## Credit Risk gydbak <br> 2022 <br> 318


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The Credit Risk report for 2022 is available in Danish at sydbank.dk and in English at sydbank.com.
In case of doubt the Danish version applies.

## Introduction

Credit risk is the risk of loss as a result of the non-performance by customers and other counterparties of their payment obligations to the Group. Credit risk concerns loans and advances, credit commitments and guarantees as well as market values of derivatives and any holdings.

The most significant credit risks in the Group relate to the Group's loans and advances and guarantees issued to retail and corporate clients. The main focus of this report is a description of the lending and guarantee portfolio which may be compared with loans and advances and guarantees in the 2022 Annual Report.

The correlation between the gross exposure, as shown in "Appendix 1 - Supplementary tables", and loans and advances and guarantees in the 2022 Annual Report is shown in the table below.

Appendix 2 explains some of the terms used in this report.

| Gross exposure - credit risk |  |  |
| :--- | ---: | ---: |
| DKKm | 2022 | $\mathbf{2 0 2 1}$ |
| Loans and advances at fair value | 10,490 | 16,918 |
| Loans and advances at amortised cost | 73,933 | 67,041 |
| Loans and advances according to |  |  |
| financial statements | $\mathbf{8 4 , 4 2 3}$ | $\mathbf{8 3 , 9 5 9}$ |
| Loans and advances to municipalities | $(76)$ | $(699)$ |
| Guarantees issued by government |  |  |
| and institutions | $(2,689)$ | $(995)$ |
| Undrawn credit commitments | 52,981 | 51,782 |
| Derivatives | 801 | 1,330 |
| Repo (deposits) | 17,104 | 3,438 |
| Contingent liabilities etc | $\mathbf{1 5 3 , 8 5 2}$ | $\mathbf{1 6 0 , 3 7 0}$ |
| Gross exposure to retail and | 29,609 | 20,159 |
| corporate clients | 9,465 | 8,925 |
| Governments, incl municipalities | $\mathbf{1 9 2 , 9 2 6}$ | $\mathbf{1 8 9 , 4 5 4}$ |
| Credit institutions |  |  |
| Gross exposure - credit risk |  |  |

## Credit and customer policy

The Group's overall credit risk is managed according to policies and limits determined and adopted by the Board of Directors.

The Board of Directors lays down the general framework for lending and the largest exposures are submitted on a regular basis to the Board of Directors for approval or information.

Employees with a lending authority may grant approvals. Such authority is adjusted to the employee's position. The lending authority is risk-based, ie a higher risk means reduced lending authority.

## Corporate clients

As a rule corporate clients are served by the regional head office or by special corporate departments. The Group's largest and most complex exposures are handled by Corporate \& Institutional Banking. The objective is that all small corporate exposures with satisfactory credit quality are approved at regional level. Mediumsize and major exposures are approved centrally by Credits, the Group Executive Management or the Board of Directors.

The Group's credit-related decisions are based on a systematic and structured review of the customer's circumstances and industry affiliation. The review is based on all accessible information, including industry analyses and financial analyses, and also comprises an assessment of the customer's forwardlooking business plan and its risk and feasibility.

## Retail clients

Lending to retail clients is based on the customer's disposable amount, wealth and leverage (defined as total household debt divided by household personal income) as well as knowledge of the customer.

The objective is that the majority of retail client exposures are approved by the customer's branch and that the remaining client exposures are approved by specially appointed heads of credit. Consequently exposures where the customer has negative assets of more than DKK 100,000 are approved by heads of credit. Major exposures and exposures with an increased risk are reviewed centrally by Credits.

## Credit activities

Credit activities are conducted partly in the retail and corporate departments and partly centrally in Credits. As described below, the Group has developed rating models to assess risks to retail clients and corporate clients.

The Group's credit activities are an active element in the Group's efforts to increase its income by:

- maintaining and increasing the portfolio of profitable and promising retail, corporate and investment clients
- maintaining and increasing customers' business volume with the Group through a balanced composition of:
- loans and advances and guarantees
- deposits
- payment services transactions
- trading in securities etc
- financial instruments
- avoiding/reducing risk of loss by implementing action plans for weak exposures. These action plans involve reducing the Group's exposure as well as hedging risks by securing additional collateral.

Risks in connection with lending must be precalculated on an informed and well-founded basis.

The Group's credit exposure is in particular to customers in Denmark and Northern Germany.

Particular focus is given to weak exposures. The objective is to ensure that the Group's action plans for these exposures are monitored, evaluated and adjusted on an ongoing basis to reduce the risk of loss.

Moreover Credits has a department which is assigned to exposures with a significant risk of loss. These exposures are closely monitored and Credits is actively involved in preparing solutions to mitigate the Group's credit risk.

On the basis of a risk-based approach Credit Control ensures that procedures and lending authorities are complied with as well as checks the Bank's systems and business procedures in the credit area. Moreover Credit Control, which is a separate department, follows up that any errors detected are corrected and reports to the Bank's management about its activities.

## Risk Follow-up

Risk Follow-up is part of the division Risk.

By means of analyses and random sampling Risk Follow-up monitors the credit quality of exposures, registrations, impairment charge calculations as well as the compliance with policies and business procedures in general.

This process involves research and analyses using information from the Group's database of all exposures.

Moreover Risk Follow-up conducts regular credit quality analyses of the Group's new exposures as well as regular random sampling of the retail and corporate client portfolios.

Finally Risk Follow-up evaluates on the basis of a credit expert assessment whether the Group's rating models rank customers correctly.

## Rating

The Group has developed rating models to manage credit risks to retail and corporate clients. The overriding objective is to constantly monitor the financial circumstances of a customer and to identify as early as possible any financial difficulties.

The models are developed for the purpose of reflecting the Group's credit processes and complying with legislation in force issued by the EU and the EBA. The Group has models for the risk parameters PD, LGD and EAD as regards the Group's retail clients and corporate clients.

PD represents the probability that the customer will default on his obligations to the Group within the next 12 months.

LGD represents the proportion of a given exposure that is expected to be lost if the customer defaults on his obligations within the next 12 months.

EAD represents the expected size of an exposure, ie how much a customer is expected to have drawn on the granted credit facilities at the time of default. In order to calculate EAD a conversion factor (CF) is estimated for the purpose of converting undrawn credit commitments to expected EAD.

The risk parameters are included in the calculation of a number of important internal ratios and key figures concerning the Group's exposure portfolio, including expected loss (EL).

Expected loss (EL) is calculated as follows: EAD $\times$ PD $\times$ LGD.

The models constitute a vital management tool in the Group's credit process in connection with eg:

- the targeting of sales activities, including pricing
- the assessment and determination of lending authority
- the review and follow-up of the risk of loans and credit commitments
- the calculation of impairment charges as regards facilities without objective evidence of credit impairment (OECI)

In addition the Group's models are used in connection with the calculation of the Group's Pillar I capital requirement.

## Implementation of new corporate model

Today the Group uses the advanced IRB approach to calculate the capital requirement as regards retail exposures. As regards corporate exposures the Group has previously used the foundation IRB approach. The Group achieved approval from the Danish FSA as of 31 October 2022 to use the advanced IRB approach (A-IRB) as regards the Group's corporate exposures.

On the basis of the rating models, customers are assigned to rating categories 1-10 where rating category 1 represents the best credit quality and rating category 10 represents the category of customers who have defaulted on their obligations to the Group.

Customers are rated in the 2 independent models described below and all models are based on statistical processing of customer data for the purpose of classifying customers according to their probability of default within the next 12 months.

## Corporate

The corporate client model is based partly on accounting data and partly on financial conduct and is supplemented by appraisals made by the credit officer and/or account manager of the customer's current strength profile as well as an industry analysis. It is possible on the basis of a specific assessment to override a rating. All overrides must be approved by the Bank's Credit Committee. As regards the largest customers, ie exposures exceeding $1 \%$ of the Group's total capital, calculated ratings are assessed by Credits at least twice a year.

## Retail

The retail client model is based primarily on account behaviour. On the basis of this data and inherent statistical correlations, customers are rated according to their probability of default vis-à-vis the Group within the next 12 months. Following approval by the Danish FSA, retail exposures acquired from Alm. Brand Bank have been incorporated in the Group's IRB portfolio as of 31 October 2022.

## Exposures outside rating models

The Group has no internal rating model to assess risk as regards credit institutions, public authorities (governments, regions and municipalities) and a few specific portfolios as regards corporate clients and retail clients, including corporate exposures acquired from Alm. Brand Bank. The Danish FSA has approved the Group's use of the Standardised Approach to calculate the risk exposure amount concerning these exposures.

## PD scale - effect of new corporate model

The implementation of the advanced IRB approach (A-IRB) as regards corporate exposures has resulted in an adjustment of the PD level, which in turn has brought about a change in the correlation between PD and rating categories
The table below shows the PD bands used at 31 December 2022 (new model) and at 30 September 2022 (previous model) as regards corporate exposures.

PD bands before and after implementation of A-IRB

| \% | 31 Dec 2022 |  | 30 Sep 2022 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Rating category | Min | Max | Min | Max |
| 1 | 0.00 | 0.01 | 0.00 | 0.01 |
| 2 | 0.01 | 0.20 | 0.01 | 0.05 |
| 3 | 0.20 | 0.50 | 0.05 | 0.20 |
| 4 | 0.50 | 1.10 | 0.20 | 0.50 |
| 5 | 1.10 | 2.50 | 0.50 | 1.10 |
| 6 | 2.50 | 4.00 | 1.10 | 2.50 |
| 7 | 4.00 | 7.00 | 2.50 | 4.00 |
| 8 | 7.00 | 12.00 | 4.00 | 8.00 |
| 9 | 12.00 | 99.99 | 8.00 | 99.99 |
| Default | 100.00 | 100.00 | 100.00 | 100.00 |

The table at the bottom of the page shows corporate loans and advances before impairment charges by rating category at 31 December 2022 (new model) compared to 30 September 2022 (previous model).

The total share of loans and advances in rating categories $1-4$ is unchanged - however there are shifts between rating categories $1-4$. Rating categories 5-6 are unchanged. Rating categories $7-9$ show an increase of 2.1 pp . The rating category default is unchanged.

