

# Danske Bank AS's Mortgage Cover Pool D and I Covered Bond Programmes – Peer Review

**Increased Buffers from IDR Upgrade:** The 'AAA'/Stable ratings of Danske Bank A/S's (A+/Stable/F1) mortgage covered bonds issued from cover pool D (Danske D) and cover pool I (Danske I) are based on the Long-Term Issuer Default Rating (LT IDR) of 'A+', the overcollateralisation (OC) maintained by the issuer (for these programmes Fitch Ratings gives credit to the lowest level of the last 12 months), and the uplifts above the IDR granted to the programmes (10 and nine notches for Danske D and Danske I). These factors provide a six- and five-notch buffer against an IDR downgrade for Danske D and Danske I, respectively.

**Higher Recovery Uplift for Danske D:** Fitch assigns Danske D a two-notch recovery uplift due to the Danish krone's peg to the euro, mitigating pre-swap foreign-exchange (FX) mismatches. Meanwhile, Danske I's recovery uplift is limited to one notch due to significant pre-swap FX mismatches. Both programmes share a two-notch resolution uplift and a six-notch payment continuity uplift (PCU), reflecting favourable treatment of covered bonds in a resolution scenario and adherence to liquidity protection measures such as maturity extension and liquidity rules.

**Credit Loss Driven by Minimum Loss Assumption:** Danske's Danish (pool D) and Norwegian (pool I) residential mortgages show very good historical default performances and low loan-to-value (LTV) ratios. These factors lead to a credit loss of 4.2% in a 'AAA' rating scenario for pool D and 3.3% at 'AA+' for pool I. The minimum loss floor assumption has been applied to both programmes to address idiosyncratic risks given the portfolios' strong credit profiles. The difference in rating scenarios arises from the distinct notches used to reach 'AAA'.

**No ALM Loss for Danske D:** The asset and liability mismatch (ALM) loss component, representing the non-credit loss component of the break-even OC for the ratings, reflects any interest and maturity mismatches within the programmes. Danske D's 'AAA' break-even OC solely comprises the credit loss component as the 'AAA' rating is achievable based only on the resolution and recovery uplifts. Danske I's ALM loss component is 3.6% because of low asset margins on Norwegian assets and maturity mismatches from bond maturities shorter than the assets' maturities.

**Plans to Sell Norwegian Assets and Liabilities:** In July 2023 Danske disclosed its intention of selling Danske I's Norwegian assets and liabilities at fair value to Nordea Eiendomskredit AS (a fully owned mortgage credit subsidiary of Nordea Bank) as part of its "Forward '28" strategy. In December 2023, the Norwegian Competition Authority approved the sale of Danske I's personal customer business to Nordea. The transaction is expected to complete by 4Q24.



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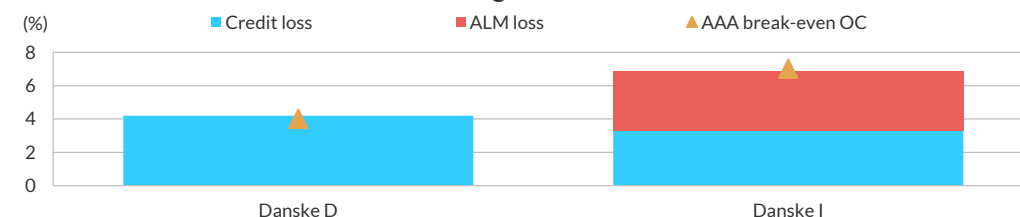
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## Key Rating Drivers

Programme	Danske Bank A/S, Mortgage SDO - cover pool D (Danske D)	Danske Bank A/S, Mortgage SDO - cover pool I (Danske I)
LT IDR	A+	A+
Resolution uplift (notches)	2	2
PCU (notches)	6	6
Timely payment rating level	AA	AA+
Recovery uplift (notches)	2	1
Covered bond (CVB) rating	AAA	AAA
CVB Outlook	Stable	Stable
Buffer against IDR downgrade	6	5
Break-even OC for rating (%)	4	7.0
OC Fitch relies upon (%)	7.4	8.8

Source: Fitch Ratings

## Break-Even OC for Covered Bonds Rating



Source: Fitch Ratings

## Uplifts Used to Reach 'AAA'

	Danske D	Danske I
	Current	Current
AAA		
AA+		
AA		
AA-		
A+		
Covered bonds rating	AAA	AAA
Recovery uplift (notches)	2	1
PCU (notches)	6	6
Resolution uplift (notches)	2	2

## Cover Pool – Peer Analysis

### Cover Assets Credit Analysis

	Danske D	Danske I
Covered bonds rating	AAA	AAA
Rating default rate (RDR) for rating (%)	8.5	8.6
Rating recovery rate (RRR) for rating (%)	52.7	53.6
Rating loss rate (RDR) x (1-RRR) for rating (%)	4.0	4.0
B case loss rate (%)	0.4	0.4

Source: Fitch Ratings

Danske D's cover pool is 100% composed of Danish residential assets. Danske I, which originally included a mix of Swedish and Norwegian loans, is currently 100% composed of Norwegian residential assets. The Swedish assets were gradually transferred out of the cover pool, with all bonds issued out of cover pool I now hedged to NOK or denominated in NOK.

