Creditreform Bank Rating
Landesbank Baden-Wuerttemberg (Group)

Creditreform Rating

Rating Object	Rating Information
Landesbank Baden-Wuerttemberg (Group)	Long Term Issuer Rating / Outlook: **A / stable** — Short Term: **L2**
Creditreform ID: 7330529315	Stand Alone Rating: A
	Type: Update / Unsolicited
Rating Date: **17 October 2023** Monitoring until: withdrawal of the rating Rating Methodology: CRA “Bank Ratings v.3.2” CRA “Rating of Bank Capital and Unsecured Debt Instruments v.2.1” CRA “Government-Related Banks v.2.1” CRA “Environmental, Social and Governance Score for Banks v.1.0” CRA “Rating Criteria and Definitions v.1.3” CRA “Institutional Protection Scheme Banks v1.0” Rating History: www.creditreform-rating.de	Rating of Bank Capital and Unsecured Debt Instruments: Preferred Senior Unsecured (PSU): A Non-Preferred Senior Unsecured (NPS): A- Tier 2 (T2): BBB- Additional Tier 1 (AT1): BB+

Rating Action

Creditreform Rating upgrades Landesbank Baden-Wuerttemberg’s (Group) Long-Term Issuer Rating to A (Outlook: stable)

Creditreform Rating (CRA) upgrades Landesbank Baden-Wuerttemberg’s (Group) Long-Term Issuer Rating to A. The rating outlook is stable.

CRA upgrades Landesbank Baden-Wuerttemberg’s Preferred Senior Unsecured Debt to A, Non-Preferred Senior Unsecured Debt to A-, Tier 2 Capital to BBB- and AT1 Capital to BB+.

Please find a complete list of rating actions regarding the bank and its affected subsidiaries at the end of this rating update.

Analysts
Tobias Stroetges
t.stroetges@creditreform-rating.de
Lead-Analyst

Johannes Kühner
j.kuehner@creditreform-rating.de
Senior Analyst

Christian Konieczny
c.konieczny@creditreform-rating.de
Person Approving Credit Ratings
Neuss, Germany

Key Rating Drivers

- Very high profitability for a Landesbank
- Continued good asset quality, with ongoing reduction of Stage 2 exposure
- Further decrease in capitalization
- Stability due to institution-specific protection system (IPS)

Executive Summary

Quantitative:	Good
Earnings	Satisfactory
Assets	Very Good
Capital	Satisfactory
Liquidity	Good
Qualitative:	Good

Creditreform Rating (CRA) upgrades Landesbank Baden-Wuerttemberg's (Group) Long-Term Issuer Rating to A. The rating outlook is stable. The rating was upgraded due to the positive financial year of LBBW and the Sparkassen-Finanzgruppe in 2022. Furthermore, the previous growth in profitability and a sustained high net interest margin in 2023 is responsible for the rating upgrade. We are also positive about the fact that all four operating segments achieved a positive result. As with the other Landesbanken, LBBW also benefits from the institution-specific protection system of the Sparkassen Finanzgruppe.

In the Institutional Support Assessment, Creditreform Rating examines the extent to which an existing cross-guarantee system or IPS can have an influence on LBBW's rating. As a result, Creditreform Rating comes to the conclusion that in the case of LBBW's Long-Term Issuer Rating, there is a strong connection between Sparkassen Finanzgruppe and LBBW due to Sparkassenunterstützungsfonds of the regional Sparkassen and Giro associations, the Guarantee Fund of the Landesbausparkassen and the Guarantee Reserve of the Landesbanken and Girozentralen. This enables additional notching. In the opinion of Creditreform Rating, a stand-alone rating of LBBW is thus not appropriate due to its affiliation with Sparkassen Finanzgruppe. The rating is prepared on the basis of consolidated statements, where possible.

Company Overview

Landesbank Baden-Württemberg (LBBW) was formed on 01 January 1999 through the merger of Landesgirokasse, Südwestdeutsche Landesbank Girozentrale, and Landeskreditbank Baden-Württemberg Marktteil. LBBW's history dates back to 1818, when one of Germany's first Sparkassenwas founded under the name "Württembergische Spar-Casse". In terms of total assets, LBBW is the largest Landesbank in Germany (as of September 23). In addition to its headquarters in Stuttgart, LBBW has further headquarters in Karlsruhe, Mainz and Mannheim.

Together with its retailbank BW-Bank, LBBW operates nationwide as a universal bank. Sachsen Bank was legally dissolved as a dependent unit of LBBW on 31 March 2018. In 2022 LBBW purchased 100% of Berlin Hyp AG (Berlin Hyp), a German bank with focus on the real estate market.

