

## CREDIT OPINION

19 October 2022

Update

Send Your Feedback

### RATINGS

#### Skandiabanken AB

Domicile	Sweden
Long Term CRR	Aa3
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	A2
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

### Contacts

Louise Welin +46.8.5179.1280  
VP-Sr Credit Officer  
louise.welin@moodys.com

Emma Jonasson +46.8.5179.1283  
Associate Analyst  
emma.jonasson@moodys.com

Simon James Robin +44 207 772 5347  
Ainsworth  
Associate Managing Director  
simon.ainsworth@moodys.com

Sean Marion +44.20.7772.1056  
MD-Financial Institutions  
sean.marion@moodys.com

## Skandiabanken AB

### Update to credit analysis

#### Summary

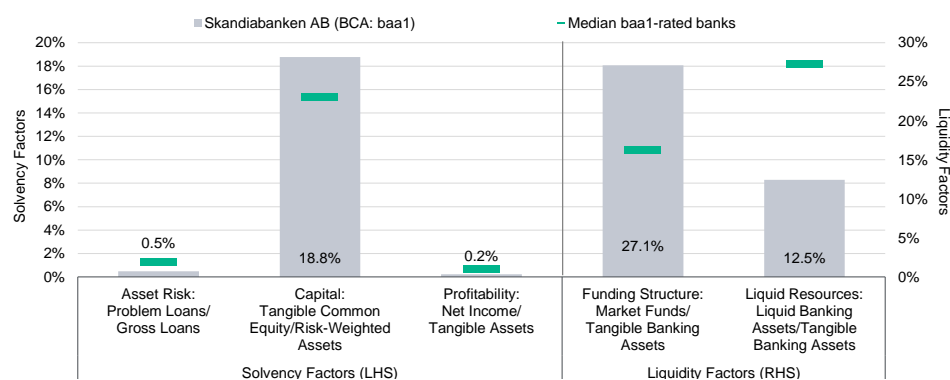
We assign [Skandiabanken AB](#) (Skandiabanken) A2/Prime-1 long-term and short-term deposit ratings with a stable outlook, a baa1 Baseline Credit Assessment (BCA) and an a3 Adjusted BCA. We also assign long-term and short-term Counterparty Risk (CR) Assessments of Aa3(cr)/Prime-1(cr).

Skandiabanken's baa1 BCA reflects the bank's very low asset risk as a Swedish mortgage lender, strong capitalisation and healthy funding structure focusing on retail deposits. These strengths are balanced against Skandiabanken's historically above market growth rate in mortgage lending, as well as the bank's low efficiency and weak profitability. The Adjusted BCA of a3 reflects our very high assumption of affiliate support from the bank's parent, [Livförsäkringsbolaget Skandia, ömsesidigt](#) (Skandia Liv, A2 stable).

Skandiabanken's A2 long-term deposit rating also includes a one notch uplift resulting from our Advanced Loss Given Failure (LGF) analysis, reflecting our view that the bank's junior depositors face a low unexpected Loss Given Failure.

Exhibit 1

#### Rating Scorecard — Key financial ratios



These are our [Banks Methodology](#) scorecard ratios. Asset risk and profitability ratios reflect the weaker of either the latest reported or three-year average ratios. The capital ratio is the latest reported figure. Funding structure and liquid resources ratios reflect the latest year-end figures.

Source: Moody's Investors Service

## Credit strengths

- » Very strong asset quality
- » Strong capitalisation
- » Very strong support from Skandia group

## Credit challenges

- » Historically high lending growth
- » Lower-than-peer efficiency and weak profitability, albeit gradually improving

## Outlook

The outlook on Skandiabanken's deposit ratings is stable, in line with the outlook of the parent, Skandia Liv. We expect the bank's financial performance will continue to remain resilient over the next 12-18 months, despite higher macroeconomic uncertainty.

## Factors that could lead to an upgrade

- » An upgrade to the rating of Skandia Liv could result in higher ratings on the bank.

