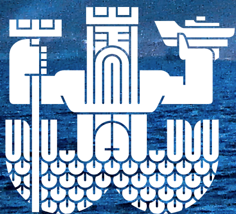
DANISH SHIP FINANCE 2020

Risk Report



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SCOPE

This Risk and Capital Management Report is presented for the Danish Ship Finance Group (referred to as the Group) on a consolidated basis as well as the subsidiary Danish Ship Finance A/S (referred to as DSF) on a standalone basis.

All economic activity in the Group is carried out by DSF. The holding company, Danish Ship Finance Holding A/S (DSH), has no business activities apart from its ownership of DSF. The pronouns 'we' and 'our' are used to refer to DSF and the Group where the specific entity is not important.

This report describes the various risks to which the Group and DSF are exposed and the associated risk capital requirements. This report also details the composition of the capital base and the various risk and capital management methodologies employed in the Group.

Further information about risks and risk management can be found in the DSF Annual Report.

Reporting pursuant to the statutory disclosure requirements is conducted annually in conjunction with the presentation of financial statements. A regulatory capital adequacy assessment is published quarterly.

As there is no audit requirement, the Risk and Capital Management Report 2020 is presented in unaudited form.

Additional Pillar 3 disclosures required under Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 (CRR) and the Danish Executive Order on Calculation of Risk Exposure, Own Funds and Solvency Need can be downloaded from:

→ www.shipfinance.dk

Legal framework

DSF is governed by its own dedicated legislation in the form of the Act on a Ship Finance Institute (the Act) and the Executive Order on a Ship Finance Institute (the Executive Order).

DSF is also governed by:

- The Executive Order on the Issue of Bonds, the balance principle and Risk Management (the Bond Executive Order)
- The Executive Order on Calculation of Risk Exposures, Own Funds and Solvency Need
- The Executive Order on Governance for Credit Institutions (the Executive Order on Governance)
- The Executive Order on Financial Reports for Credit Institutions and Investment Firms, etc. (the Executive Order on Financial Reports)

Pursuant to the Act and the Executive Order, the Group is governed by parts of the Danish Financial Business Act and the Regulation on prudential requirements for credit institutions and investment firms (CRR) via the Executive Order.

DANISH SHIP FINANCE

THE YEAR IN SUMMARY

In April 2019, the European Union approved new legislation on minimum loss coverage for non-performing loans (NPL backstop). The legislation will come into effect for the calculation of the CET 1 ratio starting as at 26 April 2021. We are currently in dialogue with the Danish authorities regarding the specific mechanisms, ensuring appropriate capital calculation with respect to the collateral value of ship mortgages (as for real estate) across capital adequacy methodologies.

The revised Capital Requirements Directive and Regulation, commonly referred to as CRD V and CRR II, was adopted in May 2019 by the European Council and the European Parliament and published in the Official Journal of the European Union in June 2019.

Upcoming changes in CRD V and CRR II are expected to include reporting under a revised market risk framework, a new standard approach for counterparty credit risk, a revised large exposure framework, a revised leverage ratio requirement, a revised net stable funding ratio requirement, and revised disclosure requirements. We are preparing to implement the relevant parts of this legislation, which will largely come into force during 2021.

In 2021, the European Commission is expected to present a first draft of CRR III, which will incorporate Basel IV into European legislation. The changes to the CRR will include revised standard approaches for credit risk, operational risk and market risk, and a revised CVA framework. We do not expect new output floors applying to IRB models, implemented with CRR III, to have any effect on our capital calculations under the Standard approach.

Development in key risk figures for DSF

DKK MILLION / %	2020	2019
Capital		
Own funds (less deductions)	9,156	9,065
Total risk exposure amount	41,042	49,020
Internal capital adequacy requirement, incl. buffers	12.0%	12.5%
Total capital ratio	22.3%	18.5%
Excess coverage	10.3%	6.0%
Leverage ratio	13.8%	12.3%
Funding and liquidity		
Liquidity coverage ratio (LCR)	572%	724%
Net stable funding (NSFR)	165%	152%
Issuer rating – S&P	BBB+ (Stable)	BBB+ (Stable)
Covered bond rating – S&P	A (Stable)	A (Stable)
Asset quality		
Annual loan impairment ratio	0.3%	0.0%
Accumulated loan impairment charges as % of loan book (year-end)	3.9%	4.9%
Net NPL ratio	4.2%	6.3%

RISK AND CAPITAL PROFILE

DSF is a leading provider of ship financing internationally and domestically and is among the 20 largest lenders to the shipping industry globally.

Financing to shipowners is only provided against first lien mortgages on vessels. On a limited scale, we may also finance clients' payment of instalments to shipyards. Our lending to shipowners, in line with market practice, is mostly denominated in USD and to a lesser extent in other currencies.

We fund our lending activity through the issuance of DKK-denominated ship mortgage bonds under Danish law from the DSF Capital Centre Institute in General and, since March 2019, issuance of EUR-denominated CRR-compliant covered bonds (SDO) from the DSF Capital Centre A. Although EUR bonds remain a smaller share of our overall funding compared to DKK bonds, we strive to ensure similar risk profiles and equally robust operating procedures and controls around Capital Centre A and Capital Centre Institute in General.

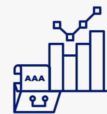
Bonds issued out of either capital centre are listed on Nasdaq Copenhagen and have been assigned ratings of 'A (Stable)' by Standard & Poor's Global Ratings.

Our business model naturally leads to a foreign exchange mismatch between loans and bonds in different currencies. This mismatch is hedged with financial counterparties, subject to the strict requirements of the Danish specific balance principle.

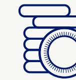
Risk types

The Group is exposed to credit risk, market risk, liquidity risk, and various types of operational risk:

Credit risk, defined as the risk of losses arising from clients or financial counterparties failing to meet their payment obligations, is the primary risk related to the business model. Credit risk primarily stems from the risk that shipowners default on their obligations towards us or, more remotely, the default of a financial counterparty with a credit exposure to the Group.



Market risk is the risk of losses due to factors that affect the overall performance of the financial market. Our exposure to market risk mainly stems from direct and indirect effects of changes in interest rates and USD/DKK, EUR/USD or DKK/NOK exchange rates on our loan book or capital reserves.



Liquidity risk is the risk of not being able to fulfil a payment obligation when due. Liquidity risk primarily arises from a maturity mismatch between the Group's payment obligations in DSF to e.g. bondholders, financial counterparties or lending clients and the amount of liquidity available at any one time. This risk is partly mitigated by a requirement to pre-fund all loans and commitments to clients under the Danish specific balance principle and is further managed subject to strict liquidity limits and regularly stress tested.

Operational risk is the risk arising from breakdowns in our internal procedures, or failures of people or systems. In this category, we also consider structural risks to our business model and the risk of material damage to our reputation.

RISK GOVERNANCE

We have a two-tier management structure, reflecting statutory requirements for listed Danish companies and the provisions laid down in the Danish Financial Business Act. The Board of Directors lays down overall policies, while the Executive Board is responsible for the day-to-day management of the Group.

The Board of Directors is responsible for ensuring that the Group has an appropriate organisational structure, and that risk policies and limits are established for all important risk categories, including handling and monitoring of such risks. The Board of Directors has laid down guidelines for the Executive Board, clearly specifying the areas of responsibility and scope of action for management. In addition, new lending above certain limits must be submitted to the Board of Directors for approval.

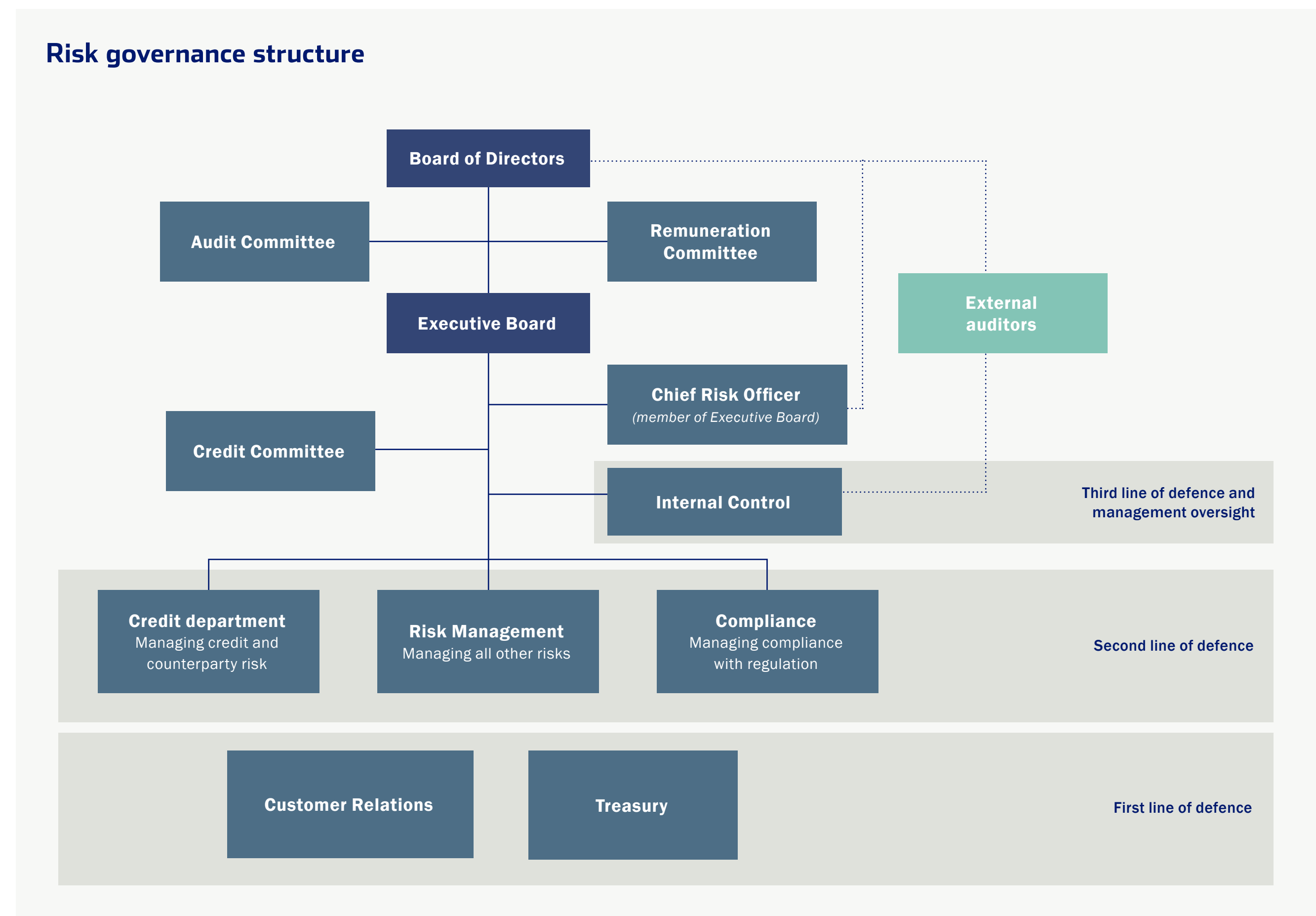
The Board of Directors has appointed a Chief Risk Officer with responsibility for monitoring and reporting on the risk management processes of the Group. The Executive Board has established a Risk Management function with the purpose of identifying, analysing and monitoring all risks except for credit risk. The Credit department is responsible for monitoring and reporting on credit risk, arising from lending activities and financial counterparties.

The Head of Compliance is responsible for monitoring compliance with applicable legislations, market standards and internal policies, and for ensuring that the Group applies effective techniques and procedures suitable for identifying and mitigating the risk of non-compliance. The Head of Compliance is also in charge of implementing, and ensuring management focus on, effective measures to prevent anti money laundering and terrorist financing.

Board committees

The Board of Directors has set up two committees: the Audit Committee and the Remuneration Committee. These committees are responsible for preparatory work and assist the Board of Directors in decision-making.

The Audit Committee is responsible for overseeing accounting and audit matters and for preparing accounting and audit-related topics for consideration by the Board of Directors. The Audit Committee consists of four members of the Board of Directors. The Chairman of the Board of Directors is not a member of the Audit Committee.



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The Remuneration Committee undertakes preparatory work and assists the Board of Directors in preparing the Group's remuneration policy. The remuneration policy is adopted at the general meeting . The chairman of the Board of Directors chairs the Remuneration Committee. The total remuneration of the Board of Directors, the Executive Board and employees whose activities are deemed to have a material impact on the company's risk profile is specified in Annex 9.

Internal audit

The Group is not required to have, and currently does not have, an internal audit function. To promote a robust control environment and support the work of the external auditors, an internal control function is in place. This function reports to the Executive Board.

In accordance with applicable legislation, the Board of Directors, including the Audit Committee, regularly assesses the need for establishing an internal audit function.

Reporting

The Board of Directors is provided with reports on a regular basis to ensure that its members possess the necessary information concerning our risk levels and trends. Based on these reports, the Board of Directors assesses the overall policies, framework and principles for risk and capital management.