Fitch determines an expected-case foreclosure frequency (FF) for each programme based on the historical performance data provided by Danske. Owing to low default volumes and the mild economic environment in Denmark and Norway, Fitch applies an FF floor of 1% to the two cover pools and high rating scenario multipliers. Higher FFs apply to loans in arrears. This leads to a 'AAA' WA FF of 8.5% for Danske D and 8.6% and for Danske I.

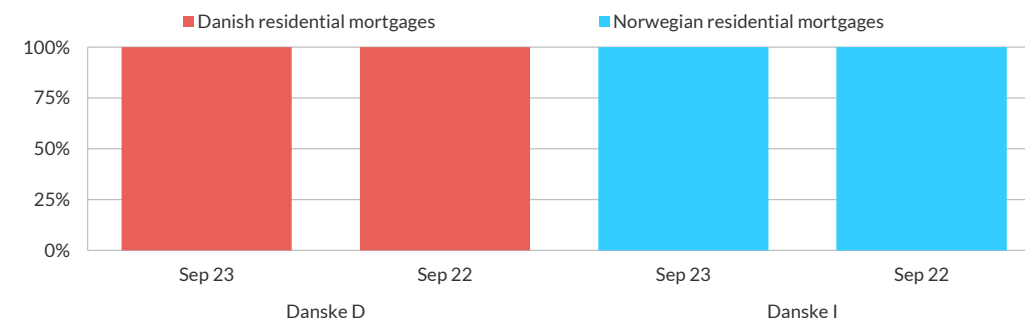
Recovery expectations on the cover assets are based on the automated valuation model for property values used by the issuer for regulatory purposes. Due to low weighted average loan-to-values (WA LTV) in the pools, the credit loss is driven by the minimum loss floor in accordance with Fitch's criteria.

The 'AAA' minimum loss assumption of 4% for Danske D and the 'AA+' minimum loss assumption of 3.2% for Danske I translate into 'AAA' and 'AA+' credit loss components of 4.2% and 3.3%, respectively.

Danske D has experienced an increase in fixed rate loans (30.3% in 3Q23, 17.2% in 3Q22). Nevertheless, the majority of the loans within the pool remain floating rate mortgages: 64% of the portfolio consists of amortising loans, 8.4% pay interest-only, and the remaining 27.6% consists of deferred amortising loans. The cover assets are well-seasoned with a low WA LTV of 53% at 3Q23.

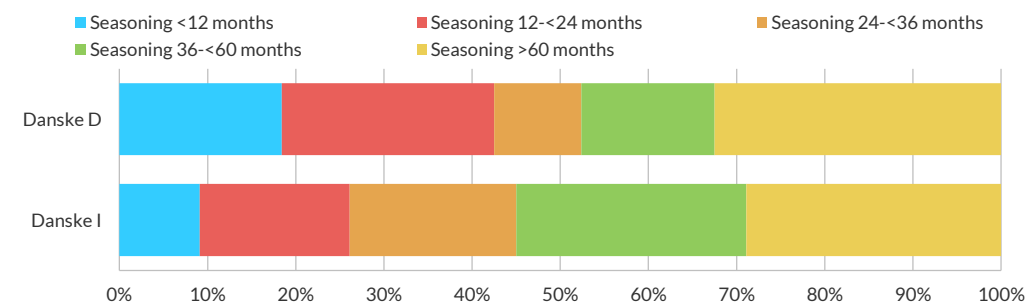
The Norwegian assets of Danske I consist of floating-rate mortgages and loans with short-term fixings (between three and five years) that revert to floating unless they are re-fixed. The majority of the loans (78.6%) are amortising loans, and the WA LTV for the assets in Danske I was also 53% at 3Q23.

### Cover Pool Composition (% of Total Cover Pool)



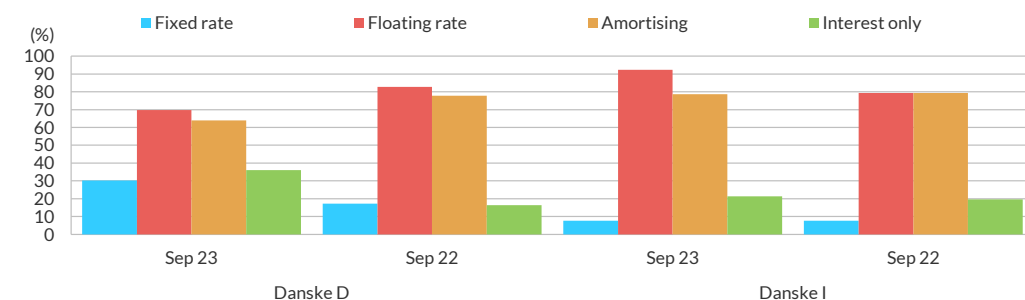
Source: Fitch Ratings, Danske Bank

### Loan Seasoning (3Q23)



Source: Fitch Ratings, Danske Bank

### Loan Type



Source: Fitch Ratings, Danske Bank

## Break-Even Overcollateralisation – Peer Analysis

### AAA Break-Even OC Components

Programme	ALM loss (%)	Credit loss (%)
Danske D	n.a.	4.2
Danske I	3.6	3.3

n.a. – Not applicable  
Source: Fitch Ratings

### Credit Loss

The credit loss component reflects the stressed credit loss derived by Fitch under its analysis of each cover pool. For Danske D, the credit loss at the 'AAA' scenario is the sole component of the BE OC for the rating, given the two-notch recovery uplift that the programme benefits from. For Danske I, the 'AA+' timely payment rating level is the driving scenario for the 'AAA' break-even OC.

