Banks and mortgage banks

Market development article

Table of contents

Summary 3

1. Earnings of credit institutions 4

Bank's interest income 5

Value adjustments 7

Return on equity 8

2. Credit institutions, capital matters 10

Status on dividends 11

Leverage 12

Minimum Requirement for Eligible Liabilities (MREL) and debt buffer requirements 14

3. The liquidity of funding of the credit institutions 16

Liquidity of the banks 17

Deposits in banks 19

Liquidity in the mortgage market 20

Supplementary collateral 22

4. Lending by banks and mortgage banks 22

Mortgage bank lending 23

Lending by banks 25

Corporate lending 26

Impairments 27

Management estimates concerning impairments 27

Stage distribution 28

Non-performing loans and forbearance measures 29

Priority loans 31

Housing loans with outstanding interest rate adjustments and risky loans 32

Exposure to commercial real estate 34

5. Structure 35

Annexes 37

Summary

The total pre-tax profit for the credit institutions was DKK 71.4 billion, which was approximately DKK 30 billion higher than in 2022[1]. The strong earnings were mainly due to high net interest income.

The significant increase in net interest income was driven primarily by a historically high deposit margin in the banks. The higher deposit margin rate reflects the current positive interest rates and a large deposit surplus.

The banks' lending margins have simultaneously fallen and for households, these figures are at record lows. It is not obvious that the risk has decreased just as much over the past few years with interest rate increases and high rates of inflation.

The credit institutions had a relatively large net capital gain on their holdings of securities. This can in particular be attributed to a general increase in the share and bond markets, particularly in the fourth quarter. The impairments were also at a low level and thus did not have a significantly negative impact on the results.

The credit institutions increased their capital ratio and excess cover for the capital requirements and the total capital percentage is now the highest it has been in recent times.

Overall, the value of the banks' lending in Danish kroner fell. This can to a great extent be attributed to the lending of the banks, where currency exchange rates resulted in losses on branch activities in Scandinavia. Added to this, there is Danske Bank's divestment of its Norwegian private customer portfolio. For the mortgage banks, the market value of their lending increased after falling in 2022 due to the large interest rate hikes. In 2023, the mortgage interest rates were more stable, and the total mortgage lending grew at the same time.

The phase distribution among the banks' commercial lending reflects a minor increase in the credit risk in 2023, but the proportion of non-performing commercial loans was similar to the 2022 levels - and thus still low.

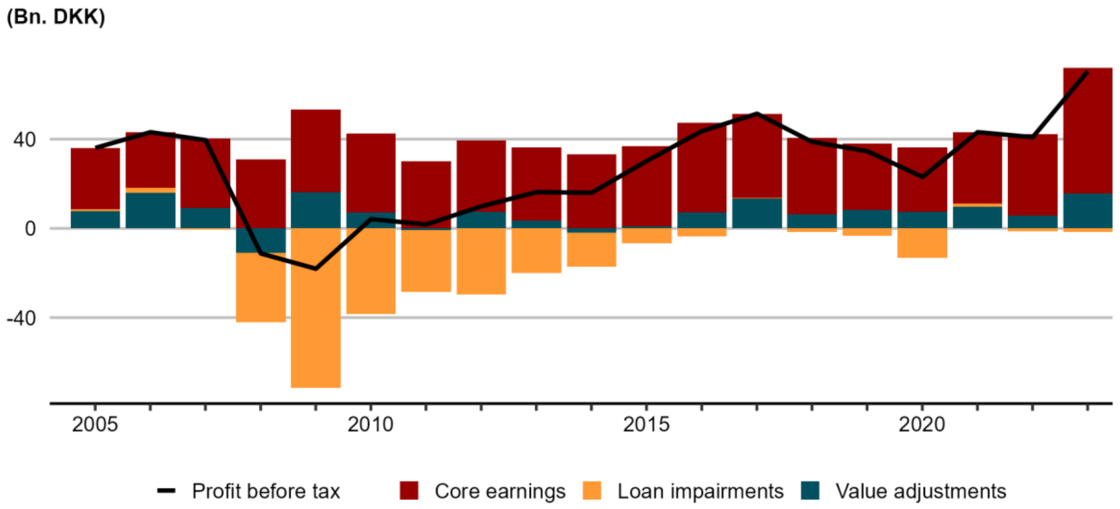
The banks have seen a large growth in lending to private customers, among other things, for priority loans to homeowners. Unlike the fixed-interest mortgages, this increases the risk – both for customers who have to pay a variable short-term interest rate and for the banks who finance long-term loans with short-term funding.