Overview of risk reports

Report	Frequency	Applicable legislation
Internal management report	Monthly/Quarterly	The Executive Order on Governance for Credit Institutions The Executive Order on Financial Reports
Treasury reporting	Quarterly	The Executive Order on Financial Reports
Stress test	Quarterly	The Executive Order on Governance for Credit Institutions
Credit reporting	Quarterly	The Executive Order on Governance for Credit Institutions
Loan impairment review	Semi-annually	The Executive Order on Governance for Credit Institutions
Compliance reporting	Annually	The Executive Order on Governance for Credit Institutions
Internal solvency, ICAAP	Annually	Guidelines on Adequate Capital Base and Solvency Needs for Credit Institutions
Internal liquidity adequacy assessment, ILAAP	Annually	Guidelines on Calculation and Assessment of the Liquidity Position and Liquidity Risks
Recovery plan	Annually	The Danish Financial Business Act
Report from the Chief Risk Officer	Annually	The Executive Order on Governance for Credit Institutions
Statement to be used for risk assessment	Annually	The Executive Order on Governance for Credit Institutions
Annual asset review	Annually	The Executive Order on Governance for Credit Institutions
IT Risk assessment	Annually	The Executive Order on Governance for Credit Institutions
Sustainability report	Annually	The Executive Order on Financial Reports

Capital and risk management framework

Prudent risk management is pivotal to our activities and crucial to ensure the long-term viability of our highly specialised business model. We have a strong culture of risk awareness and long-term decision making and stringent requirements for day-to-day monitoring and management of risks. We maintain strong capital and liquidity buffers well beyond regulatory minimum requirements.

The Board of Directors defines risk policies and principles of risk and capital management. The purpose of the policies is to establish acceptable limits for risks.

Capital management

The Board of Directors requires us to maintain sufficient own funds for lending activity in DSF to continue, even in the event of large cyclical fluctuations in the shipping industry and adverse business conditions. Our capital is managed at a level deemed sufficient to underpin the credit rating of the issued bonds.

Credit and counterparty risk

In our credit risk management activities, we distinguish between credit risk relating to lending to clients and credit risk relating to transactions with financial counterparties.

Our efforts are founded on the limits set out in the credit risk and counterparty risk policies. The policies build on the provisions of the company's own Act and the Executive Order, stipulating, among other things, that the Board of Directors must lay down risk diversification rules.

Market risk

Market risk is governed by limits laid down in the Bond Executive Order and the Executive Order. Limits specified in our internal policy further mitigate market risk.

The overall objective is to safeguard our capital adequacy, to make sure that interest rate- and foreign exchange risks are managed either by hedging or through controlled open positions and to achieve an adequate financial return within the risk targets defined.

Liquidity risk

Liquidity risk is prudently managed under the specific balance principle in accordance with the Bond Executive Order. In addition, the liquidity risk policy defines risk limits to ensure adequate liquidity at all times.

Liquidity is managed with the objective of ensuring continued access to funding on adequate terms and to avoid any situation where lack of funding could challenge the business model. Ultimately, the aim of the liquidity management framework is to ensure that we are consistently able to meet our payment obligations even under stressed market conditions.

Operational risk

Operational risk is governed by the operational risk policy issued by the Board of Directors. The policy sets out the overall framework for identifying, evaluating and managing operational risk and is supplemented by operating procedures and internal controls.

On an ongoing basis, we register losses and potential loss events deemed to be attributable to operational risk. The registration is used as a basis for assessing the adequacy of controls, processes, operating procedures, etc. If required, these may from time to time be adjusted to increase the resilience to operational risks.

CAPITAL PROFILE

Key developments

The regulatory solvency ratio for DSF increased to 22.3% at year-end 2020 (18.5% at year-end 2019) mainly due to a smaller loan book.

DSF's internal capital adequacy requirement, including buffers, amounted to 12.0% at year-end 2020 (12.5% at year-end 2019).

The Board of Directors and the Executive Board are mandated to prudently manage capital such that adequate own funds are always maintained.

Adequate own funds are defined as the minimum capital required, in the view of the Board of Directors and the Executive Board, to ensure only a remote risk of the Group becoming distressed or insolvent during the following 12-month period such that bondholders could be exposed to a potential loss. Bondholders are subject to further protection under the specific balance principle.

The Group's and DSF's capital are deemed adequate to meet the above-mentioned objective. As at 31 December 2020, the Group's total capital ratio was 18.6%. The total capital ratio for DSF separately (the risk-bearing entity) was 22.3%.

AVAILABLE OWN FUNDS

The Group's own funds net of deductions amounted to DKK 7,731 million as at 31 December 2020 (against DKK 8,911 million at year-end 2019). In DSF, own funds amounted to DKK 9,156 million (against DKK 9,065 million in 2019).

The Group's own funds consist of common equity Tier 1 capital (CET1) in the form of share capital and tied-up reserve capital in DSF, retained earnings from previous years, and a subordinated Tier 2 debt instrument in DSH.

The tied-up reserve capital was established in 2005 when DSF was converted from a foundation into a limited liability company. The amount has remained unchanged at DKK 8,343 million.

The tied-up reserve capital may only be used to cover losses that cannot be covered by the amounts available for dividend distribution. In the event the tied-up reserve capital is used to cover losses, the tied-up reserve capital must, to the greatest possible extent, be restored by a priority claim on profit in the subsequent years. Hence, no dividends may be paid, and no distributions made in connection with capital reductions, until the tied-up reserve capital has been restored to the original nominal amount.

DSH has issued Tier 2 capital on terms and conditions that meet the requirements for inclusion in the Group's own funds as a Tier 2 instrument under the CRR. The Group's Tier 2 capital, amounting to a nominal sum of DKK 2 billion, was provided by the pension fund PFA and pension funds under management by PKA. These pension funds are shareholders of DSH. Annex 2 details the terms and conditions of the Tier 2 capital.

The development in available own funds is determined primarily by net profit for the year and the dividend policies of the Group companies DSH and DSF.

The FSA has ruled that the tied-up reserve capital shall be included in the determination of consolidated capital adequacy at an amount corresponding to the tied-up reserve capital's proportionate share of the capital requirement.

The share of the tied-up capital that may be included is calculated according to the following formula:

$$\text{Share} = \frac{\text{Tied-up reserve capital}}{\text{Total CET1 capital}} * (\text{Capital requirement} * \text{total exposure})$$

Calculation of capital ratio

	Group		DSF	
DKK MILLION	**2020**	**2019**	**2020**	**2019**
Own funds less deductions	7,731	8,911	9,156	9,065
Total risk exposure amount	41,453	49,406	41,042	49,020
Total capital ratio	**18.6**	**18.0**	**22.3**	**18.5**

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Calculation of available own funds less deductions

DKK MILLION	Group 2020	Group 2019	DSF 2020	DSF 2019
Common equity Tier 1 capital				
Share capital	1,224	1,224	333	333
Tied-up reserve capital	4,413	5,528	8,343	8,343
Retained earnings	133	208	529	545
Revaluation reserve	-	-	70	38
Total common equity Tier 1 capital before deductions	**5,770**	**6,961**	**9,275**	**9,260**
Total deductions from common equity Tier 1 capital	**30**	**29**	**119**	**195**
Common equity Tier 1 capital less statutory deductions	**5,740**	**6,931**	**9,156**	**9,065**
Tier 2 capital	**1,990**	**1,979**	**-**	**-**
Own funds less deductions	**7,731**	**8,911**	**9,156**	**9,065**

DEFINITIONS

Own funds
Own funds may be composed of three different types of capital: common equity Tier 1 capital, additional Tier 1 capital and Tier 2 capital. Own funds are subordinated to the claims of ordinary creditors in the event of bankruptcy or other forms of financial restructuring.

The ratio of own funds to the total risk exposure amount is referred to as the total capital ratio.

Common equity Tier 1 capital
A firm's common equity Tier 1 capital (CET1) is the aggregate of the share capital, other reserves and retained earnings after certain statutory supplements and deductions.

Additional Tier 1 capital
Additional Tier 1 (AT1) capital consists of loans that form part of Tier 1 capital and is senior to shareholders' equity.

Tier 2 capital
Tier 2 capital consists of subordinated debt subject to certain restrictions. Tier 2 capital is senior to AT1.

CAPITAL REQUIREMENTS

The internal capital adequacy requirement, including the combined capital buffer requirement, totalled 12.0% for DSF and 11.9% for the Group as at 31 December 2020. Own funds after deductions totalled DKK 9,156 million for DSF and DKK 7,731 million for the Group, resulting in total capital ratios of 22.3% and 18.6%, respectively. This corresponds to excess coverage in the amount of DKK 4,249 million, or 10.3 percentage points for DSF, and DKK 2,781 million, or 6.6 percentage points, for the Group.

Our capital requirement is calculated based on the 8+ approach and the FSA's guidelines on Adequate Capital Base and Solvency Needs for Credit Institutions.

The guidelines issued by the FSA contain benchmarks for stress tests, etc. These benchmarks define the limits within which the FSA assesses an institution's risks as being covered by 8% of the total risk exposure amount. If these limits are exceeded, the institution is required to increase its adequate own funds.

The Group shall have own funds at least equal to the sum of the own funds requirements associated with each of the risk types defined as Pillar 1 requirements, Pillar 2 requirements and the combined capital buffer requirement.

Adequate own funds and internal capital adequacy requirement

	Group		DSF	
DKK MILLION	**2020**	**2019**	**2020**	**2019**
Total capital less deductions	**7,731**	**8,911**	**9.156**	**9,065**
Pillar 1 requirements (8% of total risk exposure amount)	**3,316**	**3,952**	**3,283**	**3,922**
Pillar 2 requirements	**532**	**575**	**532**	**575**
Earnings	-	-	-	-
Growth in lending	-	-	-	-
Credit risks	171	157	171	157
Market and liquidity risks	361	397	361	397
Operational and control risks	-	21	-	21
Leverage risk	-	-	-	-
Other risks	-	-	-	-
Capital conservation buffer	**1,036**	**1,235**	**1,026**	**1,226**
Countercyclical capital buffer	**66**	**417**	**65**	**414**
Excess capital	**2,781**	**2,731**	**4,249**	**2,929**
Solvency ratio (%)	**18.6**	**18.0**	**22.3**	**18.5**
Internal capital adequacy requirement, including combined capital buffer requirement (%)	**11.9**	**12.5**	**12.0**	**12.5**
Excess capital (%)	**6.6**	**6.0**	**10.3**	**6.0**

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CREDIT RISK MANAGEMENT

Key developments in 2020

In 2020, credit quality in the conventional shipping loan book remained healthy, with no loan defaults and reversal of loan impairment charges. Unfortunately, this was more than offset by weak performance in the already challenged Offshore segments, resulting in an annual loan impairment ratio of 0.3%. The net NPL ratio improved to 4.2%, down from 6.3% at year-end 2019.

Credit risk is the risk of incurring losses because of clients or financial counterparties failing to meet their payment obligations towards us. We are mainly exposed to the credit risk of clients (shipping companies) through loans collateralised by vessels. We are also exposed to the credit risk of financial counterparties (financial institutions) through the high-quality bonds we hold in our portfolio and the financial contracts we have entered into with those counterparties.

Credit risk is managed pursuant to a credit policy approved by the Board of Directors, containing specific guidelines for credit risk appetite, risk taking, and the ongoing risk management carried out in relation to lending activities.

Standard operating procedures have been put in place for ongoing credit risk management, which ensures a consistent approach to assessing credit requests.

GOVERNANCE STRUCTURE

The credit governance structure rests upon the three lines of defence principle, which ensures organisational separation of loan origination, credit risk management and control functions.

The Credit department has day-to-day responsibility for the credit policy, the counterparty risk policy, credit risk monitoring, loan impairment reviews and reporting of credit risk.

CLIENT SELECTION AND DIVERSIFICATION

We strive to maintain a conservative risk profile when structuring and originating loans, focusing on clients' credit quality through the shipping cycle while at the same time ensuring adequate diversification by country and vessel type. Thus, clients' financial standing and robustness, market position, track record in stressed markets, and reputation are criteria we consider when assessing loan requests.

In addition, the composition of clients in the loan book (total loans and guarantees) must be adequately diversified. The diversification rule is related to the objective clause in DSF's Articles of Association.

Objective clause

The objective of the company is to provide ship financing in Denmark. In addition, the company may provide ship financing in the international market if such activities do not unnecessarily limit the company's Danish operations.

Credit exposure to a non-Danish client may not, at a consolidated Group level, exceed 25% of eligible capital.

Five largest credit exposures

DKK MILLION	2020	2019
Five largest credit exposures	10,141	13,678
Loan book	33,576	41,440

At year-end 2020, the five largest credit exposures were secured by mortgages on 101 vessels comprising eight vessel types.

Credit exposure to one client group is substantially larger than the rest and represented approximately 15% of the loan book at year-end 2020. This is the only client where the aggregated exposure exceeds 25% of the eligible capital. This credit exposure is secured by mortgages on 35 vessels broken down by three different vessel types representing Container Liners, Product Tankers and Offshore Units.

LOAN-TO-VALUE

We grant loans with an initial loan-to-value (LTV) of up to 70%, subject to a first priority mortgage on the financed vessels.

We may, under certain conditions, grant loans above the 70% LTV limit against supplementary collateral and/or subject to an additional capital charge. The additional capital charge is maximised to an amount in DKK determined on the date of granting the loan or at disbursement of the loan at the latest.

