Creditreform Bank Rating
Luminor Bank AS (Group)

Creditreform Rating

Rating Object		Rating Information		
Luminor Bank AS (Group)		Long Term Issuer Rating / Outlook:		Short Term:
		A / stable		**L2**
Creditreform ID:	400991898	Type: Update / Unsolicited		
Rating Date:	**07 December 2023**	Rating of Bank Capital and Unsecured Debt Instruments:		
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 “Environmental, Social and Governance Score for Banks v.1.0” CRA “Rating Criteria and Definitions v.1.3”	Preferred Senior Unsecured (PSU):	A	
		Non-Preferred Senior Unsecured (NPS):	-	
		Tier 2 (T2):	-	
Rating History:	www.creditreform-rating.de	Additional Tier 1 (AT1):	-	

Rating Action

Creditreform Rating upgrades Luminor Bank AS’s (Group) Long-Term Issuer Rating to A (Outlook: stable)

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

CRA upgrades Luminor Bank’s Preferred Senior Unsecured Debt to A.

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

Analysts
Felix Schürmann
f.schuermann@creditreform-rating.de
Lead-Analyst

Philipp J. Beckmann
p.beckmann@creditreform-rating.de
Senior Analyst

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

Key Rating Drivers

- New interest rate environment leads increased, long-term earnings potential
- Transformation of bank leads to efficiency gains and cost reductions
- Solid asset quality, marked by low NPL and relatively high RWA ratios; low costs of risk
- Excellent capitalization

Executive Summary

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

The rating of Luminor Bank AS is prepared on the basis of group consolidated accounts.

The long-term issuer rating was raised by one notch to A. The upgrade is based on the fundamentally changed earnings situation due to the new interest rate environment, coupled with sustainable cost reductions as part of completed projects and efficiency programs on the part of the bank. At the same time, the capital base remains at a very high level coupled with solid asset quality.

Company Overview

Luminor Bank AS (hereinafter: Luminor or Bank) is a large, independent bank operating primarily in the Baltic region with headquarters in Tallinn, Estonia. As the third largest universal bank in the region, over 2400 employees serve around 770,000 customers in the Baltic Region (as of 30 September 2023). Formed in 2017 by pooling DNB and Nordea operations through a merger of six smaller banks, the bank competes with two larger Swedish players and a smaller regional bank in all three main markets. In the Baltics, the market share in lending is 17%. As of 2019, Blackstone acquired a 60.1% stake in Luminor Holding (Ultimate Parent of Luminor Bank AS), DNB and Nordea held only a minority stake since that time. Since 2021, Blackstone has continuously increased its share of ownership of Luminor Holding AS at the expense of Nordea, which has sold its remaining interest to Blackstone in late 2022. Blackstone now owns 80.05% and DNB Bank 19.95% of Luminor Holding.

Luminor, since its inception, has undergone a significant transformation with the initial merger and setting up the headquarter in Estonia. With its current strategy, Luminor seeks, among others, to build the bank around its customers, being the preferred bank for many banking related services and to become more lean in its day-to-day operations.

Luminor operates several subsidiaries in each major market, including leasing subsidiaries and pension funds, among others. Customers segments are separated into Retail and Commercial Banking on a pan-Baltic basis, with branches in Lithuania and Latvia and the aforementioned headquarters in Estonia.

At the end of January 2022, an agreement was signed to acquire 99% of Maksekeskus, the leading e-commerce payment service in the Baltics. The acquisition is expected to strengthen Luminor's competitive position in the payments sector and correspondingly its fee and commission income. Maksekeskus will remain as a separate entity and the management in the form of the CEO of Maksekeskus will remain unchanged. Closing is expected in the coming months, subject to approval by the Competition, and Supervision and Resolution Authorities. As of 1 July 2022, Luminor has acquired control of Maskekeskus for EUR 53.4mn, incurring EUR 0.3mn in legal fees and due diligence costs and recognizing good well of EUR 48.4mn.

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.

Luminor significantly increased its net profit in the past 2022 financial year. This was mainly due to the strong increase in net interest income as a result of both strong new business and the new, higher interest rate environment. At the same time, operating expenses were lower due to the successful completion of transformation projects, meaning that despite the normalization of risk costs, the result at the end of the year was significantly higher.

Specifically, net interest income increased by EUR 61.6mn or just over a quarter. Meanwhile, although there was progress in the net fee and commission business and in net trading and fair value income, these only accounted for a very small proportion of the increase in operating income for the year in absolute terms. As a result, operating income increased by EUR 65.7mn or 19.2% compared to the previous year.

