

# Risk and Capital Management 2021



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## **Disclosure requirements**

This report has been prepared in accordance with the legal disclosure requirements laid down in the EU's Capital Requirements Regulation (CRR) and, combined with supplementary data material, it meets the requirements. The supplementary data material is available at <u>nykredit.com/reports</u>.

## Disclaimer

This document is an English translation of the original Danish text. In the event of discrepancies between the original Danish text and the English translation, the Danish text shall prevail.

# 1. 2021 IN BRIEF

Nykredit's business activities entail certain risks that have an impact on society as well as on our business. As a systemically important financial institution (SIFI), Nykredit has a special responsibility. Our risk management focuses on providing financial solutions that are sustainable for Nykredit, for our customers and for society in the short, medium and long term.

## Customers remain resilient with high credit quality

2021 was yet another year where covid-19 was a dominant theme. Nykredit's personal and business customers have coped well during the past two years. Arrears ratios and losses have remained low throughout the period, and the share/number of weak and non-performing exposures is very limited. In 2020 impairment provisions were made for credit quality deterioration as a result of the covid-19 crisis. These provisions were maintained throughout 2021.

Nykredit recorded sustained growth in lending and new customers in 2021, but maintained its principles of sound credit granting, which was reflected in consistent, high credit quality as evidenced by internal controlling results and monitoring.

2021 saw increasing interest rates and inflation, fuelled by high economic activity in Denmark and abroad. Nykredit is keeping a close watch on this trend and its consequences for Nykredit's customers. Owing to the rising number of customers opting for fixed-rate loans, which now make up half of the loan portfolio, interest rate sensitivity diminished further in 2021. At the same time, loan-to-value ratios generally improved, further improving Danish households' resilience to interest rate increases.

# Focus on a sound risk culture

In 2021 Nykredit continued to promote and maintain a sound risk culture. All managers attended Nykredit's management academy and were trained in conduct management through cases with concrete dilemmas, which has contributed to raising awareness of conduct risk across the organisation.

The principles laid down in Nykredit's Corporate Culture Policy and Code of Conduct have served as clear guidelines for the desired conduct in Nykredit as promoted by Management, and they have been implemented across the Group and integrated into internal policies and working procedures.

Efforts were made in 2021 to support good and effective governance of Nykredit's three lines of defence by ensuring that any conflicts of interest regarding tasks of the second line of defence performed by units in the first line are managed.

### Sustainability in risk management

One of Nykredit's core values is corporate responsibility, and it is therefore natural that Nykredit should be committed to contributing to the green transition. Nykredit does not in itself have a significant environmental impact but can help customers act in a more sustainable way. Nykredit consistently integrates sustainability in both advisoryservices and internal risk management. Credit assessments and property valuations in particular are important elements, but the scope for customers' green investments is also being tightened.

Nykredit has launched a number of green products, which our customers truly embraced in 2021. In relation to green products and financing of sustainable activities in general, Nykredit is particularly focused on avoiding greenwashing. This applies to product approvals and upskilling of customer advisers through training.

ESG risks are increasingly being integrated into Nykredit's risk management, providing Nykredit with a clear picture of the sensitivity of the loan portfolio to climate risks and risks deriving from other sustainability factors. Credit assessments include assessment of physical as well as transition risks related to climate change as well as other ESG factors if relevant to individual customers. Risks related to climate change are integrated into the procedures relating to the traditional risk types, and risk management and governance in the area therefore adhere to principles and working procedures already established. Our staff are currently being trained to handle this task in the best possible way. The long-term aim is to integrate such risks directly into Nykredit's risk models. Specifically, Nykredit is in the process of mapping its exposures in various stress scenarios of future, more extreme weather events and/or rising water levels.

The sustainability profile of business customers has become increasingly important to their competitiveness. And therefore, ESG risks are included as a natural part of the credit analysis of all business customers. The analysis determines the risk of losing competitive power as a consequence of the transition to a more sustainable economy. We also use the analysis to create insights for our customers and to increase their chances of acting on red flags.

Nykredit's Corporate Responsibility Report contains more details on ESG factors.

## Cybercrime

Cyberthreats against Nykredit and general society are high. It requires a constant effort to avoid incidents. Nykredit launched several initiatives in 2021 to maintain a high level of protection, including the implementation of more advanced security software, enhanced network protection, awareness campaigns, emergency preparedness exercises and optimised processes for efficient handling of security incidents. Nykredit did not experience any significant breaches in 2021.

## **Capital requirement**

The Board of Directors has set a Common Equity Tier 1 (CET1) capital target of 15.0-16.0% of the risk exposure amount (REA), whereas the total capital target has been set at 19.5-20.5%. With a total capital ratio and a CET1 capital ratio of 24.7% and 20.6%, Nykredit is comfortably above these capital targets. In addition, Nykredit may obtain new CET1 capital from its owners through Forenet Kredit's capital resources and investment commitments from a number of Danish pension companies. Consequently, Nykredit has the same access to capital as a listed SIFI. Also, Nykredit holds CET1 capital to meet the new Basel requirements when implemented in the EU.

# 1.1 • FINANCIAL HIGHLIGHTS

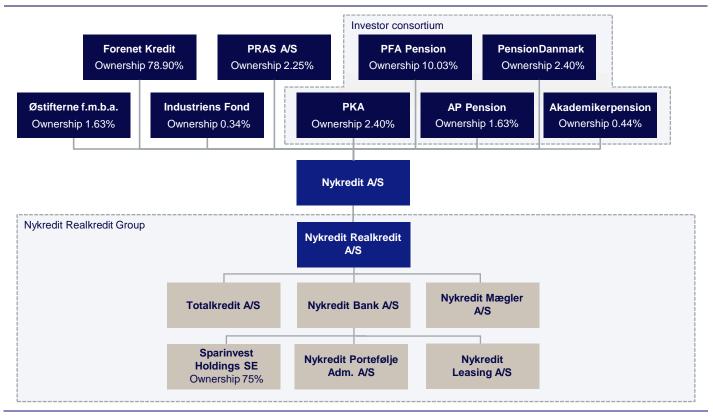
## Nykredit Realkredit Group

Year-end			
DKK billion/%	2021	2020	2019
Capital adequacy and capital			
CET1 capital ratio, %	20.6	20.2	19.5
Total capital ratio, %	24.7	24.3	23.7
Leverage ratio, %	4.8	4.8	4.5
Internal capital adequacy requirement, %	11.2	11.0	10.9
Total risk exposure amount, DKK billion	402	402	379
Funding and liquidity			
Liquidity Coverage Ratio (LCR), %	591	756	955
S&P long-term Issuer Credit Rating/outlook	A+/stable	A+/stable	A+/stable
Fitch long-term Issuer Credit Rating/outlook	A/stable	A/stable	A/stable
Net Stable Funding Ratio (NSFR), %	157	169	-
Credit ratios and key figures			
Credit exposures, DKK billion	1,692	1,683	1,632
Total provisions for loan impairment and guarantees, DKK billion	9.6	9.9	8.0
Impairment charges for the year, DKK billion	(0.1)	2.3	1.0
Credit exposures in default <sup>1</sup> , DKK billion	24	24	24

<sup>1</sup> Credit exposures in default are exposures to customers who have defaulted on their payment obligations. The exposure includes loans and advances, but also off-balance sheet items. The exposure is stated before loan impairments.

## Nykredit

Group chart



# 1.2 • BOARD DECLARATION AND RISK STATEMENT

The Boards of Directors of Nykredit A/S and Nykredit Realkredit A/S have on 8 February 2022 approved this report.

- It is the Boards' assessment that Nykredit has adequate and effective risk management arrangements and controls in place with regard to Nykredit's risk profile and strategy.
- It is furthermore the Boards' assessment that the description of Nykredit's risk profile and key figures and ratios gives a true and fair view of Nykredit, including Nykredit's overall risk appetite.

The Boards' assessment is based on the continuous risk reporting and the risk policies, the internal capital adequacy requirement (ICAAP), the liquidity position (ILAAP), Internal Audit's assessment of the control environment and the adopted strategy, Winning the Double 2.0, as approved by the Boards of Directors, the Executive Boards and the Chief Risk Officer. The Executive Boards are responsible for the day-to-day risk management and compliance with the policies and guidelines adopted by the Boards of Directors. The Chief Risk Officer is responsible for the monitoring, control and reporting of risks. Nykredit works consistently to further develop its risk management and control environment.

For information and key figures and ratios concerning Nykredit's risk profile, please refer to the relevant sections of this report.

#### Risk assessment

- Approximately 87% of the Group's REA derives from credit risk, which mainly relates to mortgage and bank lending. Credit risk is managed in accordance with the credit policy, including requirements for credit risk concentrations on single names, industries and geographical regions. At end-2021, DKK 9.6 billion had been provided for loan losses. Loan impairment charges for the year were a negative DKK 0.1 billion, equivalent to a negative 0.01% of lending. The credit risk exposure falls within the Group's risk appetite.
- Market risk mainly relates to the activities of Nykredit Markets and the Group's investment function. Approximately 6% of the Group's REA derives from market risk. Market risk is managed in accordance with the market risk policy, including detailed limits and guidelines for various types of market risk prescribed by the Board of Directors. The market risk exposure falls within the Group's risk appetite.
- Liquidity risk is managed in accordance with the liquidity policy, including detailed limits and guidelines prescribed by the Board of Directors. At end-2021 the LCR was 591%, and the NSFR was 157%.
- Operational risk is managed in accordance with the operational risk policy and pertaining guidelines. About 7% of the Group's REA derives from operational risk.
- Nykredit's total risk is reflected in the internal capital adequacy requirement, which represents 11.2% of REA.
- Based on the internal capital adequacy requirement, stress tests, guidelines and expectations for the capital position, the Board of Directors has set the CET1 capital requirement at 15.0-16.0% of REA. In addition to this, Nykredit has set aside capital to meet the upcoming Basel IV requirements. Nykredit's CET1 capital represented 20.6% of REA at end-2021, while the total capital ratio was 24.7%.

Board of Directors of Nykree	Jit A/S				
Merete Eldrup	Nina Smith	Jørgen Høholt	Inge Sand	Olav Bredgaard Brusen	Michael Demsitz
Chair	Deputy Chair				
Per W. Hallgren	Kristina Andersen Skiøld	Hans-Ole Jochumsen	Vibeke Krag	Allan Kristiansen	Preben Sunke
Ann-Mari Lundbæk Lauritse	n Lasse Nyby	John Christiansen			
Board of Directors of Nykree Merete Eldrup		Jørgen Høholt	Inge Sand	Olav Bredgaard Bruse	n Michael Demsitz
Chair	Deputy Chair	Jergen Herlon	linge Sand	Olav Dreugaaru Druse	
Per W. Hallgren		Hans-Ole Jochumsen	Vibeke Krag	Allan Kristiansen	Preben Sunke
Per W. Hallgren Executive Board of Nykredit			Vibeke Krag	Allan Kristiansen	Preben Sunke
	Kristina Andersen Skiøld	A/S	Vibeke Krag David Hellemann	Allan Kristiansen Anders Je	

# 2. GOVERNANCE AND MANAGEMENT

2.1 RISK PROFILE

2.2 RISK GOVERNANCE AND CULTURE

2.3 MANAGEMENT

2.3.1 Committees

2.4 RISK POLICY

2.4.1 Risk appetite

2.5 RISK MONITORING

2.5.1 Internal controls

2.6 REPORTING AND COMMUNICATION

2.7 ESG FACTORS

The Nykredit Realkredit Group is a Danish financial services group serving mainly personal customers, business customers and institutional customers in Denmark. The Group carries on banking and mortgage lending as well as activities within estate agency services, administration and management of investment funds, leasing and insurance mediation.

The Nykredit Realkredit Group's core business is match-funded mortgage lending secured by mortgages on real estate. Mortgage lending is carried out through Nykredit Realkredit A/S and its subsidiary Totalkredit A/S. Mortgage lending to personal customers is provided only through Totalkredit A/S, while lending to business customers is provided through both Totalkredit A/S and Nykredit Realkredit A/S.

Mortgage lending in Totalkredit is based on a strategic alliance currently comprising 45 Danish local and regional banks. According to this business concept, the partner banks are responsible for serving customers, and Totalkredit A/S undertakes the funding of the mortgage loans. Totalkredit A/S and the individual partner bank share the risk of loss on the loans, and the partner bank receives regular payments. At end-2021 mortgage lending to personal customers in Totalkredit A/S made up around half of the Nykredit Realkredit Group's total mortgage lending. The Totalkredit alliance is described in more detail in *4 Credit risk*.

Nykredit Bank is in itself an important part of the Nykredit Realkredit Group, but it also widely underpins the Group's mortgage business. For example, Nykredit's customer centres provide customer advisory and loan services for a large part of the mortgage business. Also, Nykredit Bank undertakes market making in the Group's covered bonds and thereby contributes to high market liquidity. Nykredit Bank's risk profile mainly relates to loans and credit facilities provided to personal and business customers. Other activities include administration and management of investment funds through Nykredit Bank's subsidiaries Sparinvest and Nykredit Portefølje Administration.

# 2.1 • RISK PROFILE

Nykredit's business activities, including management of the investment portfolio, involve exposure to credit risk, market risk, liquidity risk and non-financial risks, including reputational risk, conduct risk, as well as IT and compliance risks. Moreover, regulatory and strategic risks are areas of special focus. Risks related to climate change are managed as part of the traditional risk types.

As Nykredit mainly provides mortgage lending, Nykredit's primary risk is credit risk. Mortgage lending and the underlying funding are regulated by the balance principle, which means that Nykredit incurs limited market and liquidity risk on its mortgage lending and the underlying funding. The mechanisms behind the balance principle are described in detail in *7.4 Balance principle and match funding*. Liquidity and market risks are further reduced by the Danish act regulating refinancing risk, which provides for the refinancing of mortgage loans under special circumstances.

Credit risk, market risk and operational risk are countered by holding adequate capital, while liquidity risk is mitigated through a sufficient stock of liquid assets. A few outstanding regulatory measures are factored in through capital targets or the Pillar II add-on to the internal capital adequacy requirement. The Board of Directors regularly considers the current risk levels and risk appetite.

#### Nykredit's risk management

To ensure a suitable risk profile, Nykredit applies a number of basic risk management principles. These principles make up the practice and culture that guide us in managing risks in relation to Nykredit's values, strategy and performance for the purpose of preserving, creating and realising value.

The principles of all of the Group's risk management activities are based on four elements:

- Risk governance, and risk and compliance culture
- Risk policies
- Risk monitoring
- Risk communication and reporting

For each of these elements, a number of principles guide the risk management practices across the organisation. This ensures a uniform and holistic approach to risk management and a close link between strategy and risk taking.

Nykredit's overall risk policy defines Nykredit's risk appetite and sets the framework for Nykredit's risks. Further, a policy has been laid down for each type of risk with specific limits and guidelines for risk taking.

# 2.2 • RISK GOVERNANCE AND CULTURE

The Board of Directors is the supreme management body. The Board of Directors makes strategic and policy decisions and lays down guidelines for the day-to-day management undertaken and implemented by the Group Executive Board. The Board of Directors oversees the establishment of risk management procedures and monitors risks through the Board Risk Committee and the Board Audit Committee. All policies are approved at least once a year by the Boards of Directors, which receive regular reports on compliance with limits and guidelines set out in the policies. The Executive Boards oversee that risks are managed and controlled as determined by the Boards of Directors. The Executive Boards monitor risks through various committees.

The day-to-day risk management, monitoring and reporting activities are based on the three lines of defence.

**First line of defence:** The operational business units, which take, and are responsible for managing, the risk. The management of each business division is responsible for identifying, assessing and managing the risks arising in connection with the performance of its duties and for ensuring that satisfactory internal controls are in place at all times in respect of the risks related to the handling of business operations and processes. Further, the first line of defence is to ensure that risk management is performed in compliance with current legislation and the Group's business model, policies, guidelines and business procedures, and that it meets the overall principles of risk management. The Group committees undertaking the day-to-day responsibilities and tasks of the Executive Boards in the area of risk management are all part of the first line of defence.

**Second line of defence:** Risk & Conduct and Compliance, which are responsible for the monitoring, controlling and reporting of risks. These functions regularly assess whether the first line activities are sufficient according to Management's instructions and meet the risk profile. Further, some tasks within the credit, IT security and data governance areas are performed by units in the first line of defence. Descriptions of duties including various compensatory measures have been introduced for these units to ensure independence and avoid conflicts of interest. The organisation of lines of defence in the property valuation area is currently under consideration.

To strengthen the organisation's efforts to address and mitigate risks, including operational and compliance risks, one or more Assistant Risk and Compliance Officers (ARCOs) have been appointed in the individual business divisions.

Their primary duty is to assist the managements of the individual business divisions in executing compliance- and risk-related tasks and to strengthen awareness of Nykredit's risk culture. ARCOs serve as links between the first line of defence and the compliance and risk control functions. However, ARCOs are also found in functions in the second line of defence. Third line of defence: Internal Audit, which provides independent assurance over the overall management of risks and internal controls in the Group and reports on its work to the Board of Directors and the Board Audit Committee. Internal Audit is responsible for testing and providing an opinion on whether Nykredit's overall risk management approach, risk management framework, business procedures and internal controls established in all material areas and risk areas have been organised and are working satisfactorily.

The three lines of defence are mutually independent; the functions in the second line of defence work independently of the first line of defence and do not take part in business operations. Similarly, Internal Audit is independent of both the first and second lines of defence, but may base its assurance on the work performed in the second line of defence. For first-line units undertaking work for the second line of defence, compensatory measures have been established, including descriptions of duties, annual schedules and alternative lines of reporting to the Chief Risk Officer.

Nykredit has established a framework for remuneration of material risk takers etc, with a focus on accountability and risk management and supporting Nykredit's aim of contributing to financial stability. Details on remuneration in 2021 can be found in Nykredit's remuneration report.

# 2.3 • MANAGEMENT

# **Board of Directors**

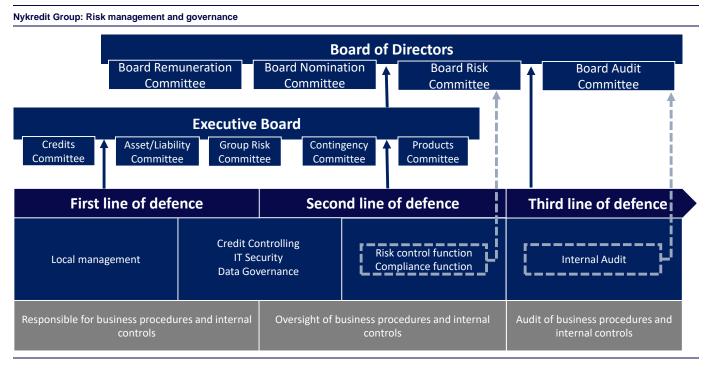
The Boards of Directors of Nykredit A/S and Nykredit Realkredit A/S must be composed so that they possess the mix of skills required to undertake the overall and strategic management of the business and to take any measures to ensure prudent business management. Furthermore, Board members must possess the knowledge and experience required to be able to critically assess and challenge the work and proposals of the Executive Board.

The Boards of Directors review their skills profiles on an ongoing basis and have decided in this respect that they should have special skills and knowledge as regards:

- Strategy
- Sector and real estate expertise
- Economics, finance and accounting
- Capital markets, securities and funding
- Politics, public administration and associations
- Financial regulation
- Corporate governance
- Digitisation, IT and processes
- Market conditions, customer relations and sales
- Organisation/HR and processes
- Risk management and credit matters

The Board of Directors of Nykredit A/S counts 15 members, of whom 10 are elected by the Annual General Meeting for a term of one year and five are elected by and among the staff for a term of four years.

The Board of Directors of Nykredit Realkredit A/S counts 12 members, of whom 8 are elected by the Annual General Meeting for a term of one year and four are elected by and among the staff for a term of four years.



Note: Assistant Risk and Compliance Officers have been appointed in all business divisions of Nykredit.

Further details on the composition, size and diversity of the Boards of Directors as well as the CVs of the individual Board members are available at <u>nykredit.com</u>

## **Executive Board**

The Executive Board is composed of four members. The Executive Board implements the Group strategy and is responsible for the dayto-day management and for implementing policies and guidelines laid down by the Board of Directors. The Executive Board has set up a number of committees at Group level charged with various tasks. These committees report to the Group Executive Board, ensuring that the Group Executive Board is briefed about committee decisions.

## Chief Risk Officer

The duties of the Chief Risk Officer are laid down in the Danish Executive Order on Management and Control of Banks, etc. A separate role description has been prepared for the Chief Risk Officer, approved by the Board of Directors. The Chief Risk Officer must have a general overview of the company's activities and operations as well as its risk exposures in order to assess whether risk management operations are satisfactory. The Chief Risk Officer also assesses whether the decision-making basis of the Executive Board and the Board of Directors is sufficient in risk-related matters.

The head of Nykredit's risk control function is designated as Chief Risk Officer. Nykredit's organisational structure ensures that the risk control function is segregated from all risk-taking units and thus independent in relation to risk-related decisions. Nykredit's central risk control function performs Group-wide controls, monitors Group risks and prepares risk reports for the Boards of Directors on all risk areas. In the organisational structure, the risk control function falls within the CRO division, but with separate and independent reporting to, for instance, the relevant Executive Boards and Boards of Directors of Group companies.

## **Chief Compliance Officer**

The duties of the Chief Compliance Officer are laid down in the Danish Executive Order on Management and Control of Banks, etc. A separate role description has been prepared for the Chief Compliance Officer, approved by the Board of Directors. The Chief Compliance Officer assists Nykredit's Management in identifying, assessing, advising on, controlling, monitoring and reporting on Nykredit's compliance risks. The head of Nykredit's compliance function is designated as Chief Compliance Officer.

The compliance function assesses whether Nykredit meets the compliance rules applicable to the individual risk areas and oversees and determines whether the methods, procedures and controls implemented by Nykredit in the risk areas are adequate and effective in terms of identifying and mitigating compliance risks. In the organisational structure, the compliance function falls within the CRO division, but with separate and independent reporting to, for instance, all relevant Executive Boards and Boards of Directors of Group companies.

## Responsible for anti-money laundering

The Group Executive Board and the Executive Boards of the Group companies have each appointed a Chief Anti-Money Laundering (AML) Officer at the executive level charged with delegating and ensuring managerial responsibility and focus on measures to prevent financial crime throughout the Group.

Moreover, an AML Responsible Officer has been appointed who is tasked with approving Nykredit's anti-money laundering policies, procedures and controls and approving business relationships with politically exposed persons (PEPs) and correspondent relationships.

## Data Protection Officer (DPO)

The Group Executive Board and the Executive Boards of the Group companies have appointed a Data Protection Officer charged with ensuring Nykredit's compliance with applicable data protection legislation.

The Data Protection Officer is responsible for identifying, assessing, advising on, controlling, monitoring and reporting on Nykredit's compliance risks relating to personal data processing. In the organisational structure, the Data Protection Officer falls under the compliance function, but with separate and independent reporting to, for instance, the relevant Executive Boards and Boards of Directors of Group companies.

## **Chief Outsourcing Officer**

The Executive Boards of the Group companies have appointed a Chief Outsourcing Officer, who assists the Executive Boards and the Boards of Directors in ensuring Nykredit's compliance with the Danish Executive Order on Outsourcing for Credit Institutions, etc. in force from time to time. The overall responsibility is vested in the Boards of Directors, however. In the organisational structure, the Chief Outsourcing Officer falls under Group Legal & Tax and Portfolio Administration, but reports directly to the Executive Board.

## 2.3.1 Committees

## **Board Committees**

The Board of Directors of Nykredit Realkredit A/S has appointed a Board Risk Committee, a Board Audit Committee, a Board Remuneration Committee and a Board Nomination Committee. These Board committees advise the Board of Directors on particular matters and prepare cases for review by the entire Board of Directors, each within their field of responsibility. The committees are described below.

### Group committees

The Group Executive Board has set up five committees in Nykredit, to which it has delegated specific responsibilities. Each committee must report to the Group Executive Board, and the individual members may at any time resolve to have the relevant Executive Board of a Group company decide on a case.

The committees are all part of the first line of defence. The Chief Risk Officer and the Chief Compliance Officer may attend committee meetings as observers. The Chief Risk Officer is a permanent observer at meetings of the Group Risk Committee, the Products Committee and the Asset/Liability Committee, and attends Credits Committee meetings when and as required. The Chief Compliance Officer is also a permanent observer at meetings of the Group Risk Committee and the Products Committee, and attends Asset/Liability Committee meetings when and as required. The Chief Risk Officer and the Chief Compliance Officer may at any time request that a matter be resolved by the relevant Executive Board or Board of Directors, if deemed relevant. The committees are described below.

## Nykredit's Board committees

Board Risk Committee	The function of the Board Risk Committee is to oversee Nykredit's overall risk profile and strategy, including to assess the long- term capital requirement and the capital policy. It also assesses risks related to products, business model, remuneration structure and incentives as well as risk models and methodological basis. The Board Risk Committee also assists the Board of Directors in overseeing that the risk appetite defined by the Board of Directors is implemented correctly in the organisation.
Board Audit Committee	The principal tasks of the Board Audit Committee are to inform the Board of Directors of the results of the statutory audit, to over- see the financial reporting process and the effectiveness of Nykredit's internal control systems, internal audit and risk manage- ment, to oversee the statutory audit of the financial statements etc, to monitor and verify the independence of the auditors, and to be responsible for the procedure for selecting and submitting a recommendation for the appointment of auditors.
Board Remuneration Commit- tee	The principal tasks of the Board Remuneration Committee are to qualify proposals for remuneration prior to consideration by the Board of Directors and to make recommendations in respect of Nykredit's Remuneration Policy, including guidelines on incentive pay, for the approval of the Board of Directors, as well as to assist in ensuring that these are observed. Moreover, the Board Remuneration Committee reviews and considers the criteria for and process of appointing risk takers, assesses whether the Group's processes and systems relative to remuneration are sufficient and takes into consideration the Group's risks, and ensures that the Remuneration Policy and practices are in alignment with and promote sound and effective risk management and are in accordance with the Group's business strategy, objectives, values and long-term interests. Finally, the Board Remuneration Committee ensures that the information in the Annual Report about remuneration of the Board of Directors and the Group Executive Board is correct, fair and satisfactory. Details on bonuses to risk takers as well as Remuneration Policy and practices can be found in Nykredit's Remuneration Policy.
Board Nomination Committee	The Board Nomination Committee is tasked with making recommendations to the Board of Directors on the nomination of candi- dates for the Board of Directors and the Executive Board. The Committee also advises the Board of Directors with respect to tar- gets for the under-represented gender on the Board of Directors and laying down a diversity policy applying to the same. In addi- tion, the Board Nomination Committee, reporting to the Board of Directors, is ultimately responsible for defining the skills profiles of the Board of Directors and the Executive Board and for the continuous evaluation of their performance and achievements.