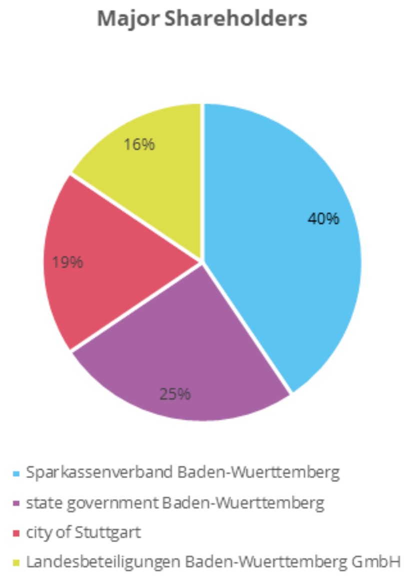
The main business areas of the LBBW Group are: *Corporate Customers* (in particular SMEs), *Real Estate/Project Finance*, *Retail Customers/Savings Banks* (mainly in Baden-Wuerttemberg, Saxony and Rhineland-Palatinate), *Capital Markets*.

As a cost-cutting measure, it was announced at the Group subsidiary BW Bank that almost half of the existing branches would be closed and 100 employees cut. A total of 700 jobs are to be cut across the Group by 2024, with the aim of reducing costs by almost EUR 100mn compared with 2019. In addition, the sustainable business volume is to reach EUR 250bn by 2025, of which EUR 65bn will be used for sustainable financing.

With the acquisition of Berlin Hyp, LBBW is strengthening the commercial real estate financing segment. The bank has an exposure of around EUR 30bn and has excellent financials from which LBBW should benefit. The bank has been part of the Group since 01 July 2022. At the same time, LBBW has taken over significant business shares in the interest rate, currency and commodity management segment from other Landesbanks since the end of 2020 as part of the efficient bundling within the Sparkassen-Finanzgruppe.

As a public-law institution with legal capacity, its ownership is as follows:

Chart 1: Major shareholders of LBBW | Source: Website of LBBW



LBBW is a member of the Sparkassen Finanzgruppe. The Sparkassen Finanzgruppe (hereinafter referred to as SFG) has an institution-specific protection system (IPS). This has been recognized as a deposit guarantee system under the German Deposit Guarantee Act (Einlagensicherungsgesetz - EinSiG) since 03 July 2015. Under the statutory deposit protection scheme, customers are entitled to reimbursement of their deposits of up to EUR 100k against the protection scheme.

The Joint Liability Scheme of the SFG is divided into three elements, the Sparkassenunterstützungsfonds of the regional Sparkassen and Giro associations, the Guarantee Fund of the Landesbausparkassen and the Guarantee Reserve of the Landesbanken and Girozentralen. Together, these three guarantee funds ensure the continued existence of each individual Sparkasse and Landesbank.

The primary objective of the IPS is to avoid a support case and to protect the institutions themselves, i.e. to ensure liquidity and solvency. The protection of the institutions can be ensured, for example, by the following measures: Injection of equity capital, assumption of guarantees and secureties, and compliance with third-party claims. Mergers with other institutions may also occur. The regional Sparkassen associations have a total of 11 Sparkassen guarantee funds. The individual guarantee funds are interlinked. Between them, there is a supra-regional equalization which takes place in the event that the fund resources available in a region are not sufficient for a so-called support case of an institution. In this case, the resources of all funds are available if required. If necessary, all the guarantee funds will stand together as part of the system-wide equalization process: all the Sparkassen guarantee funds, the guarantee reserve of the Landesbanken and the guarantee fund of the Landesbausparkassen. This applies in the event that the resources of one of the three protection schemes concerned are insufficient. This equalization means that all the funds of all the protection schemes are available for measures in the event of a crisis.

The members of the protection scheme pay annual contributions to the Sparkassendeposit guarantee scheme. These are pooled in a special fund that is used to rescue the affected member institution in the event of a crisis.

Business Development

Profitability

Creditreform Rating AG follows a structural approach in the presentation of the income statement and balance sheet as well as in the calculation of key ratios. The presentation may therefore differ from that of the bank. Creditreform Rating pursues the goal of making financial statements of different banks as well as within the scope of consolidation as comparable as possible. Certain key ratios are also taken or calculated from the bank's pillar III report for reasons of comparability. Balance sheet and income statement figures are taken from the consolidated financial statements of the respective years. One-off or exceptional items are, where possible, relegated to the line items non-recurring revenue and expense.

After strong post-covid results in 2021, LBBW posted strong earning figures in 2022 again. The majority of the increase in Net Profit was driven by the change in the interest environment and the acquisition of the Berlin Hyp.

Operating Income was up 22.6% compared to last year amounting to almost EUR 4.7bn. For LBBW, this is the second year in a row in which it has achieved double-digit growth in operating income. All major drivers of income recorded growth. Interest income increased significantly by EUR 274mn compared with the previous year. The higher interest income was mainly due to the higher financing needs of corporate clients and the increased net interest margin. Net Fee & Commission Income also increased significantly, driven by revenues from the securities and custody business. Net Trading & Fair Value Income made a somewhat smaller contribution to overall earnings, but also increased very strongly compared with the previous year.