[1] This article is limited to banking and mortgage banks headquartered in Denmark. This means that the North Atlantic institutions and branches of foreign institutions are not included. Unless otherwise stated, a correction has been made for Danske Bank's money laundering fine, which affects the result for 2022. However, the figures in the accounting tables in the annex have not been corrected for the fine.

1. Earnings of credit institutions

The overall profit of credit institutions for 2023 was the highest ever, significantly higher than in previous years. The total profit was DKK 71.4 billion before tax, cf. Figure 1. The high earnings can in particular be attributed to the base earnings rising to DKK 56.3 billion. At the same time, the credit institutions had a profit of DKK 15.7 billion from price adjustments (net capital gain), which was DKK 10 billion higher than in 2022. Recognized write-offs on loans were net DKK 1.5 billion, which is at the same level as in 2021 and 2022.

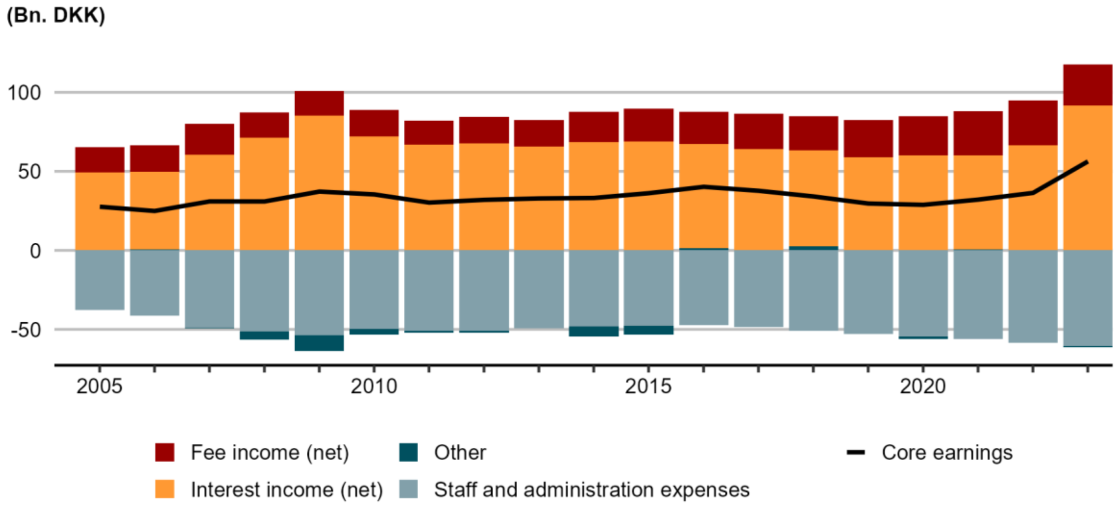
Figure 1: Profit/loss of credit institutions, 2005-2023



Note: Core earnings consist of net interest and fee revenue, expenses for staff and administration, depreciation and amortisation of intangible and tangible assets and other operating income and expenses. This is an expression of the core business of credit institutions. The transition to IFRS 9 at the end of 2018 has resulted in higher impairments. Profit/loss on shares in associated enterprises is not shown in the figure.
Source: Reports to the Danish FSA.