Loans and advances to corporate clients by rating category before and after implementation of A-IRB

| $\%$ <br> Rating category | 31 Dec 2022 |  | 30 Sep 2022 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Loans and advances | \% | Loans and advances | \% |
| 1 | 4,754 | 7.6 | 1,376 | 2.2 |
| 2 | 20,250 | 32.3 | 21,836 | 34.4 |
| 3 | 8,690 | 13.9 | 17,114 | 26.8 |
| 4 | 16,597 | 26.4 | 11,736 | 18.5 |
| 5 | 5,721 | 9.1 | 5,925 | 9.3 |
| 6 | 1,960 | 3.1 | 2,171 | 3.4 |
| 7 | 1,636 | 2.6 | 672 | 1.1 |
| 8 | 460 | 0.7 | 146 | 0.2 |
| 9 | 1,041 | 1.7 | 1,004 | 1.6 |
| Default | 1,084 | 1.7 | 1,053 | 1.7 |
| STD/NR | 558 | 0.9 | 514 | 0.8 |
| Total | 62,751 | 100.0 | 63,547 | 100.0 |
| Rating categories 1-4 | 50,291 | 80.2 | 52,062 | 81.9 |
| Rating categories 5-6 | 7,681 | 12.2 | 8,096 | 12.7 |
| Rating categories 7-9 | 3,137 | 5.0 | 1,822 | 2.9 |
| Default | 1,084 | 1.7 | 1,053 | 1.7 |
| STD/NR | 558 | 0.9 | 514 | 0.8 |
| Total | 62,751 | 100.0 | 63,547 | 100.0 |

## Rating

Loans and advances and guarantees by rating category

| DKKm | Corporate |  |  | Retail |  |  | Total 2022 |  |  | $2021$$\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loans/ advances | Guarantees | \% | Loans/ advances | Guarantees | \% | Loans/ advances | Guarantees | \% |  |
| 1 | 4,754 | 218 | 7.0 | 5,340 | 4,502 | 47.3 | 10,094 | 4,720 | 16.2 | 14.2 |
| 2 | 20,250 | 4,011 | 34.3 | 2,169 | 1,350 | 16.9 | 22,419 | 5,361 | 30.3 | 27.1 |
| 3 | 8,690 | 1,193 | 14.0 | 2,168 | 950 | 15.0 | 10,858 | 2,143 | 14.2 | 24.0 |
| 4 | 16,597 | 1,241 | 25.2 | 769 | 398 | 5.6 | 17,366 | 1,639 | 20.7 | 13.4 |
| 5 | 5,721 | 568 | 8.9 | 498 | 226 | 3.5 | 6,219 | 794 | 7.7 | 6.3 |
| 6 | 1,960 | 121 | 2.9 | 155 | 40 | 0.9 | 2,115 | 161 | 2.5 | 3.0 |
| 7 | 1,636 | 86 | 2.4 | 59 | 28 | 0.4 | 1,695 | 114 | 2.0 | 0.5 |
| 8 | 460 | 45 | 0.7 | 45 | 21 | 0.3 | 505 | 66 | 0.6 | 0.4 |
| 9 | 1,041 | 85 | 1.6 | 343 | 79 | 2.0 | 1,384 | 164 | 1.7 | 1.9 |
| Default | 1,084 | 131 | 1.7 | 102 | 30 | 0.6 | 1,186 | 161 | 1.5 | 1.4 |
| STD/NR | 558 | 348 | 1.3 | 1,274 | 278 | 7.5 | 1,832 | 626 | 2.6 | 7.8 |
| Total | 62,751 | 8,047 | 100.0 | 12,922 | 7,902 | 100.0 | 75,673 | 15,949 | 100.0 | 100.0 |
| lmpairment of  <br> loans and advances 1,386 |  |  |  | 354 |  |  | 1,740 |  |  |  |
| Total | 61,365 | 8,047 |  | 12,568 | 7,902 |  | 73,933 | 15,949 |  |  |
| 2022 \% | 83.0 | 50.5 |  | 17.0 | 49.5 |  | 100.0 | 100.0 |  |  |
| 2021 \% | 78.9 | 33.3 |  | 21.1 | 66.7 |  | 100.0 | 100.0 |  |  |

The table above shows that corporate loans and advances (including loans and advances to public authorities) account for 83.0\% (2021: 78.9\%) of total loans and advances, and retail loans and advances constitute 17.0\% (2021: 21.1\%).
80.5\% (2021: 81.1\%) of the Group's corporate loans and advances and guarantees are rated in categories 1-4 and 84.8\% (2021: 73.6\%) of the Group's retail loans and advances are rated in categories 1-4.

## Default

According to the Group's rating system, a customer is in default if at least one of the following events has occurred:

- A write-off has been recorded as regards the customer
- The customer has at least one non-accrual credit facility
- An impairment charge/provision has been registered in connection with the customer and a loss must be regarded as the most likely
- The exposure is being treated as non-performing
- The exposure has been significantly overdrawn for more than 90 consecutive days
- Distressed restructuring has been granted

Exposures in default are classified as stage 3.

## Validation

Risk parameters are monitored and validated on an ongoing basis relative to the Group's business procedures, which reflect best practice, as well as requirements from the Danish FSA, the EU and the EBA.

The validation process includes an assessment of:

- Model ability to rank customers by default risk
- Realised values compared with expected values (backtesting)
- Data quality
- Model application

The backtest of the corporate client rating model for the period 1 January 2022-31 December 2022 shows the following:

| Rating | Number | Number of real- <br> ised defaults | Number of esti- <br> mated defaults |
| :--- | ---: | ---: | ---: |
| 1 | 49 | 0 | 0 |
| 2 | 6,164 | 3 | 7 |
| 3 | 5,621 | 10 | 23 |
| 4 | 3,544 | 15 | 31 |
| 5 | 2,615 | 40 | 62 |
| 6 | 816 | 24 | 35 |
| 7 | 509 | 21 | 33 |
| 8 | 155 | 23 | 17 |
| 9 | 714 | 108 | 133 |
| Total | 20,187 | 244 | 341 |

The Group implemented a new model as regards corporate clients in October 2022. The table shows that the model is prudent overall as the number of defaults is significantly lower than the number of estimated defaults.

It can be noted that, distributed by rating category, the model is prudent apart from rating category 8 in which the number of defaults exceeds the number estimated by the model. However the portfolio is very limited and consequently it must be expected that the number will be underestimated at times.

The backtest of the retail client rating model for the same period shows the following:

| Rating | Number | Number of real- <br> ised defaults | Number of esti- <br> mated defaults |
| :--- | ---: | ---: | ---: |
| 1 | 51,885 | 5 | 17 |
| 2 | 15,039 | 7 | 9 |
| 3 | 13,223 | 26 | 29 |
| 4 | 4,424 | 15 | 23 |
| 5 | 4,583 | 15 | 48 |
| 6 | 1,325 | 8 | 32 |
| 7 | 753 | 9 | 31 |
| 8 | 4,790 | 25 | 284 |
| 9 | 2,808 | 90 | 264 |
| Total | 98,830 | 200 | 737 |

The total number of retail client defaults is $73 \%$ (2021: 67\%) below the estimated number. The primary reason is found in rating categories 7-9 where the Group's PD estimates were very prudent during the period compared to the realised default rates.

It is expected that the estimates are prudent. It is the assessment that overall and by individual rating category the model is very prudent, in particular as regards rating categories 8 and 9 .

The table below shows the average PD for solvency purposes used to calculate the Group's risk exposure amount at the end of the year as well as the realised annual default rates for 2018 to 2022.

| $\%$ | Corporate |  | Retail |  |
| :--- | :---: | ---: | :---: | ---: |
|  | PD <br> solvency <br> 1 Jan | Realised <br> default <br> rate | PD <br> solvency <br> 1 Jan | Realised <br> default <br> rate |
| Year | 1.69 | 1.21 | 0.75 | 0.20 |
| 2022 | 2.15 | 1.01 | 0.72 | 0.22 |
| 2021 | 2.61 | 1.75 | 0.90 | 0.38 |
| 2020 | 2.77 | 2.38 | 0.94 | 0.43 |
| 2019 | 2.71 | 2.43 | 0.99 | 0.61 |
| 2018 |  |  |  |  |

The realised default rates as well as the PD estimate for solvency purposes have declined during the period from 2018 to 2022, however with a small increase in 2022 in the realised default rate for corporate clients.

The Group anticipates that under normal economic conditions the PD estimates for solvency purposes are prudent compared to the realised default rates.

## Rating

The following 2 figures show PD for solvency purposes and the realised default rate since 2014. As can be seen, PD for solvency purposes is typically higher than the realised default rate as regards both portfolios.


The period 1 January 2014 - 30 September 2022 is based on estimates made on the basis of a new model.

Probability of default - retail clients


## Loss given default (LGD)

LGD is defined as the proportion of a given exposure that is expected to be lost if the customer defaults within the next 12 months.

The size of LGD will vary depending on the category of the borrower as well as the realisable value of any collateral or other type of hedging.

As regards retail clients the Group uses its own estimates of the realisable value of collateral and of the loss on the unsecured part of the exposure. This was also the case as regards corporate clients from October 2022 in connection with the Danish FSA's approval of the Group's use of own estimates in terms of the corporate portfolio.

The realisable value reflects the market value of collateral net of:

- The expected state of assets provided that the exposure is nonperforming
- The expected decline in asset values during a recession
- The transferability of the collateral
- Model uncertainty


## Loss given default (LGD) - corporate clients

The table below shows the average estimated and realised LGD of corporate clients in default from 2018 to 2022.

Loss given default - corporate clients

| Year | Estimated | Realised |
| :--- | ---: | ---: |
| 2022 | 40 | 28 |
| 2021 | 40 | 24 |
| 2020 | 40 | 29 |
| 2019 | 39 | 23 |
| 2018 | 39 | 23 |

Comparing estimated and realised LGD rates is difficult as the estimated values reflect the percentage of the loss of the original exposure when the loss has been finally determined and repayments on the exposure can no longer occur. As regards virtually all exposures in default, this period lasts several years and quite often substantial payments are recorded several years after the exposure was in default.

For instance the level realised was lower than the level estimated in 2022 but the number of open cases from which dividend can continue to be obtained via payments was higher in 2022.