### ALM Loss

Danske I has an ALM loss component of 3.6%, which reflects the following factors.

- The WA time to maturity of assets for Danske I is 22.2 years while the WA time to maturity of liabilities is considerably lower at 2.3 years.
- The WA loan margins in Danske I's Norwegian assets are relatively low. The ALM loss component is highly sensitive to changes in asset margin, which is the main source of excess spread for the programmes.

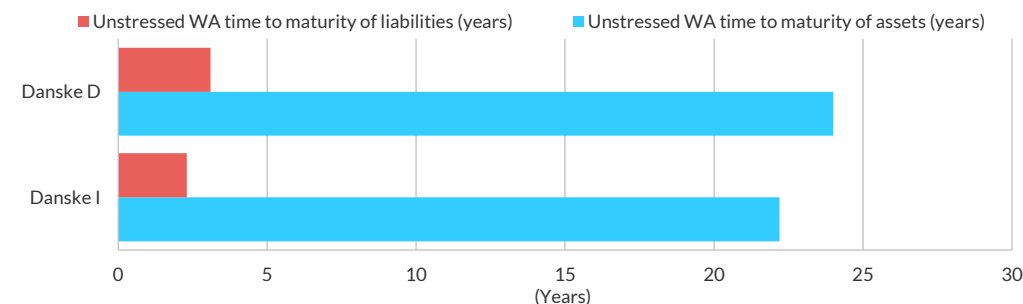
In Fitch's cash flow modelling, the lowest weighted-average asset margin observed in the pool over the last 12 months is subject to a haircut of 40bp for the first 12 months and a haircut of 15bp thereafter, and to a floor and cap of 100bp and 200bp, respectively.

### Cash Flow Analysis Driving Scenarios

Programme	Driving prepayment scenario	Driving interest-rate scenario	Driving issuer default timing scenario
Danske D	n.a.	n.a.	n.a.
Danske I	Low	Decreasing	Quarter 6

