

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

**Four- and Three-Notch Downgrade Buffers:** The 'AAA'/Stable ratings of Danske Bank A/S's (A/Stable/F1) mortgage covered bonds issued out of cover pool D (Danske D) and cover pool I (Danske I) are based on the Long-Term Issuer Default Rating (IDR) of 'A' and the various uplifts above the IDR granted to the programmes. This provides buffers of four (Danske D) and three (Danske I) notches against an IDR downgrade to maintain the ratings.

**Credit Loss at Minimum Level:** Loans granted by Danske have historically performed very well in terms of defaults. In conjunction with the low loan-to-value (LTV) levels of the Danish (Danske D), and Norwegian and Swedish (Danske I) loans, the modelled credit loss is driven by the 'AAA' expected loss floor of 4.0% in Fitch Ratings' criteria. This is applied to address idiosyncratic risks of low-default portfolios.

**ALM Loss:** The asset and liability mismatch (ALM) loss component, which represents the non-credit loss component of the break-even overcollateralisation (OC) for the ratings and reflects the programmes' maturity mismatches, is modelled at 5.5% for Danske I and 1.3% for Danske D. The higher ALM loss for Danske I than for Danske D is due to the lower asset margin on Norwegian assets, as well as the larger maturity mismatches in Danske I.

**Five-Notch PCU with Potential to Increase:** Fitch's payment continuity uplift (PCU) for Danske's programmes is five notches, rather than the standard six for mortgage covered bonds with a 12-month principal maturity extension and three-month protection for interest payment. This is due to the lack of formal provisions to find a refinancing solution without a delay in the event of a maturity extension.

Changes to Denmark's covered bond law, which comes into force in July 2022, should clarify how and when maturities could be extended. This will be credit positive for the programmes and could lead to an increase of the PCU to six notches from five.

**Higher Recovery Uplift for Danske D:** The recovery uplift for Danske D has increased from one to two notches, as Fitch now considers the Danish krone peg to the euro a sufficiently mitigating factor to the presence of significant pre-swap foreign-exchange (FX) mismatches between Danish krone-denominated cover assets and euro-denominated liabilities in a recovery scenario. The recovery uplift for Danske I remains capped at one notch.

The FX covered bonds are fully hedged until maturity (including an eventual extension period). However, upon a covered bonds' default, recoveries from mostly Norwegian krone-denominated assets, which have a longer weighted average (WA) life than the covered bonds, could expose holders of non-Norwegian krone-denominated bonds to FX risk.



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## Key Rating Drivers

| Programme                    | Danske Bank A/S – Cover Pool D (Danske D) | Danske Bank A/S – Cover Pool I (Danske I) |
|------------------------------|---|---|
| Long-Term IDR                | A   | A   |
| Resolution uplift (notches)  | 2   | 2   |
| PCU (notches)                | 5   | 5   |
| Timely payment rating level  | AA  | AA+                                       |
| Recovery uplift (notches)    | 2   | 1   |
| Covered bond rating          | AAA                                       | AAA                                       |
| Covered bond Outlook         | Stable                                    | Stable                                    |
| Buffer against IDR downgrade | 4   | 3   |
| Break-even OC for rating     | 4%  | 9%  |
| OC Fitch relies upon         | 8.2%                                      | 10.7%                                     |