## Factors that could lead to a downgrade

- » A downgrade to Skandia Liv's ratings leading to a reduced level of affiliate support uplift, or a change in our assessment of the probability of parental support would result in a lower Adjusted BCA.
- » Although we consider this less likely, a significant deterioration in the bank's fundamentals, including asset quality and capitalization, could lead to a downgrade of the BCA but not the Adjusted BCA.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Skandiabanken AB (Consolidated Financials) [1]

	06-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	12-18 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (SEK Million)	105,991.0	97,074.0	89,934.0	81,707.0	72,044.0	11.7 <sup>4</sup>
Total Assets (USD Million)	10,343.2	10,730.0	10,950.8	8,728.4	8,126.0	7.1 <sup>4</sup>
Tangible Common Equity (SEK Million)	5,074.0	4,691.0	4,403.0	4,150.0	3,622.0	10.1 <sup>4</sup>
Tangible Common Equity (USD Million)	495.1	518.5	536.1	443.3	408.5	5.6 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.5	0.5	0.2	0.1	0.1	0.3 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	18.8	18.9	19.6	19.7	19.4	19.3 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	8.4	8.3	3.3	1.4	1.5	4.6 <sup>5</sup>
Net Interest Margin (%)	0.8	0.9	1.0	1.0	1.1	0.9 <sup>5</sup>
PPI / Average RWA (%)	1.3	1.2	1.3	0.5	0.4	1.0 <sup>6</sup>
Net Income / Tangible Assets (%)	0.2	0.3	0.3	0.2	0.1	0.2 <sup>5</sup>
Cost / Income Ratio (%)	69.1	72.8	71.9	87.7	94.4	79.2 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	28.6	27.1	26.0	25.8	22.5	26.0 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	14.3	12.5	14.7	12.4	15.6	13.9 <sup>5</sup>
Gross Loans / Due to Customers (%)	191.1	187.9	174.8	175.3	147.8	175.4 <sup>5</sup>

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

## Profile

Skandiabanken AB (Skandiabanken) is a Stockholm-based bank that provides retail banking products and services, as well as mutual funds, and equity trading in Sweden. While the bank does not have any branches, it sells banking services through the branch network of the wider Skandia group. As of June 2022, Skandiabanken's consolidated asset base was SEK106.0 billion (€9.9 billion) and the bank had a market share of around 2% in the Swedish mortgage market.

## Recent developments

After five years as the CEO of Skandiabanken Johanna Cerwall has chosen to resign and Arvid Krönmark will take over as CEO at the beginning of 2023.

## Detailed credit considerations

### A limited standalone franchise with growing importance in the wider Skandia group

On 30 September 2020, Skandiabanken's ownership was transferred to the ultimate parent in the group, Skandia Liv, a leading Swedish life insurer, from Skandia Insurance Company Ltd (SICL), the unit linked policy provider within the group.

Skandiabanken focuses on mortgage lending and aims to grow its fees and commissions by increasing the volume of customer transactions, both savings and payments. The bank sells its products on the internet, by phone and through the branch network of the wider Skandia insurance group. We consider it a monoline business focused on mortgages, with earnings highly dependent on retail interest income, which represented around 77% of its operating income in 2021. This structural dependence results in a one-notch qualitative downward adjustment to the bank's BCA for Business Diversification, an adjustment shared with most Swedish mortgage lenders.

In 2018, the bank started targeting Skandia group's customers offering large rebates for occupational insurance clients with low loan-to-value (LTV) ratios. This strategy gathered significant interest and Skandiabanken's lending increased significantly in the past few years (with the exception when loan growth slowed to 5.4% in 2020). As of June 2022 Skandiabanken reached its target of SEK90 billion in mortgages, which provides better conditions for the bank to improve its efficiency without altering its risk profile.

In October 2015, Skandiabanken spun off its Norwegian business, which had accounted for 54% of its total lending as of 30 September 2015.