Nykredit's Group committees	
Group Risk Committee	The Group Risk Committee is charged with overseeing the Nykredit Group's overall risk outlook, assisting the managements of the respective companies in ensuring compliance with current legislation and risk management practices as well as supporting responsible business practices. The Group Risk Committee further oversees that the risk policies and guidelines defined by the Board of Directors are implemented correctly in the organisation. The Committee is also responsible for monitoring and assessing the required own funds and internal capital adequacy requirement.
Credits Committee	The Credits Committee is charged with ensuring adequate credit risk management and approving and/or deciding credit applica- tions and loan impairments as well as overseeing the management of risks in Nykredit's credits area. The Committee manages the Group's loan portfolio and submits recommendations on credit policies to the individual Executive Boards and Boards of Di- rectors. The Committee lays down business procedures for the granting of credits within the limits of the guidelines laid down by the Group Executive Board and the Board of Directors.
Asset/Liability Committee	The Asset/Liability Committee undertakes the day-to-day responsibilities and tasks of the Executive Boards in the areas of capi- tal, funding, liquidity and market risk according to guidelines approved by the Boards of Directors. The Committee has a govern- ance mandate in these areas at both Group and company levels. The Asset/Liability Committee has delegated responsibility to the Green Bond Committee for ensuring that the types of assets used to back green bonds comply with Nykredit's Green Bond Framework. The Green Bond Committee is composed, at a minimum, of the members of the Asset/Liability Committee, which is represented at meetings.
Products Committee	The Products Committee's objective is to ensure that the Nykredit Group's products and services meet applicable business and regulatory requirements and are provided to the right target groups. The Committee must ensure that any development and launch of new or changes to existing products and services involving material risks for customers, the Group, the individual companies and/or counterparties are in alignment with the business models of the individual companies and comply with the current product policy and the Executive Boards' guidelines for development and approval of new products and services.
Contingency Committee	The Contingency Committee has the overall responsibility for compliance with IT security policy rules in relation to contingencies (major accidents or catastrophes) and the Group's entire spectrum of contingency plans covering IT as well as business aspects.
Corporate Responsibility Com- mittee	The Corporate Responsibility Committee implements the Group strategy as laid down by the Board of Directors and is responsible for the corporate responsibility strategy, including Group-wide targets and the progress of such targets. The Committee prioritises corporate responsibility themes and initiatives based on analyses of materiality, impact and sustainability-related risks, delegates responsibility for prioritised initiatives and is responsible for the implementation of the UN Principles for Responsible Banking. The Committee receives regular reports from a number of committees to which powers have been delegated and approves the annual corporate responsibility reporting.

# Nykredit Realkredit Group

# Risk areas reviewed by the Board of Directors

Risk management	Frequency	
Risk policies	Annually	Review of risk policies, risk guidelines and risk appetite, including:
		Overall risk policy
		Capital policy, including leverage, eligible liabilities (MREL) and debt buffer
		Credit policy and guidelines for approval of loans and other credit facilities
		Valuation policy
		Market risk policy and guidelines
		Liquidity policy and liquidity risk guidelines
		Operational risk policy and guidelines
		Compliance policy
		IT risk and IT security policy
		Data governance policy
		Model risk policy
		Outsourcing policy
		Policy for the prevention of money laundering, terrorist financing and breach of financial sanctions
		Personal data policy
		Tax management policy
		Insurance cover policy
Other policies of rele- vance to risk manage-	Annually	Corporate responsibility policy
ment	Annually	Corporate culture policy and code of conduct
	Annually	Product policy
10445	Annually	Remuneration policy
ICAAP	Annually	Review of required own funds and internal capital adequacy requirement
	A	Determination and assessment of capital requirements, including through stress testing in various scenarios
ILAAP	Annually	Determination and assessment of the Group's liquidity risk exposure, including through stress testing, and evaluation of the
	Annually	Group's liquidity position and liquidity management, including its funding profile and funding schedule.
Recovery plans	Annually	Determination of trigger levels, scenarios and possible scope for action, as well as a description of the organisation for the
		purpose of capital and/or liquidity recovery of the Nykredit Realkredit Group and the Nykredit Bank Group.
Risk reporting		
Capital	Quarterly	Own funds, required own funds and internal capital adequacy requirement
0	<b>A</b>	Leverage ratio
Credit risk	Quarterly	Development in credit risk and parameters, and ratings
		Concentration risk by industry, loan type and geographical region
		Housing prices and loan-to-value (LTV) ratios
		Review, assessment and approval of exposures above a certain limit
Valuation risks	Quartarly	Results of credit approval controlling
Market risk	Quarterly Monthly/	Update on risks relating to property valuation
Warketlisk	quarterly	Yield spread, interest rate, foreign exchange and equity price risks (conventional measures and Value-at-Risk)
	quarterry	Earnings and market trends Portfolio stress testing
Liquidity risk	Monthly/	Model backtesting Liquidity and excess liquidity coverage for the period under review
	quarterly	Liquidity stress testing
	quarteriy	NSFR and LCR
		Liquidity reserves
Non-financial risks	Quarterly	Development in identified risks
	additionly	Events and losses
Compliance risks	Quarterly	Development in compliance risks
- Simplication Hold	200.001	Development in risks related to GDPR
		Results of compliance reviews
		Update on collaboration with ARCOs
IT risks	Quarterly	Development in IT risks
	····,	IT security incidents
De sudate su siales	Our stands	· · · · · · · · · · · · · · · · · · ·
Regulatory risks	Quarteriy	Update on new registration
Regulatory risks Strategic risks	Quarterly Quarterly	Update on new legislation Update on principal strategic risks

# 2.4 - RISK POLICY

The risk policy sets out the overall risk appetite as well as risk appetites for the individual types of risk. Nykredit's risk management is aimed at ensuring agreement between risk profile, risk appetite and current legislation in the context of a robust capital structure and stable earnings. Risk management should contribute to ensuring financial solutions that are viable in the short, medium and long term.

## 2.4.1 • Risk appetite

The overall risk appetite is determined on the basis of Nykredit's strategy, regulatory and credit rating agency capital requirements and the internal capital targets. The risk appetite is determined by the Board of Directors and reflects Nykredit's overall tolerance for assuming risks in the context of its business model and the Group strategy. In some areas, it is directly measurable, while in other areas the risk appetite is expressed through general objectives.

The tolerance limits for the individual risks vary according to risk type, customer exposure, product type, strategy, targets etc. These factors are described and incorporated in relevant policies and guidelines. The specific risks related to business unit activities are assessed in the context of the potential financial impact on the individual unit.

Nykredit manages its capital usage on an ongoing basis and prepares a capital budget annually. The budget should be seen in the context of the overall capital and strategy plan. Capital is allocated and prioritised according to risk profile, business returns and strategic considerations.

## Responsible product offering

Nykredit's risk appetite aims to ensure a responsible and sustainable approach to development and maintenance of products and services. Nykredit's products must build on the fundamental objective of establishing long-term customer relationships, and Nykredit must at all times be able to provide market-consistent and competitive products and services. Further, Nykredit's products and services should be seen in the context of Nykredit's commitment to actively support stable and sustainable development of society, in the short as well as in the long term. Nykredit's products and services must be responsible from a societal perspective and must secure responsible relationships with our customers. To this end, the development, distribution, change and maintenance of products and services should be aligned with internal policies, including Nykredit's Code of Conduct. Nykredit further ensures that risks to the Group and customers are minimised to the extent possible, that products are only distributed to customers whose interests, purpose and characteristics are compatible with the product and that the processes serve to support efficient and customer-friendly service.

Where relevant, Nykredit's products and services should contribute to sustainable development of society in an economic, social, or climate and environmental sense. In developing products and services, Nykredit considers whether they can have a positive influence, for instance by making it easier for customers to make sustainable choices. Nykredit also considers and addresses potential negative impacts within the three dimensions of sustainability in its development, distribution and application of products and services and related advisory services with a view to minimising any such impacts.

Nykredit has governance and risk management frameworks in place. The product policy serves to support Nykredit's governance structure as well as Nykredit's risk appetite and handling of risks.

#### Risk policy and risk appetite

Risk policy						
Capital policy						
Financial risks Non-financial risks						
Orodik policy	Market risk policy	Liquidity policy	Operational risk policy Compliance policy			
Credit policy						
Valuation policy			Model risk policy	IT risk policy and IT security policy	Policy for the prevention of money laundering, terrorist financing and breach of financial sanctions	Personal data policy
	-		Outsourcing policy	Insurance policy	Data governance policy	Tax policy

## Nykredit's overall risk appetite

The objective is to be able to maintain active lending to core customer segments, including the Group's full-service customers and personal customers of Totalkredit, also in a challenging economic climate.

Capital	In accordance with its business model, Nykredit aims to have stable earnings, a strong capital structure and competitive credit rat- ings. The capital requirement determined by Nykredit must therefore be significantly above the minimum regulatory level, ensuring that Nykredit can withstand an economic downturn and any consequent losses and meet new regulatory requirements. Lower capi- tal thresholds are set for purposes of the ongoing capital management. Leverage limits and requirements for eligible liabilities (MREL) and debt buffer have been laid down.
Financial risks	
Credit	Creditworthiness is the core element of credit granting. Credit granting must reflect Nykredit's strategy and factor in aspects such as sustainable transition and climate risks, and the credit portfolio is structured around guidelines and portfolio targets. Nykredit focuses on long-lasting and sound relationships with customers who have the ability and will to meet their obligations. The objective is that physical assets used in the Group's business and management activities be valued at long-term and robust values, thereby ensuring the necessary security for the Group's bond issues. Valuation activities include addressing climate and environmental aspects such as physical risks and energy efficiency.
Market risk	Nykredit's market risk management is to ensure that the Group's financial stability cannot be compromised as a result of losses related to market risk. The overall risk appetite is expressed as the maximum potential loss relative to budgeted earnings which Nykredit is willing to incur if market conditions become unfavourable for Nykredit's portfolios related to market risk.
Liquidity	Nykredit's liquidity management supports its mortgage lending business and ensures competitive prices for customers and Nykredit, regardless of market conditions, While also ensuring that all financial obligations and regulatory requirements are met in the short, medium and long term. It is Nykredit's policy to obtain inexpensive funding involving limited funding risk. Nykredit's funds its mortgage lending through the issuance of covered bonds (SDOs and ROs), but raises additional market funding to ensure suffi- cient liquidity and capital resources during stressed periods. Bank lending is mainly funded by deposits.
Non-financial risks	
Operational risk	Non-financial risks must be low relative to financial risks so as to ensure that they cannot compromise Nykredit's financial stability. Nykredit's objective for operational risk is to support and develop an organisation where operational risk management is an integral part of both day-to-day operations and long-term planning. Operational risk management also encompasses conduct risk.
Compliance	Nykredit has laid down objectives, principles and standards that serve to ensure compliance with regulatory requirements and sup- port the aim of promoting honest and ethical conduct in Nykredit and among its staff and a culture where openness and awareness of compliance risks and their management is a matter of course.
IT risk and IT security	Risk management must meet regulatory requirements and expectations in the area.
Data quality	Principles and standards have been laid down for Nykredit's data management to ensure that Nykredit complies with current legis- lation in this area and to support existing and future business processes and professional and effective development of such pro- cesses.
Model risk	Nykredit aims to have a stable, common foundation for using models to provide input for business decisions and for determining risk limits, capital, capital adequacy etc. Risk management must meet regulatory requirements and expectations for model risk management.
Prevention of money laundering and terrorist financing	Based on its business model and risk policy, Nykredit has defined a set of principles and attitudes aimed at preventing any misuse of Nykredit for financial crime purposes.
Other:	Nykredit's risk appetite for other risks is continuously reviewed and monitored through various forums. The Board of Directors also regularly assesses these risks.

# 2.5 • RISK MONITORING

Risks are assessed and monitored centrally in the second line of defence on the basis of various quantitative and qualitative risk measurements prepared by specialists in the individual types of risk. Risk monitoring results are reported collectively to the relevant management levels, eg the Board of Directors, the Executive Board and the Chief Risk Officer.

Non-compliance with risk policies, including breaches of prescribed limits, is reported to the Board of Directors, the Executive Board and relevant committees. Policy governance is described in detail for the individual risk areas in this report.

### 2.5.1 • Internal controls

Risk monitoring is based on internal controls, risk management systems and analyses, which together ensure that all relevant risks are addressed. The monitoring set-up is adjusted regularly so as to reflect all relevant risk factors at any given time.

The purpose of Nykredit's controls is to ensure that policies and guidelines laid down by the Boards of Directors are observed, and to ensure timely prevention, detection and correction of any errors, deviations or omissions.

Controls have been established for all material areas and risk areas, and overall principles and requirements for the preparation of business procedures and a process for the approval of business procedures in material risk areas have been established at Group level. The controls include control of transactions, spot checks and physical property valuation control, control of outsourced activities and IT controls.

# 2.6 • REPORTING AND COMMUNICATION

The Board of Directors and the Executive Board receive a report covering all relevant risks quarterly. The risk reporting complies with current legislation and is aimed at describing the current risk outlook on the basis of quantitative data and analysis of special focus areas.

At a minimum, the risk reporting covers the areas of credit risk, market risk and liquidity risk as well as non-financial risks, including reputational risk, conduct risk, IT and compliance risks. Moreover, regulatory and strategic risks are areas of special focus.

The implementation of the policies is regularly assessed together with the relevant business units to obtain a continuous assessment of the risk outlook and the contents and messages of the reporting.

# 2.7 • ESG FACTORS

Risks relating to environmental, social and governance (ESG) factors comprise risks relating to existing or future impacts of ESG factors on customers and counterparties as well as on invested assets. Risks relating to ESG factors affect the business through traditional risk types, including credit risk, market risk, liquidity risk and funding, and non-financial risks.

Risks arising from climate change include physical risks and transition risks. Physical risks pertain to the costs and losses arising from extreme weather conditions or long-term changes brought about by climate change. Transition risks pertain to business customers' risk of incurring costs and losses as a result of new regulation, technological advances and changes in consumer behaviour arising in the wake of the transition to a more sustainable economy.

The integration of ESG risks into Nykredit's risk management practices and in all relevant Nykredit policies is in progress. ESG factors are gradually being incorporated into Nykredit's policies, including the valuation policy, credit policy and risk policy. Over the coming years, Nykredit will be improving the assessment of ESG factors and providing training of Group specialists. Efforts will also be made to establish a more structured approach to collecting and capturing data.

# 3. CAPITAL

## 3.1 CAPITAL POLICY AND GUIDELINES

## 3.2 CONTROL AND REPORTING

## 3.3 CURRENT CAPITAL PROFILE AND

# DEVELOPMENT

3.3.1 Capital adequacy differences between the

Groups

# 3.4 CAPITAL REQUIREMENTS

3.4.1 Required own funds

3.4.2 Capital buffers

3.4.3 Total capital requirement

# 3.5 STRESS TESTS AND CAPITAL PROJECTIONS

## 3.6 CONSOLIDATION METHODS

3.6.1 Differences compared with Financial

Statements

3.6.2 Credit risk

3.6.3 Market risk

3.6.4 Operational risk

# 3.7 RISK EXPOSURE AMOUNT

## 3.8 LEVERAGE RATIO

3.9 DEBT BUFFER AND MREL REQUIREMENTS

# 3.10 FSA SUPERVISORY DIAMONDS

3.10.1 Banks

3.10.2 Mortgage lenders

The objective of Nykredit's capital management is to support the Group's business model, strategy and objectives. On that basis, Nykredit aims to have stable earnings, a strong capital structure and competitive ratings.

Based on a structured capital management framework, the Group aims to be able to maintain its business activities throughout Denmark regardless of fluctuations in economic trends. This implies having continued access to capital to meet new regulatory requirements and in addition be able to withstand a severe recession and consequent losses.

At the same time, Nykredit wants to ensure sufficient own funds to generate dividend for its owners and to meet regulatory requirements and the expectations of the Danish FSA.

The Board of Directors has set a Common Equity Tier 1 (CET1) capital target at 15.0-16.0% of the risk exposure amount (REA), whereas the total capital target has been set at 19.5-20.5%. With a total capital ratio and a CET1 capital ratio of 24.7% and 20.6%, Nykredit is comfortably above these capital targets. In addition, Nykredit may obtain new CET1 capital from its owners through Forenet Kredit's capital resources and investment commitments from a number of Danish pension companies. At the beginning of 2022 the Board of Directors resolved to reduce the capital targets by 0.5 percentage point. The reason was that the capital resources of Forenet Kredit are now deemed sufficient for Nykredit to rank on a par with a listed SIFI in terms of capitalisation. Also, Nykredit holds CET1 capital to meet the new Basel requirements when implemented in the EU.

The European Commission has presented its proposal for the implementation of new capital requirement rules under Basel IV (CRD6/CRR3). Nykredit retains its current CET1 capital based on the original recommendations of the Basel Committee. When a political agreement has been reached in the EU, Nykredit will assess whether to adjust it.

#### Capital ratios of Nykredit's companies

% of REA		Total regulatory
End-2021	Capital ratio	requirement <sup>1</sup>
Nykredit Realkredit Group		
CET1 capital	20.6	10.8
Tier 1 capital	21.5	12.9
Own funds	24.7	15.7
Nykredit Realkredit A/S		
CET1 capital	15.5	9.9
Tier 1 capital	16.1	11.7
Own funds	18.5	14.1
Nykredit Bank Group		
CET1 capital	23.0	10.7
Tier 1 capital	23.0	12.7
Own funds	23.5	15.4
Totalkredit A/S		
CET1 capital	22.3	11.0
Tier 1 capital	25.2	13.2
Own funds	27.1	16.1
<sup>1</sup> The regulatory requirement includes req	uirements under Pillar I and F	Pillar II and the com-

The regulatory requirement includes requirements under Pillar I and Pillar II and the combined capital buffer requirement.

# 3.1 • CAPITAL POLICY AND GUIDELINES

Nykredit's capital policy is laid down by the Board of Directors and defines the Nykredit Realkredit Group's consolidated capital needs, maximum leverage and targets for eligible liabilities (MREL), debt buffer etc.

Nykredit's capital targets are determined on the basis of the Danish FSA stress testing approach and are comprised of regulatory capital requirements and buffers, and a stress buffer based on the impact of a severe recession. Nykredit furthermore applies internal capital buffers. Consequently, the capital targets are considerably higher than the regulatory minimum requirement. The Boards of Directors will reassess the Group's capital requirements in case of major unexpected events.

In addition to the capital policy, Nykredit's Board of Directors has issued guidelines on day-to-day capital management to the Executive Board, which may in turn delegate guidelines and limits to Nykredit's Asset/Liability Committee.

The guidelines set out the scope for Nykredit's capital ratios, leverage ratio, eligible liabilities and debt buffer, and specify the governance structure, delegation options, escalation procedures etc.

The capital policies of Group companies are determined by the individual Boards of Directors on the basis of the Group's capital policy and recommendations from the Asset/Liability Committee.

#### Capital management governance

Board of Directors and Board Risk Committee: Lay down the capital policy and capital management guidelines, including capital targets, maximum leverage and targets for eligible liabilities (MREL) and debt buffer. Receive quarterly reports on capital policy compliance. Receive separate reports in case of non-compliance with the policy or guidelines, including an action plan for approval.

Executive Board and Asset/Liability Committee: Approve and implement the capital policy and regularly review compliance based on quarterly reports. Receive separate reports in case of non-compliance with the policy, including an action plan for approval.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 3.2 • CONTROL AND REPORTING

Nykredit's risk control function informs the Board of Directors and the Board Risk Committee of the Group's capital position through its quarterly risk management reports to the Board of Directors.

The Board of Directors oversees and evaluates Nykredit's current capitalisation, and this forms the basis of an annual review and approval of the capital policy and guidelines. The risk outlook is described in the quarterly reports to the Board of Directors, the Board Risk Committee and the Group Risk Committee.

The Asset/Liability Committee receives monthly reports on REA, own funds and capital plans.

Nykredit prepares an annual report on areas such as capital management and the Internal Capital Adequacy Assessment Process (ICAAP), which is submitted to the Board of Directors for approval and the Danish FSA for its assessment.

# 3.3 • CURRENT CAPITAL PROFILE AND DEVELOPMENT

Nykredit's own funds totalled DKK 99.5 billion at end-2021, against DKK 97.7 billion at end-2020. With a risk exposure amount (REA) of DKK 401.6 billion, this corresponds to a total capital ratio of 24.7% at end-2021, against 24.3% at end-2020. The table below shows Nykredit's own funds and REA.

Nykredit's Tier 1 capital of DKK 86.6 billion consists mainly of CET1 capital, which is the most important capital concept as this is the type of capital required to comply with most of the regulatory capital requirements. CET1 capital came to DKK 82.9 billion at end-2021, corresponding to a CET1 capital ratio of 20.6%, against 20.2% at end-2020. Additional Tier 1 (AT1) capital totalled DKK 3.7 billion (EUR 500 million) at end-2021 and was issued by Nykredit Realkredit A/S in October 2020.

At an extraordinary general meeting in November 2021, it was decided to distribute extraordinary dividend of DKK 2.6 billion, as the Danish FSA's recommendation on restriction of distributions issued on 18 December 2020 no longer applied as of 30 September 2021. In March 2021 ordinary dividend of DKK 2.2 billion was distributed. Nykredit has thus followed the former recommendation to withhold ordinary dividend based on profit for 2019 and take a cautious approach to distribution based on profit for 2020.

Nykredit's CET1 capital increased by a total of DKK 1.7 billion in 2021. The development was mainly driven by profit for 2021 and dividend distributions. The Board of Directors recommends to the Annual General Meeting that dividend for 2021 be distributed in the approximate amount of DKK 4.4 billion, corresponding to 50% of profit for 2021. Tier 2 capital including regulatory adjustments totalled DKK 12.8 billion at end-2021, which was DKK 0.1 billion higher than at end-2020. At end-2021 Nykredit had issued DKK 55.5 billion-worth of senior nonpreferred debt. This does not count towards own funds, but is eligible for meeting the Danish minimum requirement for own funds and eligible liabilities (MREL) applying to the Group, the debt buffer requirement for mortgage banks as well as S&P's Additional Loss-Absorbing Capacity (ALAC) criterion for credit rating purposes. Senior non-preferred debt serves to protect unsecured creditors in case of the issuer's resolution or bankruptcy.

### 3.3.1 - Capital adequacy differences between the Groups

Although the sole activity of Nykredit A/S is its ownership of Nykredit Realkredit A/S, the determination of own funds and total REA is not entirely identical for the Nykredit Group and the Nykredit Realkredit Group. The differences are due to four factors:

## 1. Common Equity Tier 1 (CET1) capital

CET1 capital totalled DKK 82.7 billion in the Nykredit Group and DKK 83.0 billion in the Nykredit Realkredit Group at end-2021. The difference is caused by a deduction from the CET1 capital of the Nykredit Group for intercompany balances with PRAS A/S and the ownership interest of PRAS A/S in Nykredit A/S.

## 2. Additional Tier 1 (AT1) capital in subsidiaries

AT1 capital was issued by Nykredit Realkredit A/S and therefore cannot be included 100% in the capital determination of the Nykredit Group. This is laid down in the rules on minority interests in the Capital Requirements Regulation (CRR), which stipulate that AT1 capital may only be included at an amount corresponding to the regulatory requirement for the group concerned, in this case the Nykredit Group.

## 3. Tier 2 capital in subsidiaries

Tier 2 capital was also issued by Nykredit Realkredit A/S and is subject to the rules on minority interests described above for AT1 capital.

## 4. Risk exposure amount (REA) - credit risk:

As mentioned in 1 above for CET1 capital, intercompany balances and indirect ownership interests are eliminated in the Nykredit Group. This reduces total REA for credit risk in the Nykredit Group.

## Capital

	Nykredit Realkredit		Nykredit
DKK billion	Group		Group
Year-end	2021	2020	2021
Equity for accounting purposes	93.6	89.8	93.6
AT1 capital etc	(3.7)	(3.8)	(3.7)
Proposed dividend	(4.4)	(2.2)	(4.4)
Other CET1 regulatory adjustments	(2.5)	(2.4)	(2.9)
CET1 capital	83.0	81.3	82.7
AT1 capital	3.7	3.7	2.2
AT1 regulatory deductions	0.0	(0.0)	0.0
Total Tier 1 capital	86.6	84.9	84.8
Tier 2 capital	10.8	10.8	7.0
Other Tier 2 regulatory adjustments	2.0	1.9	2.0
Own funds	99.5	97.7	93.9
REA			
Credit risk	350.3	333.6	349.1
Market risk	24.1	40.1	24.1
Operational risk	27.2	28.1	27.2
Total REA	401.6	401.8	400.4
Capital ratios			
CET1 capital ratio, %	20.6	20.2	20.6
Tier 1 capital ratio, %	21.5	21.1	21.1
Total capital ratio, %	24.7	24.3	23.4

#### Nykredit Realkredit Group

Loan capital, end-2021

	Interest rate	Call date	Maturity	Capital
Nykredit Realkredit A/S			·	·
AT1 capital	4.125%	15 April 2026	Perpetual	EUR 500 million
Tier 2 capital	0.875%	28 April 2026 to 28 July 2026 inclusive	28 July 2031	EUR 500 million
Tier 2 capital	3M Stibor + 1.25%	31 March 2026	31 March 2031	SEK 1,000 million
Tier 2 capital	6M Euribor + 1.71%	-	28 October 2030	EUR 50 million
Tier 2 capital	2.75%	17 November 2022	17 November 2027	EUR 800 million

# 3.4 • CAPITAL REQUIREMENTS

Nykredit's total regulatory capital requirement is composed of required own funds (internal capital adequacy requirement) and the combined capital buffer requirement.