Source: Fitch Ratings

## Breakeven OC for Covered Bonds Rating



Source: Fitch Ratings

## Cover Pool – Peer Analysis

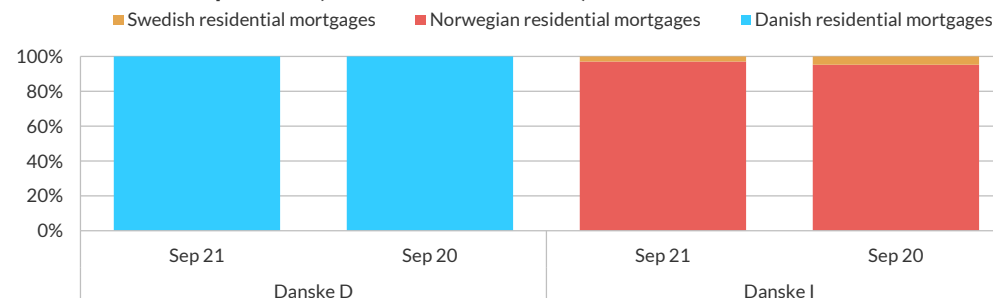
### Cover Assets Credit Analysis

|  | Danske D | Danske I |
|--|----------|----------|
| Covered bonds rating                         | AAA      | AAA      |
| Rating default rate (RDR) for rating (%)     | 8.5      | 8.5      |
| Rating recovery rate (RRR) for rating (%)    | 52.7     | 53.1     |
| Rating loss rate (RDR*(1-RRR) for rating (%) | 4.0      | 4.0      |
| 'B' case loss rate (%)                       | 0.4      | 0.4      |

Source: Fitch Ratings

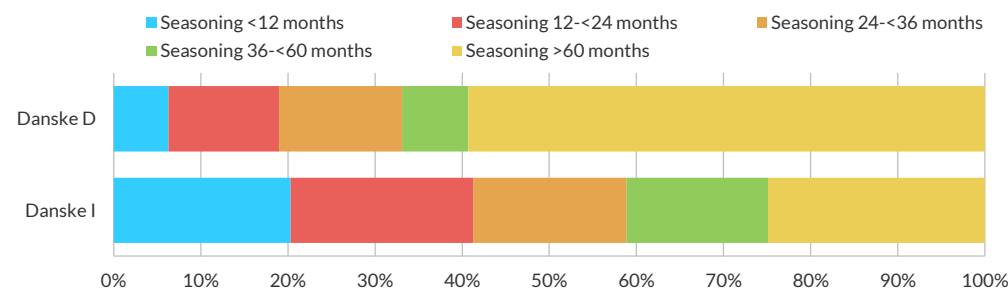
- The Danske D cover pool comprised 100% Danish residential assets, while Danske I contained 97.2% Norwegian and 2.8% Swedish residential assets at end-3Q21. Since 2016, Danske's strategy has been to steadily turn Danske I into a pool consisting of Norwegian assets only. Swedish loans are gradually transferred out of the cover pool, as bonds issued out of cover pool I hedged to the Swedish krona mature. Given Danske's strategy, we have taken into account the expected reduction in Swedish assets in the cover pool in our analysis.
- Fitch determines an expected-case foreclosure frequency (FF) for each programme based on the historical performance data provided by Danske. Due to low default volumes and the mild economic environments in Denmark, Norway and Sweden, Fitch applies an FF floor of 1% to the three countries and high rating scenario multipliers. This leads to a 'AAA' WAFF of 8.5% for both programmes.
- Recovery expectations of the cover pools are based on the automated valuation model property values used by the issuer for regulatory purposes. Due to low WALTVs in the pools, the credit loss is driven by the 'AAA' portfolio loss floor of 4% in Fitch's criteria, which is applied to address the idiosyncratic risks of low-risk portfolios. The 'AA' minimum loss assumption of 2.8% for Danske D translates into the 'AA' breakeven OC credit loss component of 2.9%. The 'AA+' minimum loss assumption of 3.2% for Danske I translates into the break-even OC credit loss component of 3.3%.
- Danske D is made up of Danish variable rate and short-term fixed-rate mortgage loans. The cover assets are well seasoned with a low WALTV of 49%.
- The Norwegian and Swedish pools of Danske I both consist of floating-rate mortgages and loans with short-term fixing (between three and five years) that revert to floating unless they are re-fixed.

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



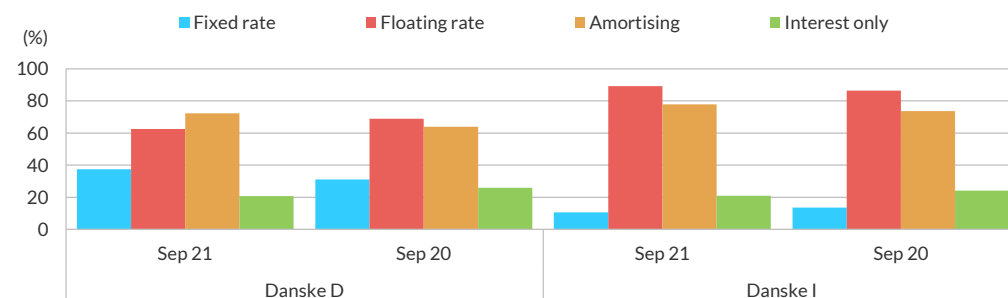
Source: Fitch Ratings, Danske Bank

### Loan Seasoning (3Q21)



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  | 1.3          | 2.9             |
| Danske I  | 5.5          | 3.3             |

Source: Fitch Ratings

### Credit Loss

The credit loss component reflects the stressed credit loss derived by Fitch under its analysis of each cover pool in the ‘AA’ (Danske D) and ‘AA+’ (Danske I) timely payment rating levels, which are the driving scenarios for the ‘AAA’ break-even OC.