Overall it is the assessment that the model's ability to rank and estimate loss rates guarantees a prudent basis for calculating the capital requirement as regards exposures to corporate clients.

## Loss given default (LGD) - retail clients

The table below shows the average estimated and realised LGD of retail clients in default from 2018 to 2022.

| Loss given default - retail clients |  | \% |
| :--- | ---: | ---: |
| Year | Estimated | Realised |
| 2022 | 74 | 63 |
| 2021 | 74 | 51 |
| 2020 | 76 | 40 |
| 2019 | 75 | 46 |
| 2018 | 75 | 45 |

For the same reason as for corporate clients it is difficult to calculate estimated and realised LGD rates.

Overall it is the assessment that the model's ability to rank and estimate loss rates guarantees a prudent basis for calculating the capital requirement as regards exposures to retail clients.

## Rating

## Conversion factor (CF)

As regards exposures with undrawn credit commitments, a conversion factor is estimated indicating the expected utilisation of an undrawn credit commitment at the time of default. EAD is then calculated as the amount already drawn plus expected additional drawings until default.

The Group uses own estimates as regards retail clients and from October 2022 the Group also used own-conversion factor estimates as regards corporate clients in connection with obtaining the Danish FSA's approval to use own estimates in terms of the corporate portfolio.

## Conversion factor - corporate clients

The table below shows the average estimated and realised conversion factors for undrawn credit commitments of corporate clients in default from 2018 to 2022.

Conversion factor - corporate clients \%

| Year | Estimated | Realised |
| :--- | ---: | ---: |
| 2022 | 53 | 51 |
| 2021 | 48 | 24 |
| 2020 | 46 | 26 |
| 2019 | 44 | 34 |
| 2018 | 48 | 37 |

As can be seen from the table, the Group's CF estimates as regards corporate clients were around $48 \%$ throughout the period, corresponding to around half of the undrawn credit commitments. The realised conversion factors were below the estimated levels during this period.

## Conversion factor - retail clients

The table below shows the average estimated and realised conversion factors for undrawn credit commitments of retail clients in default from 2018 to 2022.

| Conversion factor - retail clients |  | \% |
| :--- | ---: | ---: |
| Year | Estimated | Realised |
| 2022 | 99 | 42 |
| 2021 | 99 | 75 |
| 2020 | 99 | 39 |
| 2019 | 99 | 43 |
| 2018 | 99 | 50 |

As can be seen from the table, the Group's CF estimates as regards retail clients were around $100 \%$ throughout the period, corresponding to full recognition of undrawn credit commitments. The realised conversion factors were significantly below this level.

In 2021 the realised level was higher than previously, which can be attributed to a period with fewer default cases and more outliers in relative terms.

## Risk exposure amount (REA)

REA is a function of PD, LGD and EAD. REA appears from
"Appendix 1 - Supplementary tables". The figures below show the correlation between the unweighted exposure and REA of corporate clients and retail clients respectively.


In 2020 exposures to customers in rating categories 1-4 were unchanged whereas exposures to customers in the remaining rating categories went down by approx $20 \%$.

As a result of changes to CRR in mid-2020 the SME discount rose, which reduced the risk exposure amount. From 1 January 2021 a new definition of default is used, which increases the risk exposure amount by approx DKK 5bn. Moreover the increase in lending activity is reflected in the unweighted exposure.

The Group has previously used the foundation IRB approach as regards corporate clients. The Group achieved approval from the Danish FSA as of 31 October 2022 to use the advanced IRB approach (A-IRB) as regards the Group's corporate exposures.

The use of new models impact the possibility of comparing previous periods in particular at lower levels such as rating categories.

The previous model used only own estimates as regards probability of default (PD) but standard values as regards loss given default (LGD), recognition of off-balance sheet items (CF), maturity and collateral values. According to A-IRB own estimates are used as regards all parameters.

The consequence is an increase in unweighted exposure and an unchanged level of REA.

## REA and unweighted exposure - retail clients



The increase in 2019 in unweighted exposure as regards retail clients is attributable to the provision of guarantees in connection with the refinancing of mortgage loans.

The decrease in unweighted exposure in 2020 is predominantly attributable to a drop in the provision of guarantees as a result of lower remortgaging activity compared to 2019.

The decline in the risk exposure amount in 2021 is attributable to a decrease in exposure in rating category 9 .

The Danish FSA has given the Group its approval as of 31 October 2022 to incorporate retail exposures acquired from Alm. Brand Bank in the Group's IRB portfolio, which increases REA and unweighted exposure.

## Industry breakdown

The Group's credit exposure to corporate clients takes into account individual industry prospects. Due to special risk assessments, the Group may deliberately underweight its exposure to a few industries. The table below shows the exposure by way of loans and advances and guarantees to 10 primary industries as well as to retail clients and public authorities. After impairment charges,
total loans and advances represent DKK 73,933m. In addition the table shows loans and advances by stage according to IFRS 9 and the related accumulated impairment charges as well as impairment charges for loans and advances etc for the year by industry etc.

| $\begin{aligned} & 2022 \\ & \text { DKKm } \end{aligned}$ | Loans/advances before impairment charges | Loans/advances after impairment charges | Guarantees | Loans/ advances - stage 1 | Loans/ advances - stage 2 | Loans/ advances - stage 3 | Credit impaired at initial recognition |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture, hunting, forestry and fisheries | 2,648 | 2,427 | 955 | 1,770 | 602 | 247 | 29 |
| Manufacturing and extraction of raw materials | 12,223 | 11,918 | 926 | 10,353 | 1,770 | 100 | 0 |
| Energy supply etc | 2,944 | 2,928 | 1,104 | 2,889 | 49 | 6 | 0 |
| Building and construction | 5,365 | 5,227 | 1,002 | 4,550 | 704 | 111 | 0 |
| Trade | 19,613 | 19,187 | 2,298 | 17,669 | 1,603 | 340 | 1 |
| Transportation, hotels and restaurants | 3,254 | 3,189 | 229 | 3,007 | 180 | 67 | 0 |
| Information and communication | 401 | 390 | 24 | 330 | 68 | 3 | 0 |
| Finance and insurance | 6,452 | 6,390 | 722 | 6,022 | 352 | 78 | 0 |
| Real property | 5,319 | 5,273 | 449 | 4,895 | 345 | 31 | 48 |
| Other industries | 4,411 | 4,316 | 330 | 3,939 | 371 | 101 | 0 |
| Total corporate | 62,630 | 61,245 | 8,039 | 55,424 | 6,044 | 1,084 | 78 |
| Public authorities | 121 | 120 | 8 | 98 | 23 | 0 | 0 |
| Retail | 12,922 | 12,568 | 7,902 | 11,980 | 777 | 102 | 63 |
| Total | 75,673 | 73,933 | 15,949 | 67,502 | 6,844 | 1,186 | 141 |
| Agriculture, hunting, forestry and fisheries |  |  |  |  |  |  |  |
| Pig farming | 545 | 497 | 220 | 367 | 108 | 46 | 24 |
| Cattle farming | 625 | 562 | 359 | 439 | 127 | 57 | 2 |
| Crop production | 623 | 591 | 221 | 434 | 151 | 38 | 0 |
| Other agriculture | 855 | 777 | 155 | 530 | 216 | 106 | 3 |
| Total | 2,648 | 2,427 | 955 | 1,770 | 602 | 247 | 29 |
| Manufacturing and extraction of raw materials |  |  |  |  |  |  |  |
| Iron and metal | 2,067 | 1,951 | 209 | 1,560 | 477 | 30 | 0 |
| Food, beverage and tobacco | 3,363 | 3,293 | 104 | 2,892 | 461 | 10 | 0 |
| Clothing | 1,674 | 1,655 | 33 | 1,565 | 95 | 14 | 0 |
| Other manufacturing and extraction of raw materials | 5,119 | 5,019 | 580 | 4,336 | 737 | 46 | 0 |
| Total | 12,223 | 11,918 | 926 | 10,353 | 1,770 | 100 | 0 |
| Trade |  |  |  |  |  |  |  |
| Wholesale | 14,691 | 14,361 | 1,709 | 13,311 | 1,130 | 249 | 1 |
| Retail | 2,621 | 2,581 | 336 | 2,310 | 294 | 17 | 0 |
| Car dealers and garages | 2,301 | 2,245 | 253 | 2,048 | 179 | 74 | 0 |
| Total | 19,613 | 19,187 | 2,298 | 17,669 | 1,603 | 340 | 1 |
| Finance and insurance |  |  |  |  |  |  |  |
| Holding companies | 2,390 | 2,358 | 113 | 2,094 | 242 | 53 | 1 |
| Financing companies | 4,062 | 4,032 | 609 | 3,928 | 110 | 25 | (1) |
| Total | 6,452 | 6,390 | 722 | 6,022 | 352 | 78 | 0 |
| Real property |  |  |  |  |  |  |  |
| Leasing of commercial property | 1,877 | 1,852 | 219 | 1,618 | 205 | 9 | 45 |
| Leasing of residential property | 517 | 508 | 134 | 421 | 72 | 21 | 3 |
| Housing/cooperative associations | 2,217 | 2,214 | 30 | 2,215 | 2 | 0 | 0 |
| Purchase, development and sale on own account | 561 | 555 | 62 | 500 | 61 | 0 | 0 |
| Other related to real property | 147 | 144 | 4 | 141 | 5 | 1 | 0 |
| Total | 5,319 | 5,273 | 449 | 4,895 | 345 | 31 | 48 |

As shown below, the accumulated impairment ratio as regards loans and advances constitutes 2.3\% (2021: 2.7\%) and credit impaired loans and advances in stage 3 represent 1.6\% (2021: $1.6 \%)$ of the total volume of lending. The table shows that 9.3\% (2021: 7.3\%) of loans and advances to agriculture are regarded
as credit impaired and that the impairment charges constitute 52.6\% (2021: 44.5\%). The impairment ratio for agriculture totals 8.3\% (2021: 9.1\%). The Group's risk on the exposure to agriculture is described in a separate paragraph.


## Industry breakdown

The table below shows the Group's loans and advances to industries by rating category. 81.9\% (2021: 80.0\%) of rated loans and advances after impairment charges are rated in categories $1-4$ whereas the percentage for agriculture is 53.2 (2021: 35.7).