## 3.4.1 • Required own funds

Pursuant to the Danish Financial Business Act, it is the responsibility of the Board of Directors and the Executive Board to determine the required own funds. The required own funds are the minimum capital deemed to be required to cover all material risks. The determination takes into account the business objectives and capital policy targets by allocating capital for all relevant risks, including calculation uncertainties.

Required own funds are determined as the sum of Pillar I and Pillar II capital. Required own funds totalled DKK 44.8 billion at end-2021, equal to an internal capital adequacy requirement of 11.2%.

## Pillar I

Pillar I capital covers credit risk, market risk and operational risk. Under the Pillar I requirement, financial institutions must hold capital corresponding to 8% of REA.

## Pillar II

Pillar II comprises Nykredit's assessment of various risks not covered by the Pillar I capital requirement. The calculation of Pillar II capital thus supports the aim of maintaining a stable capital level even if the economic climate deteriorates.

Pillar II capital includes a buffer that factors in a weaker economic climate with changes in customer credit quality, falling property prices, etc.

In addition to the buffer to meet cyclical changes, various other assessments are made of other risks that may lead to a Pillar II add-on. Other risks include, for example, effects of model updates, model risk, operational risks, validation and backtest results, data quality, concentration risk and interest rate risk.

Nykredit applies an additional management buffer to allow for the fact that the capital determination depends on statistical methods, choice of model, model properties, unforeseen events, etc.

### 3.4.2 • Capital buffers

Nykredit is subject to a number of capital buffer requirements that are additional to the capital requirements under Pillar I and Pillar II. The combined capital buffer requirement is currently 4.5% of Nykredit's REA and must be met with CET1 capital. The requirement is expected to rise to 6.5% at end-2022 due to the rebuilding of the countercyclical capital buffer.

As a systemically important financial institution (SIFI), Nykredit is subject to a special and institution-specific SIFI buffer requirement of 2%. Nykredit is also subject to a capital conservation buffer of 2.5%, which is applicable to all financial institutions. After the covid-19 outbreak, the countercyclical buffer rate was reduced to 0% by the Danish Minister for Industry, Business and Financial Affairs upon the recommendation of the Danish Systemic Risk Council. Given the favourable economic conditions in Denmark, the government has announced an increase of the countercyclical buffer to 1% with effect from 30 September 2022 and to 2% with effect from 31 December 2022.

In 2021 it became possible for the Danish authorities to determine a systemic risk buffer to be applied if general systemic risks are identified that cannot be addressed by existing macroprudential instruments. At end-2021 the systemic risk buffer had not been activated.

Besides the Danish capital buffer requirements, Nykredit must hold CET1 capital for lending in countries where the countercyclical buffer has been implemented and where Nykredit has activities. However, lending in such countries is very limited.

## 3.4.3 • Total capital requirement

The total capital requirement including capital buffers was 15.7% at end-2021, of which the minimum CET1 capital requirement represented 10.8%, including Pillar II. With a total capital ratio and a CET1 capital ratio of 24.7% and 20.6%, the capital levels are well above the capital requirements applicable to Nykredit.

Besides the specific capital requirements, the results of the stress test exercises of the European Banking Authority (EBA) and the Danish FSA must be incorporated in Nykredit's capital planning.

Nykredit's capital targets, which are described in detail in 3.1 *Capital policy and guidelines*, allow for the capital requirements combined with a deteriorating economic climate corresponding to the severe recession scenario in the Danish FSA stress test or a similar scenario.

## Nykredit Realkredit Group

Total	capi	tal ı	ea	uir	em	en
i otai	oup	un i	cy	un	cilli	<b>C</b> 11

i otal capital requirement					
% of REA	31.12.2021	31.12.2020			
Minimum CET1 capital ratio requirement					
Pillar I	4.5	4.5			
Pillar II	1.8	1.7			
Buffer requirement	4.5	4.5			
- Capital conservation buffer	2.5	2.5			
- Countercyclical buffer <sup>1</sup>	0.0	0.0			
- SIFI buffer	2.0	2.0			
- Systemic risk buffer <sup>2</sup>	0.0	0.0			
Total requirement	10.8	10.7			
Minimum total capital ratio requirement					
Pillar I	8.0	8.0			
Pillar II	3.2	3.0			
Total buffer requirement	4.5	4.5			
Total requirement	15.7	15.5			
Nykredit's capital ratios					
CET1 capital ratio	20.6	20.2			
Total capital ratio	24.7	24.3			
<sup>1</sup> The buffer will be raised to 1% from 30 September 2	022 and to 2% from 31	December 2022			

<sup>1</sup>The buffer will be raised to 1% from 30 September 2022 and to 2% from 31 December 2022. <sup>2</sup>As at end-2021, the systemic risk buffer had not been activated.

# 3.5 • STRESS TESTS AND CAPITAL PROJECTIONS

In addition to the regulatory capital requirements, Nykredit holds additional capital to be applied in particularly stressed economic circumstances. Accordingly, a stress buffer is determined in connection with the annual adoption of Nykredit's capital targets, which is based on a cross-section of adverse impacts on capital in both internal and external stress test exercises over a number of years.

Model-based stress tests and capital projections are permanent elements of Nykredit's capital management. The stress tests are used to assess the impacts of different macroeconomic scenarios. The results are applied at both Group and company levels and are included in the annual assessments by the individual Boards of Directors of the internal capital adequacy requirement as well as in the determination of capital targets.

The stress test calculations include the macroeconomic factors of greatest importance historically to Nykredit's customers.

The most important macroeconomic factors identified are:

- Property prices
- Interest rates
- Unemployment
- GDP growth.

Nykredit generally applies three macroeconomic scenarios: a baseline scenario, a weaker economic climate and a severe recession. Other relevant scenarios are also considered, for instance from external parties such as the Danish FSA or company-specific scenarios for Nykredit Bank and Totalkredit.

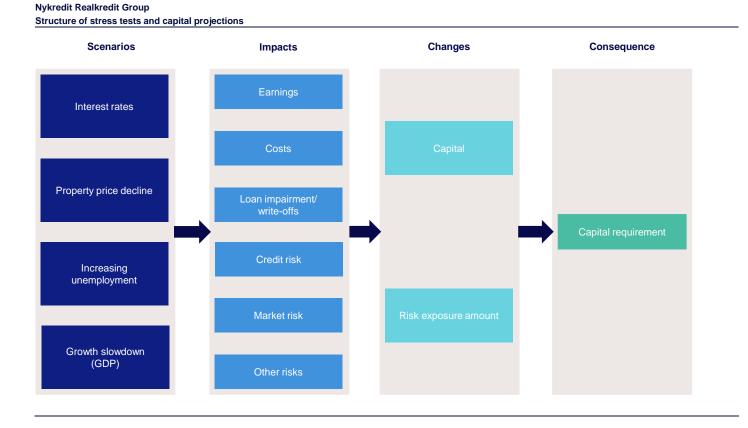
The capital requirement for credit risk builds primarily on correlations between the macroeconomic factors, the Probability of Default (PD) and Loss Given Default (LGD). These correlations are an essential element of the capital projection model. Operating losses in a stress scenario increase the capital requirement, while operating profits are not included. The impacts of both rising and falling interest rates are tested in the projection scenarios to determine the greatest stress impacts.

#### Baseline scenario

This scenario is a neutral projection of the Danish economy based on Nykredit's assessment of the current economic climate.

## Stress scenario: Weaker economic climate

This stress scenario is designed to illustrate a weaker economic climate relative to the baseline scenario. The scenario is assessed assuming both rising interest rates and falling interest rates. The stress scenario provides the basis for a Pillar II add-on calculated using the scenario with the harder impact of the two or a current risk scenario, such as covid-19 or an inflation scenario. The add-on reflects how much Nykredit's capital requirement would increase if this scenario were to occur. The results are included in the determination of Nykredit's internal capital adequacy requirement.



#### Stress scenario: Severe recession

Nykredit's capital policy aims at ensuring a robust capital level, also in the long term and in a severe recession. Therefore, Nykredit continually evaluates the impact of severe recession. This stress scenario reflects an exceptional, but plausible macroeconomic stress scenario. The calculations are factored into the annual determination of the stress buffer as part of the capital targets.

The results of the stress scenario reflect how much Nykredit's capital requirement would increase in case of plunging housing prices, falling or rising interest rate levels and high unemployment.

## Other stress scenarios

As part of the Group's capital policy, in addition to calculating its own stress scenarios, Nykredit also assesses the stress scenarios prepared by the Danish FSA. The results are compared regularly.

Since 2020 the covid-19 crisis and its economic impacts have been closely monitored. Due to the growing inflationary pressures in 2021, risk scenarios with rising interest rates have become relevant as supplementary scenarios for determining the buffer to meet cyclical changes in the internal capital adequacy requirement.

In 2021 Nykredit participated in the stress test exercises of the European Banking Authority (EBA). The stress test showed that Nykredit can withstand an even very severe macroeconomic downturn where large property price declines have a significant adverse impact on both personal and business lending.

The results of the stress tests conducted in recent years have shown that Nykredit's CET1 capital ratio will drop by approximately 4 percentage points in a severe recession. The decrease is within the scope set out in Nykredit's capital policy, thus indicating that Nykredit is sufficiently resilient to withstand a severe macroeconomic stress.

## Internal Capital Adequacy Assessment Process (ICAAP)

Through the ICAAP process, the Board of Directors annually assesses Nykredit's required own funds and internal capital adequacy requirement, reflecting the capital requirements under Pillar I and Pillar II. The internal capital adequacy requirement is determined to reflect a cautious and forward-looking approach that supports the overall risk tolerance according to Nykredit's risk policy.

Despite macroeconomic uncertainties caused by the pandemic and rising inflationary trends, the conclusion of the ICAAP process is that Nykredit has sufficient capital to withstand these risks, as well as far more severe downturns, and takes these risks into consideration in both its risk management practices and the capital policy.

Based on the ICAAP and other aspects, Nykredit's Board of Directors determines at least annually the company's capital policy and the pertaining capital requirements and targets.

## Nykredit Realkredit Group

Stress scenarios to determine the capital need				
2022	2023	2024		
(0.1)%	0.1%	0.1%		
1.9%	3.1%	3.8%		
3.4%	2.5%	2.4%		
5.1%	5.0%	4.9%		
1.0%	2.1%	3.1%		
(2.0)%	(2.0)%	(2.0)%		
1.0%	0.5%	0.1%		
5.8%	6.2%	6.2%		
2.5%	3.5%	4.5%		
(12.0)%	(10.0)%	(5.0)%		
(3.0)%	(2.0)%	0.0%		
7.5%	9.2%	9.8%		
	2022 (0.1)% 1.9% 3.4% 5.1% 1.0% (2.0)% (2.0)% 5.8% 2.5% (12.0)% (3.0)%	2022         2023           (0.1)%         0.1%           1.9%         3.1%           3.4%         2.5%           5.1%         5.0%           1.0%         2.1%           (2.0)%         (2.0)%           1.0%         0.5%           5.8%         6.2%           2.5%         3.5%           (12.0)%         (10.0)%           (3.0)%         (2.0)%		

<sup>1</sup> Average of 3-month money market rates and 10-year government bond yields.

# 3.6 - CONSOLIDATION METHODS

REA is determined according to the rules of the Danish Financial Business Act and the Capital Requirements Regulation. The determination comprises Nykredit Realkredit A/S (the Parent) and the enterprises in which Nykredit Realkredit A/S exercises direct or indirect control of the enterprises' financial and operational management.

As at end-2021 the consolidated risk exposures included:

- Nykredit Realkredit A/S
- Totalkredit A/S
- Nykredit Bank A/S
- Nykredit Leasing A/S
- Sparinvest Group
- Nykredit Portefølje Administration A/S
- Nykredit Mægler A/S
- Kirstinehøj 17 A/S
- Kalvebod Ejendomme I A/S

Together with other enterprises, Nykredit controls an enterprise which is not included in the Consolidated Financial Statements. This enterprise, JN Data, is recognised according to the equity method.

## 3.6.1 • Differences compared with Financial Statements

There are differences between the Financial Statements and determinations under the CRR. This means that the figures in this report are not directly comparable with the determination of exposures in the Annual Report. This report has been prepared in accordance with Part 8 of the CRR, which defines the disclosure requirements.

Unexercised loan offers and undrawn credit and loan commitments, as well as potential future credit exposures to financial instruments are included in exposures used for the determination of REA. The same applies to guarantees. REA for securities is calculated at ISIN level. Detailed disclosures are available at <u>nykredit.com/reports</u>

## 3.6.2 • Credit risk

Nykredit has obtained the approval of the Danish FSA to use the advanced IRB approach to determine REA for credit risk in relation to:

 Retail and business exposures of Nykredit Realkredit A/S, Totalkredit A/S and Nykredit Bank A/S.

The standardised approach is applied to determine REA for credit risk in relation to:

- Sovereign and credit institution exposures
- A few minor portfolios and remaining companies.

## 3.6.3 • Market risk

For the determination of REA for market risk, Nykredit Realkredit A/S has obtained FSA approval to apply a Value-at-Risk (VaR) model to calculate the general risk related to:

- Equities
- Debt instruments
- Foreign exchange.

Nykredit Bank A/S has obtained FSA approval to apply a VaR model to calculate the general risk related to:

- Debt instruments
- Foreign exchange.

For market risk in the remaining companies and the parts of the portfolio for which REA is not determined using VaR, the standardised approach is applied.

Nykredit has a number of procedures in place ensuring that the tradability of positions in the trading book is satisfactory, see 6 Market risk. All positions in the trading and banking books are tested regularly for uncertainty related to applied prices against observed prices. These tests are applied in the prudent valuation calculations. A deduction is made from Nykredit's CET1 capital for prudent valuation.

## 3.6.4 • Operational risk

For all Group companies, the capital requirement for operational risk is determined using the basic indicator approach. This means that the capital requirement is calculated as 15% of average gross earnings of the past three years.

# 3.7 • RISK EXPOSURE AMOUNT

Nykredit's risk exposure amount (REA) remained largely unchanged, declining by an aggregate DKK 0.2 billion during the year. At end-2021 REA totalled DKK 401.6 billion.

There were opposite trends in risk exposures in 2021. REA for market risk fell by about DKK 16 billion during the year, while REA for credit risk rose by about DKK 17 billion. The fall related to market risk reflected a normalisation of REA following the volatile markets around the outbreak of the covid-19 pandemic. As for credit risk, there is a rising trend in REA as a result of business growth and the implementation of new legislation and regulation as well as new credit risk models.

Nykredit holds capital under Pillar I to handle the effect of new regulation and IRB model development. For example, credit risk models must be developed and approved according to the new guidelines on default definition and IRB model estimation, which took effect from 1 January 2021 and 1 January 2022, respectively, see 4.6.8. In this process, Nykredit sets aside capital to cover the expected effect on REA of the model changes. Once the models have been approved and implemented in Pillar I, such capital will be released.

In recent years, such capital reserves have accounted for a significant share of the total increase in Nykredit's REA for credit risk. At end-2021 Nykredit held capital reserves in the amount of DKK 55 billion, and on 1 January 2022 Nykredit will set aside an additional DKK 30-35 billion as a result of the implementation of the new IRB model estimation guidelines.

REA for counterparty risk increased by DKK 2.3 billion to DKK 21.0 billion at end-2021 due to the new determination method introduced by the new capital requirement rules in June 2021.

## Nykredit Realkredit Group

**REA summary** 

REA for market risk declined by DKK 17.0 billion over the past year to DKK 24.1 billion at end-2021. Market risk has declined since Q2/2020 when financial markets experienced high levels of volatility during the first phase of the covid-19 pandemic. Since then, the risk metric Value-at-Risk (VaR) has reduced alongside changes in Nykredit's banking book and trading book. For details on changes in REA for market risk, see 6.4.3.

Operational risks caused a decrease in REA by DKK 0.9 billion, or about 3%, to DKK 27.2 billion. REA for operational risk is calculated using the standardised approach, which means that the capital requirement is calculated as 15% of average gross earnings of the past three years. The capital requirement corresponds to 8% of REA for operational risk.

In 2022 regulatory changes combined with expectations of continued growth in lending are expected to have an upward effect on REA.

	RE	ĒA	Minimum capital requirements (8%)
DKK million	Q4/2021	Q4/2020	Q4/2021
Credit risk (excluding counterparty risk)	329,356	306,166	26,348
Of which the standardised approach	15,573	21,216	1,246
Of which the advanced IRB (AIRB) approach	245,118	251,650	4,639
Of which equity IRB under the simple risk-weighted approach	10,676	9,083	854
Of which the foundation IRB approach (FIRB) <sup>1</sup>	54,989	24,217	19,609
Counterparty risk	20,970	18,716	1,678
Of which the standardised approach	19.134	18,017	1,144
Of which exposures to a CCP	229	194	2
Of which CVA	781	506	26348
Of which other counterparty risk	827		468
Settlement risk	0	0	(
Market risk	24,075	40,128	1,926
Of which the standardised approach	8,497	9,913	680
Of which the internal model approach (IMA)	15,578	30,215	1,246
Operational risk	27,244	28,109	2,180
Of which the basic indicator approach	27,244	28,109	2,180
Amounts below the thresholds for deduction (subject to 250% risk weight)	0	8,718	(
Total	401,644	401,837	32,132
An end were set			

<sup>1</sup> Includes Nykredit's capital reserves.

# 3.8 • LEVERAGE RATIO

The leverage ratio is defined as the relationship between Tier 1 capital and the balance sheet total (including off-balance sheet items). Under the applicable rules, the ratio does not factor in any collateral. The leverage ratio is calculated separately for each company and included in their capital management. In 2021 a minimum leverage ratio requirement of 3.0% was introduced.

In the capital policy the Board of Directors has set an internal leverage target, which is reviewed annually. Determination of this target is based on a stressed scenario and also takes into account other impacts on earnings and own funds as well as balance sheet movements, which may ultimately affect the leverage ratio. Each company has an individual target.

Nykredit's balance sheet mainly consists of match-funded mortgage loans. Match funding ensures a match between the interest and principal payments of a loan and the underlying funding. Because of the structure of Nykredit's balance sheet with stable a development in mortgage lending, the risk of excessive leverage is limited. Moreover, stress tests show that the leverage ratio remains largely unaffected in stressed scenarios, which mainly affect Nykredit's REA.

Nykredit continuously monitors the leverage ratio, which is a central element of Nykredit's capital policy. The leverage ratio is determined on a quarterly basis and projected based on the expected balance sheet and Tier 1 capital development. The results are submitted to the Asset/Liability Committee, which considers any required action. If the leverage ratio becomes too low, the Asset/Liability Committee will reassess the capital planning and, if required, recommend an increase in Tier 1 capital to the Board of Directors.

The Board of Directors receives regular reports on the leverage ratio measured against the internal leverage target. Leverage ratios are also included in recovery plans and the ICAAP documentation, which are also submitted to the Board of Directors and the Danish FSA.

At end-2021 Nykredit's leverage ratio was 4.8%, which was unchanged since end-2020, see the table below. Nykredit recorded business growth in 2021, which increased exposures, but Tier 1 capital also increased as a result of profit for the year and other factors.

# 3.9 • DEBT BUFFER AND MREL REQUIREMENTS

Nykredit must comply with the Danish minimum requirement for own funds and eligible liabilities (MREL). The purpose of the MREL requirement is to ensure that Nykredit Bank can be recapitalised and restructured through a principal write-down or conversion of capital and debt instruments, should the Bank meet the conditions for resolution. At end-2021 Nykredit Bank's own funds and eligible liabilities corresponded to 40.6% of REA.

As Danish mortgage banks, Nykredit Realkredit and Totalkredit are exempt from the MREL requirement, but must meet the regulatory debt buffer requirements. The debt buffer serves to bolster the lossabsorbing capacity of a failing mortgage bank without impairing its lending capacity.

The debt buffer must equal at least 2% of total mortgage lending and may consist of excess capital or senior non-preferred debt. The debt buffer requirement applies to Nykredit Realkredit and Totalkredit taken together.

From the beginning of 2022, the level of the debt buffer must also be such that the Group's own funds, eligible liabilities and debt buffer together amount to at least 8% of the consolidated balance sheet total (revised debt buffer). At end-2021 Nykredit's debt buffer was 5.1% and the revised debt buffer was 9.3%, see the table below.

Liabilities applied to meet the debt buffer requirement are determined after liabilities have been reserved to meet the Bank's MREL requirement, as the same liabilities cannot be applied to meet both requirements at the same time. Accordingly, by observing the debt buffer framework, the resolution group will have sufficient MREL funds to meet the MREL requirement. The capital structure and capital plans must ensure that the MREL and revised debt buffer requirements can be met across economic cycles.

#### Nykredit Realkredit Group

Leverage ratio		
DKK billion		
Year-end	2021	2020
Tier 1 capital	87	85
Leverage ratio exposures	1,787	1,753
Leverage ratio	4.8%	4.8%

Nykredit Realkredit Group

Debt buffers and MREL requirements

%		
Year-end	2021	2020
MREL funds	40.6	36.4
Debt buffer	5.1	4.7
Revised debt buffer	9.3	8.7

Note: MREL funds were calculated at the level of Nykredit Bank A/S. The debt buffer and the revised debt buffer were calculated at the aggregate level of Nykredit Realkredit A/S and Totalkredit A/S.

# 3 10 • FSA SUPERVISORY DIAMONDS

## 3.10.1 • Banks

The Supervisory Diamond for banks applies to all Danish banks. It is a strictly Danish initiative and does not stem from EU legislation. In 2021 the calculation of the funding ratio was taken out of the Supervisory Diamond, and the NSFR requirement was introduced.

The Supervisory Diamond model sets out the following benchmarks for four key ratios that indicate when a bank is operating at an elevated risk:

- The sum of large exposures should be less than 175% of own funds.
- Lending growth should be less than 20% year-on-year. The limit value is determined exclusive of reverse repurchase lending and after impairments.
- Total exposure to the property segment should be less than 25% of total lending.
- The liquidity benchmark should be more than 100%. The liquidity benchmark indicates a bank's ability to withstand a liquidity stress for a period of at least three months.

The current benchmark values of the Supervisory Diamond model are shown in the table below. Nykredit Bank A/S operates comfortably within the limit values.

## 3.10.2 Mortgage lenders

The Supervisory Diamond for mortgage lenders is a strictly Danish initiative and does not stem from EU legislation. In parallel to the Supervisory Diamond, bank loans resembling mortgage loans will be subject to special supervision.

The Supervisory Diamond model sets out the following benchmarks for five key ratios that indicate when a mortgage bank is operating at an elevated risk:

- Annual lending growth may not exceed 15% in each of the segments personal customers, commercial residential property, agriculture and other business.
- The sum of the 20 largest exposures must not exceed Nykredit's CET1 capital.
- Borrower's interest rate risk relating to residential properties: The proportion of lending where the LTV ratio exceeds 75% of the LTV limit and where the loan rate is fixed for up to 2 years only may not exceed 25% of the total loan portfolio.
- Interest-only (IO) loans to personal customers: The proportion of IO loans for owner-occupied and holiday homes with an LTV ratio above 75% of the statutory LTV limit may not exceed 10% of total lendina.
- Limitation of short-term funding: The proportion of loans to be refinanced must be below 12.5% per quarter and 25% per year.

The current benchmark values of the Supervisory Diamond model are shown in the table below. Nykredit operates comfortably within these limits.

# Nykredit Realkredit Group

Supervisory Diamond for mortgage lenders

Benchmark	2021
Lending growth in segment	
Personal customers (limit value <15%)	6.3%
Operation and interview and a distribution of EQ()	

Personal customers (iimit value <15%)	6.3%	6.0%
Commercial residential property (limit value <15%)	7.7%	6.3%
Agriculture (limit value <15%)	(1.3)%	(1.3)%
Other business (limit value <15%)	2.0%	3.1%
Borrower's interest rate risk		
Loans to private individuals and for residential rental (limit		
value <25%)	9.4%	11.0%
Interest-only loans		
Personal customers (limit value <10%)	6.4%	7.2%
Loans with short-term funding		
Refinancing (annually) (limit value <25%)	10.0%	9.7%
Refinancing (quarterly) (limit value <12.5%)	2.9%	2.3%
Large exposures		
Loans and advances:equity (limit value <100%)	39.0%	39.4%

#### Nvkredit Bank A/S

Supervisory Diamond for banks

Benchmark	2021	2020
Large exposures (limit value <175%)	109.6%	132.3%
Lending growth (limit value <20%)	4.6%	8.7%
Property exposure (limit value <25%)	11.1%	12.6%
Liquidity benchmark (limit value >100%)	256.4%	150.7%

2020

6 00/

# 4. CREDIT RISK

- 4.1 CREDIT POLICY
- 4.2 LENDING GUIDELINES AND PROCESS
  - 4.2.1 Nykredit's credit approval process
  - 4.2.2 Totalkredit's credit approval process

## 4.3 CONTROL AND REPORTING

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- 4.3.2 Control of individual exposures
- 4.3.3. Impairment provisions
- 4.3.4 Debt collection

# 4.4 CURRENT RISK PROFILE AND DEVELOPMENT

- 4.4.1 Credit portfolio characteristics
- 4.4.2 Concentration risk
- 4.4.3 Exposures in default
- 4.4.4 Customer ratings

## 4.5 SECURITY

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- 4.6.1 Modelling principles
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- 4.6.7 Approval, validation and testing of

credit risk models

4.6.8 • Implementation of upcoming legislation

## 4.7 COUNTERPARTY RISK

- 4.7.1 Risk management
- 4.7.2 Methods
- 4.7.3 Current risk profile and development

Credit risk reflects the risk of loss resulting from Nykredit's customers and counterparties defaulting on their obligations.