### Strong asset quality reflecting low risk mortgage lending

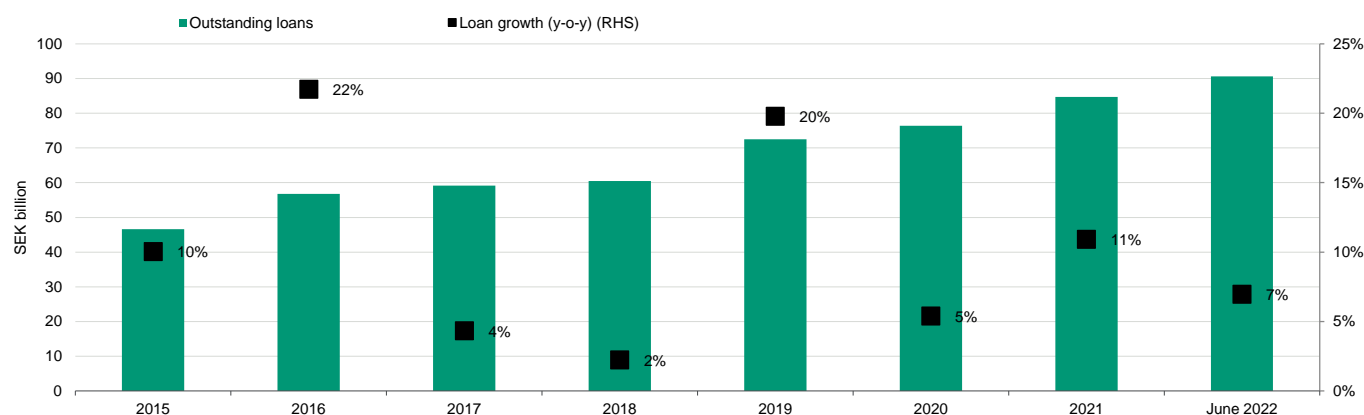
Steeply rising mortgage interest rates will raise debt service costs for borrowers going forward <sup>1</sup>. However, we expect the deterioration to be manageable and that Skandiabanken's asset quality will be broadly resilient.

Our aa3 Asset Risk score reflects Skandiabanken's very low problem loan ratio — in line with that of its Swedish mortgage peers — balanced against its significant lending growth over the last few years, resulting from the strategic plan to increase the bank's market share and size (see Exhibit 3 below).

Skandiabanken's mortgage loan book grew to SEK90.2 billion as of June 2022, from SEK84.2 billion by year-end 2021, a 7% increase during the first half of 2022 because of efforts to increase visibility, shorten processing times and answering calls more diligently. Skandiabanken aims to sustain its mortgage lending growth by offering its customers a transparent pricing model and rates that are among the lowest in the market. By increasing cross-selling to Skandia group's clients with low LTVs, the bank is able to grow while maintaining prudent asset quality metrics. Skandiabanken also had placements with the Swedish National Debt Office amounting to SEK2.2 billion as of June 2022.

Exhibit 3

#### Skandiabanken's mortgage loan growth was 7% year over year as of June 2022 Outstanding mortgage loans



Source: Moody's Investors Service

Skandiabanken's problem loan ratio was 0.48% as of June 2022, higher compared to 0.19% at year end 2020. After 1 September 2021, when the temporary amortisation relief introduced by Swedish FSA during the pandemic ended, a number of Skandiabanken's customers were granted extensions of the temporary repayment exemption. These customers are classified as stage 3, although Skandiabanken expects them to continue servicing their mortgages according to plan. Skandiabanken's level of problem loans is now moderately higher than domestic mortgage lenders, but considerably lower than most European peers. The bank updated its definition of probability of default in fourth quarter 2020, which resulted in an increase in the number of loans in stage 3. Skandiabanken considers that these additional loans have sound collateral and hence a low need for provisions, leading to a reduction in the reserve ratio for stage 3. Skandiabanken's loan book consists almost entirely of mortgages, 99.5% of total lending as of June 2022. Skandiabanken's loan loss provisions/gross loans remained low at 0.02% as of June 2022 compared with 0.01% as of year-end 2021.

The LTV ratio of the bank's mortgage portfolio (exposure-weighted) stood at a low around 47% as of June 2022. The bank implemented stricter underwriting standards by introducing caps on the debt-to-income ratio in 2016 and higher stressed interest rates in its loan approval process in 2017. The bank's current underwriting standards are aligned with those of its peers.

### High capitalisation, benefitting from affiliate support from its insurance parent

We view Skandiabanken's capitalisation as strong, given its business model, which is focused on low risk mortgage lending. Our aa3 assigned Capital score reflects the bank's strong capitalisation, but also the high leverage. The relatively weak internal capital generation is partly mitigated by the parent having a history of supporting Skandiabanken through direct capital injections (2014,

2015 and 2022). In June, the bank received a shareholder contribution from the parent of SEK250 million to support future growth in mortgage lending.

As of March 2018, Skandiabanken received approval from the SFSA to apply the internal ratings-based (IRB) approach for exposures with collateral in real estate. The bank's Common Equity Tier 1 (CET) capital includes the 25% mortgage risk weight floor in Pillar I. As of June 2022, the bank reported a CET1 capital ratio of 17.7%, down from 18.8% as of year-end 2021, due to strong loan growth. Skandiabanken's tangible common equity/total tangible assets was 4.8% as of June 2022, and we therefore apply a negative adjustment due to the leverage ratio being below 5%.