### ALM Loss

The Danske I programme has a higher ALM loss component than Danske D (5.5% against 1.3%). This can be attributed to the following factors:

- The WA residual life of assets for Danske I (22.5 years) is higher than that of Danske D (20.5 years). At the same time, WA time to maturity of liabilities for Danske I is lower (3.4 years) than for Danske D (4.6 years)
- WA loan margins are lower for Norwegian and Swedish assets in Danske I compared with the Danish assets in Danske D. In our modelling, the ALM loss component shows high sensitivity to changes in asset margins, which are the main source of excess spread for the programmes.

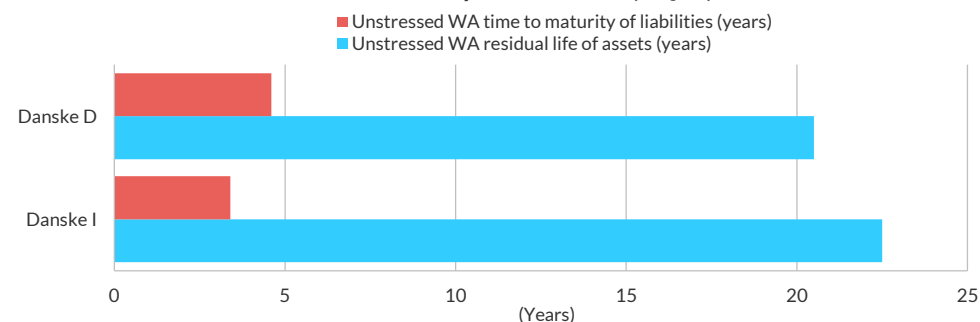
In Fitch’s cash flow modelling, the lowest WA asset margin observed in the pool over the past 12 months is subject to a haircut of 40bp for the first 12 months and a haircut of 15bp thereafter, and to a floor and cap of 100bp and 200bp, respectively.

### Cash Flow Analysis Driving Scenarios

| Programme | Driving prepayment scenario | Driving interest-rate scenario | Driving default timing scenario |
|-----------|-----------------------------|--------------------------------|---------------------------------|
| Danske D  | Low                         | Decreasing                     | Quarter six                     |
| Danske I  | Low                         | Decreasing                     | Quarter six                     |