On the expense side, changes were mainly due to higher costs on the personnel front (EUR +9.6mn or 9.5%) and significantly lower IT and communication expenses (EUR -25.5mn or 26.3%). In a year-on-year comparison, there was an increase in headcount of around 4% and salary increases in the context of inflation. IT costs were significantly lower compared to the previous year due to the successful completion of several projects in 2021.

Risk costs normalized at a relatively low level in 2022, following a positive contribution to earnings in the previous year.

At the bottom line, the pre-tax result of EUR 142.4mn was significantly higher than in the previous year (EUR +60m or 72.8%), and net profit also rose sharply by more than two thirds year-on-year from EUR 74.7mn to EUR 124.7mn. The acquisition of Maksekeskus did not materially impact the 2022 result.

The current financial year promises to surpass the previous year. At EUR 399.1mn, net interest income in the third quarter was already a third higher than the full-year result for 2022. At EUR 178.3mn, net profit for the first nine months was already 43% higher than the previous year's total.

With the improvement in net profit, the related key figures also improved considerably. The cost-income ratio improved significantly in line with the much improved interest income, from over 80% to well below 60% in Q3-23. The return on equity improved to over 13% in Q3-23, after being below 5% in 2021.

Asset Situation and Asset Quality

Following the reduction in the liquidity surplus in 2021, total assets rose sharply again in 2022.

The robust growth was achieved through dynamic demand for credit as well as an increase on the debt securities side. Specifically, the loan book increased by EUR 928mn, around one third from individual customers and around two thirds from businesses. Although growth in the financial institutions and public sector segments was good in percentage terms, these customer groups continue to play only a minor role in absolute terms. Luminor more than doubled its investment in debt securities, purchasing a total of EUR 725.1mn worth of securities. Investments were mainly made in low-risk government bonds and covered bonds. In total, total assets increased by EUR 1.4bn (+10.8%) over last year.

Geographically, more than 95% of the loan book is positioned in the Baltic region. Exposure in loans and advances to households amounts to 55% and non-financials to 40%. A good third of this non-financial exposure is attributable to real estate, followed at some distance by wholesale & retail trade and manufacturing, each with less than one sixth of the non-financial exposure.

Asset quality improved once again in the reporting year, with the NPL ratio again falling sharply compared to the previous year. The NPL volume decreased, while gross loans also increased sharply. In Q3-23, the NPL ratio remained at the low level of 2022. Risk costs returned to a normal level in 2022, but are still considered to be low. This assessment has not changed as of Q3-23. Asset quality improved once again in the reporting year, with the NPL ratio again falling sharply compared to the previous year. The NPL volume decreased, while gross loans also increased sharply. In Q3-23, the NPL ratio remained at the low level of 2022. Risk costs returned to a normal level in 2022, but are still considered to be low. This assessment has not changed as of Q3-23. Only the bank's small size and geographical footprint as well as the relatively high RWA ratio detract from the otherwise very good assessment of asset quality.

Refinancing, Capital Quality and Liquidity

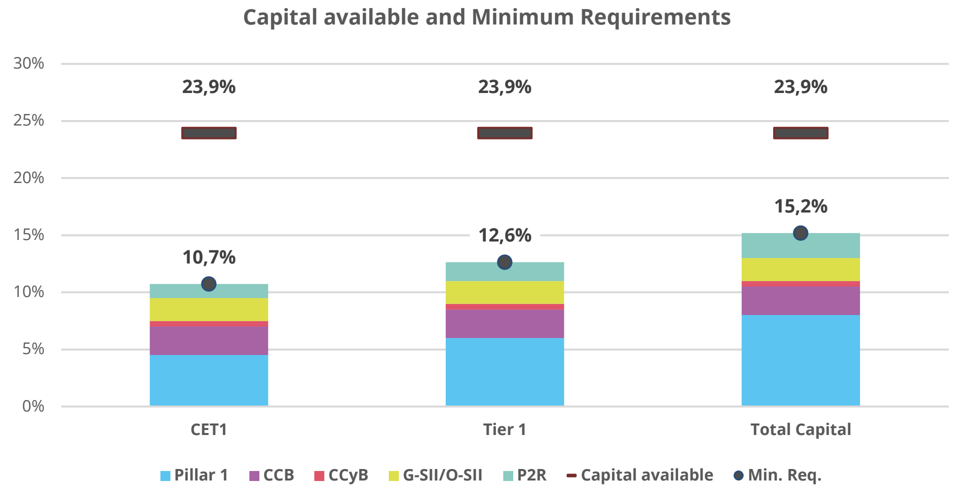
Growth on the assets side was refinanced in the 2022 reporting year through solid deposit growth and a strong increase in debt capitalization. With a volume of almost EUR 800mn, the Bank's issuing activity was significantly higher than in the previous year (just under EUR 300mn). Total debt was recognized at EUR 1.8bn in 2022 (2021: EUR 1.2bn).