The Danish FSA has given the Group its approval as of 31 October 2022 to incorporate retail exposures acquired from Alm. Brand Bank in the Group's IRB portfolio.
As a consequence quite a few loans moved from the rating category STD/NR in 2021 to other rating categories in 2022.

Loans and advances by rating category

| DKKm <br> Industry | 1-2 | 3-4 | 5-6 | 7-9 | Default | STD/NR | $\begin{aligned} & 2022 \\ & \text { Total } \end{aligned}$ | $2022$ <br> \% | $\begin{array}{r} 2021 \\ \% \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Agriculture, hunting, forestry and fisheries | 459 | 951 | 580 | 351 | 235 | 72 | 2,648 | 3.5 | 4.2 |
| Manufacturing and extraction of raw materials | 3,849 | 5,288 | 1,985 | 994 | 100 | 7 | 12,223 | 16.2 | 14.1 |
| Energy supply etc | 1,749 | 1,047 | 129 | 13 | 6 | - | 2,944 | 3.9 | 4.5 |
| Building and construction | 2,155 | 1,856 | 717 | 521 | 111 | 5 | 5,365 | 7.1 | 6.8 |
| Trade | 6,766 | 9,126 | 2,704 | 663 | 340 | 14 | 19,613 | 25.9 | 21.8 |
| Transportation, hotels and restaurants | 935 | 1,918 | 229 | 102 | 67 | 3 | 3,254 | 4.3 | 4.6 |
| Information and communication | 32 | 238 | 43 | 78 | 3 | 7 | 401 | 0.5 | 0.6 |
| Finance and insurance | 3,633 | 2,122 | 331 | 52 | 71 | 243 | 6,452 | 8.5 | 8.5 |
| Real property | 3,083 | 1,302 | 622 | 158 | 31 | 123 | 5,319 | 7.0 | 8.0 |
| Other industries | 2,321 | 1,435 | 320 | 205 | 120 | 10 | 4,411 | 5.8 | 5.6 |
| Public authorities | 22 | 4 | 21 | - | - | 74 | 121 | 0.2 | 0.1 |
| Retail | 7,509 | 2,937 | 653 | 447 | 102 | 1,274 | 12,922 | 17.1 | 21.2 |
| Total | 32,513 | 28,224 | 8,334 | 3,584 | 1,186 | 1,832 | 75,673 | 100.0 | 100.0 |
| Impairment of loans and advances | 19 | 190 | 235 | 593 | 649 | 54 | 1,740 |  |  |
| Total loans and advances | 32,494 | 28,034 | 8,099 | 2,991 | 537 | 1,778 | 73,933 |  |  |
| 2022 \% | 44.0 | 37.9 | 11.0 | 4.0 | 0.7 | 2.4 | 100.0 |  |  |
| 2021 \% | 37.7 | 42.3 | 10.1 | 2.3 | 0.8 | 6.8 | 100.0 |  |  |

## Focus on agriculture

Agriculture - loans and advances by rating category

| DKKm |  |  |  |  |  | 2022 | 2022 | 2021 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Sub-industry | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 - 9}$ | Default | STD/NR | Total | $\%$ | $\%$ |
| Pig farming | 80 | 232 | 70 | 80 | 31 | 52 | 545 | 20.6 | 20.1 |
| Cattle farming | 91 | 223 | 151 | 86 | 57 | 17 | 625 | 23.6 | 31.1 |
| Crop production | 188 | 205 | 139 | 50 | 41 | - | 623 | 23.5 | 20.3 |
| Other agriculture | 100 | 291 | 220 | 135 | 106 | 3 | 855 | 32.3 | 28.5 |
| Total | 459 | 951 | 580 | 351 | 235 | 72 | 2.648 | 100.0 | 100.0 |
| lmpairment of loans and advances | 0 | 7 | 22 | 61 | 130 | 1 | 221 |  |  |
| Total loans and advances | 459 | 944 | 558 | 290 | 105 | 71 | 2.427 |  |  |
| $2022 \%$ | 19.0 | 38.9 | 23 | 11.9 | 4.3 | 2.9 | 100.0 |  |  |
| $2021 \%$ | 5.6 | 33.5 | 44.9 | 9.4 | 4.5 | 2.1 | 100.0 |  |  |

Agriculture is divided into the following sub-industries:

- Pig farming
- Cattle farming (beef cattle and dairy cattle)
- Crop production
- Other agriculture (primarily forestry farming and leisure farmers)


## Outlook for agriculture

At year-end 2022 Sydbank's total loans and advances to agriculture constituted DKK 2,648m - a drop of DKK 225 m compared with a year ago.

The share of loans and advances in the weakest rating categories (7-9 and default) represents 22.1\% (2021:18.4\%) before impairment charges. After impairment charges this share constitutes $16.2 \%$ (2021: 13.9\%). The increase in the share of loans and advances in the weakest rating categories is attributable in part to the fact that the decline in total loans and advances to agriculture has predominantly occurred in the good rating categories.

As shown in the table on pp 12-13, 9.3\% (2021: 7.3\%) of loans and advances to agriculture are credit impaired and classified as stage 3. 8.4\% (2021: 4.0\%) of loans and advances to pig farming are classified as stage 3 and $9.1 \%$ (2021: 8.2\%) of loans and advances to cattle farming are classified as stage 3 .

At year-end 2022 an impairment charge totalling DKK 221m (2021: DKK 261m) was recorded, equivalent to $8.3 \%$ (2021: 9.1\%) of loans and advances.

DKK 130m (2021: DKK 94m) of the impairment charges for loans and advances of DKK 221m concern credit impaired exposures.

Loans and advances rated STD/NR can be attributed to the portfolio acquired from Alm. Brand Bank of which DKK 29m (2021: DKK 29m) was credit impaired at initial recognition.

The quotation for pork was very stable in 2022 and for the year as a whole pork producers saw a quotation of approx DKK 12.20 per kg , incl supplementary payments. Due to a steep increase in feed and energy prices pork producers' earnings have not been satisfactory. In particular producers with limited production of feed have been hard hit. Also producers of piglets for export have been hard hit by low prices as German producers in particular stopped restocking as a result of the poor exchange ratio.

It is expected that 2023 will be a challenging year with high feed and energy prices appearing to continue coupled with high interest rates. The quotation for pork is forecast to go up as production and consequently the supply of pork in Europe have dropped significantly and are expected to go down further. The decline can be attributed to a reduction in the breeding stock among other things.

Milk producers saw a highly satisfactory year with recordbreaking earnings in 2022. Despite the high feed and energy prices milk producers were more than compensated thanks to historically high milk prices. At the beginning of 2023 the level of milk prices is high but they are forecast to drop during the year. Earnings are expected to go down in 2023 but remain at a satisfactory level.

Whereas pork and milk producers suffered financially from high grain prices, crop producers benefited from attractive prices and high crop yields. Subject to weather conditions 2023 appears to be reasonable for crop producers despite looking into a year of high energy, fertilizer and chemical prices.

According to the political base of Denmark's new government, the government will introduce at the beginning of 2023 a plan to accelerate the payment of compensation to mink farmers and therefore the Group expects that exposures to former mink farmers will be reduced in the course of 2023/2024.

A carbon tax on the farming industry's biological processes has been an element of uncertainty for the industry. Given the new government a carbon tax is expected to be introduced. The structure of the tax is still undecided but according to the government platform the proceeds from the tax will be returned directly to the farming industry to support the green transition. The ambition is that it should continue to be possible to develop and not phase out Danish food production. As a result the Group expects that the carbon tax and the green transition can be comprised by agricultural customers' finances.

Overall 2022 was a record-breaking year for Danish agriculture and 2023 looks set to become a good year, however with large differences between the sub-industries. As in 2022 pork producers face the biggest uncertainty due to the spreading of African swine fever as well as uncertainty surrounding China's pork imports.

## Focus on retail clients

At 31 December 2022 loans and advances to retail clients represented DKK 12,922m (2021: DKK 14,573m)

Loans and advances other than mortgage-like loans to retail clients constituted DKK 10,691m at 31 December 2022 (2021: DKK 12.431 m ) - a decrease of $14.0 \%$ in 12 months.

At 31 December 2022 mortgage-like loans made up 17.3\% (2021: 14.7\%) of total loans and advances to retail clients.

Funded mortgage-like loans are not recognised in the Group's balance sheet. The Bank provides a guarantee for the part of the loan in the LTV range of 60-80\%.

Arranged mortgage loans - Totalkredit are adversely affected due to customers' refinancing of fixed-rate bond loans. Refinancing of bond loans enables customers to significantly reduce their outstanding debt and consequently arranged mortgage loans Totalkredit recorded a drop of DKK 2,822m from DKK 89,239m in 2021 to DKK 86,417m in 2022.

Total credit intermediation to retail clients - by product type

| DKKm |  |  |  |
| :--- | ---: | ---: | ---: |
| Product type | 2022 | 2021 | 2020 |
| Mortgage-like loans | 2,231 | 2,142 | 2,502 |
| Housing loans, bridging loans <br> and construction credit facilities | 4,534 | 5,614 | 6,478 |
| Car loans | 1,866 | 2,467 | 2,213 |
| Foreign currency loans and |  |  |  |
| other investment credit facilities | 324 | 273 | 325 |
| Other loans and advances | 3,967 | 4,077 | 4,434 |
| Total loans and advances | $\mathbf{1 2 , 9 2 2}$ | $\mathbf{1 4 , 5 7 3}$ | $\mathbf{1 5 , 9 5 2}$ |
| Funded loans and advances | 4,861 | 5,645 | 6,931 |
| - off-balance sheet | 86,417 | 89,239 | 85,723 |
| Arranged mortgage loans | $\mathbf{1 0 4 , 2 0 0}$ | $\mathbf{1 0 9 , 4 5 7}$ | $\mathbf{1 0 8 , 6 0 6}$ |
| Totalkredit |  |  |  |
| Total credit intermediation |  |  |  |

Total loans and advances to retail clients by product type


The tables below show that a substantial part of the decline in loans and advances to retail clients was in the rating category STD/NR. In 2021 loans and advances related to exposures acquired from Alm. Brand Bank were classified as STD/NR. As of 31 October 2022 these exposures were incorporated into Sydbank's rating model.