The improvement in the core earnings of credit institutions was mainly due to higher net interest income, cf. Figure 2. Net interest income was DKK 91.5 billion compared with DKK 66.3 billion the year before. Credit institutions' net fee revenue decreased from DKK 28.4 billion in 2022 to DKK 26.1 billion. Staff and administrative expenses amounted to DKK 60.5 billion compared to DKK 58.6 billion the year before. Since 2017, the total staff and administrative expenses of credit institutions has increased by between 2 and 5 per cent annually, which is approximately in line with the overall wage developments in the period.

Figure 2: Core earnings for credit institutions, 2005-2023



Note: The “Other” category covers other operating revenues, other operating expenses and depreciation and amortisation of intangible and tangible assets.
Source: Reports to the Danish FSA.

Bank’s interest income

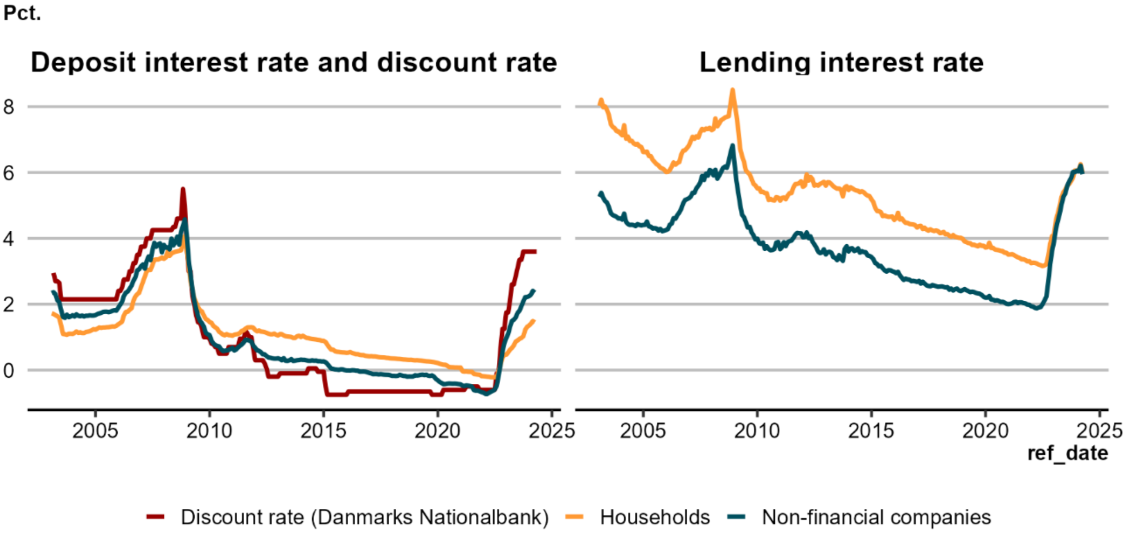
The last two years have been characterised by rising interest rates. The deposit and lending rates for banks are currently at levels not seen since the financial crisis of 2008, cf. Figure 3. As the interest on certificates of deposits has grown significantly than the deposit interest rates, the deposit margins of the banks are at a historically high level, cf. Figure 4. Between January and September of 2023, the deposit margin for household deposits grew by 1.4 percentage points and it grew by 0.9 percentage points for non-financial companies. Danmarks Nationalbank’s monetary policy interest rates have remained unchanged since September 2023, but the deposit interest rates of banks have continued to rise. This has resulted in the deposit margins having fallen slightly - by 0.3 and 0.2 percentage points for, respectively, households and non-financial companies between September and December of 2023.

Part of the explanation for this is that time-bound deposits have increased. Time-bound deposits typically provide higher interest rates than deposits that can be withdrawn on a daily basis. Between September and December of 2023, time-bound deposits grew by 9 per cent for both households and non-financial companies.