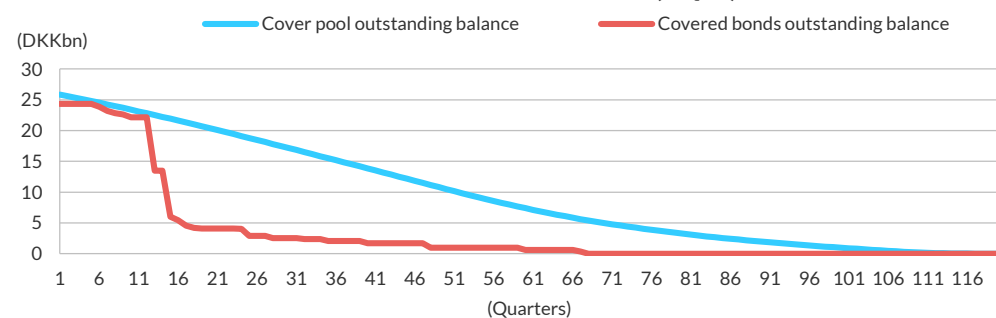
Source: Fitch Ratings

### Unstressed Assets & Liabilities Maturity Mismatches (2Q21)



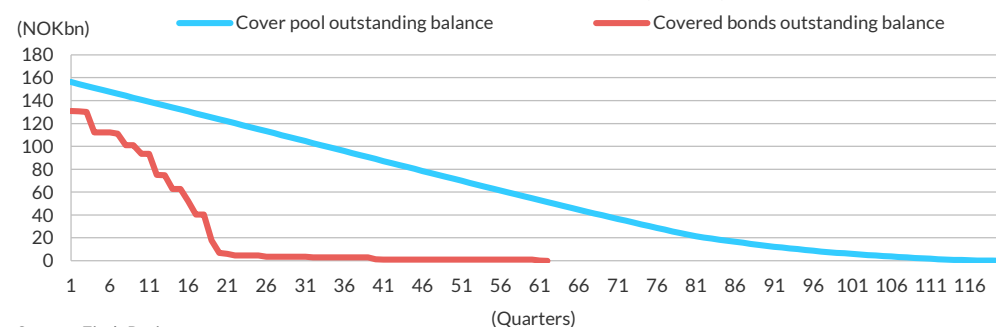
Source: Fitch Ratings, Danske Bank

### Danske D - Assets and Liabilities Amortisation Profile (2Q21)



Source: Fitch Ratings

### Danske I - Assets and Liabilities Amortisation Profile (2Q21)



Source: Fitch Ratings

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

### Continuity Uplift Assessment

| Programme | Resolution uplift (notches) | PCU (notches) |
|-----------|-----------------------------|---------------|
| Danske D  | 2                           | 5             |
| Danske I  | 2                           | 5             |

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 because the issuer has to provide additional collateral to compensate for a reduction in the collateral value securing each loan when the lower collateral value leads to a breach in LTV thresholds established by financial legislation.
- In addition, there is a level of unencumbered assets that enables an issuer 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 prior to issuer 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

- Fitch’s PCU for Danske’s programmes is five notches, rather than the standard six for mortgage covered bonds with a 12-month principal maturity extension and three-month protection for interest payment. This is due to the lack of formal provisions for finding a refinancing solution without a delay in the event of a maturity extension.
- Although no other risk considerations apart from liquidity have an impact on the PCU assessment, we believe that an incremental risk arises from the fact that the extension does not coincide with the appointment of an alternative manager in charge of making decisions for timely payment. A delay in the appointment of a manager could therefore reduce the time available for refinancing part of the cover pool.
- The draft proposal to amend the relevant domestic legislation to transpose the EU covered bond directive into domestic law was passed in the Danish parliament on 1 June 2021 and will take effect from 8 July 2022. The changes to Denmark’s covered bond law will clarify when a cover pool administrator can be appointed and set out when it can extend the maturity of a covered bond. This could lead us to increase the PCU for Danske programmes to six notches from five, increasing the buffer against an issuer downgrade.

### Recovery Uplift Assessment

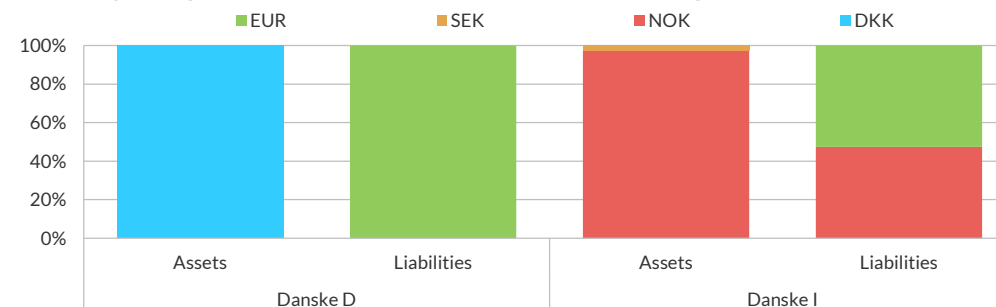
| Programme | CVB rating | Credit loss (%) in CVB rating stress scenario | OC (%) Fitch relies upon in its analysis | Maximum achievable recovery uplift (notches) |
|-----------|------------|---|--|--|
| Danske D  | AAA        | 3.3   | 8.2                                      | 2  |
| Danske I  | AAA        | 3.3   | 10.7                                     | 1  |

Source: Fitch Ratings

### Recovery Uplift

- The recovery uplift for Danske D is two notches as Fitch expects the covered bond programme to experience outstanding recoveries in case 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 for 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), however, upon a covered bonds’ default, recoveries from mostly Norwegian krone-denominated assets, which have a longer WA life than the covered bonds, could expose holders of non-Norwegian krone-denominated bonds to FX risk.

