanks contributed the majority of combined assets. This shift towards the more resilient, primarily retail client focused savings banks together with the long-term de-risking and restructuring of the Landesbanks, which started after the global financial crisis, results in a significant decline of the group's asset risks, which now better reflects the economic strengths and challenges of its home market.

Between 2015 and 2020, savings banks increased the exposure to domestic corporate loans (including self-employed) from around 52.5% to around 55.4%.⁹ We believe that the sizeable loan growth to these borrowers to \leq 490 billion at end-2020 (1H21: \leq 496 billion)

exposes the banks to the risk of higher credit provisions under stressed economic conditions. Germany's savings banks exhibit high concentrations to residential properties, accounting for around 57% of total loans (2015: around 51%). We believe that the banks apply conservative underwriting criteria, leading to moderate loan-to-values. However, German residential real estate prices continue to accelerate, with indications of price growth outpacing fundamentals, particularly in large metropolitan areas. The savings banks' high exposure to this asset class could impose future risks to asset quality and profitability, for example if significant price corrections or rising unemployment trigger higher problem loans and thus higher loan-loss charges.





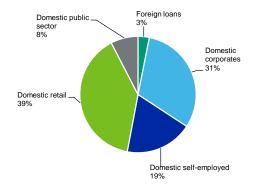
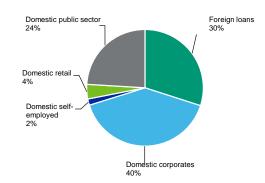


Exhibit 10 Landesbanks have sizeable foreign loans* Data as of year-end 2020



Note: The chart shows selected loan categories in accordance with the classification of Deutsche Bundesbank. Source: Deutsche Bundesbank

Note: *Included banks are BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB. Source: Deutsche Bundesbank

S-Finanzgruppe's risk profile benefits from the reduction of assets at the group of Landesbanks, which declined by around 45% to €832 billion at the end of June 2021, compared with €1.5 trillion in 2010.¹⁰ While this group of banks remains exposed to asset concentration risks, reflecting commercial real estate exposures, international lending and asset-based finance activities, we believe the susceptibility to unexpected losses has materially declined, reflecting the banks' material restructuring efforts over the last years. We believe this will lead to moderate credit costs associated with the average asset quality of their largely domestic customers.

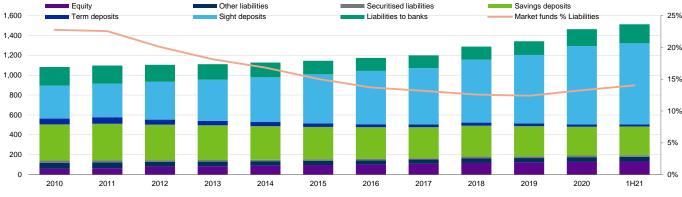
Strong funding which benefits from prime access to German depositors

S-Finanzgruppe's credit strength is strongly supported by sizeable and well diversified deposits. This view is reflected in our assigned a2 Funding Structure score which is three notches above the group's baa2 initial score. The positive adjustments take into account S-Finanzgruppe's high deposits granularity, reflecting its market leadership across Germany; the significant potential of savings banks to use their substantial mortgage books for secured funding in the capital market, if needed; and the existence of sizeable covered bonds and promotional loans, provided by sovereign-related entities. We consider these latter funding sources less sensitive to credit developments and hence more reliable. However, our assessment also reflects the wholesale funding dependence for German Landesbanks.

The strong funding profile for S-Finanzgruppe is based on the savings banks' country-wide branch network in Germany. This allows the collection of diversified and highly granular deposits. At end-June 2021, the savings banks's aggregate deposits of ≤ 1.125 trillion compare with aggregate loans of ≤ 954 billion, resulting in a very favorable and gradually improving loan-to-deposit ratio of 84.8%, almost unchanged with end-2020 and somewhat more favorable than 87% in 2015 and 88% in 2010.¹¹ A large portion of the savings banks excess funding - reflecting the difference between deposits and loans - of around ≤ 171 billion at the end of June 2021 (2020: ≤ 169 billion, 2019: ≤ 131 billion), is shared within member institutions of S-Finanzgruppe.¹²

The moderate increase in the savings banks' market fund ratio to around 14% at the end of June 2021, compared with 12.9% in 2019, largely reflects their participation in the ECB's TLTRO III program. We estimate these funding component accounted for around 4% of their assets.