The bank's strength lies in its very good capitalization. Although the equity ratio fell slightly from 11.6% to 10.7%, it was still well above the industry average. The CET1 ratio was also a high 18.4% in 2022 (2021: 20.5%), with the decline only due to the strong growth in RWA/robust growth in new business.

In Q3-23, the regulatory and balance sheet equity ratios improved again due to profit retention, as well as significantly lower RWA as a result of better data quality and improved REA measurement methodology.

The regulatory capital buffers as of Q2-23 are very high.

Chart 1: Available Capital and Minimum Requirements per Q2-23 | Source: Pillar III (EU KM1)



Due to Luminor's bank capital and debt structure, the bank's Preferred Senior Unsecured Debt instruments are not notched down in comparison to the Long-Term Issuer Rating and are rated A.

Environmental, Social and Governance (ESG) Score Card

Luminor Bank AS 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 Luminor's recent performance and steady growth path.

• Corporate Behaviour and Green Financing / Promoting are identified as moderate rating drivers. Green Financing / Promoting is rated negative due a relative lack of dedicated green financing. Corporate Behaviour is rated neutral.

ESG Bank Score
3,4 / 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 negative in terms of the CRA ESG criteria.	3	(-)
	1.2 Exposure to Environmental 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 neutral 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 positive 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 neutral 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 neutral 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 very 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 Luminor Bank AS is stable. While in the medium term Creditreform Rating sees continued earnings potential due to the new interest rate environment, current economical and geo-political risks persist.

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.

We might upgrade Luminor's Long-Term Issuer Rating and the ratings of Bank Capital and Senior Unsecured Debt if the bank manages to consolidate current earnings, while maintaining a low risk profile and high capitalization.

By contrast, a downgrade of Luminor's Long-Term Issuer Rating and the ratings of Bank Capital and Senior Unsecured Debt due to might materialize if profitability despite the new interest rate environment declines to previous, poor levels. Likewise, a material decline in asset and/or capital quality might facilitate a downgrade.

Appendix

Bank ratings Luminor Bank AS

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 Luminor Bank AS

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):	**-**
Tier 2 (T2):	**-**
Additional Tier 1 (AT1):	**-**

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	20.04.2022	A- / stable / L2
Rating Update	07.12.2023	A / stable / L2
Bank Capital and Debt Instruments	**Rating Date**	**Result**
PSU / NPS / T2 / AT1 (Initial)	20.04.2022	A- / - / - / -
PSU	07.12.2023	A

Tables Group (if applicable)

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

Income Statement (EUR m)	2022	%	2021	2020	2019
Income					
Net Interest Income	301	+25,8	239	227	254
Net Fee & Commission Income	80	+2,3	79	74	77
Net Insurance Income	-	-	-	-	-
Net Trading & Fair Value Income	24	+16,7	21	28	34
Equity Accounted Results	2	-11,1	2	1	1
Dividends from Equity Instruments	-	-	-	0	0
Other Income	1	-62,5	2	7	9
Operating Income	**408**	**+19,2**	**342**	**336**	**375**
Expense					
Depreciation and Amortisation	10	-17,4	12	12	13
Personnel Expense	111	+9,5	101	100	111
Tech & Communications Expense	71	-26,3	97	106	94
Marketing and Promotion Expense	8	+16,9	7	3	4
Other Provisions	-	-	-	-	-
Other Expense	50	-13,9	58	61	80
Operating Expense	**249**	**-9,1**	**274**	**282**	**302**
Operating Profit & Impairment					
Operating Profit	**159**	**> +100**	**68**	**54**	**73**
Cost of Risk / Impairment	16	< -100	-15	18	23
Net Income					
Non-Recurring Income	-	-	-	0	9
Non-Recurring Expense	-	-	-	1	-
Pre-tax Profit	**142**	**+72,8**	**82**	**36**	**59**
Income Tax Expense	18	> +100	8	3	5
Discontinued Operations	-	-	-	-	-
Net Profit	**125**	**+66,9**	**75**	**33**	**54**
Attributable to minority interest (non-controlling interest)	-	-	-	-	-
Attributable to owners of the parent	-	-	-	-	-