### Currency Composition - Assets and Liabilities (Before Swap - 3Q21)



Source: Fitch Ratings, Danske Bank

## ESG Considerations

### ESG Relevance Scores Recap

|                   | Danske D   | Danske I |   |
|-------------------|--|----------|---|
| Environmental (E) | GHG emissions & air quality                                | 1        | 1 |
|                   | 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  | 1        | 1 |
|                   | 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’, meaning that 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’.

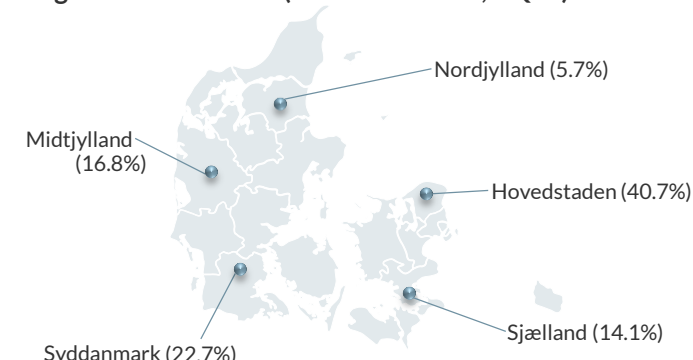
For more information on our ESG Relevance Scores, visit [www.fitchratings.com/esg](http://www.fitchratings.com/esg).

## Appendix 1A – Danske D

### Programme Structure

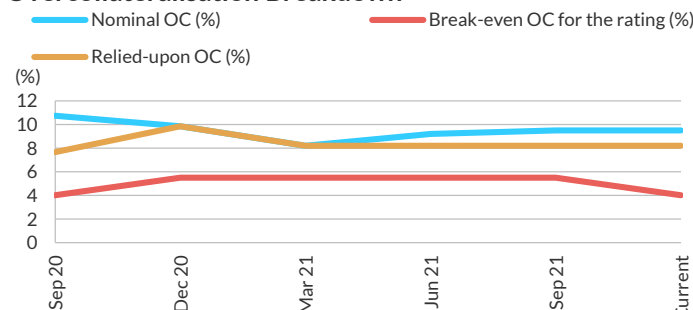
- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Danske's IDR of 'A', a resolution uplift of two notches, PCU uplift of five notches, a two-notch recovery uplift and the OC Fitch relies upon of 8.2%, which provides more protection than the 'AAA' break-even OC of 4%. The Stable Outlook on the rating reflects the four-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 100% Danish residential loans that are geographically diversified within Denmark. At end-3Q21, total cover assets were DKK25.8 billion with a WA current LTV of 49% and a WA seasoning of 8.3 years.
- 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 five notches to 'BB+' or below, or the level of OC Fitch gives credit to in its analysis falls below the 'AAA' breakeven OC of 4%. If the actual OC is reduced to the legal minimum of 0%, the covered bonds would be downgraded to 'AA', three notches above the bank's Long-Term IDR.