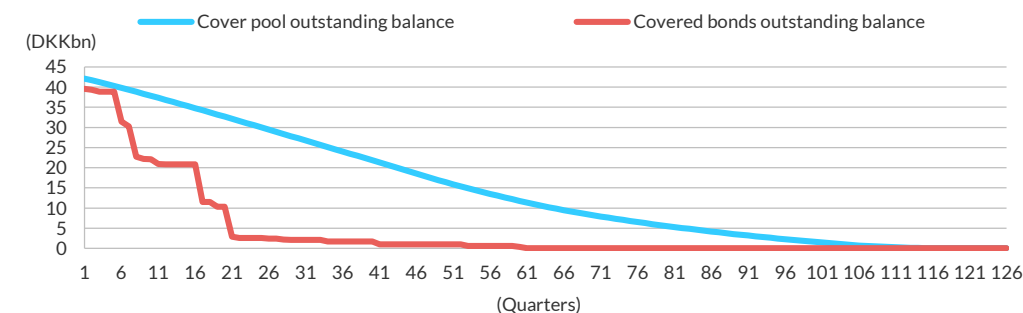
Source: Fitch Ratings

### Unstressed Assets & Liabilities Maturity Mismatches (3Q23)



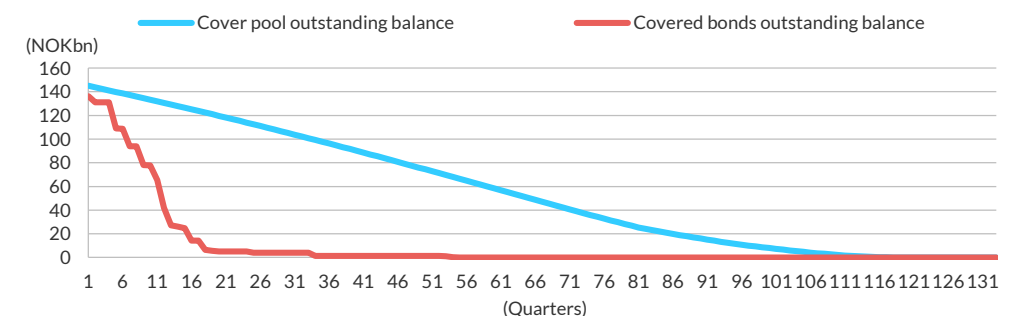
Source: Fitch Ratings, Danske Bank

### Danske D - Assets and Liabilities Amortisation Profile (2Q23)



Source: Fitch Ratings

### Danske I - Assets and Liabilities Amortisation Profile (2Q23)



Source: Fitch Ratings

## Resolution Uplift, PCU and Recovery Uplift – Peer Analysis

### Continuity Uplift Assessment

Programme	Resolution uplift (notches)	PCU (notches)
Danske D	2	6
Danske I	2	6

Source: Fitch Ratings

### Resolution Uplift

- The two-notch resolution uplift of each programme reflects the fact that covered bonds issued by commercial banks in Denmark are exempt from bail-in.
- The risk of under-collateralisation at the point of resolution is sufficiently low in Fitch's view. This is because the issuer has to ascertain that the pool includes sufficient collateral to compensate for a decrease in the collateral value securing each loan when the lower collateral value leads to a breach in LTV thresholds established by legislation.
- In addition, Danske Bank has unencumbered eligible assets to replenish the cover pool if needed to meet the legislative requirement that the value of the cover pool must be higher than that of the covered bonds at all times. Once an administrator has been appointed, even before the issuer's insolvency, the issuing bank is required to ensure the value of the assets in the cover pool is sufficient and the administrator may require the issuing bank to provide further assets.

### Payment Continuity Uplift (PCU)

- Fitch's PCU for both programmes is six notches, reflecting mortgage covered bonds with a 12-month principal maturity extension and three-month protection for interest payments. Changes to Denmark's covered bonds law, which took effect from July 2022, have clarified how maturities can be extended. The changes are only applicable after a new bond is issued under the cover pool register after the effective date of the directive. As Danske has issued new bonds under both programmes since the changes, Fitch's PCU was increased to six notches from five.

### Recovery Uplift Assessment

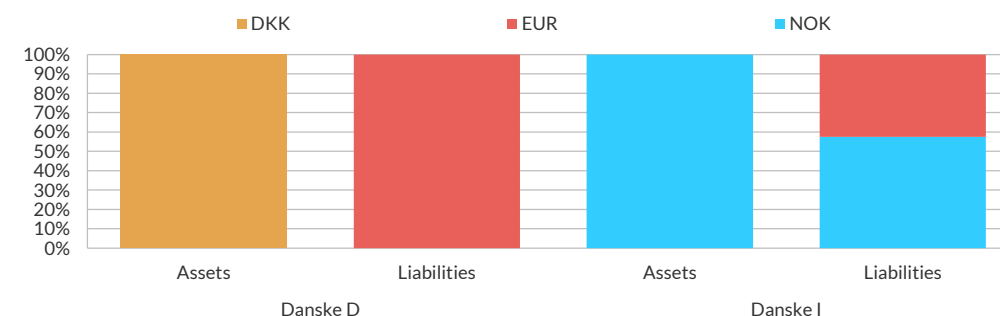
Programme	CVB rating	Credit loss (%) in timely payment rating level	OC (%) Fitch relies upon in its analysis	Maximum achievable recovery uplift (notches)
Danske D	AAA	4.2	7.4	2
Danske I	AAA	3.3	8.8	1

Source: Fitch Ratings

### Recovery Uplift

- The recovery uplift assigned to Danske D is two notches as Fitch expects the covered bonds to experience outstanding recoveries in the event of default. The agency considers the Danish krone peg to the euro a mitigating factor to the presence of significant pre-swap FX mismatches between Danish krone-denominated cover assets and euro-denominated liabilities.
- The recovery uplift assigned to Danske I is capped at one notch due to the presence of significant pre-swap FX mismatches between cover assets and liabilities. The FX covered bonds are fully hedged until maturity (including the extension period). But if the covered bonds default, recoveries from Norwegian krone-denominated assets, which have a longer weighted average life than the covered bonds, could expose holders of non-Norwegian krone-denominated bonds to FX risk.

### Currency Composition - Assets and Liabilities (Before Swap - 3Q23)



Source: Fitch Ratings, Danske Bank

## ESG Considerations

### ESG Relevance Scores Recap

		Danske D	Danske I
Environmental (E)	GHG emissions & air quality	2	2
	Energy management	1	1
	Water & wastewater management	1	1
	Waste & hazardous materials management; ecological impacts	2	2
	Exposure to environmental impacts	2	2
Social (S)	Human rights, community relations, access & affordability	2	2
	Customer welfare – fair messaging, privacy & data security	3	3
	Labour relations & practices	1	1
	Employee wellbeing	1	1
	Exposure to social impacts	3	3
Governance (G)	Rule of law, institutional and regulatory quality	3	3
	Transaction & collateral structure	3	3
	Transaction parties & operational risk	3	3
	Data transparency & privacy	3	3

Source: Fitch Ratings

### Credit-Relevant ESG Scale - Definitions

How relevant are E, S and G issues to the overall credit rating?	
5	Highly relevant; a key transaction or programme rating driver that has a significant impact on an individual basis
4	Relevant to transaction or programme ratings; not a key rating driver but has an impact on the ratings in combination with other factors
3	Minimally relevant to ratings; either very low impact or actively mitigated in a way that results in no impact on the transaction or programme ratings
2	Irrelevant to the transaction or programme ratings; relevant to the sector
1	Irrelevant to the transaction or programme ratings; irrelevant to the sector
Source: Fitch Ratings	

### ESG Considerations

The highest level of ESG credit relevance is typically a score of '3' – ESG issues are credit neutral or have only a minimal credit impact on the programme, either due to their nature or the way in which they are being managed by the issuer. For Danske D and Danske I, Fitch assigned a maximum ESG relevance score of '3'.