At 31 December 2022 loans and advances before impairment charges to customers in the 4 best rating categories, including STD/NR, represented DKK 11,720m (2021: DKK 13,520m) - a decline of DKK 1,800m, primarily attributable to a decrease in housing loans, bridging loans and construction credit facilities, and car loans.

At 31 December 2022 the share of loans and advances to customers in the 4 best rating categories represented $82.8 \%$ (2021: 66.9\%) - an increase of 15.9 pp , which is primarily attributable to the incorporation in the rating model of the exposures acquired from Alm. Brand Bank.

## Impairment of loans and advances

As regards customers in rating categories 1-9 without objective evidence of credit impairment, model-based scenario-weighted impairment charges are calculated. The scenarios reflect the assumed future economic environment and are broken down by the probability of the following scenarios: downturn, baseline
and upturn. At 31 December 2022 the probability of a downturn scenario represented $95 \%$, which is unchanged compared with year-end 2021.

At 31 December 2022 the Group had a management estimate of DKK 100m to hedge the macroeconomic uncertainty as regards retail clients.

The management estimate as regards macroeconomic risks covers potential losses related to the negative effects of energy price increases, a high inflation rate as well as the risk of a recession etc.

In 2022 impairment charges as regards retail clients totalled an income of DKK 142m (2021: income of DKK 100m). The net income is primarily attributable to amounts recovered from debt previously written off.

## Outlook for retail clients

Negative GDP growth is projected in 2023 where an increase in interest rates and high inflation will impact the economic situation in Denmark. Forecasts show eg a drop in property prices and growth in unemployment.

The assessment is that most retail clients are well equipped for an economic setback but a potential recession will likely lead to an increase in impairment charges.

Loans and advances to retail clients - by product type and rating category


| DKKm |  |  |  |  |  |  |  | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-2 | 3-4 | 5-6 | 7-9 | Default | STD/NR | Total | \% |
| Mortgage-like loans | 1,759 | 236 | 73 | 57 | 8 | 9 | 2,142 | 14.7 |
| Housing loans, bridging loans and construction credit facilities | 2,213 | 1,110 | 214 | 174 | 27 | 1,876 | 5,614 | 38.5 |
| Car loans | 747 | 222 | 34 | 11 | 1 | 1,451 | 2,466 | 16.9 |
| Foreign currency loans and other investment credit facilities | 61 | 142 | 11 | 16 | 1 | 42 | 273 | 1.9 |
| Other loans and advances | 1,896 | 1,155 | 188 | 163 | 74 | 601 | 4,077 | 28.0 |
| Total | 6,676 | 2,865 | 520 | 421 | 111 | 3,979 | 14,572 | 100.0 |
| Impairment of loans and advances | 50 | 24 | 8 | 160 | 92 | 87 | 421 |  |
| Total loans and advances | 6,626 | 2,841 | 512 | 261 | 19 | 3,892 | 14,151 |  |
| \% | 46.8 | 20.1 | 3.6 | 1.9 | 0.1 | 27.5 | 100.0 |  |

## Concentration

Under the EU Capital Requirements Regulation (CRR), exposures to a customer or a group of connected customers, after the deduction of particularly secure claims, may not exceed $25 \%$ of total capital. The compliance with these rules is reported to the Danish FSA on a quarterly basis.

The table below shows the exposures which after the deduction of particularly secure claims constitute $10 \%$ or more of total capital.

| DKKm | 2022 | 2021 |
| :--- | ---: | ---: |
| Exposure > 20\% <br> of total capital | - |  |
| Exposure 10-20\% <br> of total capital | 2,919 | 1,438 |
| Total | 2,919 | 1,438 |
| \% of total capital | 24.6 | 11.0 |

2 exposures after the deduction of particularly secure claims constituted 10\% or more of total capital at year-end 2022.

## Supervisory Diamond

The 20 largest exposures - according to CRR - may not in accordance with the Group's credit policy exceed $150 \%$ of CET1 capital. The limit is thus fixed under the Supervisory Diamond's threshold of 175\% (applicable from 1 January 2018) of CET1 capital.

At year-end 2022 the 20 largest exposures - according to CRR represented $147 \%$ (2021: 140\%) of CET1 capital.

In addition to calculating exposures according to CRR, Sydbank uses an internal exposure concept - BIS group - that consolidates customers that are interdependent as a result of any knock-on effect. Consequently one CRR group may consist of several BIS groups but one BIS group cannot form part of several CRR groups.

## Credit policy

In accordance with its credit policy, the Group does not wish to be dependent on or have exposures to large single exposures. This implies among other factors that the following must be observed as the exposures are always calculated according to the principles for BIS groups:

- The 10 largest exposures may, as a rule, not exceed $10 \%$ of the Group's total portfolio of exposures (however excluding exposures to credit institutions, investment funds and public authorities).
After deduction of the loan value of any collateral, the 10 largest exposures may not exceed 5\% of the total portfolio of exposures (however excluding exposures to credit institutions, investment funds and public authorities).
The 20 largest exposures may not exceed $125 \%$ of the Group's total capital.

At year-end 2022 the 10 largest exposures represented 5.2\% (2021: 4.3\%) of the Group's total portfolio of exposures.

After deduction of the loan value of any collateral, the 10 largest BIS exposures constitute $4.6 \%$ (2021: 4.1\%) of the total portfolio of exposures.

At year-end 2022 the 20 largest BIS exposures represented 114\% (2021: 96\%) of the Group's total capital

No exposures (however excluding exposures to credit institutions, investment funds and public authorities) represent more than $10 \%$ of the Group's total capital.

Loans and advances to corporate clients by amount/rating category

| DKKm |  |  |  |  |  |  | 2022 | 2021 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Amount | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $5-6$ | $7-9$ | Default | STD/NR | Total | $\%$ | $\%$ |
| $0-1$ | 419 | 534 | 222 | 119 | 60 | 13 | 1,367 | 2.2 | 2.6 |
| $1-5$ | 1,153 | 2,417 | 1,138 | 554 | 218 | 51 | 5,531 | 8.7 | 10.2 |
| $5-10$ | 983 | 2,142 | 1,107 | 430 | 204 | 65 | 4,931 | 7.9 | 8.6 |
| $10-20$ | 1,576 | 2,747 | 1,404 | 592 | 285 | 58 | 6,662 | 10.6 | 10.2 |
| $20-50$ | 2,777 | 5,611 | 1,650 | 641 | 188 | 97 | 10,964 | 17.5 | 17.7 |
| $50-100$ | 4,424 | 4,162 | 1,432 | 464 | - | 103 | 10,585 | 16.9 | 15.2 |
| $100-200$ | 5,841 | 4,371 | 459 | 111 | 129 | 130 | 11,041 | 17.6 | 18.8 |
| $200-500$ | 6,048 | 2,066 | 269 | 226 | - | 41 | 8,650 | 13.8 | 13.7 |
| $500-$ | 1,783 | 1,237 | - | - | - | - | 3,020 | 4.8 | 3.0 |
| Total | 25,004 | 25,287 | 7,681 | 3,137 | 1,084 | 558 | 62,751 | $\mathbf{1 0 0 . 0}$ | 100.0 |
| $2022 \%$ | 39.9 | 40.3 | 12.2 | 5 | 1.7 | 0.9 | 100.0 |  |  |
| $2021 \%$ | 34.5 | 47.3 | 11.8 | 3.2 | 1.8 | 1.4 | 100.0 |  |  |

The table below shows loans and advances to the Group's 100 largest BIS groups by industry and rating category. Since a BIS group often comprises several industries, the loans and advances to some industries in some rating categories may be modest.

The 100 largest BIS groups represent a total of 33.9\% (2021: $31.1 \%$ ) of the Group's total loans and advances. 94.0\% (2021: $93.6 \%)$ of these loans and advances are rated in categories 1-4. Moreover loans and advances to agriculture as regards these 100 largest BIS groups represent 0.6\% (2021: 0.4\%).

Loans and advances to 100 largest BIS groups by industry/rating category

| DKKmAmount |  |  |  |  |  |  |  | 2022 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1-2 | 3-4 | 5-6 | 7-9 | Default | STD/NR | Total | \% | \% |
| Agriculture, hunting, forestry and fisheries | - | 139 | - | - | - | - | 139 | 0.6 | 0.4 |
| Manufacturing and extraction of raw materials | 2,362 | 1,809 | 286 | 396 | - | - | 4,853 | 19.4 | 17.9 |
| Energy supply etc | 594 | 551 | - | - | - | - | 1,145 | 4.6 | 6.9 |
| Building and construction | 1,472 | 679 | 188 | - | - | - | 2,339 | 9.3 | 9.6 |
| Trade | 5,093 | 3,938 | 502 | - | 128 | - | 9,661 | 38.5 | 35.8 |
| Transportation, hotels and restaurants | 341 | 485 | - | - | - | - | 826 | 3.3 | 3.8 |
| Information and communication | - | - | - | - | - | - | - | - | - |
| Finance and insurance | 2,077 | 911 | - | - | - | - | 2,988 | 11.9 | 10.7 |
| Real property | 1,483 | 187 | - | - | - | - | 1,670 | 6.7 | 8.2 |
| Other industries | 1,435 | 3 | - | - | - | - | 1,438 | 5.7 | 6.7 |
| Public authorities | - | - | - | - | - | - | - | - | - |
| Retail | - | 3 | - | - | - | - | 3 | 0.0 | 0.0 |
| Total | 14,857 | 8,705 | 976 | 396 | 128 | - | 25,062 | 100.0 | 100.0 |
| 2022 \% | 59.3 | 34.7 | 3.9 | 1.6 | 0.5 | - | 100.0 |  |  |
| 2021 \% | 44.9 | 48.7 | 5.1 | 1.3 | - | - | 100.0 |  |  |

Corporate clients by size of enterprise/rating category, excluding default

| \% |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Rating category | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $5-6$ | $\mathbf{7 - 9}$ | Total | 2022 <br> Loans/advances <br> and guarantees |
| Net turnover/assets (DKKm) |  |  |  | 8 | 100 | 13 |
| $0-25$ | 35 | 35 | 22 | 9 | 100 | 6 |
| $25-50$ | 37 | 35 | 19 | 8 | 100 | 8 |
| $50-100$ | 23 | 43 | 26 | 9 | 100 | 10 |
| $100-200$ | 21 | 56 | 14 | 4 | 100 | 14 |
| $200-400$ | 40 | 46 | 10 | 2 | 100 | 44 |
| $400-$ | 53 | 38 | 7 | 6 | 100 | 5 |
| NA | 26 | 56 | 12 | 5 | 100 | 100 |
| Total | 41 | 41 | 13 | 5 |  |  |

## Collateral

The Group aims to mitigate the risk on individual exposures by way of charges on assets, netting agreements and guarantees.