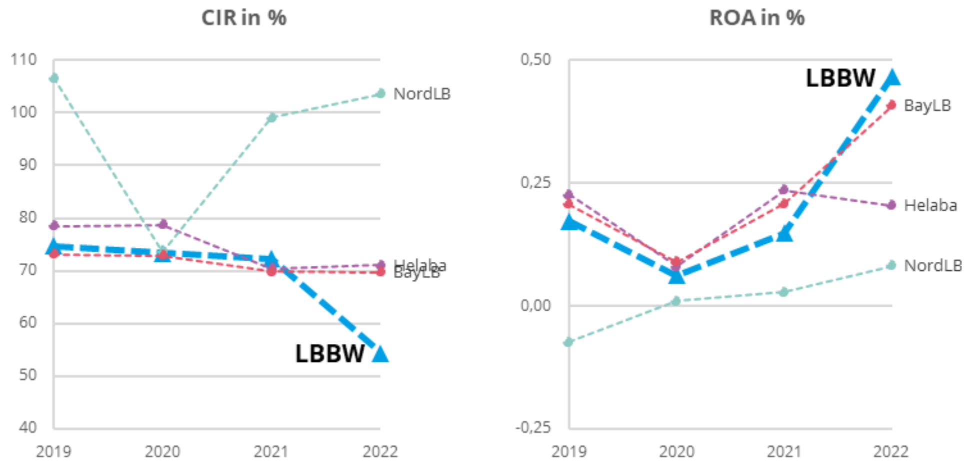
Key items on the expenses side, remained stable compared with the previous year, although Personnel Expenses rose slightly for the third year in succession. The increase is based on the first-time inclusion of Berlin Hyp as well as the inflation premium paid. In general, however, LBBW continues to demonstrate a high level of cost discipline. Overall, Operating Expenses have actually reduced by 7.7% compared with the previous year. These developments led to a significant decline in the cost income ratio (CIR). This fell from 72.25% to 54.4% in the course of the financial year 2022, which is a very good result and reflects the bank's very good profitability.

As in previous years, the majority of revenue was based on *corporate customer* business. Revenues actually increased compared with the previous year. Furthermore, the *Real Estate and Project Financing* segment made a significant contribution to earnings and significantly improved both its income and the resulting profit. This segment will continue to grow in the coming years through the acquisition of Berlin Hyp.

Risk costs, which amounted to EUR 259mn, remained almost the same as in the previous year, both in their amount and in their composition.

A comparison with the other major Landesbanks in Germany shows that LBBW has been able to improve efficiently within one year; LBBW can achieve the best value for both CIR and ROA (based on our calculation).

Chart 2: CIR and ROA of LBBW in comparison to the peer Group | Source: eValueRate / CRA



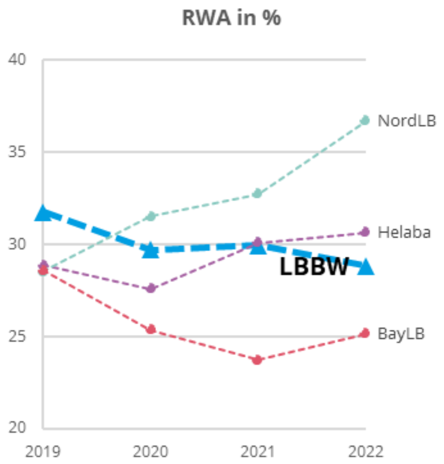
LBBW's half-year figures were again very strong this year. The net profit was EUR 978mn and was mainly driven by an increasing operating income with almost unchanged operating expenses. The increase in income in turn stemmed from an improved interest rate environment and thus increased net interest income. In particular, we consider the new business volume of EUR 5bn in the area of real estate in the first half of 2023 to be positive, as it continues to increase LBBW's profitability in the current difficult market environment.

Asset Situation and Asset Quality

The balance sheet total increased by 14.8% in 2022. A large part of the increase in the balance sheet is attributable to the acquisition of Berlin Hyp, which has been part of the Group since 01 July 2022. The largest percentage change on the assets side was in net loans to banks, which increased by 87.7% and amounted to around EUR 74.4bn at the end of fiscal year 2022. This change was based primarily on an increase in loans to the public sector (formerly Berlin Hyp). Cash and Balances with Central Banks decreased by 71.3% in relative terms to approximately EUR 10.6bn, while Net Loans to Customers increased to EUR 156bn driven by real estate financing.

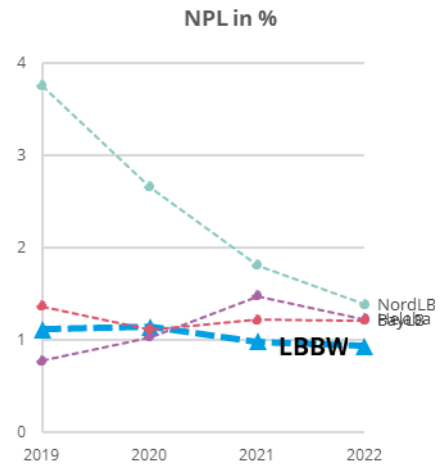
While Risk-Weighted Assets increased in absolute terms due to the acquisition of Berlin Hyp, the RWA ratio decreased by one percentage point from 29.9% in 2021 to 28.9% in 2022. In a peer group comparison with the other three Landesbanken, LBBW has the second-lowest RWA ratio, as seen above. Leader among this peer group is the BayLB with the lowest RWA ratio amounting 25.81%.