Exhibit 11

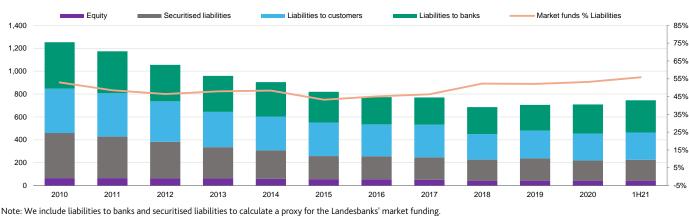


Rising deposits at savings banks helped to reduce their dependence on market funding Data in € billion

Note: We include liabilities to banks and securitised liabilities to calculate a proxy for the savings banks' market funding dependence. Source: Deutsche Bundesbank

The savings banks' sizeable and very granular deposits support the Landesbanks' funding needs which exhibit a high dependence on market funds. At the end of June 2021, Landesbanks' loan-to-deposit ratio was 147%, reflecting that loans of \leq 352 billion are higher than liabilities to customers of \leq 238 billion (2019: 147%, 2018: 148%).¹³ Despite the Landesbanks' significant deleveraging efforts - between 2008 and 2017 their aggregate assets declined from \leq 1.7 trillion to \leq 807 billion - their relative market funding dependence remained broadly stable, as expressed by a loan-to-deposit ratio, which ranged between 135% to 156% over the period.

We estimate that the favorable funding from TLTRO accounted for around 10% of German Landesbanks assets at the end of 2020 and largely explains the moderate increase of their market fund ratio to around 56% at the end of June 2021 compared with 52% in 2019.





Sizeable liquidity supported by high-quality financial securities

S-Finanzgruppe's assigned Liquid Resources score of baa1 is one notch above the group's baa2 initial score. Our assessment considers the high quality of liquid assets; additional, ECB eligible securities held in savings banks' held-to-maturity portfolios, and is balanced by asset encumbrance, which arises from issued covered bonds, repurchase (repo) activities, and intra-group exposures.

S-Finanzgruppe's liquidity strongly supports our assessment of the group's favorable credit profile. At end-2020, aggregate liquid assets within the group were €778 billion and included €193 billion in cash, €274 billion claims on banks and €311 billion financial securities (2019: €711 billion, 2018: €701 billion).¹⁴

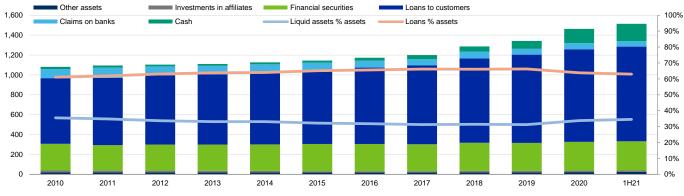
Source: Deutsche Bundesbank

At the end of June 2021, liquid assets at savings banks accounted for 34.5% of their balance sheet, a moderate increase from 33.7% in 2020 and around 31% in 2019, largely due to higher cash (around 12% of assets as of 1H21; 2019: 6%), while claims on banks (4%) and financial securities (20%) remained broadly unchanged.¹⁵ Rising loans over the last decade in combination with declining interest rates triggered a moderate, relative reduction of savings banks' liquidity until 2019 and somewhat benefited from the ECB's extraordinary liquidity provided via the long-term refinancing programs.