The most frequent types of charges include mortgages and charges on financial assets (shares, bonds and units).

The Group receives different kinds of guarantees for exposures. Many of these are provided by companies or individuals who have a group relationship with the debtor.

The Group assesses on an ongoing basis the value of collateral provided. The value is determined as the expected net proceeds on realisation.

The 2 tables below illustrate the breakdown of collateral by type and rating category respectively.

Collateral received and types of collateral

| DKKm | 2022 | 2021 |
| :---: | :---: | :---: |
| Loans and advances at fair value | 10,490 | 16,918 |
| Loans and advances at amortised cost | 73,933 | 67,041 |
| Guarantees | 15,949 | 19,722 |
| Credit exposure for accounting purposes | 100,372 | 103,681 |
| Collateral value | 57,739 | 64,311 |
| Total unsecured | 42,633 | 39,370 |
| Types of collateral |  |  |
| Real property | 11,659 | 11,793 |
| Financial collateral | 17,311 | 22,833 |
| Lease assets, mortgages etc | 6,899 | 6,973 |
| Floating charges, operating equipment etc | 10,141 | 9,092 |
| Guarantees | 2,661 | 1,936 |
| Other items of collateral | 119 | 624 |
| Total collateral used | 48,790 | 53,251 |
| Particularly secured transactions (mortgage guarantees) | 8,949 | 11,060 |
| Total | 57,739 | 64,311 |

In the event that the Group uses collateral that is not immediately convertible into cash, it is the Group's policy to dispose of such assets as quickly as possible. In 2022 repossessed equipment in connection with non-performing exposures amounted to DKK 47m (2021: DKK 23m). Lease assets are assessed and depreciated on an ongoing basis. As a result the calculated collateral as regards the Group's leasing activities will decline during periods of lower lease asset prices.

Collateral represented DKK 57,739m in 2022 - a drop of DKK $6,572 \mathrm{~m}$ compared to 2021 . The decline is predominantly attributable to a decrease in financial collateral of DKK 5,522m from DKK 22,833m in 2021 to DKK 17,311m in 2022 and a drop of DKK $2,111 \mathrm{~m}$ in particularly secured transactions (mortgage guarantees) due to lower remortgaging activity in 2022.

The decline in financial collateral is primarily attributable to a drop in loans and advances at fair value which have gone down by DKK $6,428 \mathrm{~m}$.

Loans and advances at fair value are repo loans and advances with financial collateral.

The table below shows the size of loans and advances, guarantees as well as collateral according to rating category. The value of collateral is assessed relative to loans and advances and
guarantees. Excess collateral is not included in the calculation of collateral. 49.5\% (2021: 62.0\%) of the Group's loans and advances and guarantees after impairment charges is covered via collateral.

Collateral by rating category

| DKKm |  |  |  |  | 2022 | 2021 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Rating category | Loans/advances | Guarantees | Collateral value | Unsecured | \% | \% |
| 1 | 13,803 | 4,720 | 15,208 | 3,315 | 7.5 | 2.3 |
| 2 | 24,424 | 5,361 | 12,711 | 17,074 | 38.5 | 36.0 |
| 3 | 15,634 | 2,143 | 11,355 | 6,422 | 14.4 | 26.8 |
| 4 | 17,366 | 1,639 | 8,085 | 10,920 | 24.6 | 16.5 |
| 5 | 6,219 | 794 | 3,819 | 3,194 | 7.2 | 6.1 |
| 6 | 2,115 | 161 | 1,490 | 786 | 1.8 | 3.2 |
| 7 | 1,695 | 114 | 1,089 | 720 | 1.6 | 0.5 |
| 8 | 505 | 66 | 405 | 166 | 0.4 | 0.3 |
| 9 | 1,384 | 164 | 1,017 | 531 | 1.2 | 2.1 |
| Default | 1,186 | 161 | 299 | 1,048 | 2.4 | 1.0 |
| STD/NR | 1,832 | 626 | 2,261 | 197 | 0.4 | 5.2 |
| Total | $\mathbf{8 6 , 1 6 3}$ | $\mathbf{1 5 , 9 4 9}$ | 57,739 | 44,373 | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |
| lmpairment of loans and advances | 1,740 | - | - | 1,740 |  |  |
| Total | $\mathbf{8 4 , 4 2 3}$ | $\mathbf{1 5 , 9 4 9}$ | 57,739 | $\mathbf{4 2 , 6 3 3}$ |  |  |

## Impairment charges

lmpairment charges are recorded for expected credit losses as regards all financial assets measured at amortised cost and similar provisions are made for expected credit losses as regards undrawn credit commitments and financial guarantees.

Impairment charges for expected credit losses depend on whether the credit risk of a financial asset has increased significantly since initial recognition and follow a 3-stage model. The portfolio acquired from Alm. Brand Bank in stage 3 is recognised under credit impaired at initial recognition:

- Stage 1 - facilities with no significant increase in credit risk. The asset is written down by an amount equal to the expected credit loss as a result of the probability of default over the coming 12 months.

Customers with a low PD (<0.2\%) and with no other indication of a significant increase in credit risk are considered as having a low credit risk and the exposure is classified as stage 1 regardless of any change in PD since initial recognition. In addition to loans and advances etc the category of assets with low credit risk comprises Danish government and mortgage bonds as well as amounts owed by Danish credit institutions.

Stage 2 - facilities with a significant increase in credit risk. The asset is transferred to stage 2 and is written down by an amount equal to the expected credit loss over the life of the asset.
Stage $\mathbf{3}$ - facilities where the financial asset is in default or is otherwise credit impaired.
Credit impaired at initial recognition - facilities which were credit impaired at the time of acquisition of Alm. Brand Bank. They are recognised on acquisition at the fair value of the debt acquired.

Impairment calculation is effected quarterly in a process managed by the central credit organisation.
Credit impaired bank loans and advances - stage 3 - represent 1.6\% (2021: 1.6\%) of total bank loans and advances before impairment charges and 0.7\% (2021: 0.8\%) of total bank loans and advances after impairment charges.

Credit impaired bank loans and advances from the acquisition of Alm. Brand Bank - credit impaired at initial recognition - amount to $0.2 \%$ (2021: 0.2\%) of total bank loans and advances before impairment charges and 0.2\% (2021: 0.3\%) of total bank loans and advances after impairment charges.

Loans and advances and impairment charges

| DKKm | Stage 1 | Stage 2 | Stage 3 | Credit impaired at initial recognition | 2022 Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Loans and advances before impairment charges | 67,502 | 6,844 | 1,186 | 141 | 75,673 |
| Impairment charges | 371 | 693 | 676 | - | 1,740 |
| Total loans and advances | 67,131 | 6,151 | 510 | 141 | 73,933 |
| \% |  |  |  |  |  |
| Impairment charges as \% of bank loans and advances | 0.5 | 10.1 | 57.0 | 0.0 | 2.3 |
| Share of bank loans and advances before impairment charges | 89.2 | 9.0 | 1.6 | 0.2 | 100.0 |
| Share of bank loans and advances after impairment charges | 90.8 | 8.3 | 0.7 | 0.2 | 100.0 |

Impairment charges concerning credit impaired bank loans and advances as a percentage of credit impaired bank loans and advances at 31 December 2022 stand at 57.0\% (2021: 53.8\%).

## Impairment for the year

Impairment charges for bank loans and advances etc represented an income of DKK 99m in 2022. In 2021 impairment charges constituted an income of DKK 415m.

In 2022 reported losses totalled DKK 48m (2021: DKK 141m). Of the reported losses an impairment charge of DKK 29m has previously been recorded (2021: DKK 97m).

Amounts recovered from debt previously written off represented DKK 140m in 2022 (2021: DKK 245m).

The figure below shows the development in impairment charges for bank loans and advances etc as well as losses reported for the year from 2018 to 2022.

Impairment charges etc and reported losses
DKKm


## Management estimates

At 30 September 2022 the management estimates concerning covid-19 (2021: DKK 325m) and pig farming (2021: DKK 60m) were reversed and the Group recorded a new management estimate to hedge macroeconomic uncertainty.

At 31 December 2022 the Group had a management estimate of DKK 500m to hedge macroeconomic uncertainty. The management estimate represents DKK 400m as regards corporate clients and DKK 100m as regards retail clients.

The management estimate as regards macroeconomic risks covers potential losses related to the negative effects of energy price increases, a high inflation rate as well as the risk of a recession etc.

## Credit impaired loans and advances

Credit impaired loans and advances are equal to loans and advances in stage 3 and credit impaired at initial recognition. The table below shows that the unsecured part of credit impaired loans and advances represents minus DKK 1m, equivalent to 0.0\% (2021: 15.8\%) of total credit impaired loans and advances.

Credit impaired loans and advances

| DKKm | Credit impaired |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | lmpairment <br> loarges and advances | Carrying <br> amount | Collateral <br> value | Unsecured part of <br> carrying amount |  |
| Corporate | 1,162 | 589 | 573 | 560 | 13 |
| Retail | 165 | 87 | 78 | 92 | $(14)$ |
| Total | 1,327 | 676 | 651 | 652 | $(1)$ |

## Exposures affected by macroeconomic uncertainty

At 31 December 2022 the Group had a management estimate of DKK 500 m to hedge macroeconomic uncertainty. The management estimate represents DKK 400m as regards corporate clients and DKK 100m as regards retail clients.

The management estimate as regards macroeconomic risks covers potential losses related to the negative effects of energy price increases, a high inflation rate as well as the risk of a recession etc.

Macroeconomic developments have been affected in particular by 2 events in recent years: the covid-19 pandemic which led to lockdowns and challenged the business sector in Denmark and elsewhere as well as the war in Ukraine, which has caused jitters in particular in commodities markets and financial markets alike.