The additional capital charge takes the form of a deduction from our Tier 1 capital. The deduction equals the part of the loan that exceeds 70% of the value of the mortgaged vessel(s) at the time of calculation, but not exceeding the maximum defined.

We have not granted loans with an initial LTV exceeding 70% for several years.

Loans held in Capital Centre A are subject to a maximum LTV of 60% after including any additional collateral posted towards bondholders.

In 2020, we did not grant any loans for the financing of clients' payments of instalments to shipyards.

The loan book after loan impairment charges was on average secured by mortgages within 54% of the market valuation of the financed vessels.

LOAN DOCUMENTATION

The lending operations involve the use of extensive loan and security documentation. The purpose of the loan documentation is to set out the contractual terms of the loan and the rights and obligations of both parties.

If a client defaults on its representations, warranties or undertakings (payment or otherwise) and work-out proceedings fail, the loan documentation provides for legal remedies whereby we can reduce our exposure to the client.

Ultimately, if the client defaults on its payment obligations pursuant to the loan documentation and such default continues, a first priority mortgage on vessels gives us the right to apply for the issue of a warrant of arrest by way of levy of execution against the mortgaged vessel with the local enforcement court.

The execution lien gives us the right to apply for a forced sale of the mortgaged vessel with the enforcement court or in a private sale, if permitted pursuant to the relevant arrest jurisdiction, and apply the auction/sales proceeds against the defaulted loan. Such enforcement action takes time and is costly. Use of this action will vary depending on the choice of arrest jurisdiction. The last time we arrested a vessel was in 2011.

Most of our loan and security documentation uses 'one-sided exclusive jurisdiction clauses', which allows us to take up proceedings against the client in any court of competent jurisdiction to ensure that any legal disputes are resolved in an orderly fashion and in a jurisdiction favourable to us.

We also participate in syndicated and club deal loans to shipowners together with other lenders. Standard Loan Market Association documentation is typically applied in adapted form in these transactions.

RISK MITIGATION

In addition to first priority mortgages on the financed vessels and assignment of each vessel's primary insurances, the composition of the loan book adheres to a set of diversification rules. The purpose of the diversification rules is to ensure adequate diversification by client, vessel type and country.

VESSEL TYPE DIVERSIFICATION

The loan book shall be adequately diversified across vessel types. No single vessel type may be provided as security for more than 50% of the loan book. Within each vessel type, no segment may account for more than 33% of the loan book.

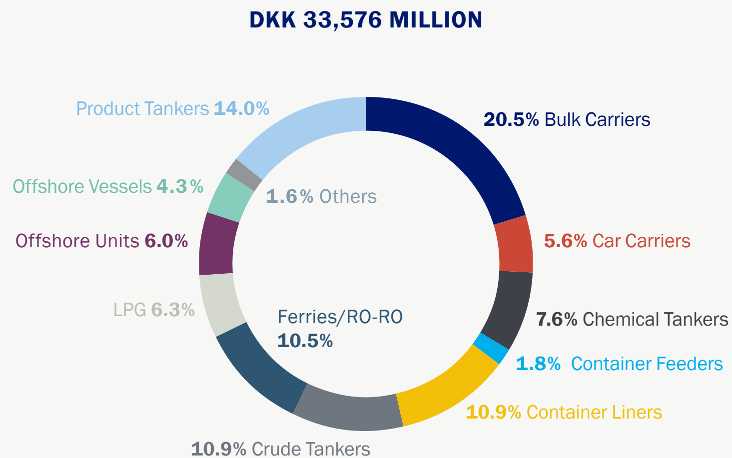
COUNTRY RISK DIVERSIFICATION

The loan book shall be adequately diversified by country. The country risk is monitored in terms of both country of ultimate risk and operational head office, and the latter is used for regulatory purposes such as solvency calculations.

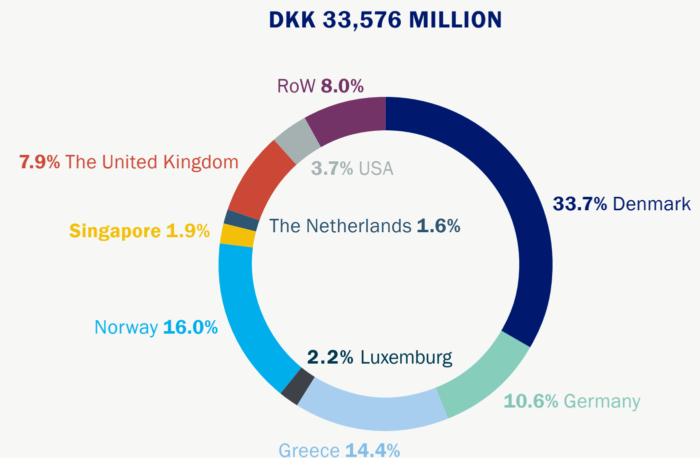
Lending to clients in most EU countries, Norway, the United Kingdom, Switzerland and the US is not subject to any restrictions. For lending to clients in other countries, we have set an overall limit per country of 25% of the loan book.

Countries accounting for a share of 1.5% or more of the loan book are shown individually. Other countries are grouped into the rest of the world (RoW).

Loan book broken down by mortgaged vessel type as at 31.12.2020



Debtor distribution by Operational Head Office as at 31.12.2020



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MITIGATION OF COLLATERAL RISK ON MORTGAGED VESSELS

Market value of mortgaged vessels

We obtain a valuation on all vessels at least semi-annually. The valuation is generally carried out by an external broker, which determines a fair market value for the financed vessels. We may in some cases self-assess the value based on, for example, a specific independent market value or external valuations of similar vessels.

Among other things, market valuations of vessels are used to determine the LTV ratios on loans and for control purposes when reassessing the collateral value of mortgaged vessels (after haircuts) as part of our semi-annual loan impairment review. The valuations are also used to monitor compliance with the 60% LTV limit in Capital Centre A.

Inspection of mortgaged vessels

As a supplement to the semi-annual market valuations, physical inspections of the financed vessels are made on a spot-check basis. An inspection may be performed both during the loan maturity period or prior to a loan offer being submitted. Due to Covid-19 restrictions, we made fewer physical inspections in 2020 than in the preceding years.

Insurance of mortgaged vessels

All vessels mortgaged as security for a credit exposure must be insured. Insurances are taken out by the client and assigned to us.

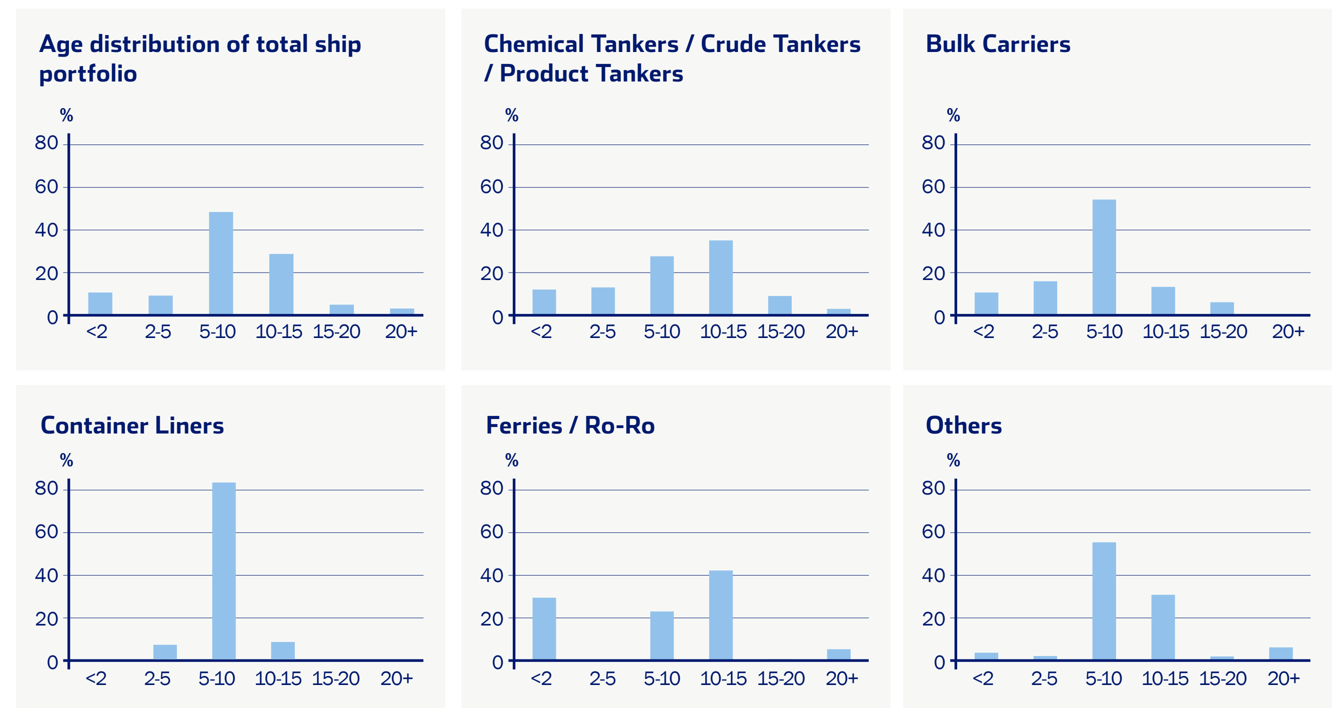
Generally, the following primary insurances are required:

- Hull and machinery insurance, which covers damage to or total loss of the vessel;
- P&I (protection and indemnity) insurance, which covers oil pollution caused by the financed vessel, damage to equipment and injuries to seamen. This insurance is also a third-party liability insurance covering collision with another vessel;
- War risk insurance, which covers damage to the vessel, potential total loss, and retention, etc. caused by war or war-like conditions.

In addition, most credit exposures are covered by a mortgagee's interest insurance (MII) and a mortgagee's additional perils pollution insurance (MAPP). These insurances cover our risks in various situations where the primary insurances do not provide cover, for example if the vessel is not seaworthy at the time of the claim.

Age distribution of mortgaged vessels

The following charts display the age distribution of all mortgaged vessels as well as the age distribution of the largest vessel types in the loan book.



DANISH SHIP FINANCE

LOAN BOOK DEVELOPMENTS

At year-end 2020, the loan book amounted to DKK 33,576 million, compared to DKK 41,440 million the year before.

The table below shows the loan book after loan impairment charges, broken down by LTV intervals.

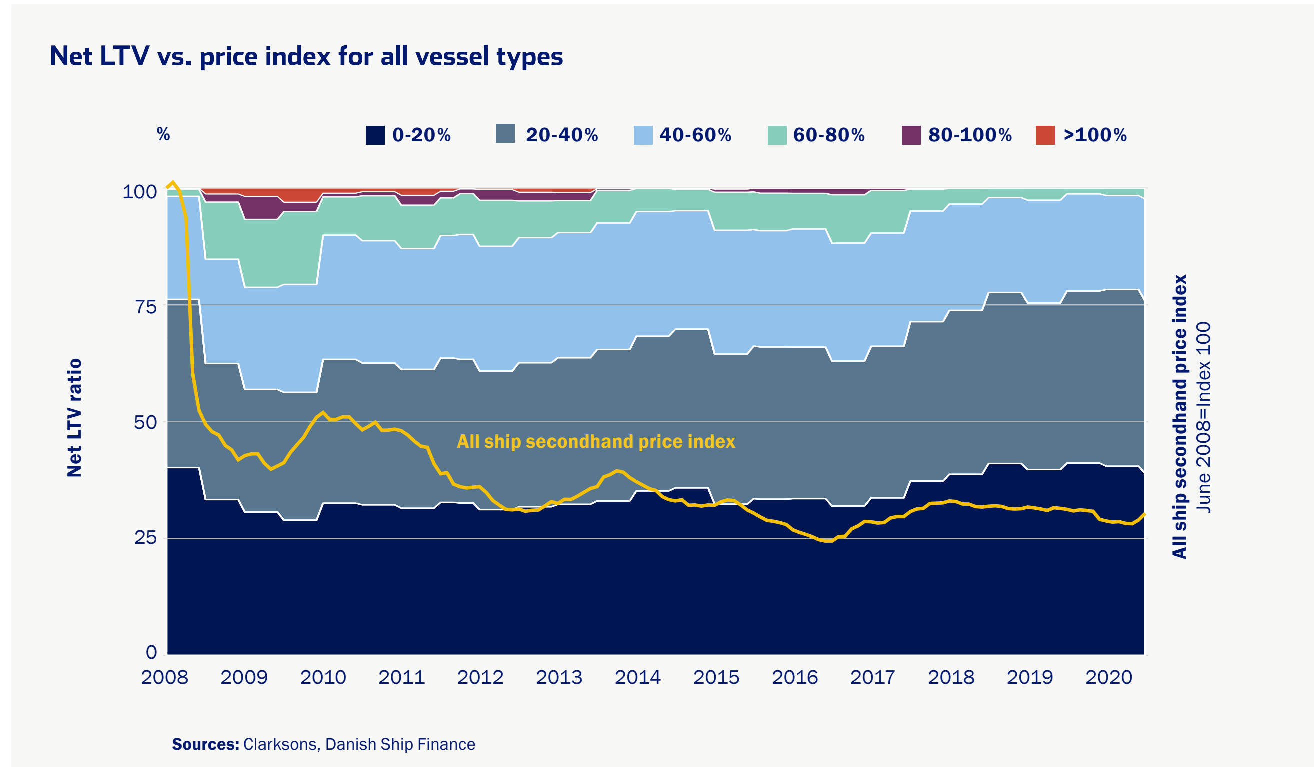
Net LTV intervals

%	2020	2019
0-20	39	41
20-40	37	37
40-60	22	21
60-80	2	1
80-90	0	0
90-100	0	0
Over 100	0	0

At year-end 2020, 98% of the loan book after loan impairment charges was secured by mortgages within 60% of the market valuation of vessels.