It is Nykredit's policy to always offer responsible and transparent financial solutions that match customers' financial position and risk appetite. This approach serves to contain Nykredit's overall credit risk.

Nykredit's credit risk mainly stems from mortgage and bank lending, but also from financial products. Most of the credit exposure derives from mortgage loans secured by real estate, which also serves to keep credit risk low.

2021 was yet another year that was strongly impacted by covid-19. The Danish economy remained resilient to the consequences of the pandemic. Nykredit's personal and business customers have coped well during the past two years, and arrears ratios have remained low throughout the period.

Helped by the reopening of the economy, businesses are not challenged by a lack of demand, but rather by bottlenecks in the Danish and global economies, resulting in labour and materials shortages. A few sectors have been particularly hard hit by covid-19; these mainly include accommodation and food services as well as arts, entertainment and recreation. Nykredit's exposure to these sectors is limited. In 2020 impairment provisions were made for credit quality deterioration as a result of the covid-19 crisis. These provisions were maintained throughout 2021.

Agriculture in particular is affected by the sustainable transition, with factors such as the redistribution of EU agricultural subsidies and increasing demands for reductions in greenhouse gas emissions posing a risk to different parts of the agricultural sector. Agricultural trends are monitored closely by Nykredit.

The housing price increases observed in 2020 continued into 2021. However, growth has since slowed and is now approaching normal levels. Nykredit is keeping a close watch on trends, with a particular focus on certain geographical areas, such as the Copenhagen and Aarhus flat markets and the Copenhagen and North Sealand house markets, and the effect of the upcoming property tax regulation.

# 4.1 • CREDIT POLICY

Nykredit has a nationwide presence across Denmark and a comprehensive distribution network, and customers are served by certified advisers at Nykredit's customer centres and advisers at local Totalkredit partner banks.

Nykredit's credit risk profile, and consequently risk appetite, is laid down in the credit policy. The credit policy is laid down by the Boards of Directors and is based on the Nykredit Group's strategy and the aim that customers should perceive Nykredit as a reliable and qualified financial partner. Building long-term relationships with financially sound customers is an integral part of Nykredit's strategy. All credit applications are assessed against the credit policy by financially trained staff. Specifically, they assess the willingness and ability of customers to meet their obligations. An overall evaluation of a customer's financial circumstances and other risk elements is made, taking into account Nykredit's total exposure to the customer and any mortgage security provided. The assessment of a customer's creditworthiness is the core element.

Nykredit wants to maintain close relationships with its customers to be able to prevent potential payment difficulties from arising. Prompt action benefits both the customer and Nykredit and limits arrears etc, making it more likely that the customer will recover. Alternatively, losses will be minimised to the advantage of both Nykredit and the customer, who will be liable for any unpaid debt.

Totalkredit's mortgage lending is based on a strategic alliance with 45 Danish local and regional banks undertaking the distribution of To-

# Credit risk governance

Board of Directors and Board Risk Committee: Lay down the credit policy, including risk appetite and limits for portfolios, and credit guidelines. Receive quarterly reports on credit policy compliance. Receive separate reports in case of non-compliance with

the policy, including an action plan for approval.

Executive Board and Credits Committee: Approve and implement the credit policy and regularly review compliance based on quarterly reports. Receive separate reports in case of non-compliance with the policy, including an action plan for approval.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board. Particularly the risk control and credit control functions play an important role in this respect. talkredit loans, customer advisory services, creditworthiness assessments and case processing. Totalkredit loans are subject always to final approval by Totalkredit.

The credit policy ensures that credit is granted in accordance with the risk appetite determined by the Board of Directors and with the Totalkredit concept, Danish mortgage legislation, the Danish Financial Business Act, good business practice, the guidelines on prudent credit assessment and any other relevant rules and regulations. The aggregate credit granting by the Group companies is undertaken within the credit policy limits for large exposures as well as limits for portfolio distribution by industry, geography and other risk types.

Reviews of credit policy compliance are undertaken by the credit control function, whose duties are segregated from those of the credit approving units.

# Sustainable transition

Climate change is a challenge that requires sustainable transition in many parts of society. Nykredit wants to contribute to society's goals of reducing greenhouse gas emissions and adapting to the new climate conditions. For many businesses, this development will bring new opportunities, but at the same time many customers are facing substantial risks. Climate change and the necessary transition to more sustainable solutions will challenge the business models, production and markets of many of our business customers. Nykredit is dedicated to being a constructive partner to all its customers in the green transition.

The credit policy describes a number of ESG factors to be considered as part of customer assessments. They include, in particular, physical risks and transition risks, but also other elements of a customer's individual ESG factors will be considered where relevant. The aim is to identify relevant risks and opportunities, which will then form part of the overall credit assessment and customer advisory services.

# 4.2 • LENDING GUIDELINES AND PROCESS

Nykredit's customer centres have been authorised to process most credit applications independently. The authority comes with a requirement of credit policy and business procedure certification every three years, in addition to the statutory certification. It is Nykredit's aim that most credit decisions should be made locally.

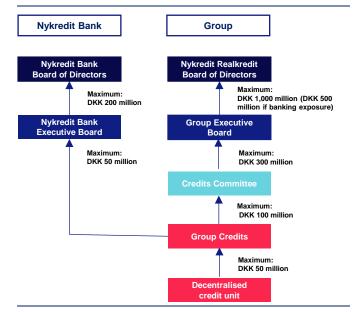
Which level of Nykredit's credit approval hierarchy determines a business customer's credit application generally depends on the size of the exposure. Nykredit has five regional credit units that process business customers' credit applications exceeding the authority assigned to the customer centres. Applications exceeding the authority of the regional credit units are processed centrally by Group Credits, unless they involve exposures requiring escalation to Nykredit's Credits Committee, the Executive Boards or the Boards of Directors.

Which level of the credit approval hierarchy determines the credit applications of personal customers of Nykredit depends on a combination of the size of the exposure and any credit circumstances requiring particular attention (credit approval rules). The level of the credit approval hierarchy determines whether credit applications are processed by the customer centres or centrally by Group Credits. Which level of the credit approval hierarchy determines the mortgage loan applications of personal customers of Totalkredit depends on the value of the property serving as security for the loan in combination with the size of the loan applied for. If credit circumstances requiring particular attention are present, these will be considered too. As regards credit applications of business customers of Totalkredit, the level is determined by the size of the exposure, in the same way as for customers of Nykredit.

The Groups' largest exposures are presented to the Boards of Directors of the Group companies on an ongoing basis. They are also briefed quarterly about the largest write-offs and impairment provisions.

#### Nykredit Realkredit Group

Credit approval structure, Nykredit Bank and Nykredit Realkredit



Note: For the Group, Maximum applies to the total exposure, and for Nykredit Bank, it applies to the total banking exposure.

## 4.2.1 Nykredit's credit approval process

Nykredit's approval of loans is based on the customer rating together with an assessment of the customer's current financial position and resilience as well as other circumstances where relevant, such as, for businesses, their managerial strength and ESG factors. This assessment is based on credit approval rules and guidelines in the credit policy. The assessment also considers the quality of security provided. Security by way of mortgages on real estate is assessed by valuers.

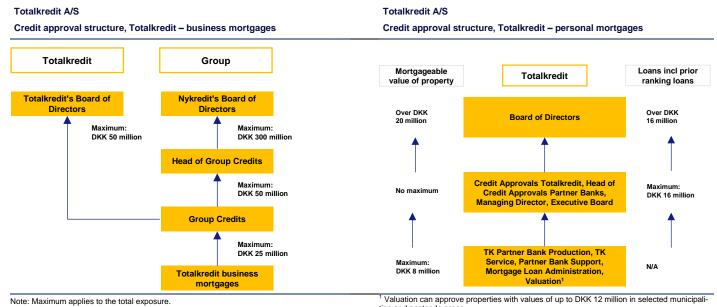
Nykredit applies its own internally estimated ratings to the vast majority of its customers. Customer ratings are based on an estimation of the customer's Probability of Default (PD), which indicates the probability of the customer defaulting on its obligations. Customer ratings are used for credit assessments and other purposes.

The approval of financial products is based on a customer's creditworthiness, the life of the product, the contractual basis and an assessment of the quality of the security provided etc.

#### 4.2.2 • Totalkredit's credit approval process

As regards Totalkredit loans, assessments of personal customers are mostly carried out by the regional and local banks, while the final approval of credit applications is undertaken by Totalkredit. Assessments of business customers and approval of business credit applications are carried out centrally by Totalkredit on the basis of a credit assessment by the partner bank.

A model is used for Totalkredit personal mortgages where the loss risk relating to the loans is shared according to principles set out in the collaboration agreement with the partner banks. The partner banks provide security to Totalkredit by way of a right of set-off and/or guarantees for the loans distributed by them. In return, Totalkredit passes on part of the administration margin payments from customers to the partner banks. This motivates the partner banks to carry out a thorough and comprehensive assessment of customer creditworthiness to minimise expected losses on customers. In case of high-risk loans where the ordinary business procedures are derogated from, the partner banks must provide a guarantee exceeding the security provided for ordinary loans. The security model reduces Totalkredit's credit risk.



ties and postcode areas

# 4.3 • CONTROL AND REPORTING

Group Credits is responsible for managing and monitoring credit risk in accordance with guidelines laid down by the Board of Directors and the Group Executive Board. The unit is also responsible for reviewing certain individual exposures as well as credit policy limits for large exposures and limits for portfolio distribution at Nykredit and Totalkredit.

Credit risk review is based on a portfolio management approach categorising customers according to industry and monitoring them against a number of credit parameters. Furthermore, individual exposures are reviewed to assure the quality of lending. Also, credit approvals are subject to review, as are weak exposures. The controls are organised to be independent of the approving units.

The risk control function oversees the ongoing control and review of credit quality and monitors the quality of credit processes. In its reports to the Board of Directors, the risk control function also explains the credit risk outlook.

## 4.3.1 • Portfolio management

The mix and trends of portfolios are monitored by means of portfolio reports, sector and thematic analyses as well as the regular risk exposure reporting to the Boards of Directors. This enables the Boards of Directors to evaluate the credit policy and make the required adjustments in relation to lending at single-name level (guidelines) and portfolio level (portfolio limits and size requirements). The aim is to avoid any single-name risk or concentration of risk which may have a material impact on the Group in the event of default.

In addition to the above, a number of other elements are part of dayto-day credit management based on, for instance, the limits for large exposures and for portfolio distribution. This is supplemented with central credit instructions with respect to individual portfolios and industries, which advisers should allow for in their customer assessments.

## 4.3.2 - Control of individual exposures

Individual exposures are controlled and reviewed at decentralised and central levels in several areas. In case of any inconsistency between the controlling and approving units, controls and reviews will include dialogue. One purpose of such dialogue is to enhance the exchange of experience and knowledge across units.

### New approvals

With respect to decentralised reviews, the heads of Nykredit's customer centres are responsible for local day-to-day credit management, comprising spot checks as well as reviews. Controlling new approvals at individual exposure level is also part of the decentralised review procedure. The same applies to Totalkredit's business exposures. Totalkredit's personal exposures are reviewed at decentralised level by the individual partner bank.

Central reviews are performed by the Group's credit control function, which is responsible for credit controlling in all the Group's companies, assessing new approvals against the credit policy. As regards Nykredit Bank, Nykredit Realkredit and Totalkredit's business exposures, monthly spot checks are carried out for each approving unit. Totalkredit's personal exposures and Nykredit Leasing are subject to quarterly controls, and spot checks are carried out for each Totalkredit partner bank. It is a requirement that the spot checks are random and sufficiently comprehensive so as to provide results that describe, at a high confidence level, the risk appetite of each approving unit and partner bank in relation to new approvals. Credit controlling is aimed at detecting, for instance, any breaches of approvals, processing errors and derogations from the credit policy guidelines. It is assessed whether the overall level of approvals is within the credit risk appetite.

## Renegotiations

Decentralised reviews of renegotiations are part of the monitoring of credit exposures, and large business exposures are reviewed by the account manager at least annually. The review is based on financial statements, ratings and customer data and is a key element of the control environment. In addition, the heads of the customer centres conduct regular spot checks of the frequency and quality of renegotiations as part of the decentralised review procedure. Central reviews and control of the frequency and quality of renegotiations are performed by the central credit control function on an ongoing basis.

#### Review of weak exposures

Nykredit identifies weak exposures based on the rating categories with the highest probability of default, with or without objective evidence of credit impairment. Objective evidence of credit impairment is determined on the basis of a number of statutory indicators of creditimpaired exposures. If Nykredit identifies objective evidence of credit impairment, the exposure will be assigned the lowest possible rating.

If supported by additional objective data, an override of the customer's rating may be performed. Customer exposures involving rating overrides are reviewed at least once a year. As a result, the customer rating may be maintained or adjusted, or the override may be removed. The use of overrides is assessed in connection with the regular validation of rating models performed by the validation unit.

Weak exposures are reviewed by units that are specialised in handling weak exposures. Weak exposures are reviewed at least annually, except for personal customers with a rating of 2 (the highest possible rating in the category of weak exposures) where review is part of the daily customer relationship management. Business bank exposures are reviewed quarterly, with a few exceptions. The reviewing units are responsible for preparing a credit strategy including an action plan for the purpose of implementing loss control measures and restoring the customer's financial strength. The account manager is responsible for executing the credit strategy. Weak exposure reviews also include assessment of the customer's credit status and consequently rating, data control and, in some cases, impairment calculations. Regular spot checks are made of the quality of weak exposure reviews conducted.

For Totalkredit mortgage loans, exposures are designated as weak if there is reasonable doubt as to whether the customers are able and/or willing to honour their obligations to Totalkredit. For Totalkredit business mortgages and Totalkredit personal mortgages arranged by the Nykredit Group, ratings are also used to identify weak exposures.

Central reviews and control of the frequency and quality of the weak exposure reviews conducted are performed by the central credit control function on an ongoing basis. The central credit control function controls Nykredit's and Totalkredit's reviews of weak exposures. The purpose of the spot checks is to ensure that the weak exposure reviews comply with relevant business procedures and process descriptions. This credit control serves to support the approving units' handling of weak exposures through ongoing dialogue about the results of controls performed.

### 4.3.3 • Impairment provisions

For the purposes of both financial reporting and capital determination, Nykredit applies IFRS 9 to calculate impairments. The calculations are divided into four parts:

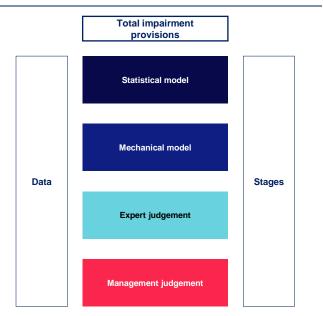
A statistical model is used for impairment of all exposures without objective evidence of credit impairment, irrespective of exposure size.

- A mechanical model is used for impairment of personal exposures with objective evidence of credit impairment and business exposures below DKK 5 million at Group level with objective evidence of credit impairment.
- Expert judgement is used for impairment of large business exposures, based on the customer's financial position in an improved, an adverse and a baseline scenario.
- Management judgement (post-model adjustments) is used for impairment of loan portfolios based on factors not reflected in the above impairment calculations. Underlying reasons may be, for instance, changes in agricultural output prices due to changed economic trends and/or changed export potential, or financial or legal conditions in the real estate sector. Management judgement may generally affect credit risk beyond the outcome derived on the basis of model-based impairments. The estimates are adjusted and evaluated on a regular basis. Management judgement is distributed at loan and credit facility level.

Nykredit's impairment model calculations include forward-looking macroeconomic scenarios. The scenarios must reflect uncertainties relating to the economy as well as both improved and deteriorating outlooks. At end-2021 the scenarios had been updated to reflect the expected economic environment caused by the covid-19 crisis and resulting market conditions.

# Nykredit Realkredit Group

Impairment components



Also according to IFRS 9, impairments are divided into three stages:

Stage 1 covers loans and advances etc without significant increase in credit risk since initial recognition. For this category, impairment provisions are generally made corresponding to the expected credit losses over a 1-year period.

Stage 2 covers loans and advances etc with significant increase in credit risk since initial recognition. For this category, impairment provisions are made corresponding to the expected credit losses over the remaining life of the asset. Stage 2 is subdivided into the categories of "strong" and "weak", "weak" designating the highest-risk exposures where customers' ability to pay is characterised by significant signs of weakness.

Stage 3 covers credit impaired loans etc, which have been subject to individual provisioning based on a specific assessment that the customers will default on their loans.

All mortgage and banking exposures above a certain limit as well as all weak exposures are reviewed individually on a regular basis for the purpose of identifying any objective evidence of credit impairment. If a customer is deemed to be in financial difficulties, impairment provisions will be made for the exposure in accordance with IFRS 9, and the exposure will be transferred to stage 3 or stage 2 (weak).

## Handling of covid-19 impact for impairment purposes

There is still substantial uncertainty about the impact of the covid-19 pandemic. When deferred tax and VAT payments fall due, the number of bankruptcies may increase, as a number of businesses that would otherwise have gone bankrupt have survived this far only because of the deferral of payments.

Loan impairments related to covid-19 are based on stress test calculations of three different factors. Firstly, stress simulations have been performed for stage 1 and stage 2 personal customers and sectors deemed to be particularly vulnerable. Secondly, the property values of stage 3 customers have been stressed to simulate a reduction in collateral values. At stage 3 the probability of the adverse scenario occurring for customers in vulnerable sectors has been raised further. Thirdly, the macroeconomic scenarios of the impairment provisioning model for stage 1 and stage 2 customers have been updated to allow for the covid-19 impact, including the relief packages.

#### Handling of sectors vulnerable to covid-19

Covid-19 locked down society for extended periods in 2020 and 2021. Some sectors were particularly vulnerable. In these sectors, Nykredit analysed customers whose liquidity and equity ratios were under pressure. Customers deemed to be vulnerable were then transferred to another stage where this was supported by stress calculations. Such calculations were made for customers in the sectors retail, business rental, wholesale, accommodation and food services as well as arts, recreation and entertainment.

For further information about the impact of covid-19 on impairment charges for loans and advances and lending mix, please refer to Nykredit's Fact Book Q4 2021, which is available at <u>nykredit.com</u>. A detailed description of impairment rules is provided in the Nykredit Group's Annual Report available at <u>nykredit.com/reports</u>. For a more detailed description and definitions of model parameters relating to

credit risk, including default, see 4.6 Models for determination of credit risk.

# 4.3.4 • Debt collection

Nykredit's substantial lending business inevitably involves arrears. In a minor number of these cases, the customer's inability to pay becomes long-term, while at the same time the security provided for the loan is insufficient to cover Nykredit's risk of loss. In these cases, the debt is written off when all possibilities of collection or recovery have been exhausted.

Customers with debt that has been written off will remain personally liable for it, and Nykredit will continue to pursue its claim to ensure that the customers will settle their debt should their financial situation so permit at a later date. At end-2021 Nykredit had approx 22,000 of such cases where claims against personal customers of Nykredit Realkredit, Totalkredit or Nykredit Bank are being pursued, involving a total amount outstanding of about DKK 6.6 billion, which has been written off in full.

Nykredit has engaged an external debt collection agency to collect these personal debts. Immediately after writing off a non-performing loan, Nykredit transfers its claim to the external business partner, which will attempt to collect the debt from the debtor on behalf of Nykredit. The debt collection agency is specialised and experienced in this area and has in-depth knowledge of debt collection law, statutes of limitation, legal processing of cases etc. Nykredit is in close dialogue with the debt collection agency about the cases transferred.

At the request of the Danish FSA, Nykredit initiated a review of its debt collection process to determine whether its debt collection systems and procedures are satisfactory. Nykredit's review did not identify any general or systematic errors in the part of the process performed by Nykredit, in the part of the process performed by legal advisers assisting us with the debt collection or in the part of the process performed by the debt collection agency. The review identified a few possible sources of error in connection with the transfer of cases to Nykredit's external business partner. On this basis, 1,080 completed banking exposures have been identified where these sources of error may have caused customers to pay too much. At end-2021 all these exposures had been reviewed, and the relevant customers had been compensated. Fewer than 200 customers were compensated, and the amount of compensation was modest relative to the size of the debt. The debt collection agency is also reviewing the just under 8,000 ongoing cases to ensure that Nykredit's claims were determined correctly. At end-2021 approximately 7,200 of these banking exposures had been reviewed, and the remaining ones are expected to have been reviewed by end-January 2022. So far, about 50 exposures have been identified where the customers are entitled to compensation. Nykredit's review of its debt collection process and systems is expected to be completed by end-H1/2022.

# 4.4 • CURRENT RISK PROFILE AND DEVELOPMENT

#### 4.4.1 • Credit portfolio characteristics

Nykredit's loan portfolio mainly consists of mortgage lending, which represents 76% of total credit exposures. The rest of the loan portfolio primarily consists of bank loans and financial instruments.

At end-2021 Nykredit Realkredit accounted for 31% of the Group's lending and guarantees, concerning mainly business customers. Totalkredit's lending, mainly to personal customers, accounted for 57%. Nykredit Bank's lending represented the last 13% of Nykredit's total lending and guarantees.

The customer portfolio is characterised by low loan-to-value (LTV) ratios and a low proportion of loans in default. At end-2021 the average LTV was 56% and the proportion of loans in default was 2%. Customers' internal ratings are predominantly at the high end of the scale and consequently considered good. The calculated ratings are based on customers' financial positions and payment behaviour, see *4.6 Models* for determination of credit risk.

#### Economic developments

Despite almost two years of covid-19, the Danish economy is well into a new upswing. Consumption and employment are now higher than before covid-19 hit Denmark. The greatest risk facing Danish businesses has gone from being a lack of demand to being labour and materials shortages. Rising costs of labour, freight and commodities are putting pressure on margins in several sectors, such as manufacturing and construction.

Government relief packages including compensation schemes and liquidity assistance supported businesses throughout 2020 and into 2021. The compensation schemes generally expired in 2021, and about 80% of the outstanding liquidity support will fall due for payment from January to April 2022. This means that businesses will be on their own again, and we will probably see a rise in the number of bankruptcies in 2022. The relief packages mainly appealed to businesses in the sectors most affected by covid-19, and primarily small business owners. In its impairment provisioning Nykredit has allowed for potential losses as a result of the termination of support schemes.

The various restrictions applying during the period have had a particularly hard impact on accommodation and food services as well as arts, entertainment and recreation. Nykredit's credit exposure to these sectors is limited and is deemed to be sufficiently covered by the existing impairments.

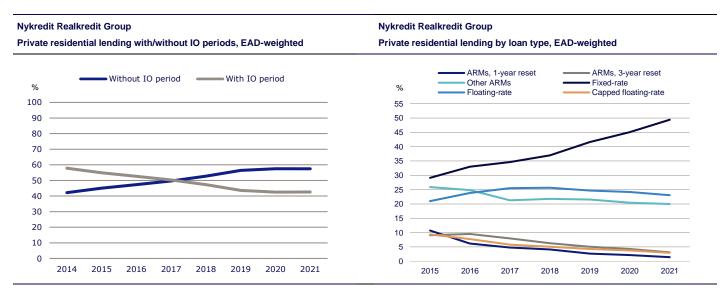
#### Housing market trends

Housing market activity was high at the beginning of 2021. The high activity with many transactions and a large number of first-time buyers made the supply of homes for sale shrink. Interest rate declines during 2020, combined with the second lockdown in the winter of 2020/2021, boosted activity and prices in the housing market at the beginning of the year. The trend peaked in spring when national housing prices increased by double-digit annual growth rates. Since then, however, housing market trends have been more subdued. This is reflected in a decrease in the sale of permanent dwellings since March; while still high from a historical perspective, trading activity is down 30%.

#### Personal loan portfolio

Nykredit's personal lending exposure continued to grow in 2021 and now accounts for 51% of the Group's total credit exposures. The credit quality of the personal loan portfolio is generally good, not least thanks to the record-high employment levels. At the same time, housing price rises have caused LTVs to decline over the past year, thereby reducing the risk of loss.

In the past years, Nykredit has launched a number of credit initiatives to increase the financial robustness of its customers. The interest rate sensitivity of personal customers has diminished with the rising number of customers opting for fixed-rate loans. The share of fixed-rate loans relative to total private residential lending has increased substantially since 2015 when it made up less than 30%. At end-2021 fixed-rate loans accounted for 50% of all private residential mortgage lending. The development is due to a combination of declining interest rates, making it attractive to lock in loan rates for a longer period, changed loan terms and stricter loan rules. Rising interest rates and



Note: Other ARMs includes capped floating-rate loans and adjustable-rate mortgages with interest periods longer than 5 years. higher housing prices in 2021 did not change the fact that fixed-rate loans are still the most popular loan type among home buyers.

In addition to a fixed loan rate, personal customers have increasingly opted for repayment mortgages in recent years. In 2016 51% of private residential mortgage loans included an interest-only (IO) period, while this was the case for 42% at end-2021. This development was partly driven by the expiry of IO periods, but the economic trends and the low interest rates also helped provide customers with the financial leeway to amortise their housing debt. In 2021 the majority of new loans were still repayment loans. However, the proportion of new IO loans grew during the period, driven by higher demand for the traditional IO loans as well as for the new loan types offering IO periods of up to 30 years.

#### Business loan portfolio

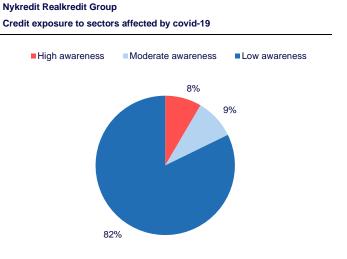
The business loan portfolio has proved very resilient to the covid-19 crisis. No significant signs of deteriorating customer credit quality, reflected in PD (Probability of Default) or LGD (Loss Given Default), have been observed. Thus, the business loan portfolio remains characterised by generally high credit quality and is well-diversified across sectors. Nykredit maintains impairment provisions made to prevent any covid-19-induced losses. However, write-offs are still at a stable low level.