### Regional Distribution (% of total assets, 3Q21)



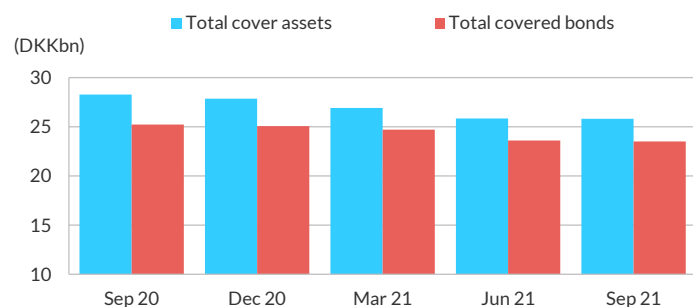
Source: Fitch Ratings, Danske Bank

### Overcollateralisation Breakdown



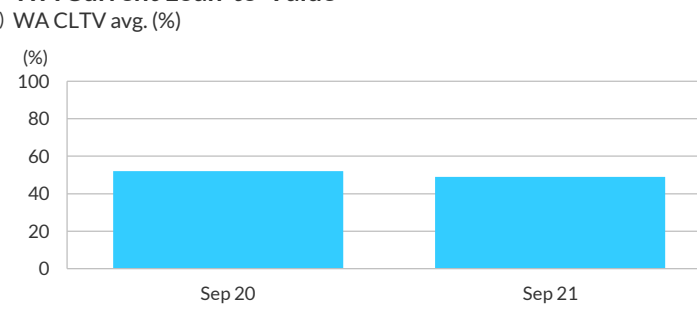
Source: Fitch Ratings, Danske Bank

### Assets and Liabilities



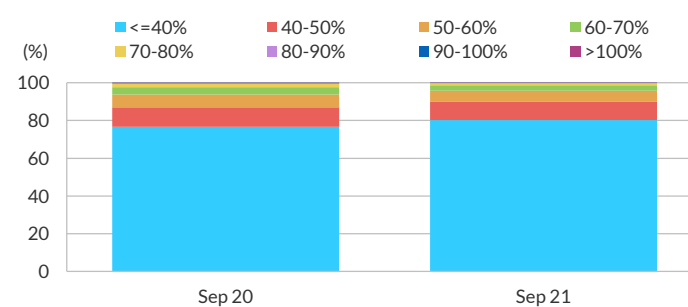
Source: Fitch Ratings, Danske Bank

### WA Current Loan-to-Value



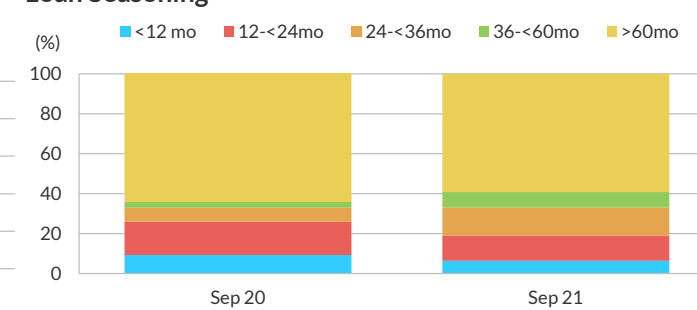
Source: Fitch Ratings, Danske Bank

### CLTV Buckets



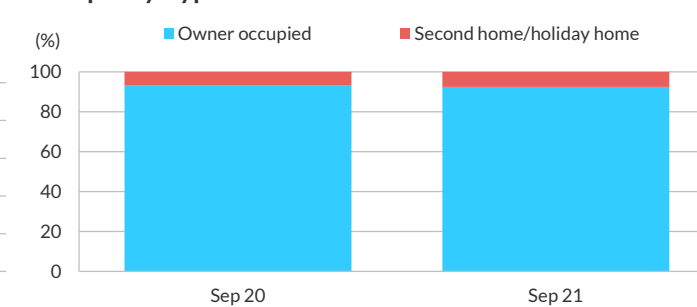
Source: Fitch Ratings, Danske Bank

### Loan Seasoning



Source: Fitch Ratings, Danske Bank

### Occupancy Type



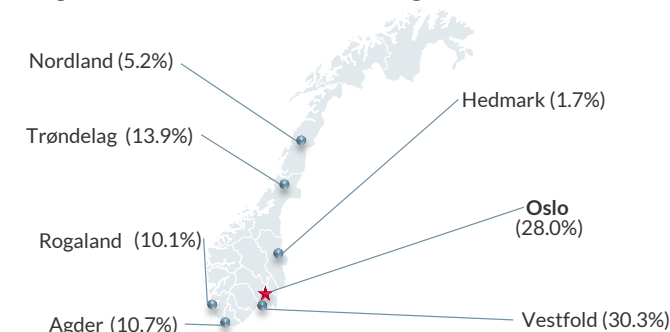
Source: Fitch Ratings, Danske Bank

## Appendix 1B – Danske I

### Programme Structure

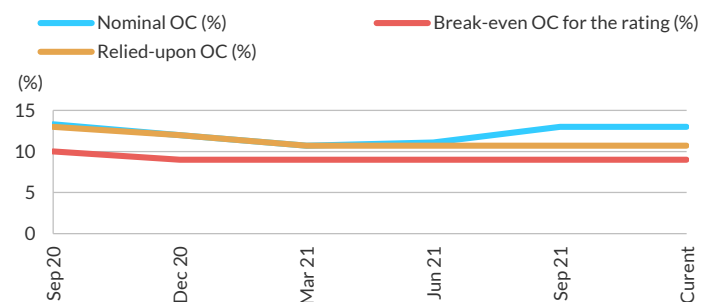
- Key Rating Drivers:** The 'AAA' rating of the covered bonds is based on Danske's IDR of 'A', a resolution uplift of two notches, PCU uplift of five notches, a one-notch recovery uplift and the OC Fitch relies upon of 10.7%, which provides more protection than the 'AAA' break-even OC of 9%. The Stable Outlook on the rating reflects the three-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 mostly Norwegian (97.2%) and a small portion of Swedish (2.8%) residential loans that are geographically diversified within both countries. At end-3Q21, total cover assets were DKK120.8 billion with a WA current LTV of 55% and a WA seasoning of 3.8 years.
- 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 four notches to 'BBB-' or below, or the level of OC Fitch gives credit to in its analysis falls below the 'AAA' breakeven OC of 9%. If the actual OC is reduced to the legal minimum of 0%, the covered bonds would be downgraded to 'AA', three notches above the bank's Long-Term IDR.