The chart illustrates the development in net LTVs over time and during periods of significant changes in market values of vessels.

Net LTV vs. price index for all vessel types



Sources: Clarksons, Danish Ship Finance

It is noteworthy that even major declines in vessel prices have not adversely affected the collateral coverage of the loan book. This is due to the positive effect of regular loan repayment schedules and the benefit of minimum value clauses included in most loan agreements, where we have the right to demand partial prepayment and/or additional collateral if the market values of the mortgaged vessels fall below an agreed threshold.

The net LTV intervals are shown together with the development in vessel prices based on a price index for all vessel types (the solid line).

DANISH SHIP FINANCE

COLLATERAL VALUE OF MORTGAGED VESSELS (AFTER HAIRCUTS)

We have prudent methodologies in place for calculating the expected minimum realisation value of a vessel after costs in a low market (Sx value).

The Sx value is calculated by discounting the expected earnings per day in a low market for each of the relevant vessel types. The calculation is based on fixed low earnings throughout the estimated residual life of the vessel and an expected sale of the vessel within 12 months. The interest rate originally agreed on the loan is used as the discount rate. Estimated selling costs are deducted from the value.

The estimated earnings per day of a mortgaged vessel are expected to gradually fall throughout the residual life of a vessel due to increasing maintenance costs and decreasing operational performance, etc. The value of earnings per day in a low market is thus adjusted over the estimated lifetime.

This method for calculating the collateral value of the mortgaged vessels resulted in an average haircut of 46% to the current market value (ranging from 41% to 63% depending on the vessel type) at year-end 2020. The method is monitored on an ongoing basis and is recalibrated when deemed prudent.

A client's unsecured credit exposure is calculated as the total credit exposure less (i) the Sx value of mortgaged vessel(s) and (ii) the value of any other collateral. Any such positive amount is applied in the calculation of loan impairment charges.

NON-PERFORMING LOANS

Non-performing loans (NPL) encompass all credit-impaired and defaulted loans. This includes loans for which no loan impairment charges have been recognised, which may be the case when the Sx value exceeds the total credit exposure.

As at 31 December 2020, gross NPL amounted to DKK 2,407 million, down from DKK 4,249 million the year before. NPL after loan impairment charges (net NPL) improved from DKK 2,471 million at year-end 2019 to DKK 1,356 million at year-end 2020. The development in key NPL figures is displayed below.

Non-performing loans

DKK MILLION / %	2020	2019
Loan book	33,576	41,440
Gross NPL	2,407	4,249
Gross NPL ratio (%)	7.2	10.3
Net NPL	1,356	2,471
Net NPL ratio (%)	4.2	6.3

A loan is considered credit impaired if one of the following events occurs, and hence is assigned a DSF Rating 11:

- The client is experiencing significant financial difficulty and the risk of incurring a credit loss is larger than not incurring a credit loss; or
- The credit exposure has lenient repayment terms, which could include forbearance measures, which we, for reasons relating to the financial difficulty, would not otherwise have granted.

A loan is in default if the client is subject to one of the following events, and hence is assigned a DSF Rating 12:

- Bankruptcy or another in-court restructuring;
- Arrears/past due for 90 days or more, unless the problem is short term and the amount concerned is limited in comparison to the client's financial situation, or if this is due to errors or technical problems;
- A loss is deemed inevitable;
- Non-accrual interest; or
- Foreclosure.

NPL prudential backstop

Legislation has been implemented by the European Union (EU) aimed at reducing non-performing loans (NPL) on balance sheets across the European banking sector. This includes an amendment to CRR regulation no. 575/2013 as regards minimum loss coverage for non-performing exposures (NPL backstop), subject to which new or modified NPL from 26 April 2019 – after two years – will require a deduction from the CET 1 capital if not sufficiently covered by loan impairment charges. We have implemented this legislation in our credit risk management systems and are currently in dialogue with the Danish authorities regarding the specific mechanisms ensuring appropriate capital calculation with respect to the collateral value of ship mortgages (as for real estate) across capital adequacy methodologies.

Forbearance measures

We focus on having a credit risk management framework that ensures consistency between the credit risk profile, credit risk appetite and current legislation, and on having a robust capital structure. Risk management should ensure financial solutions that are viable in the short, medium, and long term.

Forbearance plans may be adopted to assist clients in temporary financial difficulty. Given the cyclical nature of shipping, temporary forbearance measures are common in ship finance.

Concessions granted to clients include temporary partial payment deferrals, interest-only schedules, and term extensions. Forbearance plans are granted solely in accordance with the credit policy with the aim of reducing the long-term risk of credit losses. As at 31 December 2020, forbearance measures had been granted on a limited number of loans.

Covid-19 concessions

Forbearance practices have been updated to cater for clients materially affected by the Covid-19 pandemic. Temporary Covid-19 concessions to clients are not considered forbearance if such clients – based on an individual credit assessment – are considered to have a viable business model post-Covid-19.

In 2020, we granted Covid-19 concessions to a few clients, primarily in the Car Carrier and Ro-Ro segments.

Loan impairment charges

Loan impairment charges are made subject to the International Financial Reporting Standard 9 (IFRS 9), which provides rules for classification and impairment of financial assets, including loans.

We comply with the Executive Order on Financial Reports, according to which the IFRS 9 principles, particularly Annex 10, have been implemented, and guidelines published by the Danish Supervisory Authority (FSA).

This includes stage recognition of all loans in Stages 1, 2 and 3 and provides the overall rules and guidelines for calculating loan impairment charges for expected credit losses (ECL), based on a forward-looking approach.

We recognise 12-month ECL on initial recognition of loans. If a loan is subject to either significantly increased credit risk, significant signs of weakness or credit impairment since initial recognition, lifetime ECL are recognised.

Semi-annually, all credit exposures are reviewed to reassess the applicable stage of loans and the size of loan impairment charges. In addition, defaulted credit exposures are reviewed for partial or full write-off if a credit loss is considered unavoidable.

As part of this process and when obtaining relevant new information, it is evaluated whether the existing DSF Rating still provides the best estimate of the credit risk of the client and the loan. Where this is considered not to be the case, the client and the loan are reclassified accordingly.

Individual loan impairment charges are made based on the ECL impairment model. The size of ECL for individual credit exposures is based on the calculation of ECL, which may be supplemented by management judgment, as described below.

Loan impairment charges for 2020 amounted to an expense of DKK 100 million compared to an income of DKK 2 million the year before.

Stage recognition

All our credit exposures are subject to stage recognition in Stages 1, 2 or 3 based on the principles set out in the table below. The subsequent calculation of loan impairment charges in the form of ECL includes, depending on the stage of the loan in question, either the 12-month probability of default (PD) or the lifetime PD.

Stage recognition, PD & ECL

Stage	Recognition	ECL
Stage 1	No increase in credit risk since initial recognition	12-month PD
Stage 2	The credit risk has increased significantly since initial recognition and/or loans are showing significant signs of weakness	Lifetime PD
Stage 3	Credit impaired and/or defaulted loans (NPL)	Lifetime PD

Loans in arrears/past-due for 30 days or more (but less than 90 days) are generally showing significant signs of weakness, and they are classified as Stage 2 for calculating ECL. Loans in arrears/past due for 90 days or more are in default, and they are classified as Stage 3 for the purpose of calculating ECL.

At year-end 2020, no performing loans were in arrears/past-due. Thus, all loans recognised in Stage 2 were due to assigned DSF Ratings, reflecting significantly increased credit risk since initial recognition or showing signs of weakness, rather than arrears/past-due.

The development in the DSF Rating since initial recognition and the related stage development are monitored using a stage migration matrix. The actual stage depends on the state of the established credit risk.

Our stage migration matrix, in which the DSF Rating is mapped to the credit risk rating determined by the FSA and external ratings determined by the external credit rating agencies, can be found in Annex 11.

Rating scale

DSF Rating	External rating	
	Standard & Poor´s	Danish FSA
1	AAA/AA	3
2	A	
3	BBB	2A
4		
5	BB	
6		
7	B	2B
8		
9	CCC	2C
10		
11	CC-C	1
12	D	

Rating scale mapping

If the DSF Rating is 1 to 4 based on the mapping described in Annex 11, the client or financial counterparty is considered to have low credit risk, as such rating is equivalent to an investment grade rating from external credit rating agencies.

ECL impairment model

ECL is calculated as a function of PD, exposure at default (EAD) and loss given default (LGD), adjusted for forward-looking information using a macroeconomic factor (MEF) for each shipping segment.

ECL = PD * EAD * LGD * MEF

Scenario testing forms part of the ECL calculation, including the MEF, and is based on the following scenarios:

- Base-case scenario
- Worst-case scenario
- Best-case scenario

The calculation of the MEF is described in more detail below.

Macroeconomic factor

The MEF, which is used as a parameter in the calculation of ECL, is based on a semi-annual internal assessment.

The model consists of eight market indicators, which are considered for each vessel type.

Scenario testing is carried out based on three scenarios, their probability and an MEF effect. Based on this, a score of 0 or 1 per market indicator is provided and accumulated, with an aggregate score close to 8 indicating elevated risk.

For each client, the PD is adjusted for the MEF to reflect the outlook for the segment to which the client is primarily exposed. The PD for each client can thus be below, at or above the standard PD. The MEF parameter may range from 0.90 - 1.27 as at 31 December 2020.

At year-end 2020, the accumulated MEF effect of DKK 16 million, up from DKK 4 million the year before, was included in the total ECL allowance account.

Write-offs

A credit exposure is written off, in whole or in part, when we have exhausted all practical recovery and restructuring efforts and have concluded that there is no reasonable expectation of full recovery. A corresponding amount is then written off.

Indications that there is no reasonable expectation of full recovery include:

- Ceasing of enforcement activity; or
- The value of the collateral is such that there are no reasonable expectations for recovering the loan in full.

We may write off credit exposures that are still subject to enforcement activity. Amounts which are legally owed in full, but which have been partially written off, are still subject to full recovery initiatives.

Net write-offs amounted to DKK 805 million in 2020, compared to DKK 485 million in 2019. Write-offs were well within the total ECL allowance account provided for in previous years.

Total ECL allowance account

The total ECL allowance account amounted to DKK 1,330 million as at 31 December 2020, down from DKK 2,035 million the year before, affected by write-offs in the Offshore segments in 2020.

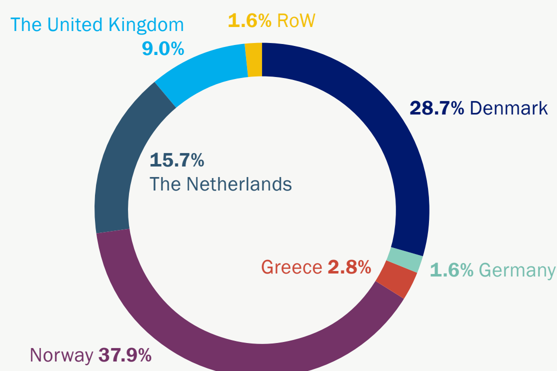
The following table displays key figures related to the total ECL allowance account:

Key figures

DKK MILLION	2020	2019
Loan book	33,576	41,440
Total ECL allowance account	1,330	2,035
Net write-offs	805	485
Loan impairment charges (minus = reversal)	100	(2)

At year-end 2020, the geographical distribution (based on operational head office) of the total ECL allowance account was as shown below:

Total ECL allowance account broken down by operational head office as at 31 Dec. 2020



DANISH SHIP FINANCE

Management judgement

Management judgments are carried out on the individual client level as an add on or reduction to the individual loan impairment charges suggested by the ECL impairment model.

At year-end 2020, accumulated management judgments of DKK 100 million, up from DKK 55 million the year before, were included in the total ECL allowance account to cover any potential deterioration in the estimated value of collateral (after haircuts), particularly in the Offshore segments, due to the uncertainty caused by the Covid-19 pandemic.