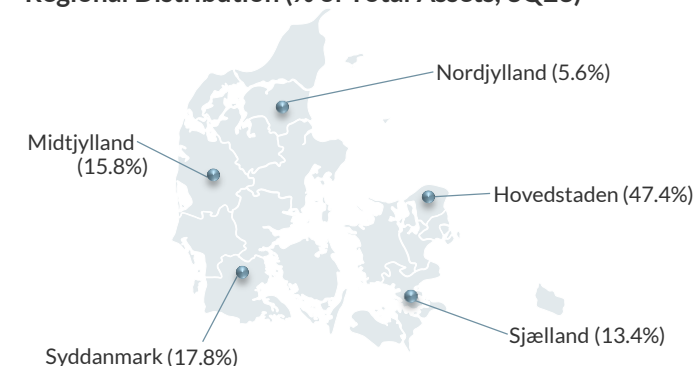
For more information on our ESG Relevance Scores, visit [www.fitchratings.com/esg](https://www.fitchratings.com/esg)

## Appendix 1A – Danske D

### Programme Structure

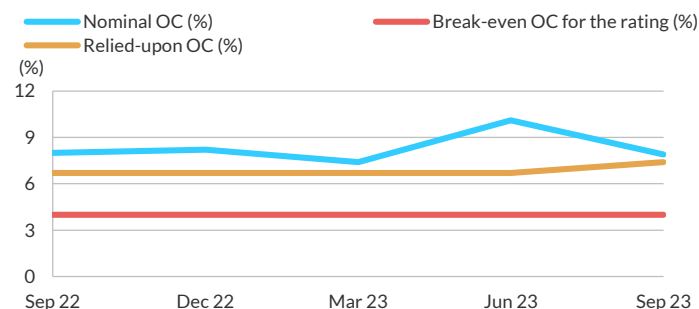
- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Danske Bank A/S's IDR of 'A+', a resolution uplift of two notches, a PCU of six notches, a two-notch recovery uplift and the OC Fitch relies upon of 7.4%, which provides more protection than the 'AAA' break-even OC of 4%. The Stable Outlook on the rating reflects the six-notch buffer against an IDR downgrade given the different uplift factors above the bank's IDR.
- Cover Pool Composition:** The covered bonds are secured by Danish residential loans (100%) that are geographically diversified within Denmark. At end-September 2023, the total cover assets stood at DKK41.7 billion with a weighted average current loan-to-value (WA CLTV) of 53%. Compared with the DKK25.5 billion of cover assets at 3Q22, the inclusion of new loans in the pool in 2023 has resulted in a higher portion of loans with seasoning of three years or less.
- Rating Sensitivities:** The 'AAA' rating of Danske's cover pool D mortgage covered bonds would be vulnerable to a downgrade if Danske's Long-Term IDR was downgraded by seven notches to 'BB' or below, or if the level of OC Fitch gives credit to in its analysis falls below the 'AAA' break-even OC of 4%. If the actual OC was reduced to the legal minimum of 2%, the covered bonds would be downgraded to 'AA+', three notches above the bank's Long-Term IDR.