These developments have resulted in high inflation and an increase in interest rates, which has affected the business sector and retail clients.

Against this background the Group has analysed credit risks as regards retail clients' home financing and the Group's corporate exposures during 2022.

## Credit risks - retail clients' home financing

Home financing comprises housing loans and mortgage loans.

The analysis of credit risks as regards retail clients' home financing shows that the Group's portfolio of housing loans is overall solid.

The proportion of interest-only financing and floating-rate financing has been falling for a number of years. The Group's proportion of interest-only financing represents approx $37 \%$ of its total home financing, which is significantly below the average of that of the Totalkredit cooperation and the country as a whole.


[^0]Floating-rate financing of Sydbank, Totalkredit cooperation and Denmark as a whole 2017-2021


Sources: Danmarks Nationalbank, Totalkredit and Sydbank
Moreover the analysis shows that around 93.5\% of home financing granted in 2020-2021 was to customers with significant assets. 61.8\% of the financing was granted to customers with a leverage below 3.5. Interest rate risk simulation shows that the Group's risk as regards floating-rate financing in growth areas designated by the Danish FSA is very limited.

Retail clients' total home financing at 31 December 2022 represented DKK 98.1bn, consisting of home loans of DKK 6.8bn within the Group and mortgage loans of DKK 91.3bn. The majority of loans are granted with collateral within $80 \%$ of LTV. Interest-only and floating rate financing where the LTV exceeds $80 \%$ totals DKK 299m, equal to approx $1.3 \%$ of the Group's total interest-only and floating-rate financing and $0.3 \%$ of the Group's total home financing.

## Home financing within collateral value



In view of the macroeconomic developments with inflation, rising interest rates and falling housing prices the Group has - despite a strong housing loan portfolio - had a management estimate of DKK 100 m as regards retail client exposures.

## Credit risks - Group's corporate portfolio

The analysis of the Group's corporate portfolio has been conducted by stress testing the Group's corporate portfolio. The stress test estimates eg GDP growth on the basis of developments in inflation and exports. The stress test shows a need for impairment charges of DKK 400m, see the table below.
$\left.\begin{array}{lrrrr}\hline \begin{array}{ll}\text { Calculation of impairment charges under stressed portfolio by stages } \\ \text { (DKKm) }\end{array} & \begin{array}{r}\text { Stages } \\ \text { 1 and 2 } \\ \text { (without } \\ \text { OECl) }\end{array} & \begin{array}{r}\text { Stage } \\ \text { (with OECl) } \\ \text { and stage 3 }\end{array} & \\ \text { Total }\end{array}\right\}$

On the basis of the stress test of the corporate portfolio the Group has recorded a management estimate of DKK 400m as regards corporate client exposures.

## Financial counterparties

Trading in securities, currencies and derivatives, as well as payment services etc involve exposure to financial counterparties in the form of delivery risk or credit risk.

Delivery risk is the risk that the Group does not receive payments or securities in connection with the settlement of securities or currency transactions equalling the securities or payments delivered by the Group.

Credits, the Group Executive Management and the Board of Directors grant delivery risk lines and credit risk lines to financial counterparties. Based on the risk profile of the individual counterparty, rating, earnings, capital position as well as size are assessed. Risks and lines to financial counterparties are monitored continuously.

The Group participates in an international foreign exchange settlement system, CLS ${ }^{\circledR}$, which aims to reduce delivery risk. In CLS ${ }^{\circledR}$ payment is made on the net position for each currency, and only one amount for each currency is paid or received. In addition this net exposure is only to one counterparty, who is the Group's partner in the system.

The Group aims to mitigate credit risk to financial counterparties in many ways, eg by concluding netting agreements (ISDA agreements and GMRA agreements). Moreover the Group has entered into agreements (CSA agreements) with all significant counterparties to ensure credit risk mitigation of derivatives. Exposures are calculated on a daily basis after which the parties settle collateral. Consequently exposures are reset in all material respects on a daily basis. The agreements are managed by Transaction Banking.

## Appendix 1-Supplementary tables

The Group's credit exposure


| 2021 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corporate clients | STD | 1,479 | (252) | (619) | 608 | 417 | 1,211 |
|  | IRB | 123,594 | $(22,012)$ | $(42,421)$ | 59,161 | 28,508 | 120,655 |
| Retail clients | STD | 7,825 | (117) | $(2,187)$ | 5,521 | 3,704 | 8,532 |
|  | IRB | 27,472 | $(5,256)$ | (86) | 22,130 | 5,414 | 29,102 |
| Total corporate and retail clients |  | 160,370 | $(27,637)$ | $(45,313)$ | 87,420 | 38,043 | 159,500 |
| Governments, incl municipalities | STD | 20,159 | (587) | (56) | 19,516 | 0 | 15,113 |
| Credit institutions | STD | 8,925 | $(5,466)$ | (438) | 3,021 | 806 | 12,603 |
| Total |  | 189,454 | $(33,690)$ | $(45,807)$ | 109,957 | 38,849 | 187,216 |
| Share IRB (\%) |  | 79.7 | 80.9 | 92.8 | 73.9 | 87.3 | 80.0 |
| Share STD (\%) |  | 20.3 | 19.1 | 7.2 | 26.1 | 12.7 | 20.0 |

## Appendix 1 - Supplementary tables

Credit exposure by industry

| DKKmIndustry/exposure category |  |  |  |  | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Corporate clients | Retail clients | Other | Total | \% |
| Agriculture, hunting, forestry and fisheries | 5,614 | 116 |  | 5,730 | 3.7 |
| Manufacturing and extraction of raw materials | 19,194 | 54 |  | 19,248 | 12.5 |
| Energy supply etc | 7,125 | 5 |  | 7,130 | 4.6 |
| Building and construction | 9,651 | 86 |  | 9,737 | 6.3 |
| Trade | 33,650 | 112 |  | 33,762 | 22.0 |
| Transportation, hotels and restaurants | 5,962 | 35 |  | 5,997 | 3.9 |
| Information and communication | 796 | 58 |  | 854 | 0.6 |
| Finance and insurance | 10,317 | 737 |  | 11,054 | 7.2 |
| Repo/reverse | 11,062 | 0 |  | 11,062 | 7.2 |
| Real property | 12,966 | 234 |  | 13,200 | 8.6 |
| Other industries | 6,956 | 304 |  | 7,260 | 4.7 |
| Sector guarantees | 195 | 0 |  | 195 | 0.1 |
| Retail | 2,486 | 26,137 |  | 28,623 | 18.6 |
| Total corporate and retail clients | 125,974 | 27,878 |  | 153,852 | 100.0 |
| Governments, incl municipalities |  |  | 29,609 | 29,609 |  |
| Credit institutions, repo/reverse |  |  | 5,767 | 5,767 |  |
| Credit institutions, other |  |  | 3,661 | 3,661 |  |
| Sector guarantees |  |  | 37 | 37 |  |
| Total | 125,974 | 27,878 | 39,074 | 192,926 |  |

## Credit exposure by industry

$\left.\begin{array}{lrrrrr}\hline \text { DKKm } & & & & \\ \text { Corporate } \\ \text { clients }\end{array}\right)$

## Appendix 1 - Supplementary tables

Credit exposure to corporate clients by rating category (IRB)

| DKKm |  |  |  |  |  | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Exposure after | Exposure-weighted, average |  |  |  |
| Rating category | Gross | effect of | PD ${ }^{\circ}$ | LGD (\%) | Risk weight (\%) |  |
|  |  |  |  |  |  |  |
| 1 | 16,146 | 12,437 | 0.03 | 24.8 | 5.9 | 730 |
| 2 | 46,335 | 33,674 | 0.21 | 24.3 | 19.8 | 6,668 |
| 3 | 21,715 | 17,258 | 0.48 | 22.0 | 26.0 | 4,485 |
| 4 | 24,797 | 20,150 | 0.87 | 31.0 | 48.7 | 9,804 |
| 5 | 8,609 | 7,083 | 2.45 | 33.2 | 70.2 | 4,974 |
| 6 | 2,393 | 1,987 | 4.20 | 35.2 | 81.3 | 1,616 |
| 7 | 2,113 | 1,773 | 6.32 | 32.8 | 94.7 | 1,679 |
| 8 | 540 | 489 | 10.97 | 34.9 | 121.7 | 596 |
| 9 | 1,122 | 1,020 | 20.18 | 35.0 | 140.0 | 1,428 |
| Default | 1,179 | 1,165 | 100.00 | 39.5 | 92.8 | 1,080 |
| Total | 124,949 | 97,036 |  |  |  | 33,060 |


|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | 6,129 | 4,495 | 0.03 | 9.4 | 2021 |
| 2 | 48,836 | 28,782 | 0.04 | 31.7 | 12.7 |
| 3 | 32,629 | 20,354 | 0.12 | 38.6 | 34.5 |
| 4 | 21,943 | 17,255 | 0.40 | 28.9 | 42.9 |
| 5 | 6,933 | 5,009 | 0.90 | 43.3 | 88.7 |
| 6 | 3,543 | 2,560 | 1.93 | 43.6 | 114.6 |
| 7 | 676 | 434 | 3.74 | 44.2 | 126.1 |
| 8 | 249 | 213 | 6.74 | 44.9 | 146.9 |
| 9 | 1,262 | 1,030 | 23.20 | 44.2 | 197.7 |
| Default | 1,394 | 1,041 | 100.00 | 44.3 | 0.0 |
| Total | $\mathbf{1 2 3 , 5 9 4}$ | $\mathbf{8 1 , 1 7 3}$ |  |  |  |

The table above shows the breakdown by rating of the gross exposure of corporate clients after the deduction of the conversion factor as well as exposure-weighted LGD, PD and average risk weight. The average risk weight is determined according to the

Danish executive order on capital adequacy as a function of LGD and PD. REA is calculated as the exposure after the conversion factor multiplied by the risk weight.