Sensitivity analysis

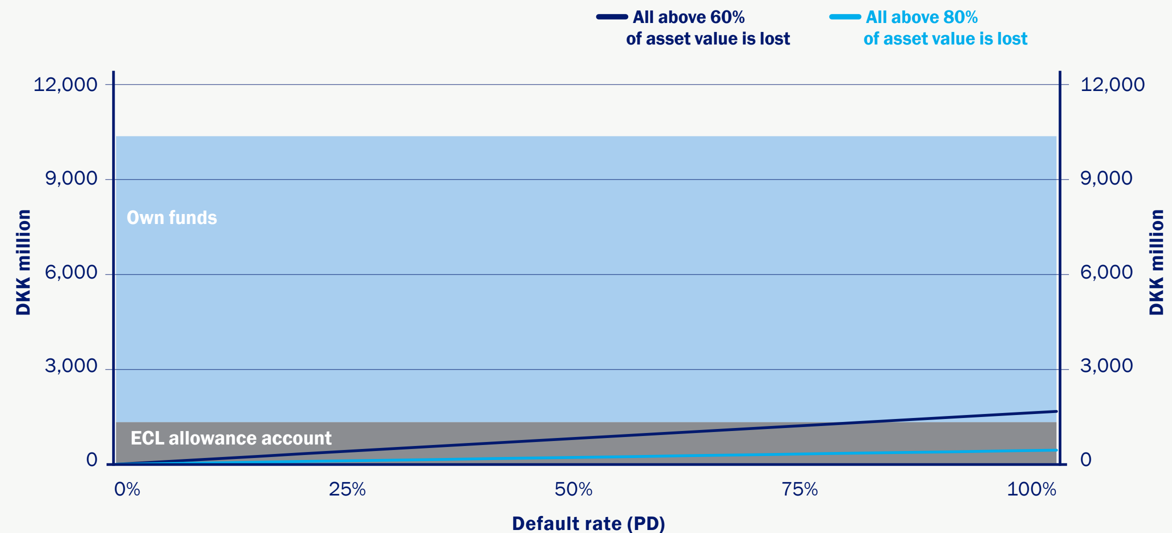
The loan impairment charges are sensitive to, among other things, changes to Sx values and the MEF. If Sx values were to decrease by 10% (in addition to the conservative 46% average haircut already applied) across the loan book, loan impairment charges would increase by about DKK 300 million. If the maximum MEF were to be applied across all shipping segments, loan impairment charges would increase by about DKK 44 million (from DKK 16 million to DKK 60 million).

Loan losses at given default rates

The graph illustrates our strong ability to absorb loan losses in the rather unlikely scenario where all or a certain percentage of the client´s default, and the mortgaged vessels are subsequently sold.

In the extreme event of all clients defaulting, the loan impairment charges alone would be almost sufficient to cover shortfalls if the mortgaged vessels were sold with haircuts of 40% to current market values.

Loan losses at given default rates



Development in the total ECL allowance account

	Clients		Financial counterparties	
DKK MILLION	2020	2019	2020	2019
Individual loan impairment charges				
Total ECL allowance account as at 1 January	2,035	2,514	0	0
New loan impairment charges/loss allowances during the year	760	581	0	0
Reversal of loan impairment charges/loss allowances made in previous years	(648)	(575)	0	0
Gross write-offs debited to the ECL allowance account	(817)	(485)	0	0
Total ECL allowance account as at 31 December	1,330	2,035	0	0

DANISH SHIP FINANCE

FINANCIAL COUNTERPARTIES

Credit exposure to financial counterparties, which may be credit institutions, export guarantee agencies and insurance companies, is entered into according to the counterparty risk policy. The policy sets out certain criteria, including that financial counterparties shall have an investment grade rating from recognised ECAIs.

The counterparty risk policy quantifies and defines the principles for credit exposure to be granted to individual financial counterparties. The counterparty risk policy is also used in the management of market risk and liquidity risk and sets out limits to be made available to financial counterparties.

Furthermore, we endeavour to ensure that financial counterparties are global systemically important banks (G-SIB) or systemically important financial institutions (SIFI).

We carry out transactions, such as purchase of securities, with financial counterparties when investing our own funds or temporary excess liquidity from bond issuances.

Our securities portfolio, comprising high-grade government and mortgage bonds, and occasionally money market deposits and interest-sensitive financial instruments, represents a significant share of our assets.

Contractual framework

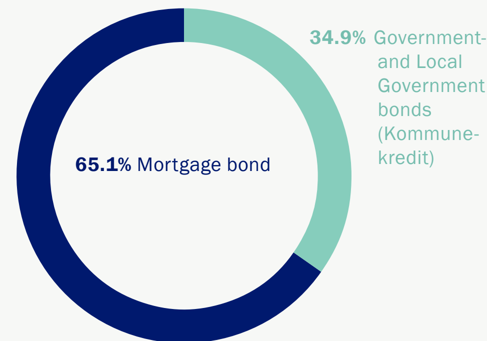
A financial contract may entail risk of loss if it has a positive market value and the financial counterparty cannot perform its part of the contract. This type of risk also includes settlement risk.

The contractual framework for transactions with financial counterparties is based primarily on market standards such as the International Swaps and Derivatives Association (ISDA) and the International Capital Market Association (ICMA) agreements, which allow netting in the event of default of the financial counterparty. Furthermore, we have agreements on market-value adjustments or collateral (CSAs) for derivatives trading with various financial counterparties.

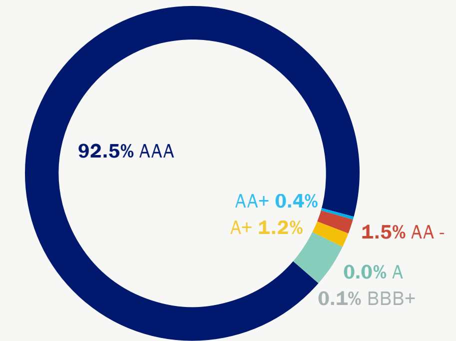
We are subject to the European regulation on OTC derivatives, central counterparties and trade repositories (known as EMIR). EMIR stipulates an obligation to clear certain types of derivatives via a central counterparty. This obligation applies to financial counterparties and non-financial counterparties that exceed the clearing threshold.

EMIR defines financial counterparties as credit institutions approved pursuant to the Credit Institutions Directive. We are exempt from this directive and are defined as a non-financial counterparty (NFC). NFCs only have a central clearing obligation if they exceed certain thresholds in trading volumes. As our trading volumes do not exceed these clearing thresholds, we are not required to perform central clearing.

Distribution of securities portfolio



Exposure on financial counterparties by credit rating



Ongoing monitoring

We continuously monitor our credit exposure to financial counterparties to ensure that the financial counterparty consistently complies with our requirements and to ensure compliance with approved lines. The ongoing monitoring is carried out independently of the executing entities.

DANISH SHIP FINANCE

EXTERNAL CREDIT ASSESSMENT (ECAI)

We use Standard & Poor's Global Ratings (S&P) as our external credit assessment institution (ECAI).

The credit rating categories used by S&P are converted into credit quality steps using the FSA's conversion table. To calculate the risk-weighted exposure amounts under the standardised approach for credit risk, each credit quality step is designated a risk weight to be used for the exposures at each credit quality step.

The table shows the FSA's conversion of S&P's credit rating categories to credit quality steps for exposures to corporates, institutions, central governments and central banks.

Credit quality step	S&P's credit rating category	Exposures to corporates	Exposures to institutions with terms to maturity > three months	Exposures to central governments or central banks
1	AAA to AA-	20%	20%	0%
2	A+ to A-	50%	50%	20%
3	BBB+ to BBB-	100%	50%	50%
4	BB+ to BB-	100%	100%	100%
5	B+ to B-	150%	100%	100%
6	CCC+ and below	150%	150%	150%

Exposure classes using S&P credit assessments

EXPOSURE CLASS DKK MILLION	**Group** *Exposure (unweighted)*	**DSF** *Exposure (unweighted)*
Exposures to central governments or central banks	x	x
Exposures to public sector entities	0	0
Exposures to regional governments or local authorities	0	0
Exposures to institutions	x	x
Exposures to corporates	x	x
Exposures in the form of covered bonds and mortgage bonds	x	x
Exposures in default	x	x
Exposures associated with particularly high risk	0	0
Exposures to institutions and corporates with a short-term credit assessment	0	0
Exposures in the form of units or shares in collective investment undertakings (CIUs)	0	0
Equity exposures	0	0
Other items	x	x
Total	**x**	**x**

MARKET RISK MANAGEMENT

Key developments in 2020

Several internal market risk limits were lowered in 2020. Actual levels of market risk at the end of the year remained well within the revised boundaries.

Market risk is the risk of loss because of movements in financial market prices, including interest rates, yield spreads, foreign exchange rates, equity prices and costs for hedging volatility, etc.

Bond issuances and lending are subject to restrictions on interest rate, foreign exchange and liquidity risk between the bond issues (funding) and the loans under the Danish balance principle. Hence, the main market risks we face are interest rate and yield spreads associated with the securities portfolio.

Our Treasury department has day-to-day responsibility for trading within the limits laid down in the market risk policy. Responsibility for monitoring and reporting of adherence to the limits on market risk lies with our Risk Management department. Market risk is monitored daily and is reported to the Board of Directors quarterly. If the limits defined in the market risk policy are breached, the Executive Board must be informed immediately and the Board of Directors no later than at the next board meeting.

The market risk policy contains specific guidelines for the ongoing management of risks relating to changes in financial risk factors. The policy lays down clear and measurable limits on, inter alia, interest rate and foreign exchange risks, building on the Bond Executive Order and other provisions. Our market risk limits are more stringent than external regulatory requirements.

INTEREST RATE RISK

Interest rate risk is the risk of incurring a loss due to a change in interest rates. Generally, rising interest rates have an adverse impact on the market value of the bond portfolio.

Due to the balance principle, we have only moderate exposure to interest rate risk outside the trading book. As at 31 December 2020, the interest rate exposure outside the trading book was calculated at DKK 20 million, against DKK 37 million at 31 December 2019.

The Bond Executive Order also stipulates that the interest rate risk on assets, liabilities and off-balance sheet items must not exceed 8 per cent of own funds. Using the FSA guidelines for calculating interest rate risk in the trading book, the interest rate exposure was DKK 164 million as at 31 December 2020, corresponding to just under 2% of own funds, against DKK 135 million as at December 2019. According to the guidelines, it is not permitted to offset (net) risk between currencies in this statement. Netting substantially reduces the risk, to DKK 41.2 million as at 31 December 2020.

Furthermore, the interest rate risk is adjusted using a minimum and a maximum for the option-adjusted duration. The maximum option-adjusted duration of the securities portfolio, including financial instruments, is currently limited to two years. The option-adjusted duration was calculated at approximately 0.4 years as at 31 December 2020.

Libor

The Financial Conduct Authority has announced that the interest rate benchmark GBP LIBOR is expected to cease after year-end 2021. Other IBORs are, in the same context, expected to be replaced in the near future. The replacement of IBOR rates will affect most or all financial institutions. We have established change programmes to handle the transition for DSF.

We will closely monitor the transition from various IBORs to the new alternative risk-free rates and will continuously track and incorporate market developments and standards to be prepared for the IBOR transition.

Due to our business profile, we are exposed to IBORs through cash products in our loan book, our bonds and derivatives. In this context, our main risk is that the current close relationship between these components will come to an end. In event of this, we will follow the proposals and recommendations from the Loan Market Association, ISDA, and other relevant market working groups and participants. It is possible that some of the residual risk may need to be re-hedged during the transition.

CREDIT SPREAD RISK

Credit spread risk arises from differences in yield either between different securities with the same issuer or between securities of the same type and maturity. The credit spread usually correlates with the creditworthiness of the issuer but can also be an expression of differences in liquidity or seniority of the securities.

The credit spread risk in the trading book was calculated at DKK 361 million as at 31 December 2020, against DKK 397 million as at December 2019.

FOREIGN EXCHANGE RISK

The market risk policy does not allow foreign exchange risk on principal amounts in capital centres arising from a mismatch between funding and lending. However, foreign exchange risks do exist in relation to net earnings, which are typically in USD. Also, minor foreign exchange risks are allowed in the investment portfolio.

Exchange rate indicator 1 as at 31 December 2020 was DKK 265 million, equal to 2.9% of own funds. Exchange rate indicator 1 corresponds to the Group's total net exposure to foreign currency in total balance sheet items, calculated according to FSA guidelines.

EQUITY RISK

At year-end 2020, we had no equity risk.

DERIVATIVES

We use derivatives according to the market risk policy, which limits the types of derivatives that may be used and for what purposes. Financial instruments may be applied to hedge risks between funding and lending and in relation to investment activities.

LIQUIDITY RISK MANAGEMENT

Key developments in 2020

Our available liquidity remains well above the minimum required level as set out in LCR and NSFR, at 572% and 165%, respectively, at year-end 2020.

Liquidity risk is the risk of loss arising from the inability to meet immediate and short-term payment obligations.

The purpose of our liquidity management framework is to ensure that we are consistently able to meet our payment obligations when due. Liquidity management is carried out to avoid a lack of funding preventing us from meeting our obligations, or from supporting planned lending activities, and to ensure that our funding costs do not become disproportionately high.

Liquidity risk is managed in each of the applicable currencies, subject to strict limits and stress tests. Our liquidity risk policy determines our overall liquidity risks and funding structure. It contains specific guidelines for the ongoing management of liquidity risk.

BALANCE PRINCIPLE

The specific balance principle laid out in the Bond Executive Order permits a future liquidity deficit between issued bonds and loans provided of up to 100 per cent of own funds.

A deficit occurs if future payments related to bonds, other funding and financial instruments exceed future incoming payments on loans, financial instruments and positions.