Due to the covid-19 crisis, many businesses have taken out loans with the Danish tax administration in 2020 and 2021 corresponding to a deferral of payments, for example VAT and income tax payments from 2019. These government loans were raised without prior credit assessment. This arrangement is about to be terminated, and Nykredit is therefore ready to offer new financing where required, based on an individual customer credit assessment showing that the customer is creditworthy.

The residential and commercial rental sectors represent Nykredit's highest business credit exposures. The residential and commercial property markets have quickly recovered from the covid-19 pandemic and are characterised by favourable key figures and a low risk of loss. The level of transactions in the first nine months of the year was higher than in the same period in previous years. The significant demand has supported favourable price trends, despite rising interest rates, and the required rates of return are still low, increasing customers' sensitivity to price declines and interest rate rises. The credit policy requirements for customers in the property rental sector have been tightened in recent years to reflect Nykredit's risk profile.

Limited industry-specific risks exist in the loan portfolio. Especially accommodation and food services as well as arts, entertainment and recreation are still affected by covid-19, with restrictions and changes in consumer behaviour continuing to put a damper on demand. Nykredit's credit exposure to these sectors is limited, however. The agricultural loan portfolio has a relatively high share of weak exposures and an elevated loss rate compared with the rest of the portfolio. However, most of the portfolio consists of mortgage exposures with low LTVs. The favourable agricultural economic trends in recent years have reduced both the debt and the share of weak exposures in Nykredit's agricultural loan portfolio. 2021 was a less favourable year, especially for pork producers, who saw their output prices dropping sharply. Less direct EU support and increased green requirements, including the binding reduction targets of the Danish agricultural agreement (a 55-65% reduction in greenhouse gas emissions by 2030), pose a future risk to the agricultural sector. The sector is also facing increased ESG requirements from the large food producers, and the ability of a farm to mitigate its environmental impact is a significant credit risk parameter. Nykredit is aware of this and has launched training programmes, tools and a partnership with SEGES to ensure that ESG factors are integrated into the lending process.

Overall, Nykredit's risk of loss on agricultural exposures is low considering the size of its agricultural loan portfolio. The reason is that the loans are mainly mortgage loans and the portfolio generally has low LTVs. In 2019 Nykredit made credit policy adjustments, targeting lending at agricultural customers with the lowest leverage ratios relative to the general market.



## Nykredit Realkredit Group

Sectors by sensitivity to covid-19

High attention	Moderate attention	Low attention		
Accommodation and food services	Outside Denmark	Households	Public services	Other
Arts, entertainment and sports	Wholesale	Energy and utilities	Finance and insurance	
Retail trade	Construction and manufacturing	Housing	Real estate	
Renting of non-residential buildings	Transportation and motor vehicle industry	Agriculture	Private services	

## 4.4.2 - Concentration risk

Concentration risk is the risk of being particularly exposed to credit events in groups of customers with identical or similar credit risks.

Nykredit's largest credit exposure consists of mortgage lending in Denmark. At end-2021 95% of Nykredit's total credit exposures were in Denmark, consisting mostly of mortgage loans. Historically, the Danish mortgage market has proved robust and stable, involving limited risk. This was evident during the years of the financial crisis when Nykredit's mortgage lending grew by 5-9% a year, and loss ratios were consistently low at levels not exceeding 1.9%.

51% of the loans were granted to private homeowners and 30% to business customers. The remaining loans were granted to, for example, sovereigns and financial institutions. 5% of total lending consists of mortgage loans to finance properties abroad, most of them granted to customers with ties to Denmark. Private residential lending is broadly diversified across loan type, age, region, maturity and size of debt outstanding. Most foreign exposures are mortgage loans to property companies in Sweden and Germany, and mortgage loans have also been granted to personal customers in Scandinavia with homes in Spain and France.

Within business mortgage lending, Nykredit's lending to the commercial and residential rental segments represented 37% at end-2021. The loan portfolio is diversified across different property types, and property uses are diversified across industries. Agricultural lending made up 15% of business lending, while industrial lending accounted for 9%.

Pursuant to the Capital Requirements Regulation (CRR), credit exposures to a single customer must not exceed 25% of Tier 1 capital in the three Nykredit Group companies Nykredit Bank A/S, Nykredit Realkredit A/S and Totalkredit A/S, see the rules on large exposures. Nykredit had no exposures exceeding this limit in 2021.

Nykredit Bank's largest single exposure to a non-financial counterparty amounted to 11.5% of the Bank's Tier 1 capital at end-2021. Nykredit Realkredit's largest exposure amounted to 11.4% of Tier 1 capital, and Totalkredit's largest exposure amounted to 0.7% at end-2019.

A minor amount has been allocated under Pillar II to cover concentration risk in accordance with the Danish FSA's guidelines.

#### Nykredit Realkredit Group Business lending by sector

DKK billion	31.12.2021	31.12.2020
Real estate	338.7	331.7
Manufacturing	20.0	19.9
Wholesale and retail trade	18.0	16.7
Electricity, gas, steam and air conditioning supply	12.1	10.8
Agriculture, forestry and fishing	10.4	9.5
Construction	8.8	8.0
Transport and storage	8.0	8.0
Information and communication	5.4	4.6
Administrative and support service activities	4.5	3.9
Professional, scientific and technical activities	4.2	3.6
Accommodation and food services	3.3	3.3
Human health services and social work activities	3.1	5.0
Other	4.9	8.7
Total	441.3	433.7

## 4.4.3 • Exposures in default

Nykredit's impairment provisions for potential future losses on mortgage and bank lending totalled DKK 9.6 billion at end-2021, equivalent to 0.5% of total lending. Provisions for mortgage loan impairment totalled DKK 6.5 billion (0.5% of mortgage lending). Provisions for bank loan impairment totalled DKK 2.8 billion (3.8% of bank lending).

About 20% of exposures in default have been provided for, equivalent to DKK 4.7 billion. The proportion of exposures provided for relative to exposures in default was lower for Nykredit Realkredit and Totalkredit than for Nykredit Bank, as mortgage exposures are secured by mortgages on real estate, which may be enforced in the event of default.

Total write-offs on the Group's exposures in 2021 were DKK 0.6 billion. Of this amount mortgage activities represented approximately DKK 0.4 billion and bank activities approximately DKK 0.2 billion. About 77% of write-offs on mortgage loans concerned private residential lending, while 23% concerned business lending.

The average arrears ratio is still low, at 0.2%.

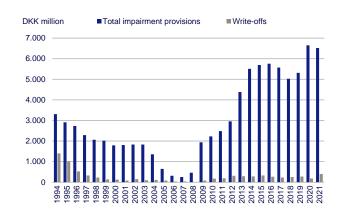
The portfolio of properties acquired by foreclosure counted one property at end-2021. The property portfolio has reduced every year since 2012.

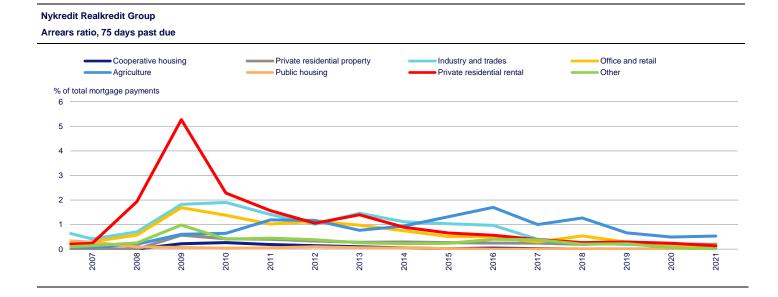
Covid-19-related impairment provisions totalled DKK 2 billion. A small number of customers have become subject to individual provisioning as a result of covid-19.

In previous years the focus of authorities on financial institutions' handling of non-performing loans has increased. This has led to tighter requirements for the handling of non-performing loans and the reporting and publication of key figures concerning these loans. Nykredit monitors the share of non-performing loans on an ongoing basis. For this purpose, the determination of non-performing loans is based on financial statement data, as provided by legislation.

The share of non-performing loans in the portfolio is relatively low, amounting to 1.5% of total lending at the end of the year.







## 4.4.4 • Customer ratings

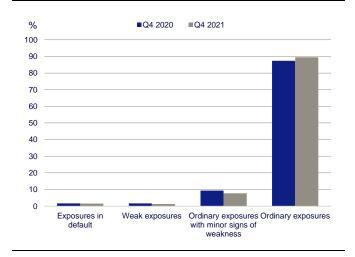
In 2021 Nykredit's customers were still characterised by strong key figures and good ratings. The credit quality of 89% of Nykredit's exposures was in the range of ordinary to high (ratings 6-10) at end-2021. These customers typically have robust finances, with a certain net worth, and make timely payments.

This type of customer made up 93% of Nykredit's personal customers, and for business customers, excluding Corporates & Institutions (C&I), the percentage was 73%. In the C&I segment, comprising the largest customers with which Nykredit maintains particularly close contact, the credit quality of 95% of the customers was in the range of ordinary to high.

At end-2021 8% of Nykredit's customers were considered "ordinary exposures with minor signs of weakness" (ratings 3-5). These customers typically have less robust finances, but make timely payments. They made up 5% of personal customers, and for business customers, excluding C&I, the percentage was 21%. The percentage for C&I was 4%.

The remaining customers were weak exposures (ratings 0-2), accounting for 1%, and exposures in default, accounting for 2%. This category primarily consists of customers that have defaulted on their payments, customers with a negative net worth or negative equity, and customers with low or negative earnings. Customers with objective evidence of credit impairment are in this group.

# Nykredit Realkredit Group Rating distribution, EAD-weighted



# 4.5 • SECURITY

The approval of loan applications is based on the customer's creditworthiness but supported by the security provided. The greater part of Nykredit and Totalkredit's lending is secured by mortgages on real estate. Other types of security are guarantees and financial collateral.

### 4.5.1 • Real estate

Mortgages on real estate reduce credit risk substantially. The mortgageable value of a property is determined initially at the time of loan granting. Valuations are based on the marketability, price volatility, alternative use, letting potential etc of the property. As a general rule, properties are valued by a valuer based on a physical inspection. In addition, a statistical model is used for the valuation of detached and terraced houses and owner-occupied flats where statistical valuation is particularly reliable and where the Danish FSA has approved the use of a property value model for the purpose of determining loan amounts. Such valuations are subject to approval by the valuer in the relevant geographical area and are monitored centrally.

A shared valuation unit has been set up by Totalkredit and a number of partner banks. As part of this collaboration, Totalkredit handles all valuations of private properties through the shared valuation unit. The shared valuation unit also values properties, including commercial properties, for purposes other than Totalkredit loans. This could be, for instance, bank loans. The shared valuation unit supports a uniform and consistent valuation approach.

ESG factors have been integrated into Nykredit's valuation policy with a special focus on the impact of climate change on property valuations. Consequently, ESG factors are part of property valuations, which allow for climate-related risks. In some geographical areas, the Danish climate involves risks of storm surges, flooding and erosion. Valuations of properties in exposed geographical areas therefore focus on whether the property has been protected from future climate change impacts and on the property's marketability in view of its exposed location. Energy efficiency and green transition will be considered important where their impact on the value of a property can be documented. Also, Nykredit is widening its focus on risk from properties in exposed geographical areas to all properties. Initially this will be done through the use of accessible climate data platforms with commenting in the valuation report. In the longer term, it will be done through a more structured approach to capturing and collecting data. In coming years Nykredit will be improving property valuations and training the Group's valuers.

Following the initial valuation, the market value of a property is monitored regularly. Nykredit's Group Risk Committee has set up a subcommittee to monitor market trends and the quality of statistical valuations and to identify areas and property types to be monitored separately.

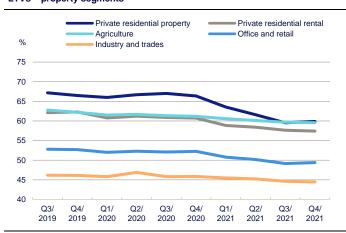
The LTV ratio denotes the debt outstanding relative to the property value. LTV ratios play a significant role in several contexts and are used for:

- Determining maximum loan amounts for the purpose of loan approvals
- Monitoring Nykredit's mortgage lending
- Calculating customers' credit risk for the purpose of, for instance, credit assessment and capital calculations
- Calculating supplementary collateral for properties with SDOfunded loans
- Calculating IFRS impairments, stages 1 and 2
- Calculating returns on individual customer exposures.

At end-2021 the average LTV level of the Group's total loan portfolio was 56% compared with 61% at end-2020. At end-2021 the average LTV level of the Group's private residential lending was 60% against 66% at end-2020. The LTV levels of sectors comprised in total business lending were in the range between 44% and 60% at end-2021, compared with a range between 46% and 61% in 2020.

LTVs have trended down over the past years as a result of rising property prices and favourable economic trends.

## Nykredit Realkredit Group LTVs – property segments



### 4.5.2 • Guarantees and financial collateral

Nykredit mainly receives guarantees from public authorities and other banks. Guarantees issued by public authorities mitigate credit risk; for instance the Danish government guarantees mortgage lending for public housing, against payment of commission.

With a view to ensuring equal access to loans all over Denmark, the Danish government presented a bill in 2021 providing for guarantees in connection with lending in peripheral areas, based on sqm prices. Nykredit has an objective of being active in all of Denmark and has recorded lending growth in all 98 Danish municipalities. Nykredit's lending is based on customer creditworthiness assessments, which will not be affected by the provision of guarantees. Consequently, Nykredit does not expect this model to have a significant impact on to-day's already efficient mortgage market.

The bank guarantees include land registration guarantees, guarantees for interim loans and loss guarantees.

Guarantees are widely applied in the day-to-day management of Nykredit's credit risk, particularly in customer relationships where a parent company supports the capitalisation of group companies.

The Totalkredit partner banks provide security by way of a right of setoff and guarantees to Totalkredit for the loans distributed by them, see *4.2.2 Totalkredit's credit approval process*.

Financial collateral includes deposits in DKK or other currencies, positions in listed Danish government and covered bonds, other high-rated liquid Danish and foreign bonds, and listed equities.

Nykredit assigns an internal value to the different types of financial collateral depending on the risk involved. For the purpose of calculating the risk exposure amount (REA), Nykredit assigns internal collateral values based on internal estimates of the reduction in the value of the collateral in case of enforcement.

# 4.6 • MODELS FOR DETERMINATION OF CREDIT RISK

The determination of credit risk using the advanced IRB approach is based on three key parameters: Probability of Default (PD), expected Loss Given Default (LGD) and expected Exposure at Default (EAD). These three key parameters are referred to as risk parameters. Nykredit estimates risk parameters on the basis of Nykredit's default and loss history.

### 4.6.1 • Modelling principles

According to the CRR, PDs must be estimated on the basis of historical 1-year default rates while at the same time reflecting a suitable weighting between the long-term average and the current level. For the purpose of determining capital requirements, LGD estimates must always reflect an economic downturn.

The above principles applied to estimate the risk parameters ensure that the Group's REA remains more stable throughout an economic cycle than if the calculations had exclusively reflected the current economic climate.

### 4.6.2 • Probability of Default (PD)

PD expresses the probability of a customer defaulting on an obligation to Nykredit within a period of one year. Nykredit calculates a PD for each individual customer.

PDs are calculated using statistical models. These models are based on, for instance, data on the customer's financial position and payment behaviour as well as any impairment. Corporate and institutional clients and farming businesses are also required to submit financial statements regularly, which will be applied in the determination of their PDs.

Elements of credit risk determination			
PD	Probability of Default (PD) is the probability of a cus- tomer defaulting on an obligation to Nykredit within a year.		
LGD	Loss Given Default (LGD) is the expected loss rate of an exposure in case of the customer's default.		
EAD	Exposure at Default (EAD) is the total estimated expo- sure to a customer in DKK at the time of default, includ- ing any drawn part of a credit commitment.		
REA	Risk Exposure Amount (REA) is credit risk exposures factoring in the risk relating to the individual customer. REA is calculated by risk-weighting credit exposures. The risk weighting is calculated on the basis of, for in- stance, PD and LGD levels.		
Default	For both mortgage and bank customers, a number of events have been defined that make it unlikely that a customer will be able to pay its credit obligations with- out realisation of collateral. The main ones are: events leading to IFRS 9 stage 3, bankruptcy, distressed re- structuring and significant arrears/overdrafts (90 days past due).		

### 4.6.3 • Ratings

The PDs of individual customers are translated into ratings from 0 to 10, 10 being the highest rating. Exposures in default are placed in a category of their own, outside the rating scale, while exposures with objective evidence of credit impairment are assigned a rating of 0. The individual rating categories have been defined based on fixed PD ranges, which means that, during an economic upswing, a high rating will be assigned to relatively more customers, while the opposite will apply during an economic downturn.

A rating reflects the customer's financial position and creditworthiness, and besides being included in the determination of capital requirements, the customer rating is also a key element of any customer assessment.

### 4.6.4 • Loss Given Default (LGD)

For each customer exposure, Nykredit calculates an LGD, reflecting the percentage share of the exposure which is expected to be lost in case of customer default.

The LGD calculations factor in any security provided, including the type of security (typically mortgages on real estate), geography, the quality of the security etc.

Expected LGDs vary with economic trends. In periods of high business activity, default will often not lead to any loss, as the value of the security will typically exceed the value of the loan. This applies in particular to loans secured by mortgages on real estate. Conversely, more and greater losses would be expected during an economic downturn.

For the determination of capital requirements, LGDs are calibrated to reflect losses during a severe economic downturn.

### 4.6.5 • Exposure at Default (EAD)

Nykredit estimates an EAD for all exposures relating to a customer, reflecting the total expected exposure to the customer at the time of default, including any additional drawn parts of approved credit commitments. The latter is factored in using conversion factors (CF).

### 4.6.6 • Other models

Besides rating, loss and credit exposure models, Nykredit has a variety of other credit-related models.

The property value model calculates the value of properties serving as security for the Group's lending. The results are used to determine the need for supplementary security, as inputs in rating and loss models and as a substitute for physical inspections of detached and terraced houses and owner-occupied flats that are subject to an exemption granted by the Danish FSA.

For the purpose of calculating impairments under the accounting standard IFRS 9, the Group uses internal models for determination of credit risk and methods developed particularly for impairment calculations.

### 4.6.7 Approval, validation and testing of credit risk models

Nykredit develops and improves its credit risk models on an ongoing basis. Focus is on achieving models that are accurate and yield consistent and stable parameters.

Nykredit's credit risk models are subject to Nykredit's general model risk management, implying limits and a division of responsibilities as well as a structure of governance with respect to models and model changes.

Nykredit's Group Risk Committee, set up by the Group Executive Board, monitors and manages Nykredit's model risks. The Group Risk Committee has established domain-specific model committees, which are in charge of the current monitoring and management of model risks and also responsible for governance in respect of model approval and model changes. The overall conclusions on model risks and validation are also reported to the Board of Directors and the Executive Board.

To ensure a good forecasting ability and consistent estimates, all credit risk models are validated annually. The credit risk models are validated independently of Nykredit's risk modelling and credit approval units. The validation results are used in the ongoing internal capital adequacy assessment process (ICAAP). If validation shows that a model contains significant inaccuracies, a capital charge will be provided under Pillar II until the model has been adjusted to reflect the actual risk.

In addition to the annual validation, the models are monitored quarterly. Quarterly monitoring includes the models' customer ranking, the accuracy of model estimates compared with actual observations, rating distributions, migration, segmentation etc.

Annual validation includes more in-depth analysis of the functioning of a model, including its accuracy, the data applied, follow-up on observations from the quarterly monitoring and a qualitative review of the model and its elements, documentation, implementation, use etc.

Monitoring and validation of rating models include model-based PDs as well as PDs adjusted by overrides. In addition, the use of overrides for manual ratings adjustment is subject to an annual general validation.

### 4.6.8 Implementation of upcoming regulation

Nykredit remains focused on adjusting and developing new models, ensuring that Nykredit's credit models are always in compliance with relevant regulatory requirements and performing as intended. By way of example, Nykredit's updated default definition was implemented in 2021. Also, a new PD model was developed for Totalkredit, expected to be finally approved by the Danish FSA in 2022. 2022 will also see the implementation by Nykredit of new European model estimation guidelines.

Nykredit operates under a precautionary principle and holds capital under Pillar I to cover the impact of new models that have not yet been finally implemented. As this capital will be released upon final implementation of new models or adjustment of existing models, such implementation or adjustment is not expected to have an impact on risk exposures.

# 4.7 • COUNTERPARTY RISK

Nykredit applies financial instruments, such as interest rate derivatives and repurchase agreements (repo transactions), for serving customers. Liquidity and market risks are also managed internally by Nykredit using financial instruments.

The market value of a derivative changes according to the underlying market parameters, such as interest rates and exchange rates. This may lead to market values in favour of both Nykredit and its counterparties.

In some cases, a counterparty is unable or unwilling to meet its payment obligations (default). This gives rise to counterparty risk. The counterparty risk exposure is affected by the market value of the financial instruments and the probability of customer default. Thus, counterparty risk involves both market and credit risk.

Nykredit mitigates its counterparty risk through financial netting agreements as well as agreements on financial collateral. The contractual framework is based on market standards, such as ISDA or GMRA agreements. Nykredit uses central counterparties (CCPs) for professional derivatives clearing. Swaps and repo transactions are cleared.

Derivatives are subject to value adjustment (xVA) in financial statements. Value adjustments are affected by several factors, including the level of long-term interest rates, credit spreads, funding spreads, the maturities of contracts as well as customers' creditworthiness.

# 4.7.1 • Risk management

### Monitoring and reporting

Nykredit monitors counterparty risk on a daily basis by means of capital market systems (market data, calculation of market values etc). This task is performed by Nykredit's risk control function together with the credit control function and the individual risk-taking unit. More specifically, it is checked whether counterparty risk relating to the individual counterparties is within the approved limits.

Any breach of limits must be reported to the unit that granted the authority to approve limits. Breaches exceeding the approval level of the Executive Board will consequently be reported directly to the Board of Directors.

Nykredit monitors xVA on a daily basis and reports on xVA sensitivity to interest rate movements, ie market risk. Furthermore, credit spreads and credit spread sensitivity are reported on in order to reflect market-implied credit risk, and funding spreads and funding spread sensitivity are reported on as well. Weekly reports are submitted to the Executive Board of Nykredit Bank, and monthly reports are submitted to the Board of Directors of Nykredit Bank. In addition, the Nykredit Realkredit Group, including the Board Risk Committee, receives quarterly counterparty risk reports.

### Approval of credit lines

The use of derivatives is governed by the general credit approval rules and credit policies, supplemented with a number of restrictions and guidelines. For instance, counterparties must be specifically approved to trade derivatives. Which level of the credit approval hierarchy determines an application depends on the amount of the credit line. In addition to limits to amounts and maturities, the approval of lines is subject to requirements relating to the type, exposure and creditworthiness of the customer.

### Collateral management

Nykredit is subject to the requirements relating to risk-mitigation techniques, see the Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (EMIR). Nykredit prevents any inconsistencies with non-cleared OTC derivatives transactions by daily monitoring and the implemented controls.

Nykredit's derivatives contracts do not include rating triggers, and therefore a credit rating downgrade would not trigger a requirement for additional collateral.

### 4.7.2 • Methods

### Determination of capital requirements

For the purpose of determining capital requirements for financial instruments, counterparty risk exposures are calculated according to the standardised approach (SA-CCR), and risk-weighted assets are determined using both the IRB approach and the standardised approach. The IRB approach is used for business counterparties, while the standardised approach is used for institutions and sovereigns.

According to Articles 111 to 134 of the CRR, counterparties whose capital requirements for default risk are determined using the standardised approach must be risk-weighted based on their credit quality step. For this purpose, S&P Global Ratings and Moody's provide information to Nykredit about the credit ratings of sovereigns, counterparties and issues. These external credit ratings are used as an integrated part of Nykredit's determination of capital requirements and are updated daily. If the external providers assign different ratings to a counterparty, Nykredit will use the lower rating. The mapping of credit ratings to credit quality steps is based on the mapping table of the EBA and is shown below.

Besides determining capital requirements using the standardised approach (SA-CCR), Nykredit also determines the capital requirement for credit valuation adjustment (CVA) risk. For this purpose, Nykredit uses the standardised approach according to the CRR.

### Nykredit Realkredit Group

Long-term credit ratings			
Risk weight			
		Corpo-	Sover-
Credit quality step – rating	Institutions	rates	eigns
1 - AAA to AA-	20%	20%	0%
2 - A+ to A-	50%	50%	20%
3 - BBB+ to BBB-	50%	100%	50%
4 - BB+ to BB-	100%	100%	100%
5 - B+ to B-	100%	150%	100%
Nykredit Realkredit Group			
Short-term credit ratings			
Risk weight			
Credit quality step - rating	Institutio	ns Co	rporates
1 - A-1+	20	1%	20%
2 - A-1	50	1%	50%
3 - A-2 to A-3	100	1%	100%
4 - Below A-3	150	1%	150%

### Approved credit lines

For the purpose of monitoring approved credit lines, Nykredit determines exposures using other internal methods. These methods basically use the same components as the determination of capital requirements, estimating exposures on the basis of their current market values plus a charge for potential future exposure.

### Value adjustment of derivatives in financial statements

Nykredit makes fair value adjustment of derivatives in accordance with the International Financial Reporting Standards (IFRS), which provide for CVA and FVA for accounting purposes. This includes individual value adjustments of customers showing objective evidence of credit impairment, CVA based on customers' current credit quality as well as management judgement.

The Danish FSA has encouraged the adoption of a prudent approach to the assessment of customers with swap contracts. This means that swap contracts with customers showing objective evidence of credit impairment (rating 0 and exposures in default) are value adjusted in full, whether or not these customers still make timely payments to Nykredit.