In December, the average deposit margin for households was 2.2 percentage points and 1.4 percentage points for non-financial companies. The high deposit margin which the banks had in 2023 contributed significantly to their earnings.

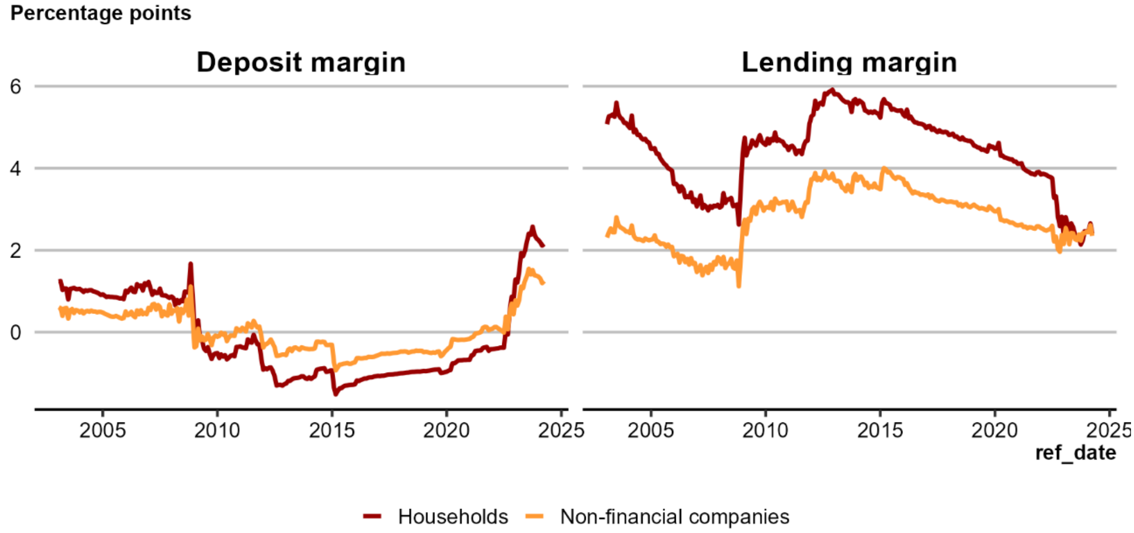
The banks have increased their lending interest rates less than the monetary policy interest rates have increased. Thus, the average lending margin has fallen and is currently at a low level when viewed from a historical context. In particular, the average lending margin for loans to households has fallen significantly since the second half of 2022. The average lending margin for banks was 2.5 percentage points for both households and non-financial companies in December 2023. A low lending margin may be an expression of an underestimation of the risks associated with loans. The latest lending margin for households was at a similarly low level right before the financial crisis, and after the crisis it had to be raised significantly again. A pro-cyclical pricing can be destabilising as higher interest rates during bad times exacerbate the negative impacts.

Figure 3: Developments in the certificate of deposit interest rate and the interest rates of banks



Note: The figure shows the financial institutions' average deposit and loan interest rates on all outstanding transactions and the deposit certificate interest rate in Danmarks Nationalbank. The latest observation is from the end of January 2024.
Source: Danmarks Nationalbank.