In our internal policies, we have defined stricter requirements for any liquidity deficits between issued bonds and loans provided. We pre-fund all credit commitments well in advance of disbursement.

Funds from pre-funding and repayments of loans are placed in secure and liquid securities or as short-term money market deposits with credit institutions which qualify for credit quality step 2 or better.

FUNDING

We typically issue bonds in DKK and EUR, whereas most of the loans granted are disbursed in USD. To cover the currency mismatch, we source USD and hedge currency risks via basis swaps.

The opportunities for sourcing USD liquidity rely on an efficient capital market. Our ability to convert DKK or EUR funding into USD entails a risk of higher financing costs or a loss of business opportunities in the event of market disruption.

The liquidity policy set limits for USD liquidity requirements over time.

ENCUMBERED ASSETS

Funding and lending activities are ringfenced by law to ensure timely payments to bond investors. Due to this setup, the ringfenced assets are subject to encumbrance, as per the European Banking Authority's (EBA) guidelines on disclosure of encumbered and unencumbered assets.

Apart from ringfenced assets, the primary sources of asset encumbrance are supplementary collateral under Capital Centre A (SDO) and collateral under CSA agreements. Encumbered assets account for 83% of total assets plus any collateral received that may be subject to encumbrance.

The information disclosed on encumbered assets and collateral received is based on data as at 31 December 2020. Encumbered assets are specified in Annex 7.

According to the regulatory technical standards on disclosure of encumbered and unencumbered assets issued by the EBA in March 2017, credit institutions with less than EUR 30 billion in total assets or an encumbrance level below 15% are exempt from the disclosure requirements for high-quality liquid assets (HQLA) and extremely high-quality liquid assets (EHQLA), and thus these are not specified in Annex 7.

MANAGEMENT, MONITORING AND REPORTING

Our liquidity management is anchored in the internal liquidity adequacy assessment process (ILAAP), which is a review aimed at identifying liquidity risk exposures and determining liquidity targets.

STRESS TESTING

We have developed a stress test programme in accordance with the EBA guidelines on institution stress testing. As part of the programme, a liquidity stress test is performed to ensure that there is enough liquidity to maintain the business model and meet our commitments under the balance principle.

The liquidity stress test identifies the resilience of the short-term liquidity position in a stressed scenario in which we have no access to our usual funding sources. The liquidity stress test focuses on the shock effects of several interrelated risk factors, such as the USD exchange rate, interest rates, credit spreads.

The results of the liquidity stress test shall be used to manage and adjust internal limits.

Our stress testing confirms that the current limit structure is adequately robust in relation to the risk exposures, capital bases and liquidity situation.

This year, we have reviewed the market stresses observed during the Covid-19 pandemic in relation to the assumptions in our stress-testing framework and have found the framework to be adequately conservative.

CONTINGENCY PLANS

In accordance with the Executive Order on Governance for Credit Institutions, we have prepared a liquidity contingency plan containing a catalogue of possible initiatives with which to strengthen the liquidity position in a critical situation.

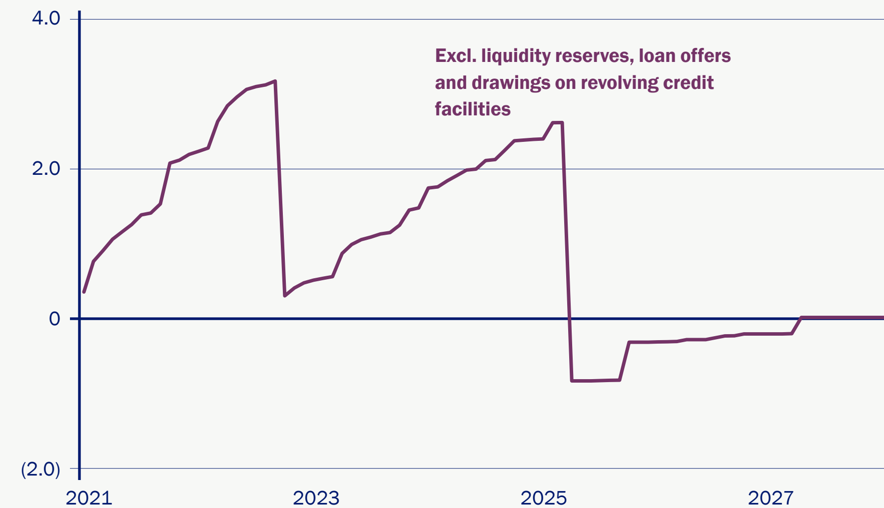
The liquidity contingency plan takes effect if and when predefined triggers are activated.

LIQUIDITY RISK PROFILE

Through bond issues and a portfolio of liquid bonds, we ensure sufficient liquidity coverage for all existing loans and credit commitments until expiry. We are therefore not exposed to refinancing risk.

A potential downgrade of our external rating would not change the robust liquidity situation but could lead to higher funding costs for new loans not yet offered.

The charts show the liquidity mismatch between funding and lending, before considering the liquidity reserve.



LIQUIDITY COVERAGE RATIO (LCR)

According to the CRR, liquidity is required to ensure that credit institutions have adequate unencumbered high-quality liquid assets (HQLA), consisting of cash or assets that can be converted into cash at little or no loss of value in private markets, to meet liquidity needs for a 30-calendar-day liquidity stress scenario.

$$\text{Liquidity coverage ratio} = \frac{\text{HQLA}}{\text{Net liquidity outflow over a 30 day stress period}} \geq 100\%$$

As at 31 December 2020 the LCR was 572%.

The securities portfolio represents a significant share of the liquid assets. The securities portfolio comprises government and mortgage bonds, money market transactions and interest-sensitive financial instruments.

Annex 12 provides a more detailed description of the LCR.

NET STABLE FUNDING RATIO (NSFR)

The purpose of the NSFR requirement is to ensure that institutions use stable medium- and long-term funding to support their lending operations and to ensure an appropriate liquidity level over a year.

$$NSFR = \frac{\textit{Available amount of stable funding}}{\textit{Required amount of stable funding}} \geq 100\%$$

We maintain a high and stable NSFR level.

As at 31 December 2020 the NSFR was 165%.

OPERATIONAL RISK MANAGEMENT

Key developments in 2020

Our Operational Excellence program again in 2020 continued to markedly improve the robustness of our operating environment.

Our operational risk policy stipulates that operational risk should be kept low. Operational risk is assessed on the basis of the expected probability of a given event occurring and the potential loss resulting from such an event.

Given its nature and characteristics, operational risk is best mitigated and managed as part of day-to-day business conduct. Responsibility for the day-to-day management of operational risk lies with the individual business areas. Operational risk management activities are coordinated by Risk Management to ensure coherence, consistency and effectiveness across the Group.

It is our policy to promote a culture where openness about and awareness of operational risk are natural elements of the day-to-day work of all staff members, and to ensure that the Executive Board and the Board of Directors are briefed regularly on key risk areas.

As part of operational risk management, operational risk events are systematically recorded, categorised and reported. Operational errors are divided into three main groups by potential or actual loss:

- Small errors (<DKK 25,000)
- Medium-sized errors (<DKK 5 million)
- Large errors (>DKK 5 million)

Errors can be upgraded to a more severe category according to management judgement. We make regular use of this option.

Small errors are reported to the relevant head of department. Medium-sized and large errors are reported to the Executive Board. The Board of Directors is notified of large errors.

The recording of operational risk events must include information about the type of product, process and risk concerned and a plan of action for more severe events.

COMPLIANCE

Operational risk includes compliance risk, which is subject to separate guidelines. This area is managed by the Head of Compliance. An assessment of the compliance risk is reported to the Board of Directors and the Executive Board.

The Compliance department is an independent function which serves to assess and report on any non-compliance with applicable legislation, practice and market standards in the Group. This helps mitigate the risk of sanctions being imposed on the Group, the risk of loss of reputation or the risk of the Group or its clients suffering material financial losses.

The Compliance department takes a risk-based approach when identifying areas to review.

MONEY-LAUNDERING RISK

In relation to anti-money laundering (AML), we have laid down specific policies, business procedures and controls. Furthermore, extensive efforts are made to ensure compliance with requirements pertaining to proof of client identity (know-your-customer procedures). The prevention of money laundering and terrorist financing is a high-priority area although the business model in itself incurs very limited risk of DSF being used for these purposes.

The AML function is charged with ensuring that we comply with the Danish Act on Measures to Prevent Money Laundering and Financing of Terrorism, the EU Funds Transfer Regulation and EU anti-terrorism regulations. The AML function is anchored in the Compliance department and reports directly to the Executive Board and Board of Directors.

IT SECURITY

Information and information systems are vital, and IT security is therefore essential to our credibility and continued existence. The IT department reports to the Executive Board and Board of Directors, who regularly review the IT security measures.

The work of the IT department is based on a defined security and risk level aimed at ensuring that our day-to-day business and activities are consistently supported by a secure and reliable IT infrastructure. The IT department is responsible for complying with the adopted IT security level and IT contingency plan. The IT department contributes to ensuring and controlling that our IT activities to the best possible extent are protected against internal and external threats. The IT department is thus charged with ensuring compliance with legislative requirements and our own requirements.

Our activity in the area of IT security is based on regulatory requirements as well as considerations for day-to-day operations. Our operations must be secure and stable, a requirement fulfilled through automation and ongoing capacity adjustments. Our IT security efforts include the preparation of contingency plans and recovery procedures and periodic testing of such measures aimed at ensuring our continued operation at a satisfactory level should extraordinary events occur.

In our assessment of IT risk, we have revised and described all our systems. For each single risk event, requirements to support and error handling have been included in the description. Levels for system availability and stability are determined and revised regularly and IT security is frequently tested.

We consider cybersecurity to be the most important aspect of IT security that cannot be fully mitigated up front . To mitigate the exposure to cyber risk, we constantly keep our knowledge of cyber threats up to date. We also use the knowledge we gather to inform employees of pending cybersecurity threats and thereby heighten inhouse awareness. We have engaged several external partners to monitor and periodically test our cybersecurity defences, to ensure that we keep our infrastructure protected against the prevailing cybersecurity threat level.

CAPITAL MANAGEMENT

Key developments in 2020

The capital ratio for DSF increased to 22.3% at year-end 2020 (from 18.5% the year before), mainly due to a smaller loan book in 2020. DSF's internal capital adequacy requirement, including buffers, amounted to 12.0% at year-end 2020 (compared to 12.5% the year before).

Adequate own funds are defined as the minimum amount of capital required to ensure only a remote risk of the Group becoming distressed or insolvent during the following 12-month period such that bondholders could be exposed to a potential loss. Bondholders are, however, subject to further protection ensured by law as non-acceleration clauses apply in the event of bankruptcy.

AVAILABLE OWN FUNDS

The Group's own funds net of deductions amounted to DKK 7,731 million as at 31 December 2020 (against DKK 8,911 million in 2019). In DSF, own funds amounted to DKK 9.156 million (against DKK 9,065 million in 2019).

The Group's own funds consist of common equity Tier 1 capital (CET1) in the form of share capital and tied-up reserve capital in DSF, retained earnings from previous years, and a subordinated Tier 2 debt instrument in DSH.

The tied-up reserve capital was established in 2005 when DSF was converted from a foundation into a limited liability company. The amount has remained unchanged at DKK 8,343 million.

Tied-up reserve capital in DSH was recognised in own funds at DKK 4,413 million as at 31 December 2020 (against DKK 5,528 million in 2019). The recognition of tied-up reserve capital is calculated according to FSA's ruling as an amount corresponding to the tied-up reserve capital's proportionate share of the capital requirement.

Besides the effect of the recognition of the tied-up reserve capital, the development in available own funds is determined primarily by net profit for the year and the dividend policies of the Group companies DSH and DSF.

Calculation of available own funds less deductions

DKK MILLION / %	Group 2020	Group 2019	DSF 2020	DSF 2019
Common equity Tier 1 capital				
Share capital	1,224	1,224	333	333
Tied-up reserve capital	4,413	5,528	8,343	8,343
Retained earnings	133	208	529	545
Revaluation reserve	-	-	70	38
Total common equity Tier 1 capital before deductions	**5,770**	**6,961**	**9,275**	**9,260**
Deduction from common equity Tier 1 capital				
Proposed dividends	-	-	59	133
Deferred tax assets	-	-	-	-
Position of own shares	2	1	-	-
Additional capital charge pursuant to the Executive Order	-	-	-	-
Prudent valuation of trading portfolio	28	28	28	28
Deductions pursuant to transitional rules	-	-	33	33
Total deductions from common equity Tier 1 capital	**30**	**29**	**119**	**195**
Common equity Tier 1 capital less statutory deductions	**5,740**	**6,931**	**9,156**	**9,065**
Tier 2 capital	1,990	1,979	-	-
Own funds less deductions	**7,731**	**8,911**	**9,156**	**9,065**

DEFINITIONS

Own funds

Own funds can be composed of three different types of capital: common equity Tier 1 capital, additional Tier 1 capital and Tier 2 capital. Own funds are subordinated to the claims of ordinary creditors in the event of bankruptcy or other forms of financial restructuring.

The ratio of own funds to the total risk exposure amount is referred to as the total capital ratio.

Common equity Tier 1 capital

The common equity Tier 1 capital (CET1) is the aggregate of the share capital, other reserves and retained earnings after certain statutory supplements and deductions.