### Regional Distribution (% of Norwegian pool, 3Q21)



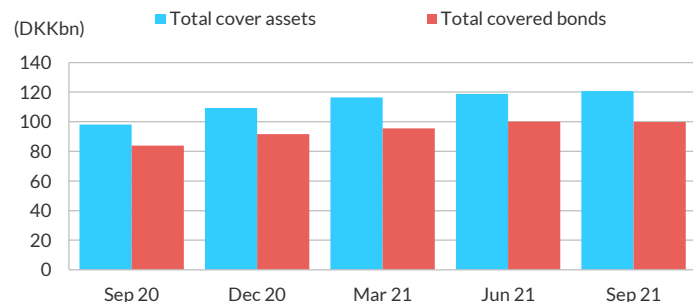
Source: Fitch Ratings, Danske Bank

### Overcollateralisation Breakdown



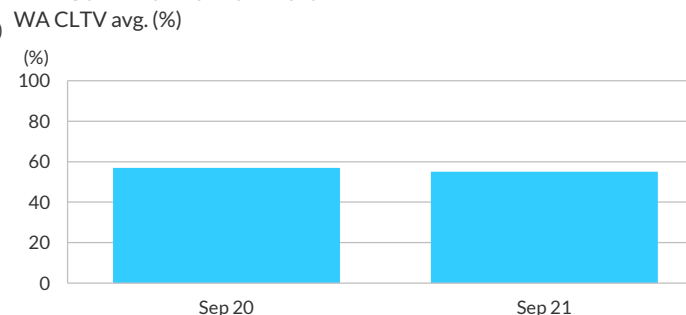
Source: Fitch Ratings, Danske Bank

### Assets and Liabilities



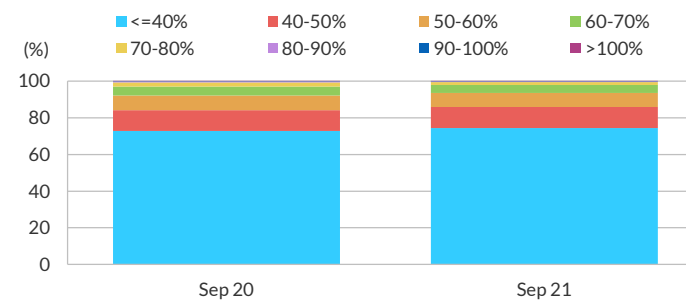
Source: Fitch Ratings, Danske Bank

### WA Current Loan-to-Value



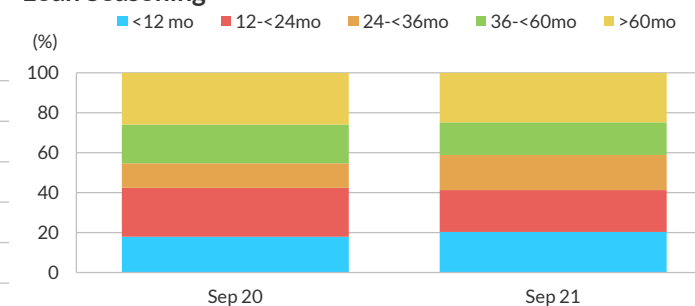
Source: Fitch Ratings, Danske Bank

### CLTV Buckets



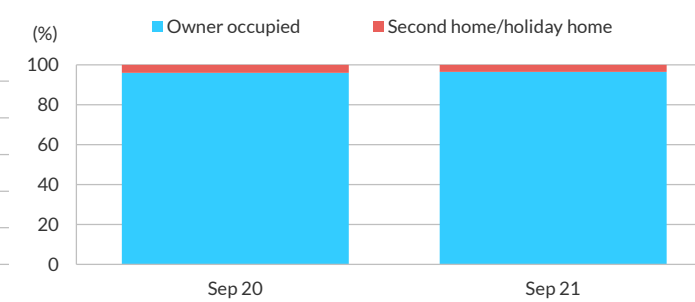
Source: Fitch Ratings, Danske Bank

### Loan Seasoning



Source: Fitch Ratings, Danske Bank

### Occupancy Type



Source: Fitch Ratings, Danske Bank

## Appendix 2

### Summary of Applicable Covered Bond Legislation

| Items   | Description  |
|---|--|
| Basis of the framework  | The Danish covered bond legislation 2007.  |
| 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 specialised 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                                     | Danish legislation does not specify an absolute nominal OC requirement. However, capital requirements have to be fulfilled at the capital centre level and at the institution level for mortgage banks and translate into a mandatory OC level of at least 8% of risk-weighted assets. For commercial banks there is no minimum mandatory OC. The OC can be funded by equity and senior debt. In practice, it is mostly invested in securities. In its programme prospectuses, Danske commits to a minimum OC of 2.0%.   |
| 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>• Either bonds and debt issued by credit quality step 1 credit institutions, provided they do not exceed 15% of the outstanding covered bonds, or bonds and debt issued by credit quality step 2 credit institutions, provided they do not exceed 10% 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 Financial Services Authority (FSA); and</li> <li>• In practice, supplementary collateral is made of exposure to public authorities and covered bonds.</li> </ul> |
| Maximum LTVs 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; and</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 | Yes, but the part of mortgage loan above the limit is excluded from the calculation of the OC (for SDROs and SDOs only).   |