### 4.7.3 • Current risk profile and development Market value

A large part of Nykredit's swap portfolio was established in the period 2005-2008 when business customers hedged the risk of rising interest rates on their variable-rate mortgage loans using swap contracts. From the perspective of the customers, the interest rate declines in the ensuing years caused the market values of the individual swap contracts to become negative.

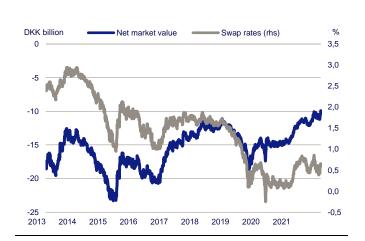
In March 2015 the negative market value was DKK 23.3 billion, but since then the development in market values has generally been positive.

At end-2021 the negative market value of derivatives relating to customer exposures was about DKK 10 billion. During the year, credit value adjustments were moderately affected by interest rate changes, while the widening of credit spreads had a positive impact. Portfolio run-offs had an adverse impact. At end-2021 Nykredit's total provisions amounted to DKK 1.9 billion, of which credit value adjustments represented DKK 1.6 billion.

Part of Nykredit's swap portfolio is designated as legacy swaps. An example of legacy swaps is long-term interest rate swaps. The portfolio of legacy swaps is in run-off, and its market value will therefore approach zero over time.

At end-2021 legacy swaps represented 53.9% of the total negative market value of derivatives relating to customer exposures. The market value has been value adjusted by 19%.

### Nykredit Realkredit Group Net market value of derivatives contracts with business customers



### Nykredit Realkredit Group

### Value adjustment of portfolio of customer derivatives (swaps)

DKK million		CVA			FVA	Other	Total value	Market value	Value adjustment as
31.12.2021	Customers without objec- tive evidence of credit im- pairment	Customers with objective evidence of credit impair- ment	Management	Total CVA			adjustment		% of market value
Derivatives offered	70	155	11	236	61	110	407	4,568	9%
Legacy derivatives	150	929	250	1,329	104	74	1,507	5,341	28%
Total	220	1,084	260	1,565	165	185	1,914	9,909	19%

Risk and Capital Management 2021 - Nykredit Realkredit Group and Nykredit Group

# 5. NON-FINANCIAL RISKS

## 5.1 OPERATIONAL RISK

- 5.1.1 Policy and guidelines
- 5.1.2. Identification of operational risks
- 5.1.3 Managing operational risks
- 5.1.4 Managing operational risk events
- 5.1.5 Capital requirement for operational risk
- 5.2 CONDUCT RISK
- 5.3 COMPLIANCE RISK
- 5.4 IT RISK AND IT SECURITY
- 5.5 PREVENTION OF MONEY LAUNDERING,

TERRORIST FINANCING AND BREACH OF

FINANCIAL SANCTIONS

- 5.6 DATA QUALITY RISK
- 5.7 MODEL RISK
- 5.8 PERSONAL DATA PROTECTION

Nykredit is exposed to a number of risks arising from internal or external factors that affect the core tasks, processes and regulatory obligations of the business. These risks are referred to as non-financial risks and can be divided into a number of areas, see the figure below.

Nykredit monitors and manages non-financial risks as part of its dayto-day operations, keeping non-financial risks low relative to the Group's financial risks. Specific policies have been prepared for the individual types of risk, setting the framework for the underlying risk appetite. The relevant areas are described on the following pages. The Boards of Directors of Nykredit receive quarterly reports on the nonfinancial risk outlook, including compliance with relevant policies.

Again in 2021 focus was on supporting the Group's ability to operate its core business during the covid-19 pandemic, and this will continue in 2022. Nykredit did not observe any increase in operational risk events in 2021 resulting from covid-19. In 2021 Nykredit entered into an agreement with the Bank of New York Mellon to divest Nykredit's Depositary Services activities, which has contributed to reducing Nykredit's non-financial risks. Also, efforts were made to strengthen the approach and platform for managing non-financial risks, including through improved data.

Again in 2021, particular focus was on non-financial risks related to IT and IT security, data quality and personal data protection as well as on preventing the risk of being misused for money laundering or terrorist financing purposes, for example through initiatives to raise awareness of non-financial risks as part of everyday work and e-learning programmes on anti-money laundering, personal data protection, IT security and conduct.

### Non-financial risk areas

Non-financial risks			
Operational risk	Compliance risk	Conduct risk	IT risk and IT security
Data quality risk	Personal data protection	Risk of money laundering, terrorist financing and breach of financial sanctions	Model risk

# 5.1 • OPERATIONAL RISK

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems or from external events, including legal risks.

### 5.1.1 • Policy and guidelines

The operational risk policy stipulates that operational risks should be low relative to other types of risk to which Nykredit is exposed. The nature of operational risks must not be such as to potentially jeopardise the financial stability of Nykredit and/or the individual subsidiaries. Operational risks are mitigated through improved processes, business procedures and other mitigating actions and covered by holding the requisite capital.

Nykredit's Board of Directors lays down the Group's policy and guidelines for operational risk. In its guidelines to the Executive Board, the Board of Directors sets out tasks and responsibilities for ensuring that the operational risks are mitigated and managed in accordance with the principles and limits of the operational risk policy.

It is Nykredit's policy to promote a culture where openness and awareness of operational risks are natural elements of the everyday work of all staff members, and to ensure that the Executive Board and the Board of Directors are briefed regularly on key risk areas.

The Executive Board has delegated responsibility for the ongoing monitoring of operational risk to the Group Risk Committee. The Committee regularly reviews material risks, considers specific action plans and determines whether specific risks should be presented to the Board of Directors. Risks that fall outside Nykredit's risk appetite are always presented to the Board of Directors for consideration.

To strengthen the efforts to address and mitigate operational and compliance risks, one or more Assistant Risk and Compliance Officers (ARCOs) have been appointed in the individual business divisions. Their primary duty is to assist the managements of the individual business divisions in executing compliance- and risk-related tasks and to strengthen awareness of Nykredit's risk culture. ARCOs serve as links between the first line of defence and the compliance and risk control functions (second line of defence). ARCOs are also found in functions in the second line of defence.

### 5.1.2 - Identification of operational risks

The Group's ongoing risk management activities include the identification of operational risks. All Nykredit business units must regularly, and at least once a year, identify, assess and report on their operational risk outlook. Reports must describe the risk-mitigating activities and controls implemented, or expected to be implemented, to mitigate any identified risks. Operational risks are also identified in connection with approval of new products and major strategic and business decisions.

Operational risks are assessed based on the probability that an operational risk event will occur and the consequences of such event. Identified risks are scored on a four-point scale from low to very high.

### 5.1.3 • Managing operational risks

Operational risks are mitigated and managed in the first line of defence through the day-to-day business conduct. The responsibility for the day-to-day management of operational risks is decentralised and lies with the individual business divisions, which may change and reduce operational risks as part of their day-to-day work. The risk control function coordinates activities to ensure coherence and consistency across the Group.

Operational risks are mapped by each business division identifying, assessing and mitigating its own significant risks on an ongoing basis. Nykredit's risk function holds regular risk meetings with selected business divisions for the purpose of reviewing the divisions' operational risks. The business divisions are selected according to a risk-based approach so that divisions with the largest risks are reviewed more often. Risk meetings are held with each business division at least annually. At the risk meetings, the operational risks of the division are reviewed, and it is assessed whether the risks are adequately managed through controls and other risk-mitigating actions, or whether additional measures are required to reduce risk.

Operational risk mapping identifies particularly risky processes, systems, products or conduct and therefore constitutes a general management tool.

# Operational risk governance, including conduct risk

Board of Directors and Board Risk Committee: Lay down the operational risk policy, including the risk appetite.

Receive quarterly reports on compliance with the operational risk policy. Receive separate information about risks with very high risk scores and events with very high impacts and a report on the how they are handled.

Executive Board and Group Risk Committee: Approve and implement the operational risk policy and regularly review compliance based on quarterly reporting on the risk outlook.

Receive quarterly reports on compliance with the operational risk policy. Receive separate information about risks with high risk scores and events with high impacts and a report on the handling of the case and risk mitigation.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

### 5.1.4 Managing operational risk events

In addition to the identification of operational risks, all operational loss events of DKK 10,000 or more are systematically recorded, categorised and reported. Moreover, operational risk gain events, potential operational loss/gain events and events that did not lead to a loss/gain (near-miss events) are recorded.

The recording of operational risk events must include information about the type of product, process and risk concerned as well as about any insurance cover and the time spent dealing with the event. In relation to events that are significant in terms of size or number, an assessment will be made of the need to implement new risk-mitigating measures. Significant events are reported quarterly to the Board of Directors and the Executive Board as part of Nykredit's overall risk outlook. The reports also cover any measures taken to reduce the risk of recurrence of a given risk event.

### 5.1.5 - Capital requirement for operational risk

Nykredit determines the capital requirement for operational risk using the basic indicator approach. This means that the capital requirement is calculated as 15% of average gross earnings of the past three years. REA for operational risk was DKK 27.2 billion in 2021.

Based on the reported operational risks and risk events, it is assessed whether the total internal capital adequacy requirement for operational risk is appropriate. This assessment is conducted quarterly in connection with the determination of the internal capital adequacy requirement and is documented annually in the ICAAP.

# 5.2 • CONDUCT RISK

Nykredit's advice, products and services must be responsible, both in a societal context and relative to the individual customer. This calls for an organisation which is in every way prepared to act responsibly and correctly, complying with not only the letter, but also the spirit of the law, and a culture where we openly air, discuss and act on the dilemmas that may arise in a financial undertaking.

Conduct risk is the risk of reputational damage or financial losses as a result of improper business conduct related to products, conduct or third parties. Conduct risk is addressed in Nykredit's operational risk management activities and is governed by the Group's operational risk policy. Conduct risk is a fixed part of the Group's established risk management practices and is identified, assessed and dealt with on a par with other types of risk. Conduct risk is also reviewed at the meetings held at least annually by the Group's risk control function with all business units and the relevant managers. Nykredit's product development procedures also include the assessment of new products in terms of conduct risk.

To support a safe and open culture where both managers and staff talk about and adjust behaviours and practices, Nykredit has launched several initiatives in recent years, training Nykredit's staff in identifying, discussing and acting on situations perceived as irresponsible. This is not a process with a defined beginning and end, but rather an ongoing process to promote a corporate culture where it is natural and safe for Nykredit's staff to speak up if they experience something that does not live up to Nykredit's objective of being a responsible business. Further, conduct is included as a topic in management and talent programmes and in the introductory programme for new staff. Also, Nykredit's Code of Conduct was updated in 2021 to ensure that all Nykredit staff have an up-to-date and clear framework within which to act responsibly in their day-to-day work.

# 5.3 • COMPLIANCE RISK

Compliance risk is the risk that legal or regulatory sanctions are imposed on Nykredit or that Nykredit suffers financial losses or reputational damage caused by non-compliance with legislation, market standards or internal rules.

### 5.3.1 • Policy and Chief Compliance Officer

Nykredit's Board of Directors has adopted a compliance policy that defines the risk appetite in the compliance area.

The policy sets out a number of objectives and compliance principles, which management and all staff must observe at all times in relation to Nykredit's activities, including in particular the objective that Nykredit must comply with current legislation, market standards and internal rules applying to Nykredit's activities. Therefore, like other non-financial risks, compliance risks should be low relative to other types of risk of the Group. The policy is to support the aim of promoting honest and ethical conduct in Nykredit and among its staff and a culture where openness and awareness of compliance risks and their management is a matter of course.

Further, the compliance policy contains a description of the responsibilities, authority and organisation of the compliance function. Based on the policy, the Board of Directors has issued a role description for the Chief Compliance Officer, providing a detailed description and delimitation of the Chief Compliance Officer's tasks, authority, duties and responsibilities. The role description also specifies the compliance function's duties and organisation, including skills and resources, and the division of responsibilities relative to other relevant units of Nykredit.

### 5.3.2 - Control and reporting

The primary purpose of the compliance function is to assist Management in ensuring that Nykredit meets the compliance rules and to assess whether Nykredit meets the compliance rules in the individual risk areas. Further, the compliance function controls, assesses and reports on the adequacy and effectiveness of Nykredit's methods and procedures for compliance with legislation. Lastly, the compliance function reports regularly to Management.

The compliance function reports to Boards of Directors and Executive Boards on a quarterly basis. Management reporting covers:

- an assessment of compliance with the compliance policy
- an assessment of the Group's overall compliance risk
- a description of conclusions of completed compliance reviews in the period
- an update on agreed measures from previous reviews.

### 5.3.2 • Compliance plan, reviews and follow-up

The compliance functions performs a risk assessment every year. Based on this risk assessment, the compliance function identifies the areas to be reviewed in the coming year. In addition to the compliance function's own input, the risk assessments include input from the Executive Boards, the Chief Risk Officer and the business management as well as experience from previous reviews, etc.

The risk areas identified are reviewed during the year. Following its review of an area, the compliance function prepares a compliance report for the business management. The report provides a description of the results of the review and an assessment of whether appropriate and adequate measures have been taken to address the most significant compliance risks or whether additional measures have been agreed to reduce the risks in the area concerned. In conclusion, the report contains an assessment of the overall compliance risk in the area after the review. Compliance risk is assessed on the basis of the probability of a given event occurring and the potential impact of such event. The compliance function thus uses the same risk classification model as for other non-financial risks.

As mentioned, the compliance report also includes any risk-mitigating measures agreed with the business and a deadline for their implementation. Agreed measures are recorded in a central system, and the compliance function regularly follows up on agreed measures not yet implemented.

### **Compliance governance**

Board of Directors and Board Risk Committee: Lay down the compliance policy, including the risk appetite. Receive quarterly reports on compliance with the policy and identified compliance risks.

Executive Board and Group Risk Committee: Approve and implement the compliance policy and regularly review compliance based on quarterly risk outlook reports.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 5.4 • IT RISK AND IT SECURITY

IT risks primarily include breakdowns or instability of Group systems, while IT security risks comprise eg cybercrime targeted at Nykredit or Nykredit's customers and phishing attacks or breakdowns of systems caused by external factors.

Nykredit's IT risk and IT security management activities are governed by its IT risk and IT security policies. The policies lay down the Nykredit Group's general IT risk and IT security requirements on the basis of the desired risk profile and current threat levels. The purpose of the policies is to ensure that Nykredit's strategic objectives for applying electronic data processing, including legislative and regulatory compliance, are met.

The IT security policy was prepared on the basis of the internationally recognised ISO 27001/2 standard. The policy helps ensure that entities across the Group operate according to the same guidelines in the IT area.

Most of the operation of Nykredit's IT systems has been outsourced to external providers. Controls and close collaboration with these providers serve to ensure that they comply with service agreements and maintain a satisfactory IT security level.

### IT security activities

Nykredit improved its IT security continuously during 2021, but external threats increased as well. Measures included enhanced cyberdefence and improved internal processes, with stronger implementation of the IT security policy. Nykredit ensures consistent transparency and focus on this area through regular reporting of IT risks to the Group Risk Committee, Executive Boards and Boards of Directors.

At Nykredit, IT security is a continuous process in multiple phases, including the planning of measures, implementation, control and monitoring as well as optimisation of existing implemented measures. This process enables continuous improvement of IT security and ensures that Nykredit takes the right steps at the right time to strengthen the Group's cyberdefence against hackers, phishing, malware etc. Measures in 2021 included implementation of more advanced security software, enhanced network protection, including increased network segmentation, awareness campaigns, emergency preparedness exercises and optimising the processes for efficient handling of security incidents.

### IT risks

Nykredit regularly conducts IT risk assessments to ensure that risks are identified and assessed as well as addressed according to a riskbased approach taking into account both risk and materiality. Thanks to this approach, resources are utilised in the best possible way for Nykredit. The objective is not to eliminate all risks, but rather to identify risks and make the right decisions on how to manage them.

The following risks are deemed to be the most critical risks faced by Nykredit at end-2021:

- The risk of being unable to maintain vital services/functions due to a critical event affecting a key provider.
- The risk of cyberattacks from an organised hacker group or government, including ransomware attacks.

### Self-checking and penetration testing

Regularly checks are performed of whether Nykredit and relevant business partners comply with the IT security policy and guidelines. These checks are performed on the basis of selected security requirements set out in the IT security policy.

In addition, Nykredit conducts penetration testing and/or Red Team testing at least once a year, where professional hackers challenge Nykredit's cyberdefence, testing Nykredit's ability to handle security incidents in practice. These tests are conducted by external business partners. Any potential risks identified are subsequently reduced through mitigating measures. Further, Nykredit participates in largescale emergency preparedness exercises at sector level.

### Awareness and training

To ensure that all Nykredit staff have satisfactory knowledge of IT security, all new staff members must complete an e-learning programme on IT security. The programme ends with a mandatory test that must be passed. Nykredit regularly provides e-learning and conducts phishing tests aimed at its staff.

### IT risk and IT security governance

Board of Directors and Board Risk Committee: Lay down the IT risk and IT security policies, including the risk appetite, stipulating general IT risk and IT security requirements.

Receive quarterly reports on compliance with the policies as well as separate reports, possibly including an action plan, in case of major security incidents.

Executive Board and Group Risk Committee: Approve and implement the IT risk and IT security policies and regularly review compliance based on quarterly risk outlook reports.

Are informed of major security incidents and consider risk mitigation.

### Control functions (second line of defence):

Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 5.5 • PREVENTION OF MONEY LAUNDERING, TERRORIST FINANCING AND BREACH OF FINANCIAL SANCTIONS

Nykredit works consistently to strengthen monitoring and control mechanisms, and processes in general, throughout the Group so as to have an effective safeguard at all times against misuse of the Group's products and services for purposes of money laundering, terrorist financing or breach of financial sanctions.

Activities in this area are based on Nykredit's policy for the area, and responsibility for them has been broadly delegated across the Group. A member of the Group Executive Board has been charged with delegating and ensuring managerial responsibility and focus on the prevention of money laundering, terrorist financing and breach of financial sanctions throughout the Group. The Executive Boards of the other Group companies have each appointed a Chief AML Officer at the executive level. The Nykredit Group also has a Chief Compliance Officer and an AML Responsible Officer covering all relevant Group companies.

In 2021 Nykredit ramped up its efforts to reduce the risk of money laundering, terrorist financing and breach of financial sanctions. This included introducing a more extensive risk assessment method, implementing additional systems support as well as new and improved processes and business procedures in the area.

Staff awareness and vigilance are important elements of the defence against money laundering, terrorist financing and breach of financial sanctions. To ensure that all Nykredit staff possess the requisite knowledge, a mandatory e-learning programme on preventing money laundering, terrorist financing and breach of financial sanctions has been introduced. All staff must complete the programme every year, and the programme ends with a test that must be passed. The number of staff working full-time with the prevention of money laundering, terrorist financing and breach of financial sanctions increased during 2021.

Nykredit acknowledges the importance of integrating measures to prevent money laundering, terrorist financing and breach of financial sanctions into all business activities. Nykredit wants to be known for its integrity and regulatory compliance, in accordance with the expectations of customers, society, authorities and other stakeholders.

### AML governance

Board of Directors and Board Risk Committee: Lay down the policy for the prevention of money laundering, terrorist financing and breach of financial sanctions, including the risk appetite.

Receive quarterly reports on compliance with the policy and the Group's risk assessment with respect to financial crime.

*Executive Board and Group Risk Committee:* Approve and implement the policy and guidelines and regularly review compliance based on ongoing reporting and risk assessments with respect to financial crime. Are informed of material issues and consider risk mitigation.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 5.6 • DATA QUALITY RISK

As a financial institution, the Nykredit Group is dependent on the quality of the data it uses, as they form the basis for business decisions made by Nykredit. A strong data governance set-up is therefore crucial to minimise the risk that data quality across the Group does not satisfy Nykredit's business needs and regulatory requirements in this area. Nykredit has stepped up its data governance efforts considerably in recent years.

Nykredit's data governance policy lays down the overall principles and standards for data governance at Nykredit. The purpose of the policy is to ensure that Nykredit complies with current legislation in this area and to support existing and future business processes as well as professional and effective data governance development.

Five main themes define the scope and lay the foundation for Nykredit's data governance:

- Roles and responsibilities, where the objective is to ensure unambiguous assignment of data ownership and roles for the creation, modification and deletion of data.
- Uniform understanding of data, where the goal is to ensure a uniform understanding and a common data language by way of unambiguous data definitions.
- Consensus on data usage and sources, where the objective is to ensure a common understanding of data origination and data usage at Nykredit, thereby ensuring one version of the truth.
- Data quality, where the objective is to ensure greater efficiency and trust in data by introducing a common standardised data quality process, including quality targets and reporting to facilitate continuous improvements of data quality through either error correction or the development of data quality enhancing measures.
- Change management, where the aim is to ensure that development takes place in accordance with the data governance strategy.

Data have been divided into data domains, together comprising all data used by Nykredit. Ownership lies with data domain owners, each holding overall responsibility for data governance and for defining and maintaining data standards in their respective areas.

Nykredit made substantial investments in 2021 to strengthen the Group's data governance, including in establishing a data governance framework and launching a Group-wide programme for implementing data governance. In 2021 several of Nykredit's data elements were subjected to governance under the programme.

# Data quality governance

Board of Directors and Board Risk Committee: Lay down the policy, and overall principles, for data governance and data quality targets. Receive quarterly reports on compliance with the policy and data maturity.

Executive Board and Group Risk Committee: Approve and implement the data governance policy and regularly review compliance based on quarterly risk outlook reports.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 5.7 • MODEL RISK

Model risk is the operational risk of loss resulting from decisions based mainly on mathematical and statistical model results. Nykredit uses such models for the purpose of business decisions and to determine risk limits, capital, capital adequacy, impairments etc.

Model risk occurs as a result of model weaknesses. Such weaknesses may result from operational errors or weak data in connection with the development or implementation of the models, or from weaknesses in the data to which the models are applied.

Over the past few years, the focus of authorities on model risk as an independent risk area has increased significantly. In a Danish context, this is reflected, for instance, by the amendment in 2021 of the Danish Executive Order on Management and Control of Banks, etc, specifying regulatory requirements related to model risk management.

Nykredit's model risk policy, which is adopted by the Board of Directors, reflects the current Executive Order and defines Nykredit's risk appetite in this area. The policy also lays down requirements for ongoing reporting and review of model risk.

Nykredit's set-up with defined boundaries, structures and responsibilities ensures active management and monitoring of model risk and structured governance of models and model changes. Nykredit has a comprehensive model register that provides an overview and clear definitions of roles and responsibilities. The model register is also used as a central tool for measurement and assessment of model risks. Nykredit has defined a governance structure for changes and approval of models as well as an established framework for the ongoing monitoring and reporting of model risk.

Model risk is monitored closely by domain-specific model committees, which report to the Group Risk Committee and are responsible for governance in respect of model approval and model changes. This ensures that model risk is managed and assessed in a uniform way across the Group and that model risk becomes visible in Nykredit's overall risk landscape.

### Model risk governance

Board of Directors and Board Risk Committee: Lay down the model risk policy, including the risk appetite. Receive quarterly reports on compliance with the model risk policy and on the current risk outlook.

Executive Board and Group Risk Committee: Approve and implement the model risk policy and regularly review compliance based on ongoing reporting. Review and approve main model risks.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 5.8 • PERSONAL DATA PROTECTION

Nykredit focuses strongly on ensuring that personal data are treated as confidential and processed in compliance with the General Data Protection Regulation (GDPR) and the data protection legislation. Relevant policies and business procedures have been laid down, and processes have been established to ensure that personal data are processed in compliance with applicable law.

Responsibility for personal data processing is decentralised and supported by privacy leads in all units of the organisation. The local privacy leads are responsible for ensuring that data protection rules are complied with locally and for identifying possible challenges and solutions. Privacy leads also extend knowledge of Nykredit's policies and guidelines in this field locally in the organisation.

Group Legal holds central governance responsibility, including responsibility for the overall policies and guidelines, and assists the business in implementing the rules through advice, support and training.

Data breaches must be reported and treated in compliance with the guidelines of the Danish Data Protection Agency. Nykredit continuously monitors for personal data breaches in the Group. Most data breaches in Nykredit have been related to procedural errors involving a few customers, for instance e-mails sent to the wrong recipient or with the wrong document attached.

Nykredit's compliance function includes a Data Protection Officer (DPO) tasked with assessing, monitoring and reporting on the effectiveness of Nykredit's methods and procedures relating to personal data processing.

All Nykredit staff must complete an e-learning programme on the processing of personal data once a year. The programme ends with a test that must be passed.

### Data protection governance

Board of Directors and Board Risk Committee: Lay down the personal data policy with descriptions of risk appetite.

Receive reports on compliance with the personal data policy and on the risk outlook as well as separate reports, possibly including an action plan, in case of material breaches.

Executive Board and Group Risk Committee: Approve and implement the personal data policy and regularly review compliance with the policy based on ongoing reporting.

Are informed of material breaches and consider risk mitigation.

Control functions (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent

# 6. MARKET RISK

- 6.1 MARKET RISK POLICY AND GUIDELINES
- 6.2 CONTROL AND REPORTING

### 6.3 CURRENT RISK PROFILE AND

# DEVELOPMENT

- 6.3.1 Trading book risk
- 6.3.2 Daily stress tests
- 6.3.3 Other market risks
- 6.3.4 Banking book risk

# 6.4. MODELS FOR DETERMINATION OF

# MARKET RISK

- 6.4.1 VaR for day-to-day management
- 6.4.2 Backtesting of market risk models
- 6.4.3 Regulatory VaR capital requirement

Market risk is the risk of loss as a result of movements in financial markets and includes interest rate, yield spread, foreign exchange, equity price and volatility risks etc.

Nykredit's aggregate market risk is divided into the trading book exposure and the banking book exposure. Portfolios with positions held for trading are placed in the trading book. Long-term investments held until maturity, however, are placed in the banking book. Nykredit has laid down guidelines defining criteria for the valuation of securities and financial instruments and their distribution between trading and banking books.