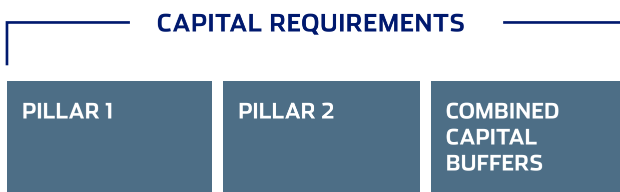
Additional Tier 1 capital

Additional Tier 1 (AT1) capital consists of loans that form part of Tier 1 capital and is senior to shareholders' equity.

Tier 2 capital

Tier 2 capital consists of subordinated debt subject to certain restrictions. Tier 2 capital is senior to AT1.

CAPITAL REQUIREMENTS



The Group shall have own funds at least equal to the sum of the own funds requirements associated with each of the risk types defined as Pillar 1 requirements, Pillar 2 requirements and the combined capital buffer requirement.

Adequate own funds and internal capital adequacy requirement

	Group		DSF	
DKK MILLION	**2020**	**2019**	**2020**	**2019**
Total risk exposure amount	**41,453**	**49,406**	**41,042**	**49,020**
Pillar 1 requirements (8% of total risk exposure amount)	**3,316**	**3,952**	**3,283**	**3,922**
Pillar 2 requirements				
Earnings	-	-	-	-
Growth in lending	-	-	-	-
Credit risks				
- Credit risks for large clients in financial difficulty	31	50	31	50
- Other types of credit risk	116	75	24	75
- Concentration risks	24	32	116	32
Market and liquidity risks	361	397	361	397
Operational and control risks	-	21	-	21
Leverage risk	-	-	-	-
Other risks	-	-	-	-
Total adequate own funds	**3,848**	**4,527**	**3,815**	**4,497**
Total capital less deductions	7,731	8,911	9,156	9,065
Total adequate own funds	3,848	4,527	3,815	4,497
Capital conservation buffer	1,036	1,235	1,026	1,226
Countercyclical capital buffer	66	417	65	414
Excess capital	**2,781**	**2,731**	**4,249**	**2,929**
Solvency ratio (%)	**18.6**	**18.0**	**22.3**	**18.5**
Internal capital adequacy requirement	9.3	9.2	9.3	9.2
Capital conservation buffer	2.5	2.5	2.5	2.5
Countercyclical capital buffer requirement	0.2	0.8	0.2	0.8
Internal capital adequacy requirement, including combined capital buffer requirement	**11.9**	**12.5**	**12.0**	**12.5**
Excess capital	**6.6**	**5.5**	**10.3**	**6.0**

Pillar 1 requirements

PILLAR 1	PILLAR 2	COMBINED CAPITAL BUFFERS

Pillar 1 requirements

The Pillar 1 own funds requirement is a regulatory requirement for financial institutions. Own funds must represent at least 8% of an institution's total risk exposure amount (risk-weighted assets). Non-compliance with the own funds requirement will lead to withdrawal of the institution's licence.

We apply the standardised approach for the calculation of the total risk exposure amount and the own funds requirement for credit and market risks. When using the standardised approach, the risk weights are pre-defined. In addition, we apply the basic indicator approach to calculate the risk exposure amount for operational risk.

Credit risk

According to the standardised approach, all loans generally carry a weight of at least 100%. In addition, the value of the ship mortgages cannot be deducted, and for capital adequacy purposes the loans are thus treated as unsecured loans.

The table shows that the majority of our risk exposures have a risk weight of 100%.

Credit risk exposure by risk weights

Risk weight	Group Credit risk exposure (weighted)	Group Own funds requirement
DKK MILLION	**2020**	**2020**
0	-	-
10	569	46
20	621	50
50	2,429	202
100	31,968	2,563
150	440	35
200	-	-
250	309	30
Total credit risk exposure	**36,336**	**2,925**

Pursuant to the Executive Order, the following loans or shares of loans each carry a risk weight of more than 100%:

- Pursuant to section 24(3) of the Executive Order, construction loans carry a risk weight of 200% if total construction loans do not exceed 125% of the excess capital coverage. If total construction loans exceed 125%, the excess amount must be deducted from Tier 1 capital. Construction loans are secured through the client's liability, assignment and subrogation in the construction contract and assignment of the shipyard's collateral for payments according to the construction contract.
- Pursuant to the definition in Article 178 of CRR, loans in default (equivalent to internal DSF ratings 11 and 12) carry a risk weight of 150%.
- Under certain conditions, we may grant loans exceeding 70% of the value against other collateral and/or against additional reservations of our own funds. The maximum deduction is determined in DKK at the date of approval.
- Where the client either has an external rating corresponding to credit quality steps 5 and 6 or is unrated and is headquartered in a country where the country risk calls for a higher weighting, the loan carries a risk weight of 150%.

As at 31 December 2020, we held no construction loans in the portfolio.

Counterparty risk on derivatives and calculation of capital

We apply the mark-to-market method to calculate derivative exposures. Using the mark-to-market method to determine the exposure value for counterparty risk involves the following:

- Contracts are calculated at fair value to obtain the current replacement cost for all contracts with a positive value.
- To obtain the potential future credit exposure, the notional principal of the contracts or the underlying values are multiplied by percentages determined by the FSA.
- The sum of the current replacement cost and the potential future credit exposure represents the counterparty risk.

In the ordinary monitoring of counterparty credit risk, we take into consideration the calculated exposure value to ensure that approved credit limits for the counterparty are not exceeded.

Counterparty risk

DKK MILLION	Group Exposure (weighted) 2020
Netting of exposure value	
Gross positive fair value of financial contracts after netting	
- Counterparty with risk weight of 0%	-
- Counterparty with risk weight of 20%	539
- Counterparty with risk weight of 50%	1,251
- Counterparty with risk weight of 100%	36
Total counterparty risk exposure value calculated according to the mark-to-market method for counterparty risk	
- Counterparty with risk weight of 0%	-
- Counterparty with risk weight of 20%	881
- Counterparty with risk weight of 50%	2,750
- Counterparty with risk weight of 100%	36

Credit valuation adjustment (CVA)

Pursuant to the CRR, institutions shall calculate a credit valuation adjustment (CVA) charge. The CVA charge is a separate capital requirement for OTC derivatives to cover the risk of loss due to a value adjustment caused by a deterioration of a counterparty's credit quality.

We have decided to use the standardised approach for calculating the CVA charge, which allows the use of risk mitigation techniques such as netting and collateral.

The counterparty risk on financial derivatives is reduced through netting agreements as well as through margin calls and collateral provided in accordance with standard documentation from ISDA and ICMA. Bilateral collateral agreements (CSAs) have been signed with the largest financial counterparties, which means that collateral is received or posted automatically if the positive market values exceed a specified minimum threshold.

The CVA charge for the Group amounted to DKK 501 million as at 31 December 2020.

CVA charge - Standardised approach

DKK MILLION	Group 2020
Exposure – unweighted	1,806
Exposure – weighted	501
Own funds requirement	40

Collateral and guarantees

We may receive the following types of financial collateral and guarantees:

- Deposit funds;
- Securities (debt instruments, investment fund units), primarily listed;
- Government and credit institution guarantees.

Funded credit protection

DKK MILLION	Group Exposure (weighted) 2020	2019
Deposits in cash or cash assimilated instruments	475	97
Debt securities issued by central governments or central banks	-	-
Debt securities issued by institutions	-	6
Total financial collateral	**475**	**104**

We have operating procedures in place for the management and valuation of collateral. These procedures form an integral part of the regular risk monitoring process.

We use the simple method for valuing financial collateral in our credit risk mitigation assessment. This means that the capital charge on a credit exposure can be reduced by means of collateralisation. The CRR specifies the financial collateral eligible for credit risk mitigation purposes.

In accordance with the rules of the CRR, we use financial collateral and guarantees to hedge credit and counterparty risk. The table for funded credit protection shows the level of protection in each exposure category, i.e. the fully adjusted size of the collateral within each exposure category.

Market risk

We use the standardised approach to calculate the own funds requirement for market risk. Positions involving market risk are instruments in the trading book and positions involving foreign exchange risk are outside the trading book.

Risk exposure amount and own funds requirement for market risk

DKK MILLION	**Group** Credit risk exposure (weighted) **2020**	**Group** Own funds requirement **2020**
Debt instruments, specific risk		
Total specific risk*	1,032	83
Debt instruments, general risk		
Total general risk	2,422	194
Shares, etc.		
Total shares, etc.	18	1
Foreign currency positions		
Total long foreign currency positions	365	21
Total amounts for market risk	**3,736**	**299**

*) *Specific risk for debt instruments is calculated for all debt instruments in the trading book, including unweighted and weighted amounts for repo transactions.*

Operational risk

We apply the basic indicator approach to calculate the own funds requirement for operational risk. The risk exposure amount for operational risk is calculated at 15% of a three-year average of net interest income and non-interest related net income.

An assessment of the own funds requirement for operational risk is performed quarterly. If the own funds requirement is deemed to be higher than the level mentioned below, we adjust the own funds reservation accordingly.

Risk exposure amount for operational risk, DSF

DKK MILLION	2020	2019	2018	AVERAGE
Accounting items				
Interest income	820	941	1,075	945
Interest expenses	(279)	(310)	(435)	(341)
Dividends on equity investments	-	-	-	-
Fee and commission income	21	26	32	26
Fee and commission expenses	-	-	-	-
Market value adjustments	(150)	(197)	(135)	(161)
Sum of accounting items	**411**	**460**	**537**	**470**
Risk exposure amount (weighted) under the basic indicator approach	**880**	**1,056**	**1,374**	

DANISH SHIP FINANCE

Summary of Pillar 1 requirements

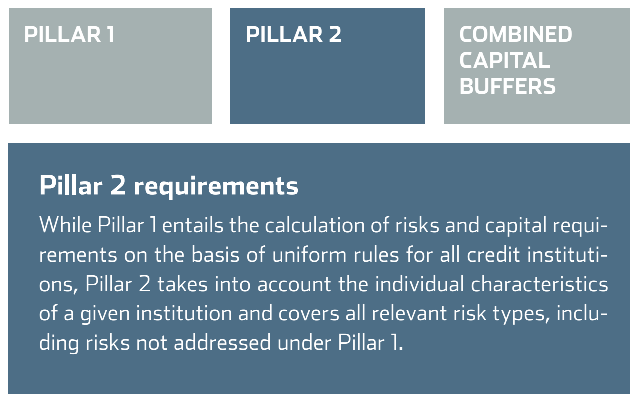
The following table details the risk exposure amounts and own funds requirements for each exposure category.

Risk exposure amount

	Group Risk exposure amount (weighted)		Group Own funds requirement		DSF Risk exposure amount (weighted)		DSF Own funds requirement	
DKK MILLION	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Credit risk								
- Central governments or central banks	377	209	30	17	28	123	2	10
- Regional governments or local authorities	-	-	-	-	-	-	-	-
- Public sector entities	-	-	-	-	-	-	-	-
- Institutions	1,149	730	92	58	1,055	687	84	55
- Corporates	32,331	38,832	2,586	3,107	32,140	38,575	2,571	3,086
- Covered bonds and mortgage bonds	699	634	56	51	699	634	56	51
- Exposures in default	1,476	2,753	118	220	1,476	2,753	118	220
- High-risk exposures	-	-	-	-	-	-	-	-
- Exposures with short-term credit assessment	-	-	-	-	-	-	-	-
- Equity exposures	-	-	-	-	-	-	-	-
- Other items	527	349	42	28	527	349	42	28
Total credit risk	**36,559**	**43,507**	**2,925**	**3,481**	**35,924**	**43,122**	**2,874**	**3,450**
Of which, Counterparty risk	827	862	66	69	826	772	66	62
Market risk								
- Debt instruments	3,454	3,952	276	316	3,454	3,952	276	316
- Shares, etc.	18	7	1	1	18	7	1	1
- Foreign exchange risk	265	253	21	20	265	253	21	20
- Commodity risk	-	-	-	-	-	-	-	-
Total market risk	**3,736**	**4,211**	**299**	**337**	**3,736**	**4,211**	**299**	**337**
Credit valuation adjustment (CVA)	**501**	**631**	**40**	**50**	**501**	**631**	**40**	**50**
Total operational risk	**880**	**1,056**	**70**	**84**	**880**	**1,056**	**70**	**84**
Total risk exposure amount	**41,678**	**49,407**	**3,334**	**3,952**	**41,042**	**49,020**	**3,283**	**3,922**

DANISH SHIP FINANCE

Pillar 2 requirements



Own funds requirements for specific risk areas

We base our calculations of the Pillar 2 requirement and our total adequate own funds on a number of predefined risk areas and other relevant risk elements:

1. Credit risk including counterparty risk
2. Market risk
3. Liquidity risk
4. Operational and control risk
5. Leverage risk
6. Earnings
7. Growth in lending
8. Other risks

A capital requirement deemed adequate to cover the underlying risks is determined for each risk area. Institutions must decide whether other elements of risk should be considered when calculating adequate own funds. Additionally, the Group's operating results are stress tested to determine, among other things, whether it will require additional capital within the next 12 months.