Chart 3: RWA of LBBW in comparison to the peer Group | Source: eValueRate / CRA / Pillar 3



The ratio of non-performing customer loans (gross exposure excluding financials, Stage 3) remained well below one percent. In a peer group comparison with the other Landesbanks, as seen in Chart 4 below, LBBW thus continues to assert its dominance in the area of NPLs, reflecting its good asset quality. At the same time, the potential problem loan ratios (gross exposure excluding financials, stage 2), which were also high by Landesbank standards, decreased significantly from just under 23% to around 13.4% in 2022. Asset quality continues to be classified as excellent.

Chart 4: NPL ratio of LBBW in comparison to the peer Group | Source: eValueRate / CRA



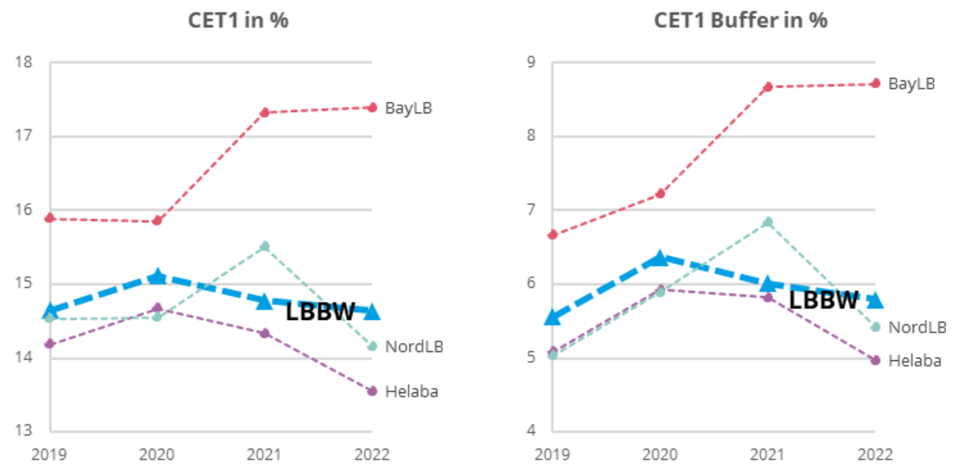
At the half-year 2023, LBBW's asset quality remains at a high level, in some cases the asset ratios have even improved marginally. Only the LTV of the loan portfolio has increased slightly from 53% (2022) to 55%. The RWA ratio, on the other hand, even improved significantly.

Refinancing, Capital Quality and Liquidity

LBBW refinances its balance sheet assets primarily with bank and customer deposits, as well as with securitized liabilities. Customer deposits increased by 20%, mainly as a result of the acquisition of Berlin Hyp and the changed interest rate environment, which made deposits more attractive. Total deposits from banks decreased by 4.5%. This decrease is attributable to TLTRO III repayments, which were partly offset by an increase in overnight and term deposits. Securitized liabilities increased significantly due to the acquisition of Berlin Hyp and amounted to approximately EUR 68.7bn. Total equity increased by 8.8% to EUR 15.4bn. This increase was mainly driven by the retention of last year's net income less distributions of EUR 230mn. Regulatory capital on the basis of the CET1 ratio remained virtually unchanged and actually decreased slightly by 0.14% amounting to 14.64%. Both T2 and AT1 decreased slightly in 2022.

In the peer group comparison with the other three Landesbanken below, LBBW ranks second in terms of CET1 ratio, while BayLB leads the group. While LBBW still ranked third behind Norddeutsche Landesbank (NordLB) last year, it was able to overtake the latter in the course of the 2022 financial year. In terms of the CET1 buffer, LBBW also ranks second behind BayLB with a decent buffer rate of 5.8%. We continue to consider LBBW's capitalisation to be sufficient. The expected high annual profits in the coming years should have a positive effect on the capital ratios.

Chart 5: CET1 and CET1 Buffer of LBBW in comparison to the peer Group | Source: eValueRate / CRA



As of the first half of 2023, both the CET1 ratio and the T1 ratio increased slightly. The net stable funding ratio (NSFR) was 114.2%, while the liquidity coverage ratio (LCR) was 137.2%. On the liabilities side of the balance sheet, deposits from customers and banks both increased. Equity increased by 1.41% compared with year-end 2022, corresponding to an amount of approximately EUR 15.7bn.

Due to Landesbank Baden-Wuerttemberg's bank capital and debt structure, the Group's Preferred Senior Unsecured Debt instruments are (not) notched down in comparison to the Long-Term Issuer Rating. Due to the seniority structure, LBBW's Non-Preferred Senior Unsecured debt is rated A-. LBBW's Tier 2 Capital is rated BBB- based on the LBBW's capital structure and seniority in accordance with our rating methodology. Additional Tier 1 Capital is rated BB+, reflecting the capital structure, seniority and a high bail-in risk in the event of resolution.