Nykredit mainly assumes market risk in connection with the trading book from the investment of equity and Nykredit's liquidity reserves. Investments are mainly made in Danish and European covered bonds as well as government bonds. In addition, Nykredit Bank A/S and Nykredit Realkredit A/S incur market risk when trading bonds, swaps and other financial products.

In the banking book, Nykredit holds a portfolio of assets held for business purposes, which primarily consist of investments in a number of regional banks with which Nykredit has business relationships and of private equity. These investments have a long-term purpose and are therefore placed in the banking book. In addition, the banking book comprises portfolios of credit bonds and short-dated bonds from the liquidity reserves.

Nykredit's main market risks are yield spread risk on covered bonds in the trading book and equity price risk on equities held for business purposes in the banking book. Yield spread risk is the risk of movements in the spreads between yields of covered bonds/credit bonds and swap rates, which may lead to gains as well as losses. Equity price risk is the risk of movements in equity prices affecting the values of Nykredit's portfolios, which may lead to gains as well as losses.

The market risk relating to Nykredit's largest business area, mortgage lending, is, in practice, negligible. This is because mortgage lending is governed by a statutory balance principle and match-funded, see the description in *7. Liquidity risk and funding*.

Nykredit's investee companies are screened quarterly to identify any breaches of international conventions etc. Such screening is based on Nykredit's Sustainable Investment Policy, which covers all Nykredit's portfolios, including alternative investments. The policy also serves to implement Nykredit's Corporate Responsibility Policy laid down by Nykredit's Board of Directors.

# 6.1 • MARKET RISK POLICY AND GUIDELINES

The Board of Directors has laid down a market risk policy setting out principles for the overall market risk in Nykredit's trading and banking books. The main principle of the policy is that the probability of losses from market risk exposures exceeding Nykredit's expected aggregate quarterly results must be low. This is monitored daily, for instance by measuring budgeted quarterly results against the estimated losses of a number of stress scenarios that may occur in the trading book or the banking book.

In addition to the market risk policy, Nykredit's Board of Directors has laid down market risk guidelines for the Executive Board, applicable to the trading book and banking book, respectively, which are used in day-to-day market risk management. In accordance with these guide-lines, the Executive Board delegates specific limits for the different types of market risk to the Group companies through the Asset/Liability Committee. Read more about the Asset/Liability Committee in 2.4.1 Committees.

The market risk guidelines lay down measurable limits on the total portfolio risk and also permit the use of financial instruments. However, it is a condition that the risk relating to the financial instruments can be measured and managed sufficiently accurately. Risk limits covering trading book as well as banking book portfolios are applied to all types of financial instruments involving market risk.

# 6.2 • CONTROL AND REPORTING

The risk control function continuously reports on the Group's market risk profile to the Board of Directors, the Board Risk Committee, the Executive Boards, the Asset/Liability Committee and the Group Risk Committee.

On a daily basis, Nykredit's risk control function checks that the market risk policy and guidelines are complied with. Also on a daily basis, the current utilisation of the limits set out in the guidelines is reported to the head of Nykredit's risk control function, the Asset/Liability Committee and the heads and dealers of the acting units. Any breaches of these limits are reported by the risk control function to the Asset/Liability Committee, Executive Boards, the Board of Directors of Nykredit Realkredit or other Boards of Directors depending on the nature of such breaches.

The current utilisation of risk limits is monitored and reported by Nykredit's risk control function and thus independently of the risk-taking units.

Nykredit's Executive Boards and Boards of Directors as well as the Asset/Liability Committee monitor and evaluate the current market risk and its elements at least quarterly. and this forms the basis for an annual review and approval of the liquidity policy and guidelines. The risk outlook is described in the quarterly reports to the Board of Directors, the Board Risk Committee and the Group Risk Committee.

### Market risk governance

Board of Directors and Board Risk Committee: Lay down the market risk policy and the Board of Directors' market risk guidelines, including risk appetite and risk limits for eg equities, bonds and financial instruments.

Receive monthly reports on compliance with the market risk policy and on the risk outlook.

Receive separate reports, possibly including an action plan, in case of non-compliance with the policy or guidelines.

Executive Board and Asset/Liability Committee: Approve and implement the market risk policy and the Board of Directors' guidelines and regularly review compliance based on quarterly and monthly reports.

Receive separate reports and action plans in case of non-compliance with the policy or guidelines.

Risk control function (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 6.3 • CURRENT RISK PROFILE AND DEVELOPMENT

Market risk is assessed on the basis of a range of different metrics that express sensitivity to movements in the financial markets combined with two market risk models, Value-at-Risk (VaR) models, for calculating an aggregate trading book exposure for both Nykredit Realkredit and Nykredit Bank.

VaR levels declined for both Nykredit Realkredit and Nykredit Bank during 2021, driven by generally lower market volatility in 2021 than in 2020 and the fact that the volatility observed in the period of the covid-19 outbreak in March 2020 is no longer factored into the VaR model, which is based on market data from the past 250 days.

The metrics and market risk models are supplemented with a number of stress tests which, based on the current portfolios, quantify potential losses in financial markets using historical as well as forward-looking scenarios.

### 6.3.1 • Trading book risk

Basically, Nykredit's market risk is determined based on calculations of a number of traditional metrics that may be regarded as portfolio sensitivity tests. They are used to calculate the effect on the value of the individual portfolios in case of changing market conditions involving, for example, rises or falls in interest rates, equity prices or volatilities. The calculations are made for the trading book as well as the banking book. Nykredit's key risks are interest rate risk, yield spread risk and equity price risk.

The traditional metrics do not indicate the probability of an event occurring, but rather how much the occurrence of the given event would affect the value of a portfolio. To incorporate the probabilities of different events in day-to-day risk measurement, Nykredit applies VaR models. In addition, stress and scenario tests are used.

### Value-at-Risk (VaR)

In day-to-day risk management, Nykredit uses VaR to calculate one risk measure covering most of Nykredit's trading book positions. VaR captures Nykredit's maximum potential losses in one day at a probability of 99%. The Nykredit Group's VaR totalled DKK 27 million at end-2021.

Daily VaR calculations are based on historical daily fluctuations in, for instance, yield spreads, equity prices and interest rates over the past 250 trading days. Since the end of 2020, daily VaR has reduced by DKK 32 million, mainly driven by the fact that the volatility observed in the period of the covid-19 outbreak in March 2020 is no longer factored into the VaR model, as mentioned above. The result is a significant VaR reduction for both Nykredit Realkredit and Nykredit Bank and subsequently a relatively stable VaR at Group level.

For a detailed description of VaR, see 6.4. Models for determination of market risk.

### Yield spread risk

Yield spread risk is the risk of loss as a result of yield spreads between individual bonds and general interest rate levels widening by 1 percentage point. In historical terms, yield spread widening of 1 percentage point is much rarer than a general interest rate rise of 1 percentage point.

In the Group's trading book, the yield spread exposure on covered bonds was DKK 1.6 billion at end-2021, while the yield spread exposure on the credit bond portfolio was DKK 11 million. The chart below shows the development in yield spread risk in Nykredit's trading book.

### Interest rate risk

Interest rate risk is the risk of loss as a result of interest rate changes. Nykredit's interest rate risk is measured as the change in the market value of Nykredit's portfolios resulting from a general interest rate increase of 1 percentage point in respect of bonds and financial instruments.

Nykredit's interest rate exposure in the trading book was DKK 153 million at end-2021.



### Equity price risk

Equity price risk is the risk of loss as a result of changes in equity prices, and it is expressed by the aggregate market value of Nykredit's equity portfolios. The Group's net equity price risk exposure in the trading book amounted to DKK 250 million at end-2021.

### 6.3.2 • Daily stress tests

Systematic stress tests are performed on a daily basis to measure the risk of loss during turbulent market conditions. The tests are based on a number of forward-looking scenarios characterised by significant, but plausible, market movements and events that could occur during the next 3-5 years. In addition, a historical stress scenario is used, calculating portfolio losses for particularly stressed periods of the past approximately 12 years. Overall, the different stress tests are used to assess portfolio losses, should these events occur. The stress tests are also used for reporting on compliance with the Board of Directors' market risk policy, as losses estimated by the stress tests are measured against the market risk appetite set out in the policy. The stress tests are reviewed quarterly to ensure their adequacy and relevance to Nykredit's portfolios.

# 6.3.3 • Other market risks

Besides the market risks addressed above, Nykredit is exposed to foreign exchange risk and volatility risk in relation to equity, foreign exchange and interest-bearing instruments, such as options. These risks only make up a minor part of the total market risk exposure.

Nykredit hedges its foreign exchange risk and has only minor foreign exchange positions held to achieve a gain. Therefore, the Group had only minor positions in currencies other than EUR in 2021.

Nykredit's volatility risk mainly relates to investments in, for example, callable covered bonds with implied call options, as these bonds may be prepaid. Interest rate expectations will affect market values and may in consequence lead to gains as well as losses. However, the risk is limited and stems mainly from the portfolio of Danish callable covered bonds, but also from other interest rate and equity derivatives.

### 6.3.4 Banking book risk

The market risk exposure of the trading book can quickly be increased or reduced, as positions tend to be very liquid. This is not necessarily the case with the banking book. Basically, the same types of market risk are found in the banking book, but much stricter requirements apply to the trading frequency in such positions.

The market risk exposure of Nykredit's banking book generally derives from equities held for business purposes, which are illiquid, as many of them are unlisted and the portfolio is concentrated in fewer securities. Further, the banking book comprises a private equity portfolio and some long-dated, interest rate-hedged bond portfolios, relating to the lending operations. Also, a number of short-dated credit and covered bond portfolios are included in the banking book.

### Interest rate risk

Interest rate risk in the banking book (IRRBB) is limited and derives mainly from Nykredit's lending operations. The interest rate risk of the mortgage banks is very limited due to the match-funding principle governing covered bond issues.

Any IRRBB is partly hedged using interest rate swaps in relevant currencies and maturities. IRRBB exposure totalled DKK 184 million net at end-2021. IRRBB is subject to daily market risk monitoring, see 6.1 and 6.2.

Moreover, a number of specific regulatory requirements apply to IR-RBB, and the Board of Directors' market risk policy lays down an annual maximum risk appetite for IRRBB. Two regulatory metrics are used to manage IRRBB: Economic Value of Equity (EVE) and Net Interest Income (NII), expressing estimated losses in terms of value adjustments and earnings impact, respectively, as a result of interest rate changes (losses are denoted with a positive sign). At end-Q4/2021 EVE amounted to DKK 312 million, while NII amounted to DKK 35 million. Utilisation is monitored daily and reported to Nykredit Realkredit's Board of Directors and Executive Board and the Asset/Liability Committee on an ongoing basis.

EVE is calculated daily, based on full repricing and stress testing of the entire underlying yield curve, and includes gap risk.

NII is calculated quarterly and also includes gap risk and, for Nykredit Bank, also an option element allowing for deposits and lending with interest rate floors and caps in the banking book. NII is calculated assuming constant balances where positions are reinvested upon maturity.

### Nykredit Realkredit Group

### **IRRBB** exposure by maturity

Total	141	(9)	53	(1)	184
Nykredit Bank A/S	79	4	9	(1)	91
Totalkredit A/S	0	0	0	0	0
Nykredit Realkredit A/S	62	(13)	43	0	93
DKK million	0-1 year	1-3 years	3-6 years	years	Total
				Over 6	
2021					

# Yield spread risk

Yield spread risk in the banking book mainly derives from the investment of proceeds from unsecured debt issued by Nykredit for purposes such as meeting the debt buffer and MREL requirements. Secondarily, it derives from portfolios containing bonds in all ISINs for loan redemptions, allowing customers to prepay their loans at any time.

In the banking book, the yield spread risk on covered bonds was DKK 1.2 billion net at end-2021.

### Equity price risk

Equities in the banking book comprise Nykredit's equities held for business purposes and private equity holdings.

Equities held for business purposes comprise equities in regional and national banks with which Nykredit has business relationships as well as equities in property companies. The aggregate market value of these portfolios was DKK 5.9 billion at end-2021.

Given the relatively large equity portfolio, equity price risk represents a substantial proportion of the Group's total market risk. For capital adequacy purposes, the risk associated with equities held for business purposes is determined as credit risk exposure.

# 6.4 • MODELS FOR DETERMINATION OF MARKET RISK

In addition to the traditional risk metrics of interest rate risk and equity price risk etc, Nykredit uses market risk models to calculate VaR as described above. Nykredit Realkredit and Nykredit Bank use different models.

Both models are applied in day-to-day internal risk management and in the determination of the regulatory capital requirement for positions involving market risk. Use of the models to determine capital requirements is subject to the approval of the Danish Financial Supervisory Authority (FSA), which oversees the models.

The market risk models, including IRRBB, are subject to the same internal approval, validation and control procedures as credit risk models so as to assure their quality. Read more in *4.6.7. Approval, validation and testing of credit risk models.* 

### 6.4.1 • VaR for day-to-day management

VaR model results are reported on a daily basis against prescribed limits and are determined as the 0.99 fractile of the distribution of daily returns over a rolling 1-year period. Daily VaR limits have been laid down at Group, company and organisational unit levels. There were no breaches of VaR limits in 2021.

### 6.4.2 • Backtesting of market risk models

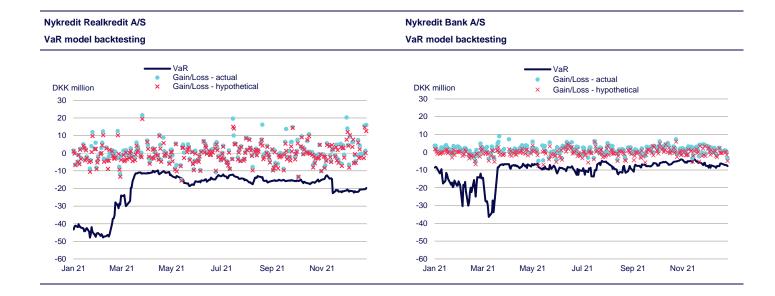
To measure VaR model performance, the model results are backtested against realised returns on Nykredit's portfolios on a daily basis. In the backtests, daily earnings (gains/losses) are compared with the model estimates of maximum losses.

As the models apply a 99% probability, there will likely be backtest overshootings, indicating losses exceeding the VaR model estimate, 2.5 times per year.

If losses exceed the model estimate of maximum losses five times or more within a year, an additional regulatory capital charge will be added to Nykredit's VaR capital requirement.

VaR backtests for Nykredit Realkredit A/S and Nykredit Bank A/S are shown in the charts below.

Nykredit Realkredit A/S recorded one backtest overshooting in 2021, and Nykredit Bank A/S recorded none. The overshooting was due to significant yield spread widening of callable covered bonds in particular, which caused major losses on the relevant day.



### Risk and Capital Management 2021 - Nykredit Realkredit Group and Nykredit Group

### 6.4.3 - Regulatory VaR capital requirement

In determining the risk exposure amount (REA) for market risk, Nykredit uses a combination of market risk models and the standardised approach, and the risk exposures are furthermore divided into general risk and specific risk. General risk means risk affecting financial markets in general, and specific risk is the risk related to singlename issuers.

Nykredit applies the current VaR models for determination of the regulatory capital requirement for general market risk. These models have been approved for use on the trading books of Nykredit Realkredit A/S and Nykredit Bank A/S. Totalkredit A/S only applies the statutory standardised approach, as the company does not have an approved internal VaR model.

To determine the VaR capital requirement, the time horizon has been scaled up to 10 days instead of 1 day as used in day-to-day management and limit monitoring. Total REA for general market risk in the portfolio is calculated daily under current as well as stressed market conditions by including:

- The largest losses over the past 12 months based on the current portfolio (VaR)
- The largest losses over a historical 12-month period when markets were particularly distressed based on the current portfolio (stressed VaR).

The period used to calculate stressed VaR is under constant review. Until the covid-19 outbreak in March 2020, the period of the Lehman Brothers collapse in September 2008 was used to calculate stressed VaR of Nykredit Realkredit. The Lehman Brothers crisis was characterised by significant yield spread widening, particularly on short-dated bonds, which had a large impact on covered bond positions with maturities of up to 5 years. Correspondingly, the covid-19 period in March 2020 was characterised by substantial widening of credit and yield spreads of long-dated callable covered bonds. Nykredit Realkredit's portfolio composition makes both periods relevant for the purpose of stressed VaR calculation.

At the beginning of the year, stressed VaR was still calculated based on the covid-19 crisis in March 2020. However, in February the stressed VaR period was changed back to the period of the Lehman Brothers crisis and has remained unchanged since then. One reason for this change was a reduction in credit spread risk in the trading book.

For Nykredit Bank, the period serving as the basis for stressed VaR calculation is still the financial crisis from 2008. This was not changed in connection with the covid-19 outbreak, as the composition of Nykredit Bank's portfolios is different compared with those of Nykredit Realkredit.

Total REA for market risk came to DKK 24.1 billion at end-2021. Nykredit's REA calculated using VaR models amounted to DKK 15.6 billion at end-2021, of which stressed VaR amounted to DKK 11.8 billion.

Thus, total REA was down DKK 16 billion on end-2020 when it amounted to DKK 40.1 billion.

The development was driven by trading book positions and the fact that the covid-19 outbreak in 2020 is no longer included in the period used to calculate VaR. VaR has consequently declined as a result of significantly lower price and interest rate volatility in financial markets in the current 12-month period. Lower VaR results in lower REA.

			2021	2020
	Specific risk	General risk	Total REA	Total REA
Internal models (VaR):	-	15,578	15,578	30,215
Value-at-Risk (99%, 10 days)	-	3,781	3,781	12,947
Stressed Value-at-Risk (99%, 10 days)	-	11,796	11,796	17,268
Standardised approach:	6,040	2,457	8,497	9,913
Debt instruments	4,806	2,340	7,146	7,847
Equities	1,234	22	1,256	1,811
Foreign exchange risk	-	-		-
Collective investment schemes	-	95	95	255
Settlement risk	-	-		-
Total market risk exposure			24,075	40,128

# Nykredit Realkredit Group

REA for market risk, trading book

# 7. LIQUIDITY RISK AND FUNDING

7.1 LIQUIDITY POLICY AND LIQUIDITY

**RISK GUIDELINES** 

- 7.2 CONTROL AND REPORTING
- 7.3 CURRENT RISK PROFILE AND

DEVELOPMENT

7.4 BALANCE PRINCIPLE AND MATCH FUNDING

### 7.5 REGULATORY REQUIREMENTS

- 7.5.1 Liquidity Coverage Ratio (LCR)
- 7.5.2 Liquidity reserves

7.5.3 Liquidity and funding benchmarks

- 7.5.4 Intraday liquidity risk
- 7.5.5 Supplementary collateral
- 7.5.6 Net Stable Funding Ratio (NSFR)
- 7.5.7 New covered bond regulation
- 7.5.8 Stress testing

# 7.6 FUNDING

- 7.6.1 Covered bonds
- 7.6.2 Green bonds
- 7.6.3 Funding schedule
- 7.6.4 Capital market funding
- 7.6.5 Issuance schedule

### 7.7 CREDIT RATINGS

- 7.7.1 S&P Global Ratings
- 7.7.2 Fitch Ratings
- 7.7.3 S&P Global Ratings key ratios
- 7.7.4 ESG ratings
- 7.8 ENCUMBERED ASSETS

Nykredit's liquidity risk is the risk that Nykredit is unable to fulfil its financial obligations and meet regulatory requirements and rating criteria in the short, medium and long term. Liquidity risk is also the risk of funding shortages, preventing Nykredit from pursuing the adopted business model, or the risk that Nykredit's costs of raising liquidity become prohibitive.

The composition of Nykredit's liquidity and funding is much affected by regulatory requirements and rating criteria. Nykredit therefore has a strong focus on existing and future requirements, including the Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR), Minimum Requirement for own funds and Eligible Liabilities (MREL), Additional Loss-Absorbing Capacity (ALAC), debt buffer and Supervisory Diamond benchmarks.

Throughout 2021 Nykredit maintained a high level of excess liquidity coverage, relative to regulatory requirements as well as to internal delegated guidelines and limits.

# 7.1 • LIQUIDITY POLICY AND LIQUIDITY RISK GUIDELINES

Nykredit's liquidity policy is laid down by Nykredit's Board of Directors and defines Nykredit's overall risk appetite in relation to its liquidity risk profile and funding structure. One aim of the liquidity policy is to ensure that Nykredit's funding and liquidity management supports its mortgage business and ensures competitive prices for customers and Nykredit, regardless of the market conditions. Furthermore, the liquidity management framework must sustain Nykredit's ability to maintain high credit ratings and its status as issuer of covered bonds.

In addition to the liquidity policy, Nykredit's Board of Directors has laid down guidelines on the day-to-day liquidity management. In accordance with the guidelines provided by the Board of Directors, the Executive Board delegates liquidity management limits to the Group companies through the Asset/Liability Committee.

The guidelines provide limits to Nykredit's day-to-day liquidity management and to short-, medium- and long-term management. Limits have also been set for the composition of the stock of liquid assets, the LCR, the NSFR, Nykredit Bank's deposits, the use and diversification of funding sources, leverage, MREL, the debt buffer, rating criteria as well as future regulatory requirements.

Nykredit prepares an annual report on areas such as liquidity management and the Internal Liquidity Adequacy Assessment Process (ILAAP), which is submitted to the Board of Directors and the Danish FSA for their review.

# 7.2 • CONTROL AND REPORTING

The risk control function continuously reports on the Group's liquidity and funding risk profile to the Board of Directors, the Board Risk Committee, the Executive Boards, the Asset/Liability Committee and the Group Risk Committee.

The current utilisation of risk limits is monitored and reported by Nykredit's risk control function and thus independently of the acting units. Also, the current utilisation of the limits set out in the guidelines is reported daily to the head of Nykredit's risk control function, the Chair of the Asset/Liability Committee and the heads and dealers of the acting units. Any breaches of these limits are reported by the risk control function to the Asset/Liability Committee, Executive Boards, the Board of Directors of Nykredit Realkredit or other Boards of Directors depending on the nature of such breaches.

Nykredit's Executive Boards and Boards of Directors as well as the Asset/Liability Committee oversee and evaluate the current liquidity and funding risks on a monthly basis, and this forms the basis for an annual review and approval of the liquidity policy and guidelines. The risk outlook is described in the quarterly reports to the Board of Directors, the Board Risk Committee and the Group Risk Committee.

# Liquidity and funding governance

Board of Directors and Board Risk Committee: Lay down the liquidity policy and the Board of Directors' liquidity risk guidelines, including risk appetite and limits.

Receive monthly reports on compliance with the liquidity policy and on the risk outlook. Receive separate reports, possibly including an action plan, in case of non-compliance with the policy or guidelines.

Executive Board and Asset/Liability Committee: Approve and implement the liquidity policy and the Board of Directors' guidelines and regularly review compliance based on quarterly and monthly reports. Receive separate reports and action plans in case of non-compliance with the policy or guidelines.

Risk control function (second line of defence): Perform continuous control and monitoring independently of the risk-taking units. Prepare independent reports for the Board of Directors and the Executive Board.

# 7.3 • CURRENT RISK PROFILE AND DEVELOPMENT

Nykredit's liquidity risk is still limited, and measured against the Board of Directors' guidelines, the risk level is low.

Throughout 2021, Nykredit maintained liquidity reserves considered adequate to withstand financial turmoil and meet any increased loan demand. Nykredit has a high level of excess liquidity coverage, relative to regulatory requirements as well as to internal delegated guidelines and limits.

The covid-19 crisis did not cause increased financial market uncertainty and volatility in 2021 as it did in the spring of 2020. 2021 did see periods of high volatility in the market for callable covered bonds, but this was due to structural changes in the covered bond market, such as increased regulation, high lending growth based on long-dated fixedrate bonds etc. Nykredit has had no difficulties selling bonds to fund its lending activities, but lower liquidity and volatility could discourage foreign investors, posing challenges during a crisis.

Housing price growth continued in H1/2021 and was followed by a flatter trend in H2. Rising property prices in recent years have contributed to Nykredit's high excess liquidity coverage, and Nykredit consequently remains comfortably within the Board of Directors' limits and regulatory liquidity requirements.

Nykredit Bank has also reduced its use of short-term funding sources over the past few years, thereby reducing its risk.

# 7.4 • BALANCE PRINCIPLE AND MATCH FUNDING

Nykredit's mortgage lending is governed by the balance principle, which provides limits to the financial risks Nykredit may assume in relation to lending and funding.

Nykredit operates according to the general balance principle, which allows the use of derivatives for risk hedging under certain conditions. In practice, Nykredit's mortgage lending is match funded. As a result, Nykredit's lending and related funding activities only involve negligible financial risks. Nykredit currently does not apply derivatives in connection with mortgage lending.

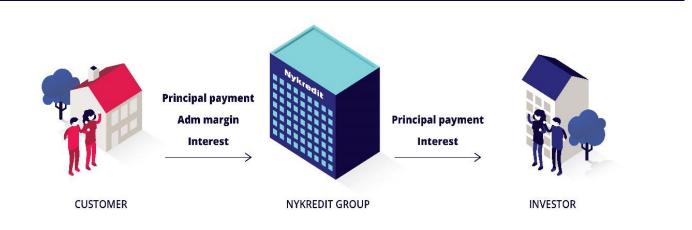
To eliminate interest rate risk and foreign exchange risk, the interest rate and foreign exchange terms of mortgage loans match those of the bonds funding the loans. Long-term fixed-rate loans maintain the same funding throughout the term of a loan. Adjustable-rate mortgages (ARMs) and variable-rate loans are funded by bonds with maturities shorter than the terms of the underlying loans, which are refinanced on maturity of the bonds. The loan rate is adjusted upon refinancing according to the yield-to-maturity of the new bonds sold.

The outstanding funding is reduced by principal payments and loan redemptions. Borrowers cover Nykredit's costs of redemption.