| DKKm |  |  |  |  |  | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Exposure after | Exposure-weighted, average |  |  |  |
|  | Gross | effect of | PD (\%) | LGD (\%) | Risk weight |  |
| 1 | 14,958 | 14,954 | 0.03 | 60.8 | 7.0 | 1,043 |
| 2 | 4,354 | 4,351 | 0.06 | 61.4 | 11.3 | 491 |
| 3 | 3,965 | 3,966 | 0.17 | 59.4 | 21.9 | 869 |
| 4 | 1,153 | 1,155 | 0.49 | 67.2 | 50.0 | 577 |
| 5 | 681 | 681 | 1.24 | 60.4 | 77.0 | 524 |
| 6 | 199 | 200 | 2.50 | 69.3 | 114.9 | 229 |
| 7 | 74 | 74 | 4.75 | 65.3 | 150.9 | 112 |
| 8 | 83 | 84 | 6.23 | 63.8 | 165.3 | 139 |
| 9 | 562 | 562 | 9.49 | 62.6 | 212.8 | 1,196 |
| Default | 150 | 150 | 100.00 | 42.5 | 499.4 | 748 |
| Total | 26,179 | 26,177 |  |  |  | 5,928 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 2021 |
| 1 | 15,771 | 15,715 | 0.03 | 63.2 | 6.5 | 1,015 |
| 2 | 4,828 | 4,815 | 0.07 | 62.4 | 13.2 | 636 |
| 3 | 4,231 | 4,217 | 0.16 | 59.6 | 21.3 | 897 |
| 4 | 1,203 | 1,201 | 0.40 | 61.1 | 39.0 | 469 |
| 5 | 573 | 572 | 0.94 | 58.1 | 64.2 | 367 |
| 6 | 118 | 118 | 1.91 | 60.1 | 89.1 | 105 |
| 7 | 48 | 48 | 3.54 | 60.5 | 112.8 | 54 |
| 8 | 70 | 70 | 5.36 | 65.4 | 151.9 | 107 |
| 9 | 480 | 480 | 9.34 | 63.1 | 179.1 | 860 |
| Default | 150 | 150 | 100.00 | 28.2 | 602.7 | 904 |
| Total | 27,472 | 27,386 |  |  |  | 5,414 |

## Appendix 1 - Supplementary tables

Credit exposure by client's country of residence

| DKKm |  |  |  |  | 2022 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Denmark | Germany | Sweden | Other | Total |
| Corporate clients | 111,170 | 9,799 | 266 | 4,739 | 125,974 |
| Retail clients | 26,544 | 698 | 13 | 623 | 27,878 |
| Total corporate and retail clients | 137,714 | 10,497 | 279 | 5,362 | $\mathbf{1 5 3 , 8 5 2}$ |
| Governments, incl municipalities | 10,915 | 18,694 | 0 | 0 | 29,609 |
| Credit institutions | 3,106 | 896 | 4,042 | 1,421 | 9,465 |
| Total | $\mathbf{1 5 1 , 7 3 5}$ | $\mathbf{3 0 , 0 8 7}$ | $\mathbf{4 , 3 2 1}$ | $\mathbf{6 , 7 8 3}$ | $\mathbf{1 9 2 , 9 2 6}$ |


|  |  |  |  | 2021 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Corporate clients | 112,917 | 8,347 | 329 | 3,480 | 125,073 |
| Retail clients | 33,951 | 729 | 14 | 603 | 35,297 |
| Total corporate and retail clients | $\mathbf{1 4 6 , 8 6 8}$ | $\mathbf{9 , 0 7 6}$ | $\mathbf{3 4 3}$ | $\mathbf{4 , 0 8 3}$ | $\mathbf{1 6 0 , 3 7 0}$ |
| Governments, incl municipalities | 6,812 | 13,347 | 0 | 0 | 20,159 |
| Credit institutions | 2,145 | 260 | 4,506 | 2,014 | 8,925 |
| Total | $\mathbf{1 5 5 , 8 2 5}$ | $\mathbf{2 2 , 6 8 3}$ | $\mathbf{4 , 8 4 9}$ | $\mathbf{6 , 0 9 7}$ | $\mathbf{1 8 9 , 4 5 4}$ |

Credit exposure by exposure category and maturity

| DKKm | Nonallocated | 3 months or less | Over 3 months not exceeding 1 year | Over 1 year not exceeding 5 years | Over 5 years | $2022$ <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| Corporate clients | - | 73,385 | 28,021 | 12,033 | 12,535 | 125,974 |
| Retail clients | - | 12,643 | 1,170 | 1,857 | 12,208 | 27,878 |
| Total corporate and retail clients | - | 86,028 | 29,191 | 13,890 | 24,743 | 153,852 |
| Governments, incl municipalities | 170 | 28,381 | 642 | 85 | 331 | 29,609 |
| Credit institutions | - | 9,147 | 74 | 204 | 40 | 9,465 |
| Total | 170 | 123,556 | 29,907 | 14,179 | 25,114 | 192,926 |


|  |  |  |  |  | $\mathbf{2 0 2 1}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Corporate clients | - | 76,096 | 31,595 | 9,910 | 7,472 | 125,073 |
| Retail clients | - | 12,325 | 9,497 | 2,919 | 10,556 | 35,297 |
| Total corporate and retail clients | - | $\mathbf{8 8 , 4 2 1}$ | $\mathbf{4 1 , 0 9 2}$ | $\mathbf{1 2 , 8 2 9}$ | $\mathbf{1 8 , 0 2 8}$ | $\mathbf{1 6 0 , 3 7 0}$ |
| Governments, incl municipalities | 206 | 18,872 | 937 | 80 | $\mathbf{6 4}$ | $\mathbf{2 0 , 1 5 9}$ |
| Credit institutions | - | 8,504 | 414 | $\mathbf{7}$ | $\mathbf{0}$ | 8,925 |
| Total | $\mathbf{2 0 6}$ | $\mathbf{1 1 5 , 7 9 7}$ | $\mathbf{4 2 , 4 4 3}$ | $\mathbf{1 2 , 9 1 6}$ | $\mathbf{1 8 , 0 9 2}$ | $\mathbf{1 8 9 , 4 5 4}$ |

The table shows the maturity of the Group's exposures broken down into different segments. According to the Group's documents, the majority of corporate exposures can be terminated at very short notice and retail exposures can normally be terminated at a notice of 3 months.

## Appendix 1 - Supplementary tables

Credit exposure by credit quality
$\left.\begin{array}{lrrrrr}\hline \text { DKKm } & \text { Corporate } \\ \text { clients }\end{array} \quad \begin{array}{rrrrr}\text { Retail } \\ \text { clients }\end{array}\right)$

Credit impaired exposures represent exposures in stage 3 and credit impaired at initial recognition. Past due amounts consist of loans and advances from a customer's first day of arrears where
there is no objective evidence of credit impairment. A very limited share of past due amounts concerns high credit risk customers.

Past due amounts

| DKKm |  |  | 2022 |  |  | $2021$ <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Corporate clients | Retail clients | Total | Corporate clients | Retail clients |  |
| 0-30 days | 85 | 56 | 141 | 88 | 60 | 148 |
| 31-60 days | - | 1 | 1 | - | 2 | 2 |
| 61-90 days | - | 2 | 2 | - | 6 | 6 |
| Total | 85 | 59 | 144 | 88 | 68 | 156 |

Impairment charges for bank loans and advances etc recognised in the income statement

| DKKm | 2022 | 2021 |
| :--- | ---: | ---: | ---: |
| lmpairment and provisions | 25 | $(214)$ |
| Write-offs | 19 | 44 |
| Recovered from debt previously written off | 140 | 245 |
| Total | (96) | (415) |

Credit impaired loans/advances and guarantees as well as impairment charges and provisions by customer's country of residence

| DKKm |  |  | 2022 |  |  | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Credit impaired loans/advances and guarantees | Impairment charges and provisions | Credit impaired loans/advances and guarantees after impairment charges | Credit impaired loans/advances and guarantees | lmpairment charges and provisions | Credit impaired loans/advances and guarantees after impairment charges |
| Denmark | 1,468 | 712 | 756 | 1,378 | 591 | 787 |
| Germany | 32 | 25 | 7 | 61 | 40 | 21 |
| Other | 27 | 13 | 14 | 34 | 11 | 23 |
| Total | 1,527 | 750 | 777 | 1,473 | 642 | 831 |

## Appendix 2 - Glossary

| CEBS | Committee of European Banking Supervisors. |
| :---: | :---: |
| CF | Conversion Factor, ie the proportion of the undrawn credit commitment that the customer is expected to have drawn at default. |
| CLS ${ }^{\circledR}$ | Continuous Linked Settlement. A settlement system operating on the principle of "payment on delivery", which minimises the settlement risk of currency transactions concluded between CLS ${ }^{\circledR}$ participants. |
| CSA | Credit Support Annex. The part of an ISDA agreement that concerns collateral. |
| Default | When a customer has not honoured all of his payment obligations. |
| EAD | Exposure At Default. EAD represents the expected size of an exposure, ie how much a customer is expected to owe at the time of default. |
| GMRA agreement | Global Master Repurchase Agreement. Agreement where the mutual rights, obligations and collateral of 2 or more parties are netted. Credit risk is mitigated by means of netting agreements and collateral. |
| Gross exposure | Loans and advances, undrawn credit commitments, interest receivable, repo/reverse transactions and guarantees as well as counterparty risk on derivatives. The exposure is determined after impairment charges and provisions. |
| IRB | Internal Ratings Based approach to manage credit risk and calculate the capital requirement as regards credit risk. |
| ISDA agreement | International Swaps and Derivatives Association. Agreement where the mutual rights and obligations of 2 or more parties are netted. Credit risk is mitigated by means of netting agreements. |
| LGD | Loss Given Default. LGD represents the proportion of a given exposure that is expected to be lost if the customer defaults within the next 12 months. |
| LTV | Loan-to-Value. The loan's share of the collateral value. |
| Net exposure | Gross exposure after inclusion of the conversion factor and after deduction of collateral. |
| PD | Probability of Default. Probability that a customer will default on his obligations within the next 12 months. |
| REA | Risk Exposure Amount calculated in accordance with prevailing capital adequacy rules. |
| STD | Standardised approach to calculate credit risk. |
| Unsecured portion | Following a prudent assessment of collateral provided, the portion of an exposure for which collateral does not exist. |


[^0]:    Sources: Danmarks Nationalbank, Totalkredit and Sydbank