Environmental, Social and Governance (ESG) Score Card

LBBW has one significant and two moderate ESG rating drivers

Corporate Governance is identified as a highly significant rating driver. The relevance for the credit rating results from the impact of the Corporate Governance factor on all other ESG factors and the overall well-being of the bank. This sub-factor is rated positive due to LBBW's strong and sustainable earning figures, the widespread ESG policies and its ambitious ESG targets.

• Corporate Behaviour and Green Financing / Promoting are identified as moderate rating driver. Green Financing / Promoting is rated positive due to LBBW´s sustainable lending guidelines and a relatively high amount of green bond emissions. Coporate Behaviour is rated positive as well, as no significant legal risks or otherwise unacceptable behaviour could be identified

ESG Bank Score

3,9 / 5

Score Guidance	
> 4,25	Outstanding
>3,5 - 4,25	Above-average
>2,5 - 3,5	Average
>1,75 - 2,5	Substandard
< = 1,75	Poor

Factor	Sub-Factor	Consideration	Relevance Scale 2022	Eval.
Environmental	1.1 Green Financing / Promoting	The sub-factor "Green Financing/Promoting" has a moderate relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	3	(+)
	1.2 Exposure to Environ-mental Factors	The sub-factor "Exposure to Environmental Factors" has a low relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	2	(+)
	1.3 Resource Efficiency	The sub-factor "Resource Efficiency" has no significant relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	1	(+)
Social	2.1 Human Capital	The sub-factor "Human Capital" has low relevance for the credit rating, and is rated neutral in terms of the CRA ESG criteria.	2	( )
	2.2 Social Responsibility	The sub-factor "Social Responsibility" has no significant relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	1	(+)
Governance	3.1 Corporate Governance	The sub-factor "Corporate Governance" is highly relevant for the credit rating, and is rated positive in terms of the CRA ESG criteria.	4	(+)
	3.2 Corporate Behaviour	The sub-factor "Corporate Behaviour" has a moderate relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	3	(+)
	3.3 Corporate Transparency	The sub-factor "Corporate Transparency" has no significant relevance for the credit rating, and is rated positive in terms of the CRA ESG criteria.	1	(+)

ESG Relevance Scale	
5	Highest Relevance
4	High Relevance
3	Moderate Relevance
2	Low Relevance
1	No significant Relevance

ESG Evaluation Guidance	
(+ +)	Strong positive
(+)	Positive
( )	Neutral
(-)	Negative
(- -)	Strong negativ

The ESG Score is based on the Methodology "Environmental, Social and Governance Score of Banken (Version 1.0)" of Creditreform Rating AG, which is available on our homepage https://creditreform-rating.de/en/about-us/regulatory-requirements.html. In addition, we refer to CRA's position paper "Consodering the Impact of ESG Factors".

Outlook

The outlook of the Long-Term Issuer Rating of Landesbank Baden-Wuerttemberg is stable. In the medium term, CRA expects further growth for LBBW in the core segments, such as *commercial real estate financing* or *corporate loans*. As a result, we continue to expect a profitable business model, even with lower interest margins. Due to the low RWA ratio and the good LTV, we do not expect a weakening economy to jeopardise the good asset quality.

Scenario Analysis

Best-case scenario: A+

Worst-case scenario: A-

Please note:

The scenarios are based on information available at the time of the rating. Within the forecast horizon, circumstances may occur that could lead to a change of the rating out of the indicated range.

In a scenario analysis, the bank is able to reach a Long-Term Issuer Rating of A+ in the "Best-Case-Scenario" and a Long-Term Issuer Rating of A- in the "Worst-Case-Scenario". The ratings of Bank Capital and Senior Unsecured Debt would respond similarly based on our rating methodology. These ratings are especially sensitive to changes in total equity and to the bank capital and debt structure in general. Likewise, material change with regard to the IPS and/or Sparkassenfinanzgruppe may precipitate up or down notching.

We might upgrade Landesbank Baden-Wuerttemberg's Long-Term Issuer Rating and the ratings of Bank Capital and Senior Unsecured Debt due to continued high income in the Sparkassen sector and at LBBW itself, while NPLs should not increase significantly. Furthermore, the capital ratios should at least remain constant and future profits of the Landesbank should be largely retained.

By contrast, a downgrade of Landesbank Baden-Wuerttemberg's Long-Term Issuer Rating and the ratings of Bank Capital and Senior Unsecured Debt due to a further weakening of the economy in Germany and the resulting higher write-offs on the loan portfolio. A softening of the IPS among the Landesbanken could also have a negative impact on the rating.

Appendix

Bank ratings

The bank ratings are dependent on a host of quantitative and qualitative factors. An improvement in either sub-category may result in a higher rating score.