### Regional Distribution (% of Total Assets, 3Q23)



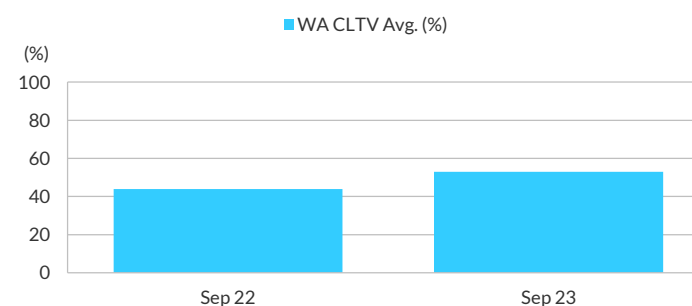
Source: Fitch Ratings, Danske Bank

### Overcollateralisation Breakdown



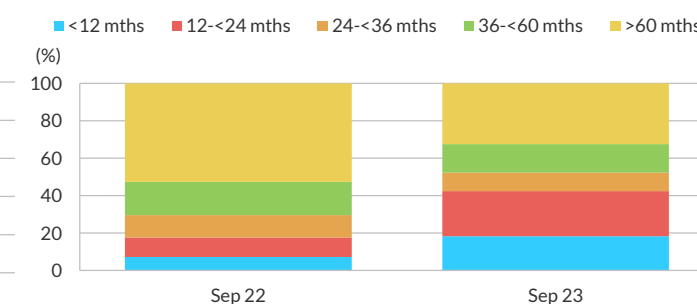
Source: Fitch Ratings, Danske Bank

### WA Current Loan-to-Value



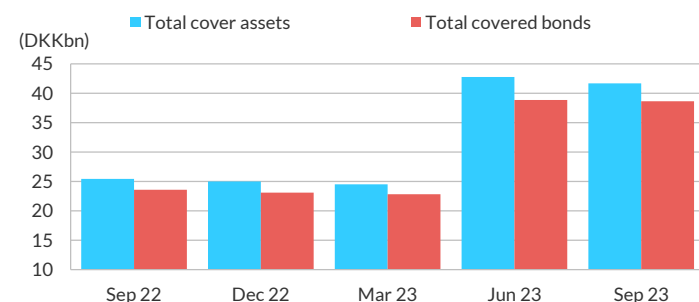
Source: Fitch Ratings, Danske Bank

### Loan Seasoning (Months)



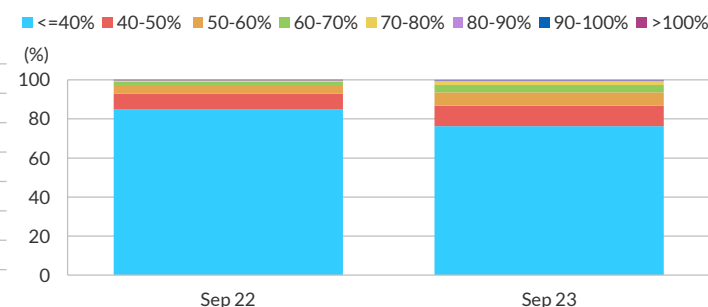
Source: Fitch Ratings, Danske Bank

### Assets and Liabilities



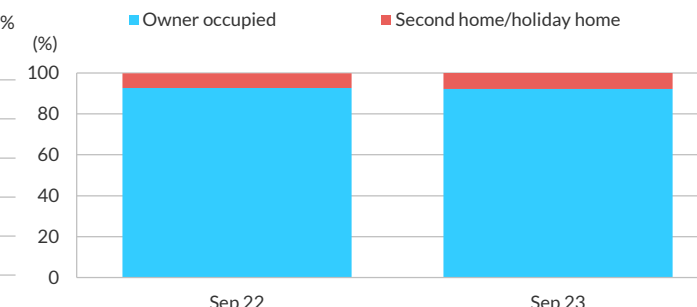
Source: Fitch Ratings, Danske Bank

### CLTV Buckets



Source: Fitch Ratings, Danske Bank

### Occupancy Type



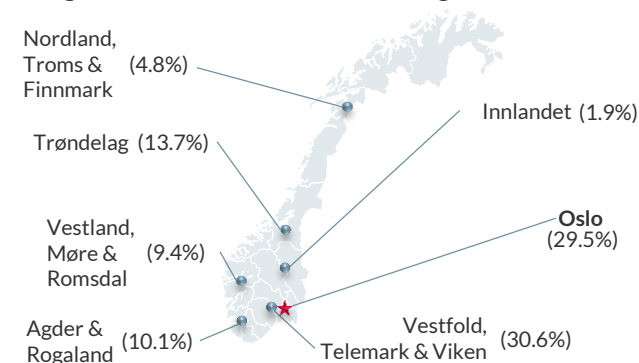
Source: Fitch Ratings, Danske Bank

## Appendix 1B – Danske I

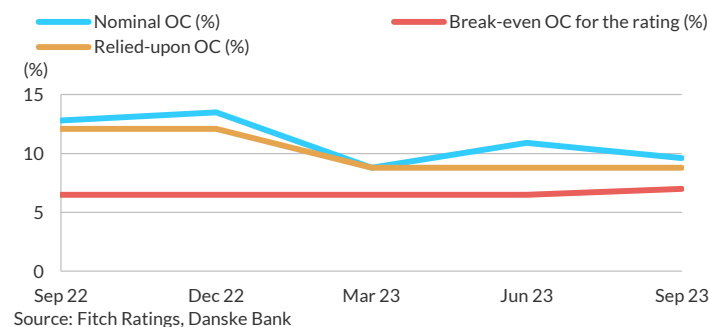
### Programme Structure

- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Danske Bank A/S's IDR of 'A+', a resolution uplift of two notches, a PCU of six notches, a one-notch recovery uplift and the OC Fitch relies upon of 8.8%, which provides more protection than the 'AAA' break-even OC of 7%. The Stable Outlook on the rating reflects the five-notch buffer against an IDR downgrade due to the different uplift factors above the bank's IDR.
- Cover Pool Composition:** The covered bonds are secured by Norwegian residential loans that are geographically diversified within Norway. At end-September 2023, total cover assets stood at DKK93.9 billion with a WA CLTV of 53%.
- Rating Sensitivities:** The 'AAA' rating of Danske's cover pool I mortgage covered bonds would be vulnerable to a downgrade if Danske's Long-Term IDR was downgraded by six notches to 'BB+' or below, or the level of overcollateralisation (OC) Fitch gives credit to in its analysis falls below the 'AAA' break-even OC of 7%. If the actual OC was reduced to the legal minimum of 2%, the covered bonds would be downgraded to 'AA+', three notches above the bank's Long-Term IDR.