The savings banks' Liquidity Coverage Ratio (LCR) was around 204% at the end of 2020, compared with 188% in 2019 and 200% in 2018.¹⁶

Exhibit 13

In 2020, the savings banks' liquid assets has somewhat increased reflecting higher cash positions Data in € billion



Note: We include cash, claims on banks, and financial securities for calculating the savings banks' liquid assets. Source: Deutsche Bundesbank

At the end of June 2021, liquid assets at German Landesbanks accounted for around 45% of assets, compared with 42% in 2020 and 2019. The ratio remained broadly stable between 2017-20 and improved during the first six month of 2021, because of the banks' incremental TLTRO participations. This is reflected in higher cash, which represented around 12% of assets as of 1H21, compared with around 6% in 2020 and 4.6% in 2019. For our calculation of liquid assets for the group of Landesbank, we also include claims on banks (22%), as well as financial securities (11%).¹⁷ Reported Liquidity Coverage Ratios (LCR) for Landesbanks ranged between 124% and 225% at the end of 2019 (2018: 115%-223%).

Exhibit 14

Compared with savings banks, Landesbanks operate with relatively larger claims on banks (light blue) and lower financial securities (light green) Data in € billion



Note: We include cash, claims on banks, and financial securities for calculating the Landesbanks' liquid assets. Source: Deutsche Bundesbank We consider the savings banks' financial securities of very high quality, reflecting the large share of domestic issuers, including German public sector entities. This view is supported by the near absence of exposure to equities and somewhat balanced by the relatively high portion of investment funds, which we believe mostly relates to fixed income securities.

Exhibit 15

Around 80% of savings banks' financial securities are to domestic issuers Data in percent, as of end-2020

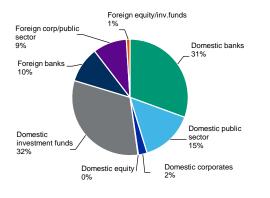
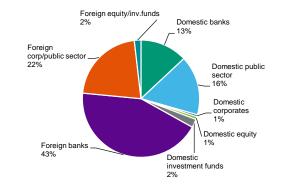


Exhibit 16

Around two thirds of Landesbanks' financial securities are exposed to foreign issuers* Data in percent, as of end-2020



Note: *This group includes BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB. Source: Deutsche Bundesbank

Macro Profile of "Strong+"

Source: Deutsche Bundesbank

S-Finanzgruppe's BCA is supported by its Strong+ macro profile, which is derived from the group's weighted average credit exposures, reflecting around 80% exposure to Germany, around 15% to the European Union, and around 5% worldwide. S-Finanzgruppe's Strong+ macro profile matches the assigned <u>German macro profile</u>, which is largely determined by the country's very high economic, institutional and government financial strength and very low susceptibility to event risk.

Environmental, social and governance (ESG) considerations

Environmental considerations

In line with our general view on the banking sector, S-Finanzgruppe and its member banks have an overall low exposure to Environmental risks (see our <u>environmental risk heat map¹⁸</u> for further information).

Social considerations

For social risks, we also place S-Finanzgruppe and its member banks in line with our general view on the banking sector, which indicates a moderate exposure (see our <u>social risk heat map¹⁹</u> for further information). This includes considerations in relation to the rapid and widening spread of the coronavirus outbreak, given the substantial implications for public health and safety and deteriorating global economic outlook, creating a severe and extensive credit shock across many sectors, regions and markets.

Some savings banks in Germany have started to cancel certain types of deposit contracts (*Prämiensparverträge*) which offered relatively high interest rates to depositors. We believe that the cancelation may have negative repercussions on certain clients relationships but consider the overall impact on the savings banks' brand name and banking franchises to be limited. In October 2020, Germany's Federal Court of Justice declared void the calculation of interest payments under these contracts and referred the cased back to a regional court.

Corporate governance considerations

Governance²⁰ is highly relevant for S-Finanzgruppe and its member banks, as it is to all banks. While we do not see meaningful governance risks and do not apply any corporate behavior adjustments to Germany's largest banking sector or its member institutions, we consider the group's overall structure to be somewhat more complex and diverse. This view reflects different ownership structures, including municipalities and federal states, and individual risk management frameworks as well as corporate governance set-ups. The unusual diverse group of stakeholders slows down the decision-making process within S-Finanzgruppe. However, we acknowledge the

centralized risk management oversight, housed under the Berlin-based Deutscher Sparkassen- und Giroverband e.V., which is partly a requirement under S-Finanzgruppe's Institutional Protections Schemes.