Figure 4: The deposit and lending margins of banks

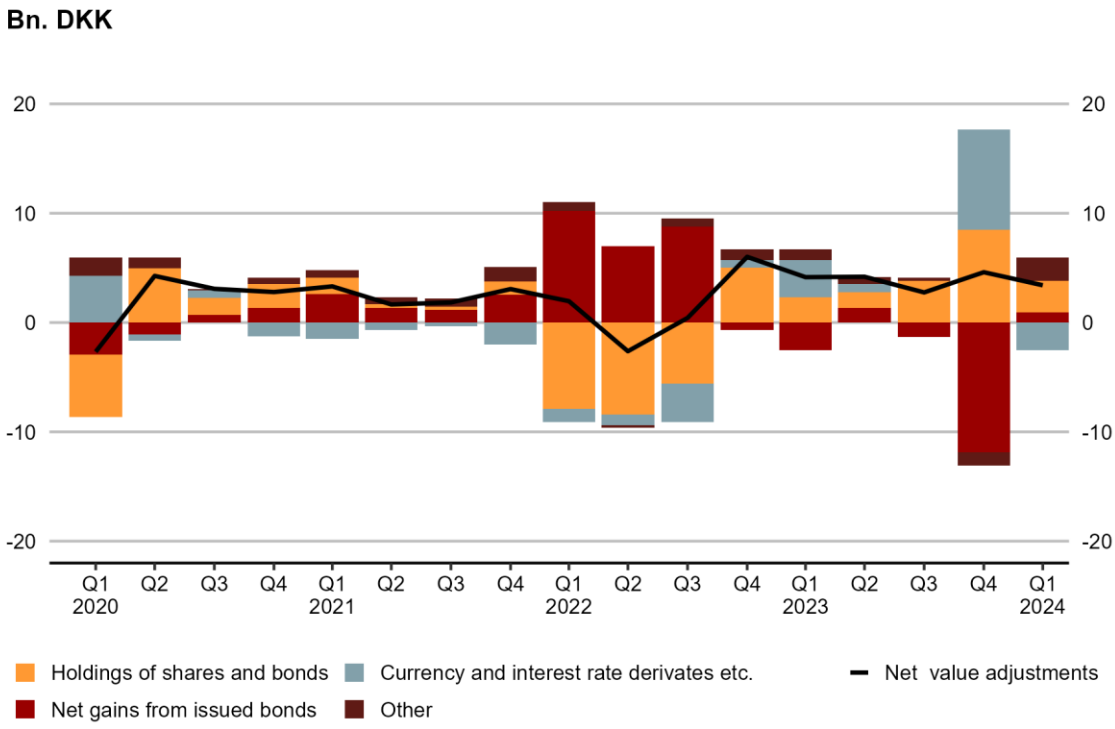


Note: The deposit margin is the difference between the certificate of deposit interest rate and the average deposit interest rate in the banks. The deposit margin is the difference between the average lending interest rate in the banks and the certificate of deposit interest rate. The latest observation is from the end of January 2024.
Source: Danmarks Nationalbank.

Value adjustments

Throughout 2023, the credit institutions saw major net positive value adjustments on their holdings of shares and bonds, cf. Figure 5. This is because the stock markets were in a major bull market. On top of this, bond prices grew significantly in the fourth quarter, among other things, due to market expectations for rate cuts in 2024. This resulted in net positive value adjustments for the institutions' holdings of shares and bonds and derivative contracts. However, issued bonds resulted in price losses, though to some extent this was offset by interest rate hedging instruments.

Figure 5: Developments in value adjustments



Note: The figure shows the gross movements in the credit institutions' price regulations, calculated per quarter. The items "Holdings of shares and bonds" and "Net gains on issued bonds" and "Other" are comprised of multiple elements and calculated on a net basis. Movements in the individual items in the figure can thus cover opposite movements in underlying items. "Net profit on issued bonds" shows the sum of price adjustments on issued bonds and mortgage bank lending. "Other" includes, among other things, price adjustments on investment properties, currencies and liabilities and assets in pooled fund schemes.
Source: Reports to the Danish FSA.

When the value of a financial instrument is to be calculated, there are generally three recognised approaches to deal with this from an accounting perspective, cf. the Danish Accounting Executive Order[2:]

[2] In Section 44 of the Danish Executive Order on Financial Reports for Credit Institutions and Investment Firms, etc. it is stated that: *Financial assets shall, after the first recognition, be valued at:*
1) amortised cost price, cf. Section 45(1),
2) fair value via other total income, cf. Section 45(2) or
3) fair value via the income statement, cf. Section 45(3).

- amortised cost price
- fair value via the income statement
- fair value via other total income.