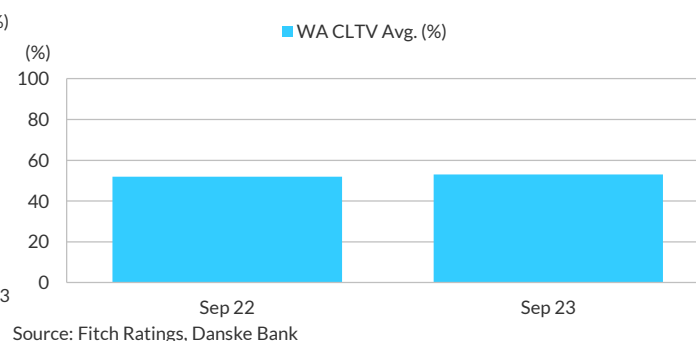
### Regional Distribution (% of Norwegian Pool, 3Q23)



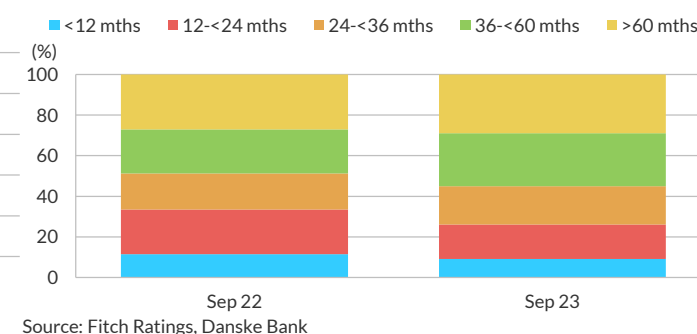
### Overcollateralisation Breakdown



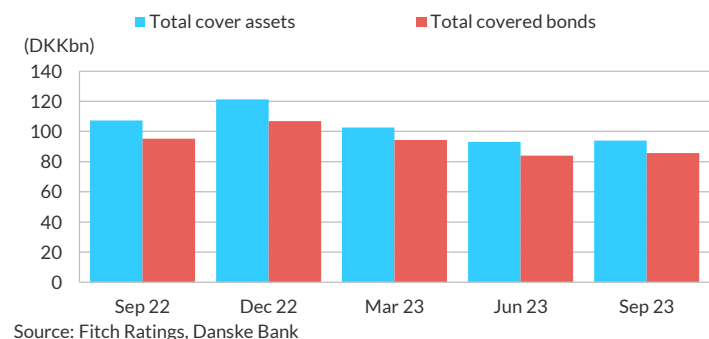
### WA Current Loan-to-Value



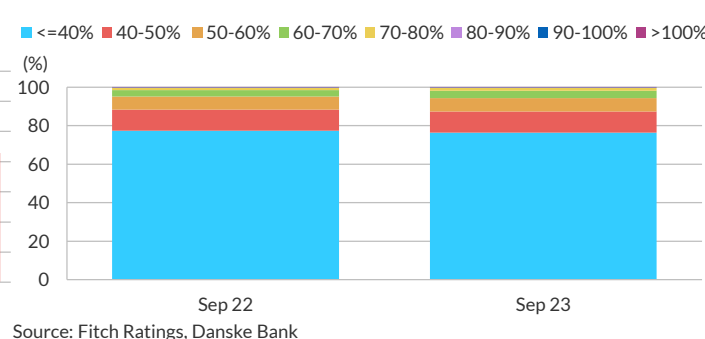
### Loan Seasoning (Months)