### Gradual improvement in profitability due to cost efficiency measures and increased business volumes

The ba3 Profitability score reflects Skandiabanken's weaker-than-peer profitability, with net income to tangible assets of 0.23% for the first half of 2022, resulting from its more aggressive pricing strategy and its relatively low efficiency. We expect profitability to gradually improve over the next 12-18 months due to continued cost reduction efforts and growing business volumes. The Riksbank's interest hikes and projected path will generally support banks' net interest margins. However, competitive pressure in the Swedish mortgage market remains intense. While Skandiabanken's strategy to grow volumes by focusing on low margin mortgages to Skandia group customers will not necessarily help their net interest margin, the higher lending volumes will support the bank's cost efficiency.

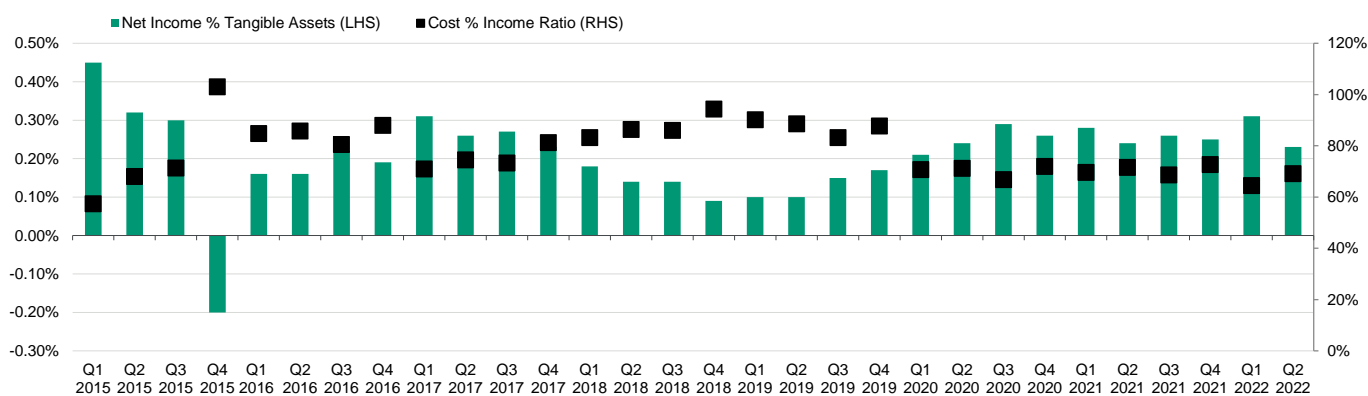
Skandiabanken's profitability improved by 6.9% with Moody's adjusted net income of SEK124 million in the first half of 2022 compared to SEK116 million for the same period the previous year. The improvement was mainly related to an increase in net interest income, because of higher mortgage volumes. The bank's net fee and commission income decreased to SEK88 million in the first half of 2022 compared to SEK95 million in the period the previous year, due to lower income for securities commissions and slightly higher costs for payment brokerage commissions.

The bank's cost-to-income ratio continued to improve in the first half of 2022 with a cost to income ratio of 69% (see Exhibit 4), from very weak levels historically compared to Swedish peers, which report a weighted average cost-to-income ratio near or below 45%. In the coming years, Skandiabanken plans to reduce its cost base and increase efficiency through economies of scale, and targets a cost-to-income ratio of 60%. We believe that improvements in the bank's cost-to-income ratio primarily will come from higher lending volumes leading to economies of scale. We also expect Skandiabanken to continue to reduce its operating expenses as most large technology investments already have been taken.

Exhibit 4

### Skandiabanken is gradually improving its efficiency

Quarterly development of profitability metrics



Source: Moody's Investors Service

### A retail-based funding profile and adequate liquidity

The a3 Funding Structure score captures Skandiabanken's high proportion of retail deposits and our expectation of an increase in the bank's reliance on wholesale funding to support balance-sheet growth. This reliance is, however, mitigated by the fact that most of the issuance will be in SEK denominated covered bonds, which we consider more resilient than most other covered bonds as they

benefit from a large domestic investor base. We reflect this feature by making an additional positive adjustments for covered bonds denominated in local currency for all Swedish banks.