Support and structural considerations

Notching for Corporate Family Rating (CFR)

S-Finanzgruppe represents a conglomerate of diverse financial institutions in Germany. As such, it is not considered a banking group in the context of the European Capital Requirement Regulation. S-Finanzgruppe is, therefore, not a regulated group ("*Konzern*"), but all of its affiliated institutions are subject to applicable regulation for banks or other financial institutions. As a result, the EU's Bank Recovery and Resolution Directive, which we consider to be an operational resolution regime, does not apply to S-Finanzgruppe but only to its member banking institutions individually. Thus, our CFR on S-Finanzgruppe represents the risk characteristics of a notional single class of debt assumed to fund its aggregate balance sheet.

Our Advanced Loss Given Failure analysis suggests that this notional instrument would face very low losses in resolution. This results in two notches of uplift to the CFR compared with S-Finanzgruppe's BCA of a2, and hence, a Preliminary Rating Assessment of aa3.

Government support considerations

We expect a moderate probability of government support, resulting in a one-notch rating uplift for S-Finanzgruppe. Our government support assumption reflects the size and high relevance of S-Finanzgruppe to Germany's financial stability.

Methodology and Scorecard

Methodology

The principal methodology we use in rating S-Finanzgruppe is 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 17

Sparkassen-Finanzgruppe

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	-	-	-	al	Quality of assets	Sector concentration
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	16.7%	aa2	\leftrightarrow	aa2	Risk-weighted capitalisation	Expected trend
Profitability						
Net Income / Tangible Assets	0.2%	b1	\leftrightarrow	ba3	Return on assets	Expected trend
Combined Solvency Score		a2		a2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	26.4%	baa2	\leftrightarrow	a2	Market funding quality	Deposit quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	19.6%	baa2	\leftrightarrow	baa1	Quality of liquid assets	Additional liquidity resources
Combined Liquidity Score		baa2		a3		• •
Financial Profile				a2		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments	0					
Sovereign or Affiliate constraint	Ааа					
BCA Scorecard-indicated Outcome - Range				a1 - a3		
Assigned BCA	a2					
Affiliate Support notching				0		
Adjusted BCA				a2		

Balance Sheet is not applicable.

[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 18

Category	Moody's Rating
SPARKASSEN-FINANZGRUPPE	
Outlook	Stable
Baseline Credit Assessment	a2
Adjusted Baseline Credit Assessment	a2
Corporate Family Rating -Dom Curr	Aa2
Source: Moody's Investors Service	

Source: Moody's Investors Service

Endnotes

- 1 As of 15 September 2021.
- 2 The ratings shown are the bank's deposit rating and outlook/senior unsecured rating and outlook, and its Baseline Credit Assessment.
- 3 Source: DSGV.
- 4 This reflects average ratio for BayernLB, DekaBank, Helaba, LBBW, NORD/LB, and SaarLB.
- 5 This scheme includes rules for mutual support within groups of banks in order to ensure the liquidity and solvency of their member institutions.
- <u>6</u> Source: Deutsche Bundesbank.
- 7 Source: DSGV.
- 8 In 2010, Deutsche Bundesbank's group of Landesbanks included 10 banks and 6 banks in 2019.
- 9 Source: Deutsche Bundesbank.
- 10 Source: Deutsche Bundesbank.
- 11 Source: Deutsche Bundesbank.
- 12 Source: Deutsche Bundesbank.
- 13 Source: Deutsche Bundesbank.
- 14 Source: DSGV.
- 15 Source: Deutsche Bundesbank.
- 16 Source: DSGV.
- 17 Source: Deutsche Bundesbank.
- 18 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, such as the impact 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.
- 19 Social risk considerations represent a broad spectrum, including customer relations, human capital, demographic and social 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 articularly 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 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 demand for financial services or socially driven policy agendas translating into regulations that affect banks' revenue bases.
- 20Corporate 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 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 company'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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Contacts

 Gerson Morgenstern
 +49.69.70730.796

 Associate Analyst
 gerson.morgenstern@moodys.com