Long-Term Issuer / Outlook / Short-Term **A / L2 / stable**

Bank Capital and Debt Instruments Ratings

The ratings for bank capital and debt instruments are inter alia dependent on subordination and relative size of the instrument class, based on the long-term issuer rating of the bank.

Preferred Senior Unsecured (PSU): **A**
Non-Preferred Senior Unsecured (NPS): **A-**
Tier 2 (T2): **BBB-**
Additional Tier 1 (AT1): **BB+**

Rating History

Please consult our website www.creditreform-rating.de for additional information regarding the dates of publication.

Figure 1: Rating History

Bank Issuer Rating	Rating Date	Result
Initialrating	23.02.2017	A- / stable / L2
Rating Update	27.06.2018	A- / stable / L2
Rating Update	17.09.2019	A- / stable / L2
Monitoring	24.03.2020	A- / NEW / L2
Rating Update	02.10.2020	A- / stable / L2
Rating Update	24.09.2021	A- / stable / L2
Rating Update	23.11.2022	A- / stable / L2
Rating Update	17.10.2023	A / stable / L2
Bank Capital and Debt Instruments	**Rating Date**	**Result**
Senior Unsecured / T2 / AT1 (Initial)	27.06.2018	A- / BB+ / -
PSU / NPS / T2 / AT1	17.09.2019	A- / BBB+ / BB+ / -
PSU / NPS / T2 / AT1	24.03.2020	A- / BBB+ / BB+ / -
PSU / NPS / T2 / AT1	02.10.2020	A- / BBB+ / BB+ / BB
PSU / NPS / T2 / AT1	24.09.2021	A- / BBB+ / BB+ / BB
PSU / NPS / T2 / AT1	23.11.2022	A- / BBB+ / BB+ / BB
PSU / NPS / T2 / AT1	17.10.2023	A / A- / BBB- / BB+

Tables Group (if applicable)

Figure 2: Income statement[1] | Source: eValueRate / CRA

Income Statement (EUR m)	2022	%	2021	2020	2019
Income					
Net Interest Income	2.305	+13,5	2.031	1.771	1.675
Net Fee & Commission Income	628	+5,0	598	538	558
Net Insurance Income	-	-	-	-	-
Net Trading & Fair Value Income	359	+41,9	253	178	307
Equity Accounted Results	-44	< -100	23	5	6
Dividends from Equity Instruments	-	-	-	-	-
Other Income	1.427	+57,2	908	506	421
Operating Income	**4.675**	**+22,6**	**3.813**	**2.998**	**2.967**
Expense					
Depreciation and Amortisation	114	-8,8	125	134	141
Personnel Expense	1.108	+7,5	1.031	1.010	1.038
Tech & Communications Expense	410	+12,3	365	321	312
Marketing and Promotion Expense	30	+50,0	20	20	31
Other Provisions	-7	-46,2	-13	-18	38
Other Expense	888	-27,6	1.227	734	656
Operating Expense	**2.543**	**-7,7**	**2.755**	**2.201**	**2.216**
Operating Profit & Impairment					
Operating Profit	**2.132**	**> +100**	**1.058**	**797**	**751**
Cost of Risk / Impairment	259	+7,5	241	545	142
Net Income					
Non-Recurring Income	-	-	-	-	1
Non-Recurring Expense	-	-	-	-	-
Pre-tax Profit	**1.873**	**> +100**	**817**	**252**	**610**
Income Tax Expense	363	-9,0	399	80	167
Discontinued Operations	-	-	-	-	-
Net Profit	**1.510**	**> +100**	**418**	**172**	**443**
Attributable to minority interest (non-controlling interest)	-7	-	-	-	1
Attributable to owners of the parent	1.517	> +100	418	172	442

Figure 3: Key earnings figures| Source: eValueRate / CRA and Pillar III

Income Ratios (%)	2022	%	2021	2020	2019
Cost Income Ratio (CIR)	54,40	-17,86	72,25	73,42	74,69
Cost Income Ratio ex. Trading (CIRex)	58,92	-18,47	77,39	78,05	83,31
Return on Assets (ROA)	0,47	+0,32	0,15	0,06	0,17
Return on Equity (ROE)	9,78	+6,83	2,94	1,23	3,20
Return on Assets before Taxes (ROAbT)	0,58	+0,29	0,29	0,09	0,24
Return on Equity before Taxes (ROEbT)	12,13	+6,38	5,75	1,80	4,41
Return on Risk-Weighted Assets (RORWA)	1,61	+1,12	0,50	0,21	0,55
Return on Risk-Weighted Assets before Taxes (RORWAbT)	2,00	+1,03	0,97	0,31	0,76
Net Financial Margin (NFM)	0,84	+0,01	0,83	0,72	0,79
Pre-Impairment Operating Profit / Assets	0,66	+0,28	0,37	0,29	0,29

Change in %- Points

[1] Data by our data provider eValueRate, which is standardized for analytical reasons. Thus, the used data and the resulting figures do not have necessary to match the presentation of the bank, which refers to this and all subsequent tables and figures.