The due dates of payment of interest and principal are fixed so that Nykredit receives the funds on or before the dates when the payments to bondholders fall due, provided borrowers make timely payments.

Thus, match funding ensures a match between the interest and principal payments of a loan and the underlying funding. Nykredit's earnings margin consists of a separate so-called administration margin, which is most often calculated on the basis of borrowers' debt outstanding. In addition, various fees may be charged.

### Balance principle and match funding



# 7.5 • REGULATORY REQUIREMENTS

Legislation lays down a number of requirements for the structure and amount of Nykredit's liquidity and funding in the short, medium and long term. At end-2021 all requirements had been met. Over the next few years, new regulation will be introduced that will affect Nykredit's funding requirement.

# 7.5.1 - Liquidity Coverage Ratio (LCR)

Nykredit Realkredit Group

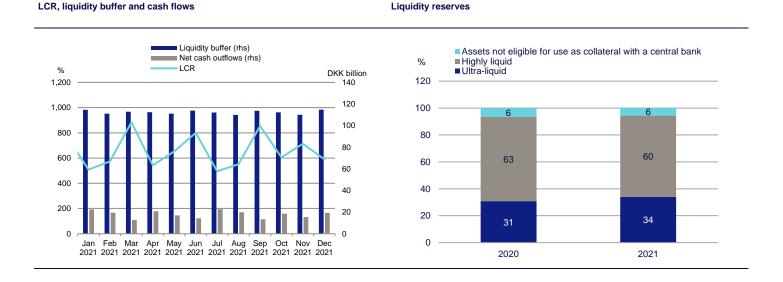
The regulatory requirement of LCR is used to assess Nykredit's shortterm liquidity risk. Nykredit's LCR reflects the share of liquid assets relative to net cash outflows over a 30-day period and must be at least 100%. Under this requirement, Nykredit must hold an adequate stock of liquid assets to withstand a liquidity stress for a period of at least 30 days.

As appears from the table below, Nykredit's LCR was 591% and the excess liquidity coverage was DKK 95.3 billion at end-2021. The aggregate LCR of Nykredit's mortgage banks was 2,305%, while Nykredit Bank's LCR was 213%. Liquid assets used to comply with the requirement of supplementary collateral in Nykredit Realkredit and Totalkredit are considered to be encumbered and consequently ineligible for the purpose of LCR determination. For more details, see 7.5.5 Supplementary collateral.

The Danish FSA has granted Nykredit permission not to include mortgage lending and its funding in the calculation of LCR for Nykredit Realkredit and Totalkredit. The permission was motivated by the fact that match funding limits liquidity risk in relation to mortgage lending and its funding. The condition for the permission is that Nykredit must comply with a minimum LCR requirement. This means that the stock of liquid assets must make up at least 2.5% of Nykredit Realkredit's and Totalkredit's total mortgage lending. At end-2021, liquid assets eligible for meeting the minimum requirement amounted to 3.5%, or DKK 47.9 billion. Over the next few years, the minimum LCR requirement will be replaced by an LCR Pillar II add-on. The add-on will cover a potential liquidity requirement resulting partly from remortgaging cases where borrowers have terminated an existing loan for prepayment but have not raised a new loan and partly from the liquidity risk related to borrowers in arrears. The Danish FSA has developed a model for this, which is expected to enter into force in mid-2022. The existing minimum LCR requirement will therefore be maintained for now. Talks are ongoing between the Danish FSA and the EBA about the exemptions applicable to Danish mortgage lending and funding in relation to LCR calculations. The outcome of these talks may be of significance to Nykredit, and also, the Danish FSA will adjust the future model according to potential changes in the calculation of LCR.

The Danish FSA has introduced an additional liquidity requirement concerning foreign currencies. Under this requirement, an LCR-like requirement must be met in respect of significant currencies except for SEK and NOK. The currency requirement contributes to ensuring a suitable currency match between liquid assets and cash flows. This requirement, which for Nykredit only concerns EUR, applies to the Nykredit Realkredit Group. The LCR in foreign currencies must be 100% or more. At end-2021, Nykredit's LCR in EUR was 392%.

Nykredit is under a statutory obligation to disclose derivatives exposures and their effect on the LCR. Nykredit uses derivatives to hedge risks relating to the stock of liquid assets. The market value of the derivatives portfolio will vary over time, which will impact Nykredit's posting of collateral. Therefore, when calculating the LCR, an amount is allocated to cover any negative fluctuations in required collateral.



Nykredit Realkredit Group

Risk and Capital Management 2021 - Nykredit Realkredit Group and Nykredit Group

# 7.5.2 • Liquidity reserves

Nykredit's liquidity reserves are exclusively made up of assets that can readily be converted into cash or which are eligible as collateral to obtain cash when required.

Nykredit's liquidity reserves may include

- Ultra-liquid assets; ie assets placed with Danmarks Nationalbank or the ECB
- Highly liquid assets; ie assets such as Danish and European government and covered bonds
- Assets not eligible for use as collateral with a central bank; ie negotiable securities with longer realisation periods.
   Securities in this group are mainly bonds not qualifying for the highly liquid category, credit bonds and equities.

In its liquidity policy, Nykredit has an overall policy for the size and quality of the liquidity buffer, based on the balance sheet structure and risk profile of the Group. At end-2021 the Group's liquidity reserves amounted to DKK 121 billion against DKK 113 billion at end-2020.

### 7.5.3 - Liquidity and funding benchmarks

The liquidity benchmark is included in the Supervisory Diamond for banks.

The liquidity benchmark is based on the LCR and must be 100%, but over a 3-month period. It means that Nykredit Bank must have sufficient liquidity to withstand a liquidity stress for a period of at least three months. At end-2021 Nykredit Bank's liquidity benchmark was 256%.

## 7.5.4 Intraday liquidity risk

Nykredit Bank's intraday liquidity risk is the risk that the Bank will not be able to meet its intraday financial obligations. Nykredit Bank actively controls, manages and monitors its intraday liquidity risk.

The intraday liquidity risk of Nykredit Realkredit and Totalkredit is limited, as the mortgage lending model is designed so as to eliminate any structural intraday liquidity requirement.

Liquidity Coverage Ratios		
DKK billion	31.12.2021	31.12.2020
Nykredit Realkredit Group		
LCR (%)	591	756
Excess liquidity coverage (DKKbn)	95.3	93.4
LCR, EUR (%)	392	422
Nykredit Realkredit and Totalkredit		
LCR (%)	2,305	5,064
Excess liquidity coverage (DKKbn)	36.1	31.0
Nykredit Bank		
LCR (%)	213	178
Excess liquidity coverage (DKKbn)	34.2	22.0

### 7.5.5 - Supplementary collateral

In order for the Capital Centres E and H to comply with CRR requirements for covered bonds, Nykredit must provide supplementary collateral for loans in case of property price declines where the LTV ratios exceed the statutory LTV limits.

Supplementary collateral is not required for public housing loans issued through Capital Centre J, as these loans and bonds are government guaranteed.

As the prices of commercial and residential property have generally risen in recent years, the supplementary collateral requirement has decreased. The supplementary collateral requirement for Capital Centres E and H amounted to DKK 6.6 billion at end-2021 against DKK 9.7 billion at end-2020.

It is Nykredit's policy to have a collateral buffer in case of declining property prices. The minimum buffer is determined by means of stress testing.

Thanks to the buffer, Nykredit would have been able at end-2021 to absorb an immediate property price decline of about 26% without additional funding. The funding of the debt buffer requirement and the minimum requirement for own funds and eligible liabilities (MREL) raises Nykredit's ability to absorb a property price decline.

### 7.5.6 • Net Stable Funding Ratio (NSFR)

The NSFR is a liquidity metric that took effect in 2021. The purpose of the NSFR is to ensure that credit institutions apply sufficiently stable, long-term funding when issuing loans. The NSFR is the ratio of an institution's amount of available stable funding to the amount of its required stable funding. To meet the NSFR requirement, this ratio must be at least 100%. The level of stable funding is calculated by weighting assets according to their liquidity and maturity. Funding with times-to-maturity of more than one year is considered more stable than other types of funding.

At end-2021 the NSFR was 157%.

### 7.5.7 New covered bond regulation

The EU has adopted a Covered Bond Directive aimed at harmonising and strengthening existing covered bond regulation. The Covered Bond Directive enters into force in July 2022.

Overall, the Directive will not cause significant changes to the Danish mortgage system. However, it does include aspects which may be of significance to Nykredit's funding. For instance, a minimum overcollateralisation (OC) requirement of 2% is introduced, potentially increasing the OC funding requirement.

### 7.5.8 • Stress testing

To sustain Nykredit's business model and also to ensure that Nykredit has sufficient liquidity to meet regulatory requirements, liquidity stress tests are conducted for the short, medium and long term. They show the development in excess liquidity coverage in an expected scenario and in stress scenarios, taking into account regulatory requirements and rating criteria.

The stress tests show the resilience of the liquidity position in a situation where Nykredit has no access to a significant part of its usual funding sources, while at the same time external factors have an adverse impact on liquidity in the stress scenarios.

The stress tests are based on a number of scenarios: An expected scenario, an institution-specific scenario, a market-specific scenario and a combination stress scenario in which the institution-specific and market-specific scenarios occur at the same time.

Excess liquidity coverage is determined according to a set of regulatory and rating agency criteria.

The Board of Directors and the Asset/Liability Committee have set limits for excess liquidity coverage in an expected scenario on a 12month horizon and for the most severe of the three above stress scenarios on a 6-month horizon.

# 7.6 • **FUNDING**

Nykredit has a sizeable balance sheet and extensive market activities for the purpose of funding the Group's lending. This includes daily tap issuance to fund Nykredit's mortgage lending. Moreover, Nykredit regularly refinances ARMs, floating-rate loans etc. Nykredit also issues capital market funding to comply with regulatory requirements and rating criteria.

Nykredit raises funding in the following markets:

- Covered bonds (SDOs and ROs)
- Senior secured debt (currently not issued)
- Secured and unsecured bank loans
- Senior unsecured debt
- Senior non-preferred (SNP) debt
- Tier 2 and Additional Tier 1 capital

As shown in the chart below, covered bond issues are the primary funding source. For the Bank, the primary source is deposits.

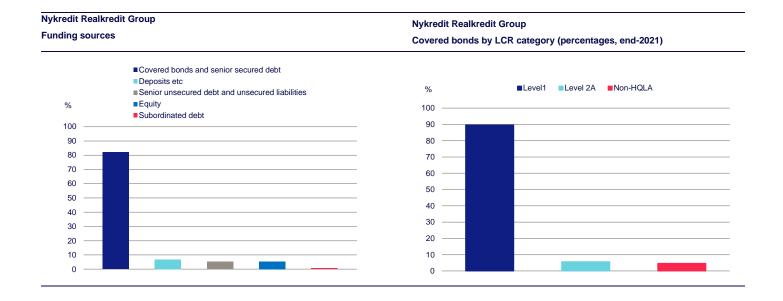
### 7.6.1 • Covered bonds

Nykredit's balance sheet mainly consists of lending secured by mortgages on real estate funded through the issuance of covered bonds (SDOs and ROs). Mortgage covered bonds are issued through daily tap issuance coupled with refinancing auctions for ARMs, floatingrate loans etc.

Nykredit strives to build large, liquid benchmark bond series to obtain an effective pricing of its bonds. Nykredit Realkredit and Totalkredit's joint bond issuance contributes to creating large volumes and high liquidity in the Group's key bond series.

In 2021 Nykredit had primary dealer arrangements with a number of securities brokers for the purpose of underpinning liquidity in the bond series and ensuring consistent market making in and efficient pricing of Nykredit's bonds. Nykredit's primary dealer arrangement with Nordea terminated at end-2021. This is not expected to affect the pricing of Nykredit's bonds.

Due to the rules determining which liquid assets are eligible for the LCR calculation, many banks prefer to invest in bonds with outstanding amounts of more than EUR 500 million and high credit ratings. As shown in the chart below, as much as 90% of the outstanding amounts of Nykredit's active bond series are today classified in the top LCR category (Level 1), while 6% are in the second-best category (Level 2A).



Nykredit strives to have a range of bonds that best suits customers' needs while at the same time meeting investors' increased preference for very liquid bond series. The chart below shows Nykredit's products and the distribution of Nykredit's mortgage lending.

Over the past few years, Nykredit has reduced its refinancing risk. As shown in the chart Refinancing auctions, covered bonds (SDOs and Ros) below, adjustable-rate mortgages (ARMs) funded by 1-year and 3-year bullet covered bonds represent a decreasing share of total mortgage lending. Because of the low interest rate levels, borrowers increasingly choose loans funded by bonds with longer maturities from 5 to 30 years. Nykredit's annual refinancing volumes are expected to be maintained at around DKK 140 billion going forward.

To support the liquidity of bullet covered bonds, Nykredit is working towards a gradual phase-out of the refinancing of ARMs on 1 April and 1 October. Going forward, the refinancing of ARMs will be concentrated on the payment dates of 1 January and 1 July. Other products, such as Cita-linked loans, will continue to be refinanced on 1 April and 1 October, which serves to even out the maturing bond volumes over the individual payment dates. Over the past few years, Nykredit has introduced quarterly refinancing auctions with almost equal refinancing volumes, see the chart below.

### Nykredit Realkredit Group

Refinancing in 2022	
DKK billion	2021
Refinancing <sup>1</sup>	
Total maturity before set-off of self-issued bonds	230.5
- ordinary principal payments and scheduled <sup>2</sup>	
prepayments (settled)	40.6
- ordinary principal payments and scheduled <sup>2</sup>	
prepayments (not settled)	22.6
- pre-issued bonds and interest rate risk <sup>2</sup>	(0.1)
Total refinancing volume	167.3
- pre-auctioned amount sold under forward contracts	(28.4)
Refinancing volume remaining for 2022	138.9
<ul> <li>of which SDOs and ROs</li> </ul>	138.7
- of which other issues	0.2

<sup>1</sup> Applicable for the January, April, July and October 2022 payment dates.

<sup>2</sup> Known as at 31 December 2021.

### DKK billion February November Mav August 250 200 150 100 50 0 2015 2017 2018 2019 2021 2016 2020 Forecast 2022

### 7.6.2 • Green bonds

Nykredit's green mortgage loans are offered to finance energy-efficient buildings with energy label A or B or equivalent certification. The loans are currently offered to corporate clients. About DKK 21.8 billion-worth of green bonds had been issued at end-2021. Nykredit also offers a series of green banking products.

Nykredit's Green Bond Framework, which was established in compliance with ICMA's Green Bond Principles (GBP), describes the principles of green loans and determines which sustainable assets are eligible for financing with green bonds.

### 7.6.3 • Funding schedule

Nykredit Realkredit Group

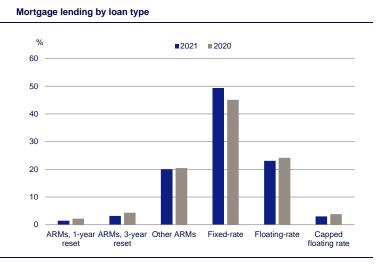
Nykredit's future funding requirement depends on the volume of loans with refinancing, expected new lending as well as new regulatory requirements and rating agency criteria. The funding of senior and subordinated debt is centralised in Nykredit Realkredit, meaning that funding is managed and issued by Nykredit Realkredit and distributed to Totalkredit and Nykredit Bank as required.

Nykredit issues covered bonds (SDOs and ROs) to fund new mortgage lending and the refinancing of existing mortgage loans. See 7.6.5 *Issuance schedule* for expected issuance at refinancing auctions in 2022.

Bond issuance is distributed fairly evenly over the quarters, reflecting Nykredit's aim of spreading loan refinancing over the different payment dates. Also, Nykredit seeks a funding profile with a limited amount of short-term funding.

Nykredit expects to refinance DKK 149 billion-worth of covered bonds at auctions in 2021 and 2022. In addition, Nykredit expects to issue about DKK 200 billion-worth of bonds through tap issuance.

Senior non-preferred debt will largely replace senior secured debt and senior preferred debt, which has been used historically by Nykredit to meet the existing supplementary security and overcollateralisation (OC) requirements and the MREL requirement for Nykredit Bank A/S.



# Nykredit Realkredit Group Refinancing auctions, covered bonds (SDOs and ROs)

### 7.6.4 - Capital market funding

Nykredit raises capital market funding mainly for the purpose of meeting regulatory capital requirements.

In 2021 Nykredit issued senior non-preferred debt of approximately DKK 12.6 billion to meet the debt buffer/MREL requirements. Senior non-preferred debt in issue totalled DKK 50.1 billion at year-end.

As at 31 December 2021, the Bank's senior unsecured debt consisted of short-term euro commercial paper (ECP) of DKK 4.4 billion.

Debt raised to fund Nykredit Bank is issued by Nykredit Realkredit and distributed to Nykredit Bank as long-term intercompany funding.

The total funding and ECP issuance need will depend on the development in customer deposits and lending as well as the Bank's other business activities. The chart below shows the current maturity profile of Nykredit's capital market funding.

### 7.6.5 • Issuance schedule

Nykredit Realkredit will continue to issue covered bonds through tap issuance and at refinancing auctions.

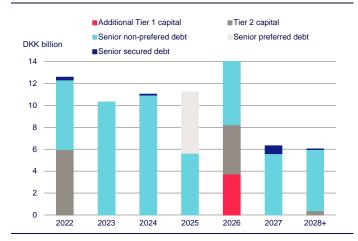
Nykredit expects to refinance bonds worth DKK 38 billion and DKK 29 billion at the auctions in February and May 2022, and DKK 39 billion and DKK 33 billion at the auctions in August and November 2022.

Nykredit expects to issue up to DKK 15-20 billion-worth of capital market funding in 2022.

ECP issuance will continue through Nykredit Bank.

# Nykredit Realkredit Group

# Maturity profile of capital market funding



Nykredit Realkredit Group		DKK million
Bonds in issue	31.12.2021	31.12.2020
Covered bonds (ROs)	124,927	138,260
Covered bonds (SDOs)	1,351,177	1,282,909
Senior secured debt	853	852
Senior preferred debt,		
Nykredit Bank A/S	-	516
Senior preferred debt,		
Nykredit Realkredit A/S	5,577	5,579
Senior non-preferred		
debt	50,098	41,651
Tier 2 capital	10,737	10,893
Additional Tier 1 capital, Nykredit Realkredit A/S	3,706	3,720
ECP issues, Nykredit Bank A/S	4,415	4,885

# 7.7 • CREDIT RATINGS

Nykredit Realkredit and Nykredit Bank collaborate with international credit rating agencies S&P Global Ratings (S&P) and Fitch Ratings regarding the credit rating of the Group's companies and their funding.

### 7.7.1 - S&P Global Ratings

S&P has assigned Nykredit Realkredit and Nykredit Bank long-term and short-term Issuer Credit Ratings of A+/A-1 with a stable outlook and long-term and short-term Resolution Counterparty Ratings of AA-/A-1+.

Senior non-preferred debt has a BBB+ rating with S&P.

Covered bonds (SDOs and ROs) issued by Nykredit Realkredit and Totalkredit through rated capital centres are all rated AAA by S&P, which is the highest possible rating. The rating outlook is stable.

Covered bonds initially issued by LR Realkredit are not and will not be rated.

# 7.7.2 • Fitch Ratings

Nykredit Realkredit and Nykredit Bank each have long-term and shortterm Issuer Credit Ratings of A/F1 with Fitch and long-term and shortterm senior preferred debt ratings of A+/F1.

Senior non-preferred debt is rated A by Fitch.

# Nykredit Realkredit Group

Credit	ratings
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Credit ratings			
End-2021	Nominal DKK billion <sup>1</sup>	S&P	Fitch
Covered bonds (SDOs, ROs)			
Nykredit Realkredit A/S			
- Capital Centre C (covered bonds, RO)	0.3	AAA	
- Capital Centre D (covered bonds, RO)	14.4	AAA	
- Capital Centre E (covered bonds, SDO)	668.9	AAA	
- Capital Centre G (covered bonds, RO)	65.7	AAA	
- Capital Centre H (covered bond, SDO)	646.4	AAA	
- Capital Centre H (senior secured bonds)	8.2	AAA	
- Capital Centre I (covered bonds, RO)	0.2	AAA	
- Nykredit Realkredit In General (covered bonds, RO)	0.3	AAA	
Totalkredit A/S			
- Capital Centre C (covered bonds, RO)	3.5	AAA	
Other ratings			
Nykredit Realkredit A/S			
- Short-term Resolution Counterparty Rating		A-1+	
- Long-term Resolution Counterparty Rating		AA-	
- Short-term Issuer Credit Rating		A-1	F1
- Long-term Issuer Credit Rating		A+	А
- Short-term senior unsecured debt		A-1	F1
- Long-term senior unsecured debt		A+	A+
- Senior non-preferred (SNP) debt		BBB+	А
- Tier 2 capital		BBB	BBB+
- Additional Tier 1 capital		A-1+	
Nykredit Bank A/S			
- Short-term Resolution Counterparty Rating		A-1+	
- Long-term Resolution Counterparty Rating		AA-	
- Short-term Issuer Credit Rating		A-1	F1
- Long-term Issuer Credit Rating		A+	А
- Short-term senior unsecured debt		A-1	F1
- Long-term senior unsecured debt		A+	A+
- Short-term deposits		A-1	F1
- Long-term deposits		A+	A+

<sup>1</sup> Bonds in issue at nominal value at 31 December 2021.

### 7.7.3 - S&P Global Ratings key ratios

In its rating criteria, S&P Global Ratings (S&P) has included a number of key ratios defined by S&P itself. These key ratios form part of S&P's overall credit rating of an institution.

### Additional Loss-Absorbing Capacity (ALAC)

S&P's criteria provide for a rating upgrade if the level of additional lossabsorbing capacity (ALAC) is sufficiently high. In December 2021 S&P revised its criteria, and ALAC now consists of Tier 2 capital and senior non-preferred debt designated to absorb losses in case of Nykredit's recovery or resolution, thus protecting ordinary senior debt.

ALAC is expressed as a percentage of risk-weighted assets determined according to S&P's calculation method (S&P RWA). An ALAC maintained at 6% of S&P RWA or higher will currently trigger a 2-notch uplift of Nykredit's Issuer Credit Rating/senior rating. At end-2021 Nykredit's ALAC was 8.6%.

### Overcollateralisation behind bond rating

When rating the Danish covered bonds issued by Nykredit Realkredit and Totalkredit, S&P applies its criteria to assess the collateral posted in the capital centres. In addition to the security by way of mortgages on real estate, Nykredit has overcollateralisation (OC) in the form of liquid securities. To obtain the highest possible rating (AAA), OC of at least DKK 61.8 billion must be provided. The required OC is determined as the result of S&P's individual assessments of the OC requirement for each individual mortgage loan. Each assessment includes a large number of parameters, including property type, location, LTV ratio, loan type and payment history. In total, Nykredit Realkredit and Totalkredit had liquid assets of DKK 95.2 billion eligible for OC purposes at end-2021.

### 7.7.4 • ESG ratings

ESG ratings (Environmental, Social and Governance) are a tool used by investors and other stakeholders to assess a company's position in terms of sustainability, corporate responsibility and governance.

Nykredit currently focuses on ESG rating agencies MSCI and Sustainalytics, which consider all ESG factors, as well as on the CDP (Carbon Disclosure Project), which assesses the environmental impact of businesses. These agencies have published unsolicited ratings of Nykredit based solely on publicly available information.

Sustainalytics has revised Nykredit's ESG Risk Rating twice, in April and October 2021. Sustainalytics still considers Nykredit's ESG risk to be low. Furthermore, MSCI raised Nykredit's ESG Rating from A to AA in May 2021.

The table below shows Nykredit's ESG ratings.

# Nykredit Realkredit Group

ESG ratings	at	31.12.2021
-------------	----	------------

End-2021	Nykredit's rating	Scale <sup>1</sup>
MSCI	AA	AAA to CCC
Sustainalytics	16.9	0 to 100
CDP	A-	A to D-

<sup>1</sup>Highest to lowest rating.

# 7.8 • ENCUMBERED ASSETS

Nykredit's main activity is to provide loans secured by mortgages on real estate. Nykredit's mortgage lending to customers is match funded through the issuance of bonds. The loans remain on Nykredit's balance sheet until they mature, and they are ring-fenced to ensure timely payments to bond investors in the event that Nykredit should default. Ring-fencing assets for creditors/investors is referred to as asset encumbrance. Liquid assets used to comply with the requirement of supplementary collateral are considered to be encumbered for the purpose of LCR determination.

Moreover, Nykredit provides collateral in connection with derivatives trading and repo transactions. Nykredit provides collateral to other credit institutions for movements in the market value of Nykredit's OTC derivatives contracts and margin collateral in connection with exchange-traded derivatives. Nykredit also provides collateral to central clearing counterparties (CCPs). Such collateral is also considered to be encumbered assets.

Encumbered assets made up 82% of Nykredit's total assets at end-Q3/2021<sup>1</sup>, the same level as at end-2020. It is natural that Nykredit should have a relatively high asset encumbrance ratio. It follows from the Danish mortgage lending model under which mortgage loans serve as collateral in favour of bondholders in the individual capital centres. The vast majority of the encumbered assets are in DKK. After netting for accounting purposes, encumbered assets in EUR are not significant.

Totalkredit's mortgage lending is also encumbered. The lending activities of Totalkredit and Nykredit Realkredit are jointly funded, which means that most of their mortgage lending is subject to intercompany encumbrance.

Nykredit's asset encumbrance is monitored and reported to the Danish FSA on a quarterly basis. The level of asset encumbrance is stable over time.

### Encumbered assets

DKK million	31.12.2021	31.12.2020
Total encumbered assets	1,378,931	1,368,043
- of which derivatives collateral	1,226	3,429
- of which repo contracts	12,665	12,902
- of which central bank funding	0	0
- of which SDO issues	1,362,760	1,349,147
- of which other assets	2,280	2,564
Total encumberable assets	1,686,509	1,664,349
Asset encumbrance ratio	82%	82%