Credit risk

In its guidelines, the FSA divides credit risk into three subgroups: credit risk exposure to large clients in financial difficulty, other credit risks and credit risk concentration.

Credit risk exposure to large clients in financial difficulty

For large clients in financial difficulty, a conservative loss estimate should be made for each loan. A large client is for this purpose defined as a client whose total credit risk exposure accounts for more than 2% of own funds. Financial difficulty is defined as being either credit impaired (Stage 3) or showing significant signs of weakness since initial recognition without being credit impaired (Stage 2), corresponding to rating steps 1 and 2c on the FSA rating scale.

A large client is defined as a client with a credit exposure of more than DKK 183 million (corresponding to 2% of DKK 9,156 million).

FSA rating steps 1 and 2c refer to clients with a DSF Rating between 9 and 12 on our 12-point internal scale (12 being the weakest, denoting that a client is in default). A detailed description of the FSA rating steps is provided in Appendix 7 of the FSA's instructions for financial reports for credit institutions, etc.

Pursuant to the guideline method for calculating capital charges for large clients in financial difficulty, our Pillar 2 add-on amounted to DKK 31 million as at 31 December 2020.

Other credit risk

Other credit risk primarily covers 'other credit risks in the loan portfolio' and 'other credit risk associated with financial counterparties'.

In our assessment of 'other credit risk in the loan portfolio', we consider areas laid down in the guidelines on adequate own funds and internal capital adequacy requirements for credit institutions and sensitivity analyses based on scenarios, and their importance for the need to make loan impairment charges.

Based on these assessments and sensitivity analyses, we have made a Pillar 2 reservation of DKK 100 million to absorb potential credit risk impacts arising from Covid-19-related effects in 2021. We will continue to monitor the impact of the pandemic and may reassess the reservation.

Pursuant to the Executive Order on a Ship Finance Institute, additional capital is required in the event that the LTV exceeds 60% at the time the loan is added to Capital Centre A. In 2020, the Pillar 2 capital reservation was DKK 16 million. In 2019, the figure was DKK 21 million and reported under Operational and Control risk.

The assessment of 'other credit risk associated with financial counterparties' is based on an evaluation of the financial standings of the financial counterparties. The principal risks relate to the investment of the trading book, the majority of which is placed in Danish covered bonds.

The financial standings of financial counterparties and thereby the credit risk associated with the investment of the trading book, and interest rate and exchange rate hedging etc., are monitored continuously, including an assessment of the capital required to hedge the exposures. Furthermore, bilateral collateral agreements (CSAs) have been signed with financial counterparties to reduce the counterparty credit risk.

Based on the current financial standings of our financial counterparties, we conclude that the Pillar 1 requirement adequately covers the capital requirement concerning 'other credit risks associated with financial counterparties'.

DANISH SHIP FINANCE

Credit risk concentration
Concentration risk is calculated with respect to single-name concentration and sector concentration pursuant to the Executive Order on Calculation of Risk Exposures, Own Funds and Solvency Need.

In its guidelines, the FSA notes that Danish mortgage lenders have a unique profile due to the nature of their core business. Against this background, the assessment of sector concentration does not apply to mortgage lenders as per the guidelines.

However, the guidelines stipulate that institutions exempt from these rules must consider the extent to which they have concentration risk that should be addressed and for which capital should be allocated. Based on the sensitivity analyses used in the assessment of 'Other credit risks in the loan portfolio', we find that there is no material risk of loss as a result of sector concentration not covered by the Pillar 1 requirement.

With respect to single-name concentration, we must consider any imbalances in the distribution of exposure sizes in the loan portfolio, irrespective of credit quality. We apply the calculation method stipulated in the guidelines with adjustments approved by the FSA. The Pillar 2 add-on for client concentration has been calculated at DKK 24 million.

Market risk
According to the FSA guidelines, mortgage banks and similar institutions are exempt from Pillar 2 add-ons with respect to market risk. We have nonetheless assessed our market risk based on the guidelines and have adjusted the Pillar 2 add-on for spread risk accordingly.

Spread risk arises from rising spreads between individual bonds and the general level of near-risk-free interest rates. The Pillar 2 add-on for spread risk as at 31 December 2020 has been calculated at DKK 361 million.

Liquidity risk
The specific balance principle limits the risk that we may assume. Limits specified in our internal policies further mitigate the risk.

Collateral obligations to derivative counterparties do impose a need for liquidity. These are carefully managed and evaluated through risk management tools including stress tests.

Mortgage banks and similar institutions are exempt from Pillar 2 add-ons with respect to liquidity risk. We nevertheless assess our liquidity risk based on the guidelines and conclude that the is covered by the Pillar 1 requirement.

Operational and control risk
Operational risk and control risk under Pillar 2 include business risk, i.e. external factors negatively influencing the business model.

In DSF, business risk would most likely arise from lower credit margins following increased competition or the risk of new regulatory requirements that jeopardise the covered bond status, LCR eligibility or repo access of our bonds. These risks are considered to be adequately monitored and managed.

Reputational risk can affect the size of the risk premium related to issuance of the bonds. We manage this risk by applying an overall conservative approach and holding substantial capital and liquidity reserves.

Leverage
The leverage ratio is calculated as Tier 1 capital relative to the institution's total exposure value (unweighted). As at 31 December 2020, the leverage ratio was calculated at 8.6% for the Group and 13.8% for DSF.

Pursuant to Article 451(1) of the CRR, institutions must disclose whether they use Tier 1 capital to measure capital, cf. Article 499(1)(a) of the CRR, and whether the leverage ratio is calculated at the end of the quarter.

According to the Basel Committee, the leverage ratio should not be lower than 3%. Therefore, there is no need for the Group to increase the internal capital adequacy requirement to reduce leverage.

Further information on the leverage ratio is provided in Annex 9.

Earnings risk

Mortgage lenders with core earnings representing less than 0.1% of loans and guarantees before loan impairment charges and market value adjustments must consider whether this gives rise to an increase in the internal capital adequacy requirement. Core earnings relative to loans and guarantees amounted to 1.3% for 2020.

In addition to the level of earnings, earnings stability also forms part of the internal capital adequacy assessment. Our earning capacity should be assessed in relation to our dividend policy and access to capital. The results of the stress test show that we will not, even in a severe stress scenario, require additional capital within the next 12 months.

We find that the Pillar 1 requirement is sufficient to cover risk relating to our earnings.

Risk from growth in lending

The FSA defines total year-on-year lending growth of 10% or more as potentially exposing an institution to higher-than-normal credit risk. Consequently, institutions with lending growth at this level or above must allocate additional capital. Our annual rate of growth in lending was -18.2% from 2019 to 2020.

Other risks

Institutions must assess whether there is a need for a Pillar 2 add-on in respect of strategic risk, group risk and external risk.

No external risks have been identified that may challenge the business model. Therefore, no additional capital has been allocated to cover risks.

Combined capital buffer requirement

PILLAR 1	PILLAR 2	COMBINED CAPITAL BUFFERS

Pursuant to the Danish Financial Business Act, the combined buffer requirement is an addition to the capital adequacy requirements described on the previous pages. Institutions must have sufficient regulatory capital available to cover the sum of the Pillar 1 and Pillar 2 requirements and the combined capital buffer requirement. If a credit institution does not meet this total capital requirement, it will only be permitted to make distributions, disburse variable pay and make payments relating to AT1 capital instruments if certain conditions are met.

The combined capital buffer requirement consists of:

- **Capital conservation buffer**
  In 2020, the capital conservation buffer was 2.5% of the total risk exposure amount.
- **Systemic risk buffer**
  The systemic risk buffer only applies to SIFI institutions in Denmark.
- **Countercyclical capital buffer**
  The institution-specific countercyclical capital buffer may be applied by the authorities if lending growth results in higher macroprudential risk. This buffer may be between 0% and 2.5% of the total risk exposure amount.

Based on the geographical distribution of credit risk exposures, the capital requirement for the countercyclical capital buffer was calculated at DKK 65 million as at 31 December 2020. The capital requirement pertains to exposures to clients domiciled in Norway, Hong Kong, and Luxembourg, which have set the following countercyclical capital buffer rates:

- Norway: 1.00%
- Hong Kong: 1.00%
- Luxembourg: 0.25%

Institution-specific countercyclical capital buffer, DSF

DKK MILLION / %	2020	2019
Total risk exposure amount	41,042	49,020
Institution-specific countercyclical buffer requirement	65	414
Institution-specific countercyclical buffer requirement, %	0.2	0.8

The geographical distribution of credit exposures relevant for the calculation of the countercyclical buffer is provided in Annex 10.

All EU member states can implement a systemic risk buffer applying to domestic exposures. The requirement may apply to the entire sector or to individual subsectors.

The systemic risk buffer is aimed at preventing and mitigating long-term, non-cyclical systemic or macroprudential risks not covered by the Capital Requirements Regulation (CRR). Since the Danish systemic risk buffer rate is only applied to systemically important financial institutions, it is not relevant for DSF.

In accordance with the Executive Order on Management and Control of Banks, etc., a capital contingency plan has been prepared as part of the recovery plan, containing a catalogue of possible courses of action to strengthen the capital position in a critical situation.

The capital contingency plan would take effect in the unlikely event of predefined triggers being activated.

LEVERAGE RATIO

The leverage ratio is defined as the relationship between Tier 1 capital and the balance sheet total (including off-balance sheet items). The ratio does not factor in any collateral.

The intention is to reduce the risk of excessive leverage and to allow for the potential uncertainty in the determination of capital requirements resulting from the internal models or the standardised approach.

All risks and the material Tier 1 capital are in DSF. The leverage ratio for DSF is 13.8%. In DSH, the leverage ratio is 41.1% and at the Group level it is 8.6%.

The reason that the ratio is significantly lower for the Group than for DSF and DSH alone is the calculation technique stipulated by the FSA whereby the tied-up reserve capital is included in the determination of consolidated capital adequacy at an amount corresponding to the tied-up reserve capital's proportionate share of the capital requirement. For further information, please refer to the section on 'Available own funds'.

According to the FSA, policies that contain a total leverage ratio target are a requirement when the leverage ratio is less than 10%. However, for the reasons described above, the Group does not have a policy regarding a target for the total consolidated leverage ratio.

SUPPLEMENTARY COLLATERAL AND OVER COLLATERALIZATION

Pursuant to the Executive Order, the issuance of covered bonds in Capital Centre A requires DSF to post supplementary collateral for loans exceeding an LTV limit of 60% in the event of declining ship values.

The LTV ratios are closely monitored, and the capital centre maintains a collateral buffer should ship values decline.

The general need for supplementary collateral for Capital Centre A was low throughout the year, and increased slightly towards the end of the year, averaging 2.6% of issued bonds.

At the end of 2020, the requirement for supplementary capital amounted to DKK 315 million or 4.8% of issued bonds.

The capital requirement for Capital Centre A consists of the mandatory 8% requirement plus the additional capital adequacy requirement and the combined capital buffer.

As at 31 December 2020, Capital Centre A had a cover pool ratio of 19.4%, which is well above the combined capital requirements of 12.0%.

The overcollateralisation rate of the cover pool was 7.4%-points as at 31 December 2020. The securities placed in the cover pool can be used for supplementary collateral to cover any breaches of LTV.

MANAGEMENT DECLARATION

The Board of Directors of both Danish Ship Finance A/S (Danmarks Skibskredit A/S) and Danish Ship Finance Holding A/S (Danmarks Skibskredit Holding A/S) approved the Risk and Capital Management report for 2020 on 26 February 2021.

The Board of Directors find that the Group's risk management procedures are adequate and provide assurance that the risk management systems in place are adequate in relation to the Group's risk profile and strategy.

The Board of Directors also find that the Group's overall risk profile in relation to its business strategy, business model and key figures provides a relevant and comprehensive picture of the Group's risk governance, including how the risk profile and the risk tolerance defined by the Board of Directors affect each other.

The Board of Directors made their assessment on the basis of the adopted business model, the latest strategy report, material and reports presented to the Board of Directors by the Executive Board, risk managers and compliance officers, internal controls and any supplementary information or reports obtained. A review of the business model and policies shows that the overall requirements set out in the model for specific risk areas are fully reflected in the more specific limits of the individual policies.

The Group maintains solvency and liquidity well in excess of minimum requirements and seeks to ensure it has an appropriate and robust capital base supporting its business model.

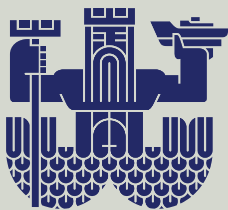
The risk tolerance defined by the Board of Directors is managed via applicable policies and limits.

Copenhagen, 26 February 2021

Board of Directors

Eivind Drachmann Kolding (Chairman)	Peter Nyegaard (Vice Chairman)		
Anders Damgaard*	Nanna Flint	Povl Christian Lütken Frigast*	
Thor Jørgen Guttormsen	Anna-Berit Koertz	Ninna Møller Kristensen	
Jacob Meldgaard	Michael Nellemann Pedersen*	Christopher Rex	Henrik Sjøgreen

**) also signed in the capacity of board member of Danmarks Skibskredit Holding A/S*



DANISH
SHIP FINANCE

DANISH SHIP FINANCE A/S (DANMARKS SKIBSKREDIT A/S)

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