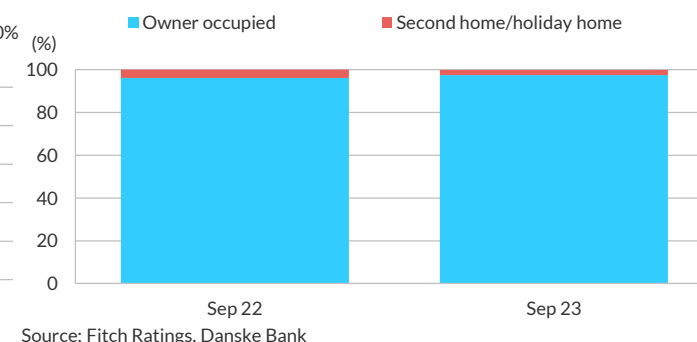
### Assets and Liabilities



### CLTV Buckets



### Occupancy Type



## Appendix 2 – Summary of Applicable Covered Bonds Legislation

Items	Description
Basis of the framework	The Danish covered bond legislation.
Issuer type	There are three types of Danish covered bonds: <ul style="list-style-type: none"> <li>• RealkreditObligationer (RO): Oldest type of bond, issued by mortgage banks only, UCITS-compliant, but not Capital Requirements Regulation (CRR)-compliant if issued after 31 December 2007</li> <li>• Særligt Dækkede Realkreditobligationer (SDRO): Issued by mortgage banks only, both UCITS- and CRR-compliant, a minimum OC of 8% of risk-weighted assets applies.</li> <li>• Særligt Dækkede Obligationer (SDO): Implemented in 2007 following changes in legislation, can be issued by both commercial banks and mortgage banks, both UCITS- and CRR-compliant; a minimum OC of 8% of risk-weighted assets applies (only to mortgage bank issuers).</li> </ul>
Dual recourse	To the assets of the capital centre, including OC in the case of mortgage banks. To the issuer and, post insolvency, to the insolvency estate of the issuer, before other creditors for mortgage banks or pari passu with other senior creditors for commercial banks.
Segregation	Assets used to cover the bonds have to be segregated into independent cover pools referred to as capital centres for mortgage banks and cover registers for commercial banks.
Minimum overcollateralisation	Through the transposition of the harmonisation of the covered bond directive, Danish legislation now specifies an OC requirement of 2%. In addition, capital requirements have to be fulfilled at the capital centre level and at the institution level, and translate into a mandatory OC level of at least 8% of risk-weighted assets. The OC can be funded by equity and senior debt. In practice, the OC for mortgage banks' covered bonds is mostly invested in securities.
Cover assets	<ul style="list-style-type: none"> <li>• Loans granted against mortgages on real property;</li> <li>• Exposure to public authorities: <ul style="list-style-type: none"> <li>- bonds and debt issued by or guaranteed by central government, central banks, public entities, and regional and local authorities in the EU/EEA;</li> <li>- bonds and debt issued by or guaranteed by multilateral development banks or international organisations if risk-weighted 0% (or risk-weighted 20%, provided they do not exceed 15% of the outstanding covered bonds).</li> </ul> </li> <li>• Bonds and debt issued by credit institutions if risk-weighted 20%, provided they do not exceed 15% of the outstanding covered bonds;</li> <li>• Mortgages on ships (only for commercial banks; a register may not include assets secured on both real estate and ships);</li> <li>• Other assets eligible for covered bonds financing according to the Capital Requirements Directive, if allowed by the Danish FSA;</li> <li>• In practice, supplementary collateral is made of exposure to public authorities and covered bonds.</li> </ul>
Maximum LTV limits for the cover test	<ul style="list-style-type: none"> <li>• ≤ 80% for residential real-estate loans with up to 30 years' maturity and 10 years' interest-only period;</li> <li>• ≤ 75% for residential real-estate loans with up to 30-year interest-only period and for holiday real-estate loans;</li> <li>• ≤ 60% for commercial, agricultural and real-estate loans for commercial use. In some cases, the LTV requirement can be increased to 70% if the bank adds additional collateral.</li> </ul>
Eligibility of loans with LTVs higher than the maximum thresholds	Eligible, but the part of mortgage loan above the limit is excluded from the calculation of the over-collateralisation (for SDROs and SDOs only).
Balance principle or matched-funding	This is intended to ensure a close connection between the cash flow received from the borrowers and the cash flow due to the bondholders.
Treatment of swap counterparties	Derivative counterparties rank pari passu with covered bondholders when derivative contracts were concluded with the purpose of hedging cash flows between assets and liabilities.
Supervision	Danish Financial Services Authority (FSA)
Cover pool administrator	An administrator (trustee) will be appointed by the Danish FSA on, or prior to, the insolvency of the mortgage lender. An alternative manager has the power to sell cover pool assets, take out loans and enter into repo agreements on behalf of the cover pool to make timely payment on covered bond obligations. This would facilitate actions the alternative manager may seek to take in meeting obligations.
Source: Fitch Ratings	



## Appendix 3 – Related Research & Definitions of Terms Used

### Related Research

Details of the latest rating action for the programmes and the applicable criteria can be found in the following publications:

[Originator-Specific Residential Mortgage Analysis Rating Criteria \(January 2024\)](#)

[Large European Banks Will Enter 2024 in a Solid Position \(December 2023\)](#)

[Fitch Affirms Danske Bank A/S's Mortgage Cover Pool C Covered Bonds at 'AAA'; Outlook Stable \(December 2023\)](#)

[Fitch Affirms Realkredit Danmark's CC S and CC T Covered Bonds at 'AAA' \(November 2023\)](#)

[Covered Bonds Rating Criteria \(October 2023\)](#)

[Originator-Specific Residential Mortgage Analysis Rating Criteria \(January 2024\)](#)

[Fitch Affirms Danske Bank A/S's Cover Pools D and I Mortgage Covered Bonds at 'AAA'; Outlook Stable \(September 2023\)](#)

[Fitch Upgrades Danske to 'A+'; Outlook Stable \(September 2023\)](#)

[European RMBS Rating Criteria \(June 2023\)](#)

### Related Covered-Bonds Specific Research

[Global Covered Bonds Outlook 2024 \(December 2023\)](#)

[Global Housing and Mortgage Outlook 2024 \(February 2024\)](#)

[Covered Bonds Protection Dashboard \(December 2023\)](#)

[Covered Bonds Snapshot – 4Q23 \(January 2024\)](#)

### Definitions of Terms Used

CVB	Covered bonds
LT IDR	Long-Term Issuer Default Rating
BE OC	Break-even overcollateralisation
PCU	Payment continuity uplift
FF	Foreclosure frequency
WA	Weighted average
WAL	Weighted average life
OC	Overcollateralisation
LTV	Loan-to-value
DTI	Debt-to-income
RO	Realkreditobligationer
SDRO	Særligt Dækkede Realkreditobligationer
SDO	Særligt Dækkede Obligationer
FSA	The Danish financial services authority
CRR	Capital Requirements Regulation
Danske D	Danske Bank A/S, Mortgage SDO - cover pool D
Danske I	Danske Bank A/S, Mortgage SDO - cover pool I

Source: Fitch Ratings

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