Figure 4: Development of assets| Source: eValueRate / CRA

Assets (EUR m)	2022	%	2021	2020	2019
Cash and Balances with Central Banks	10.569	-71,3	36.871	13.650	18.331
Net Loans to Banks	74.397	+87,7	39.640	58.267	55.801
Net Loans to Customers	155.929	+23,0	126.741	119.305	120.177
Total Securities	42.214	+10,1	38.344	38.158	34.445
Total Derivative Assets	19.562	+2,6	19.073	25.369	22.047
Other Financial Assets	14.143	-10,9	15.870	15.562	-
Financial Assets	**316.814**	**+14,6**	**276.539**	**270.311**	**250.801**
Equity Accounted Investments	226	-17,5	274	261	265
Other Investments	791	-1,7	805	796	655
Insurance Assets	-	-	-	-	-
Non-current Assets & Discontinued Ops	1	+0,0	1	2	65
Tangible and Intangible Assets	1.022	+15,0	889	968	1.012
Tax Assets	1.038	-8,4	1.133	1.225	1.252
Total Other Assets	4.282	+58,4	2.703	2.881	2.617
Total Assets	**324.174**	**+14,8**	**282.344**	**276.444**	**256.667**

Figure 5: Development of asset quality| Source: eValueRate / CRA and Pillar III

Asset Ratios (%)	2022	%	2021	2020	2019
Net Loans to Customers / Assets	48,10	+3,21	44,89	43,16	46,82
Risk-weighted Assets[1] / Assets	28,89	-1,01	29,90	29,70	0,00
NPL[2]/ Loans to Customers[3]	0,93	-0,05	0,99	1,14	1,12
NPL[2]/ Risk-weighted Assets[1]	1,40	+0,12	1,28	1,35	1,39
Potential Problem Loans[4]/ Loans to Customers[3]	13,39	-10,22	23,61	39,24	12,68
Reserves[5]/ NPL[2]	75,34	-1,11	76,45	21,34	21,86
Cost of Risk / Loans to Customers[3]	0,18	-0,04	0,22	0,56	0,14
Cost of Risk / Risk-weighted Assets[1]	0,28	-0,01	0,29	0,66	0,18
Cost of Risk / Total Assets	0,08	-0,01	0,09	0,20	0,06

Change in %- Points
1 RWA: Pillar 3, EU CR1
2 NPL: Gross; Non- Performing Loans of the categories Households, Non- Financial Corporations, Other Financial Corporations as per Pillar 3, EU CR1
3 Loans to Customers: Gross; Households, Non- Financial Corporations, Other Financial Corporations as per Pillar 3, EU CR1
4 Potential Problem Loans: Stage 2; Households, Non- Financial Corporations, Other Financial Corporations as per Pillar 3, EU CR1
5 Reserves: Impairment & Provisions and Collateral & Guarantees; Households, Non- Financial Corporations, Other Financial Corporations as per Pillar 3, EU CR1

Figure 6: Development of refinancing and capital adequacy| Source: eValueRate / CRA

Liabilities (EUR m)	2022	%	2021	2020	2019
Total Deposits from Banks	84.002	-4,5	88.004	78.223	66.633
Total Deposits from Customers	114.614	+20,0	95.546	94.334	90.319
Total Debt	82.893	+37,0	60.486	59.832	57.346
Derivative Liabilities	18.769	+15,5	16.252	22.590	20.058
Securities Sold, not yet Purchased	-	-	-	-	-
Other Financial Liabilities	3.620	+4,0	3.481	2.663	1.736
Total Financial Liabilities	**303.898**	**+15,2**	**263.769**	**257.642**	**236.092**
Insurance Liabilities	-	-	-	-	-
Non-current Liabilities & Discontinued Ops	-	-	-	0	4
Tax Liabilities	212	-42,7	370	73	88
Provisions	1.824	-12,3	2.081	2.523	4.531
Total Other Liabilities	2.799	+45,3	1.927	2.219	2.113
Total Liabilities	**308.733**	**+15,1**	**268.147**	**262.457**	**242.828**
Total Equity	**15.441**	**+8,8**	**14.197**	**13.987**	**13.839**
Total Liabilities and Equity	**324.174**	**+14,8**	**282.344**	**276.444**	**256.667**

Figure 7: Development of capital and liquidity ratios | Source: eValueRate / CRA and Pillar III

Capital Ratios and Liquidity (%)	2022	%	2021	2020	2019
Total Equity / Total Assets	4,76	-0,27	5,03	5,06	5,39
Leverage Ratio[1]	4,70	-0,40	5,10	4,70	4,40
Common Equity Tier 1 Ratio (CET1)[2]	14,64	-0,14	14,78	15,12	14,65
Tier 1 Ratio (CET1 + AT1)[2]	15,43	-0,51	15,94	16,61	16,47
Total Capital Ratio (CET1 + AT1 + T2)[2]	20,22	-1,21	21,43	22,82	22,98
CET1 Minimum Capital Requirements[1]	8,84	+0,08	8,76	8,75	9,08
Net Stable Funding Ratio (NSFR)[1]	111,43	+2,89	108,54	n/a	n/a
Liquidity Coverage Ratio (LCR)[1]	129,20	-11,00	140,20	141,90	134,40