The bank's retail deposits were SEK47.4 billion as of June 2022, or 47% of the non-equity funding. Most of these retail deposits are internet based because the bank does not have its own branch network and we consider these to be more price and confidence sensitive than deposits sourced through branches. Skandiabanken's loan-to-deposit ratio was 191% as of June 2022, compared with 188% as of year-end 2021. Skandiabanken's funding as of end of June 2022 included issued debt securities of SEK43.8 billion in covered bonds, SEK5.2 billion of senior unsecured funding and SEK0.5 billion senior non-preferred (SNP) debt as well as internally issued to the parent SEK0.5 billion SNP debt and SEK0.5 billion of subordinated debt.

On 31 December 2019, Skandiabanken took a SEK500 million subordinated loan from its owner, Skandia Liv. This loan is eligible for bail-in and can therefore be counted towards fulfilling the bank's minimum requirements for own funds and eligible liabilities (MREL). The bank intends to continue to issue senior non-preferred debt to fulfil its subordination requirements ahead of the deadline on 1 January 2024. The updated MREL decisions based on the EU Bank Recovery and Resolution Directive (BRRD2), were announced in December 2021<sup>2</sup>, and the updated subordination requirement resulted in lower senior nonpreferred (SNP) needs compared to the previous Swedish requirements.

The bank's liquid resources/tangible banking assets was 14.3% as of June 2022, and its reported liquidity reserves were SEK14.6 billion. The portfolio consists mainly of cash and balances with central banks, and highly rated government securities and secured and unsecured debt issued by financial institutions, mostly in the Nordics. Skandiabanken reported a liquidity coverage ratio of 271% as of June 2022. Skandiabanken's liquidity is adequate as captured by our ba1 assigned Liquid Resources score.

### Source of facts and figures cited in this report

Bank-specific figures originate from the banks' reports and Moody's Banking Financial Metrics. All figures are based on our own chart of accounts and may be adjusted for analytical purposes. Please refer to the document [Financial Statement Adjustments in the Analysis of Financial Institutions](#), published on 9 August 2018.

### ESG considerations

In line with our general view for the banking sector, Skandiabanken has a low exposure to environmental risks. See our [Environmental risk heat map](#) for further information.

The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are 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 a further social risk. Societal trends are also relevant in a number of areas, such as shifting customer preferences towards digital banking services increasing information technology cost, ageing population concerns in several countries affecting demand for financial services or socially driven policy agendas that may translate into regulation that affects banks' revenue base. Overall, banks, including Skandiabanken, face moderate social risks. See our [Social risk heat map](#) for details.

Governance is highly relevant for Skandiabanken, as it is to all participants in the banking industry. Corporate governance weaknesses can lead to a deterioration in a bank's credit quality, while governance strengths can benefit its credit profile. Governance risks are largely internal rather than externally driven. For Skandiabanken, risks related to governance are considered low, and we do not apply any corporate behaviour adjustment to the bank.

### Support and structural considerations

#### Affiliate support

The a3 Adjusted BCA incorporates our assessment of a very high probability of support from the bank's parent Skandia Liv, in the event of need. We use A3 as an anchor rating for Skandia Liv, which is one notch below its Insurance Financial Strength Rating of A2, because any potential support to its subsidiaries will be subordinated to the claims of its own policyholders. The Skandia insurance group has a history of supporting Skandiabanken through direct capital injections, with SEK250 million in 2022, SEK1.7 billion in 2015 and SEK981 million in 2014.

### Loss Given Failure (LGF) analysis

We apply our Advanced LGF analysis to Skandiabanken as the bank is subject to the EU BRRD, which we consider an operational resolution regime. For this analysis, we assume that equity and losses are 3% and 8%, respectively, of tangible banking assets in a failure scenario. We also assume a 25% runoff in junior wholesale deposits and a 5% runoff in preferred deposits. Moreover, we assign a 25% probability to junior deposits being preferred to senior unsecured debt. These are in line with our standard assumptions. Given the bank's focus on retail deposits, we assume the bank's junior deposits to account for 10% of total deposits, in line with other retail mortgage banks.

The buffer of outstanding junior deposits and senior unsecured debt provides a loss-absorption buffer in case of failure, and our Advanced LGF Analysis indicates a low loss rate given failure for the bank's junior deposits, resulting in a one-notch uplift from the bank's a3 Adjusted BCA.

Skandiabanken is subject to MREL requirements, and we expect Skandiabanken to issue junior senior debt in order to meet its subordination requirements. We include this additional loss absorbing capacity in our LGF analysis of Skandiabanken.