| Balance principle or matched-funding                              | Meant 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   | The Danish FSA.  |
| Cover pool administrator  | An administrator (trustee) will be appointed by the Danish FSA upon or prior to insolvency of the mortgage lender. An alternative manager has the power to inter alia 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:

[Fitch Affirms Danske Bank AS's Mortgage Cover Pool D and I Mortgage Covered Bonds at 'AAA'/Stable \(November 2021\)](#)

[Covered Bonds Rating Criteria \(June 2021\)](#)

[Originator-Specific Residential Mortgage Analysis Rating Criteria \(November 2021\)](#)

[European RMBS Rating Criteria \(December 2021\)](#)

### Related Covered Bonds-Specific Research

[IO Lending Rise Signals Increasing Risk in Danish Mortgage Market \(November 2021\)](#)

[Danish Covered Bond Proposal Clarifies Extension Rules \(December 2020\)](#)

[Covered Bonds Surveillance Snapshot \(October 2021\)](#)

[Global Housing and Mortgage Outlook – 2022 \(December 2021\)](#)

[Fitch Ratings 2022 Outlook: Global Covered Bonds \(November 2021\)](#)

[Covered Bonds Protection Dashboard \(December 2021\)](#)

[Structured Finance and Covered Bonds Interactive ESG Relevance Dashboard – 3Q21 \(October 2021\)](#)

### Definitions of Terms Used

|          |  |
|----------|--|
| CVB      | Covered bonds                                |
| RRP      | Resolution reference point                   |
| PCU      | Payment continuity uplift                    |
| FF       | Foreclosure frequency                        |
| WA       | Weighted average                             |
| WAL      | Weighted average life                        |
| OC       | Overcollateralisation                        |
| LTV      | Loan-to-value                                |
| RO       | Realkreditobligationer                       |
| SDRO     | Særligt Dækkede Realkreditobligationer       |
| SDO      | Særligt Dækkede Obligationer                 |
| FSA      | 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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