Change in %- Points

1 Pillar 3 EU KM1

2 Regulatory Capital Ratios: Pillar 3 EU KM1

Regulatory

Creditreform Rating AG was neither commissioned by the rating object nor by any other third party for the rating. The analysis took place on a voluntary basis by Creditreform Rating AG and is to be described in the regulatory sense as an unsolicited rating. The following table clarifies the level of participation of the rated entity (rating object):

Unsolicited Credit Rating	
With Rated Entity or Related Third Party Participation	No
With Access to Internal Documents	No
With Access to Management	No

The rating is based on publicly available information and internal evaluation methods for the rated bank. The quantitative analysis is based mainly on the latest annual accounts, interim reports, other investor relations information of the bank, and calculated key figures by eValueRate / CRA.

The information and documents processed met the requirements of the rating system of Creditreform Rating AG as published on the website www.creditreform-rating.de. The rating was carried out on the basis of the following methodologies and Rating Criteria and Definitions (v1.3):

- Bank ratings (v3.2)
- Rating of bank capital and unsecured debt instruments (v2.1)
- Government-Related Banks (v2.1)
- Institutional Protection Scheme Banks (v1.0)
- Environmental, Social and Governance Score for Banks (v1.0)

The complete presentation of the rating methodologies used by Creditreform Rating AG and the basic document Rating Criteria and Definitions are published on our homepage:

https://www.creditreform-rating.de/en/about-us/regulatory-requirements.html

On 17 October 2023, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to Landesbank Baden-Wuerttemberg, and the preliminary rating report was made available to the bank. There was no change in the rating.

The rating is valid until withdrawal and is subject to monitoring from the rating date (see cover page). The rating will be comprehensively reviewed at least once every year. Within this period, the rating can be updated.

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG (CRA) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

Rating Endorsement Status: The rating of Landesbank Baden-Wuerttemberg (Group) was not endorsed by Creditreform Rating AG from a third country as defined in Article 4 (3) of the CRA-Regulation.

Conflict of Interests

Creditreform Rating AG ensures that the provision of ancillary services does not present conflicts of interest with its credit rating activities and discloses in the final rating reports any ancillary services provided for the rated entity or any related third party.

The following ancillary services were provided for the rating entity or for third parties associated with the rated entity:

Credit Service ancillary services for a related third party.

For the complete list of provided rating and credit service ancillaries please refer to the Creditreform Rating AG's website: https://www.creditreform-rating.de/en/about-us/regulatory-requirements.html#non-core-business-activities

Rules on the Presentation of Credit Ratings and Rating Outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our policy "Rating Committee," all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRA has used following substantially material sources:

1. Aggregated data base by eValueRate

2. Annual Report and interim reports

3. Investors relations information and other publications

4. Website of the rated bank

5. Public and internal market analyses

6. Internet research

There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRA website. Furthermore CRA considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity Creditreform Rating AG regarded available historical data as sufficient.

Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The "Basic data" information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In case where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating and indicates how the different methodologies or these other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions, such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings as well as best-case scenario credit ratings are explained in mentioned methodologies and / or in the credit rating report.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating report or in the "Basic data" card as a "Rating action"; first release is indicated as "initial rating", other updates are indicated as an "update", "upgrade or downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available in the rating report or the „Basic data" information card.

In accordance to Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website: https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

An explanatory statement of the meaning of Creditreform's default rates are available in the credit rating methodologies disclosed on the website.

Disclaimer

Any rating performed by Creditreform Rating AG is subject to the Creditreform Rating AG Code of Conduct which has been published on the web pages of Creditreform Rating AG. In this Code of Conduct, Creditreform Rating AG commits itself – systematically and with due diligence – to establish its independent and objective opinion as to the sustainability, risks and opportunities concerning the enterprise or the issue under review.

Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. This rating is therefore no statement of fact, but an opinion. For this reason, Creditreform Rating AG cannot be held liable for the consequences of decisions made on the basis of any of their ratings. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at corporate or investment decisions. Ratings are not meant to be used as substitutes for one's own research, inquiries and assess-ments.

We have assumed that the documents and information made available to us by the client are complete and accurate and that the copies provided to us represent the full and unchanged contents of the original documents. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

This report is protected by copyright. Any commercial use is prohibited without prior written permission from Creditreform Rating AG. Only the full report may be published in order to prevent distortion of the report's overall assessment. Excerpts may only be used with the express

Contact information

Creditreform Rating AG
Europadamm 2-6
D-41460 Neuss

Phone +49 (0) 2131 / 109-626
Fax +49 (0) 2131 / 109-627

E-Mail info@creditreform-rating.de
www.creditreform-rating.de

CEO: Dr. Michael Munsch

Chairman of the Board: Michael Bruns
HR Neuss B 10522