### Government support considerations

Because of the relatively small size of its retail operations, we assume a low probability of government support for Skandiabanken's long-term deposit ratings.

### Counterparty Risk (CR) Assessment

#### Skandiabanken's CR Assessment is Aa3(cr)/P-1(cr)

Skandiabanken's CR Assessment is positioned at Aa3(cr)/P-1(cr), based on the buffer against default provided by junior deposits, senior unsecured and subordinated debt, and does not benefit from any government support, in line with the deposit debt ratings.

### Counterparty Risk Ratings (CRRs)

#### Skandiabanken's CRRs are Aa3/P-1

The CRRs are positioned three notches above Skandiabanken's Adjusted BCA of a3, reflecting extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities.

## Rating methodology and scorecard factors

Exhibit 5

### Skandiabanken AB

<b>Macro Factors</b>							
<b>Weighted Macro Profile</b>		<b>Strong +</b>	<b>100%</b>				
<b>Factor</b>	<b>Historic Ratio</b>	<b>Initial Score</b>	<b>Expected Trend</b>	<b>Assigned Score</b>	<b>Key driver #1</b>	<b>Key driver #2</b>	
<b>Solvency</b>							
<b>Asset Risk</b>							
Problem Loans / Gross Loans	0.5%	aa1	↔	aa3	Sector concentration	Loan growth	
<b>Capital</b>							
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	18.8%	aa2	↔	aa3	Nominal leverage		
<b>Profitability</b>							
Net Income / Tangible Assets	0.2%	b1	↔	ba3	Return on assets		
Combined Solvency Score		a1		a2			
<b>Liquidity</b>							
<b>Funding Structure</b>							
Market Funds / Tangible Banking Assets	27.1%	baa2	↔	a3	Market funding quality		
<b>Liquid Resources</b>							
Liquid Banking Assets / Tangible Banking Assets	12.5%	ba1	↔	ba1	Stock of liquid assets		
Combined Liquidity Score		baa3		baa2			
<b>Financial Profile</b>							
				a3			
<b>Qualitative Adjustments</b>				<b>Adjustment</b>			
Business Diversification				-1			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				-1			
Sovereign or Affiliate constraint				Aaa			
BCA Scorecard-indicated Outcome - Range				a3 - baa2			
Assigned BCA				baa1			
Affiliate Support notching				-			
Adjusted BCA				a3			
<b>Balance Sheet</b>							
		<b>in-scope (SEK Million)</b>		<b>% in-scope</b>	<b>at-failure (SEK Million)</b>	<b>% at-failure</b>	
Other liabilities		48,699		46.0%	52,018	49.1%	
Deposits		47,418		44.8%	44,099	41.6%	
Preferred deposits		42,676		40.3%	40,542	38.3%	
Junior deposits		4,742		4.5%	3,556	3.4%	
Senior unsecured bank debt		5,150		4.9%	5,150	4.9%	
Junior senior unsecured bank debt		1,000		0.9%	1,000	0.9%	
Dated subordinated bank debt		500		0.5%	500	0.5%	
Equity		3,178		3.0%	3,178	3.0%	
Total Tangible Banking Assets		105,945		100.0%	105,945	100.0%	



Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF Notching Guidance vs. Adjusted BCA	Assigned LGF notching	Additional Notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	12.6%	12.6%	12.6%	12.6%	3	3	3	3	0	aa3
Counterparty Risk Assessment	12.6%	12.6%	12.6%	12.6%	3	3	3	3	0	aa3 (cr)
Deposits	12.6%	4.4%	12.6%	9.3%	1	2	1	1	0	a2

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Assessment	3	0	aa3 (cr)	0	Aa3(cr)	
Deposits	1	0	a2	0	A2	A2

[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 6

Category	Moody's Rating
<b>SKANDIABANKEN AB</b>	
Outlook	Stable
Counterparty Risk Rating	Aa3/P-1
Bank Deposits	A2/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
<b>PARENT: LIVFOERSAEKRINGSBOLAGET SKANDIA, OEMSESIDIGT</b>	
Outlook	Stable
Insurance Financial Strength	A2

Source: Moody's Investors Service

## Endnotes

1 See [Higher central bank rates are credit positive for banks, but asset risks are building](#), published 22 September 2022

2 [Decisions on resolution plans and MREL, Swedish National Debt Office](#)

© 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at [www.moody's.com](http://www.moody's.com) under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1338679