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

Income Ratios (%)	2022	%	2021	2020	2019
Cost Income Ratio (CIR)	61,12	-19,02	80,15	83,97	80,48
Cost Income Ratio ex. Trading (CIRex)	65,01	-20,35	85,36	91,52	88,48
Return on Assets (ROA)	0,85	+0,28	0,56	0,22	0,39
Return on Equity (ROE)	7,88	+3,05	4,82	1,99	3,31
Return on Assets before Taxes (ROAbT)	0,96	+0,35	0,62	0,24	0,43
Return on Equity before Taxes (ROEbT)	8,99	+3,67	5,32	2,15	3,63
Return on Risk-Weighted Assets (RORWA)	1,63	+0,56	1,07	0,47	0,68
Return on Risk-Weighted Assets before Taxes (RORWAbT)	1,86	+0,68	1,18	0,50	0,74
Net Financial Margin (NFM)	2,23	+0,26	1,97	1,60	1,80
Pre-Impairment Operating Profit / Assets	1,07	+0,56	0,51	0,36	0,53

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	2.178	-12,7	2.494	4.927	2.924
Net Loans to Banks	123	+91,6	64	104	142
Net Loans to Customers	10.875	+9,3	9.947	9.431	10.223
Total Securities	1.292	> +100	611	287	227
Total Derivative Assets	122	+61,1	76	43	59
Other Financial Assets	-	-	-	-	4
Financial Assets	**14.590**	**+10,6**	**13.192**	**14.792**	**13.578**
Equity Accounted Investments	6	-10,9	6	5	6
Other Investments	-	-	0	1	2
Insurance Assets	-	-	-	-	-
Non-current Assets & Discontinued Ops	2	-16,7	2	1	3
Tangible and Intangible Assets	93	+63,2	57	63	76
Tax Assets	13	+10,6	11	10	3
Total Other Assets	54	+12,3	48	52	70
Total Assets	**14.757**	**+10,8**	**13.317**	**14.924**	**13.739**

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

Asset Ratios (%)	2022	%	2021	2020	2019
Net Loans to Customers / Assets	73,69	-1,00	74,69	63,19	74,41
Risk-weighted Assets[1] / Assets	51,92	-0,55	52,48	47,48	0,00
NPL[2]/ Loans to Customers[3]	1,23	-0,65	1,88	3,24	3,81
NPL[2]/ Risk-weighted Assets[1]	1,74	-0,92	2,65	4,31	4,89
Potential Problem Loans[4]/ Loans to Customers[3]	15,11	+1,09	14,02	13,83	8,67
Reserves[5]/ NPL[2]	98,50	+0,67	97,82	97,74	96,29
Cost of Risk / Loans to Customers[3]	0,15	+0,30	-0,15	0,19	0,22
Cost of Risk / Risk-weighted Assets[1]	0,21	+0,42	-0,21	0,25	0,29
Cost of Risk / Total Assets	0,11	+0,22	-0,11	0,12	0,17

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	37	-56,3	84	47	957
Total Deposits from Customers	10.948	+6,2	10.305	11.822	10.259
Total Debt	1.814	+55,9	1.164	1.201	652
Derivative Liabilities	194	> +100	70	51	58
Securities Sold, not yet Purchased	-	-	-	-	-
Other Financial Liabilities	48	+63,8	29	15	45
Total Financial Liabilities	**13.040**	**+11,9**	**11.652**	**13.136**	**11.971**
Insurance Liabilities	-	-	-	-	-
Non-current Liabilities & Discontinued Ops	-	-	-	-	-
Tax Liabilities	10	> +100	1	0	4
Provisions	22	> +100	9	9	4
Total Other Liabilities	101	-4,7	106	114	127
Total Liabilities	**13.173**	**+11,9**	**11.768**	**13.259**	**12.106**
Total Equity	**1.583**	**+2,2**	**1.549**	**1.665**	**1.632**
Total Liabilities and Equity	**14.757**	**+10,8**	**13.317**	**14.924**	**13.739**

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	10,73	-0,90	11,63	11,16	11,88
Leverage Ratio[1]	9,10	-1,20	10,30	10,20	10,90
Common Equity Tier 1 Ratio (CET1)[2]	18,38	-2,10	20,48	22,38	19,66
Tier 1 Ratio (CET1 + AT1)[2]	18,38	-2,10	20,48	22,38	19,66
Total Capital Ratio (CET1 + AT1 + T2)[2]	18,38	-2,10	20,48	22,38	19,66
CET1 Minimum Capital Requirements[1]	10,70	+0,56	10,14	10,13	10,82
Net Stable Funding Ratio (NSFR)[1]	130,47	-10,34	140,81	159,19	123,32
Liquidity Coverage Ratio (LCR)[1]	136,60	-31,34	167,94	163,00	138,88

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)
- 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 07 December 2023, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to Luminor Bank AS, 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 Luminor Bank AS (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

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks.

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 ratings reports any ancillary services provided for the rated entity or any related third party. The following ancillary services were provided for the rated entity or for third parties associated with the rated entity:

- No ancillary services in the regulatory sense were carried out for this rating object.

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.

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Creditreform Rating AG

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