Box 1: Calculation of financial assets

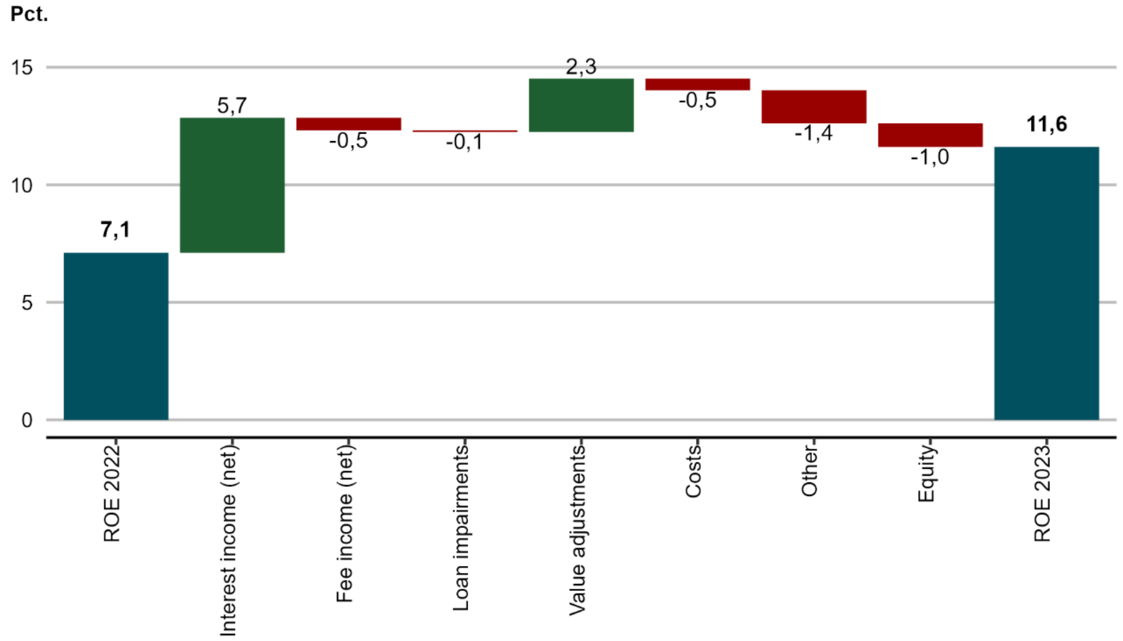
Amortised cost price can be used if the institution holds the instrument with a commercial objective of collecting the asset's contractual payment streams (interest). The instrument can only be calculated at amortised cost price if it is placed in the bank account and not the trading portfolio. Credit institutions can also hold the instrument at fair value via other total income (value regulation via the equity and not the income statement). This accounting practice may only be used if the institution holds the instrument with a view towards either collecting the contractual payment streams or by selling the instrument. Finally, the instrument's value must be calculated at fair value with a value adjustment via the income statement if the instrument is held in the trading portfolio.

In Denmark, the vast majority of shares and bonds, etc. are calculated at fair value. However, some institutions use the fair value via other total income for parts of their bond holdings. Value changes in debt instruments calculated by this method will therefore not impact the institution's price adjustments in the income statement but will instead by stated under "Other total income". The total capital gains for credit institutions as shown in the income statement will therefore not reflect the total changes of value during the period. If an institution chooses to recognise a bond at amortised cost price an thus without ongoing price adjustments, there will also not be any fluctuations in the equity as prices move on the bond and this may result in a misleading view of the institution's solvency. Therefore, the Danish FSA has specified in the solvency requirement guidelines that if bonds outside of the trading portfolio are valued at amortised cost price with a greater deviation from fair value, the institution must set aside a pillar 2 supplement to the solvency requirement statement.

Return on equity

Credit institutions saw a significant improvement in the return on equity after tax in 2023. The return on equity after tax ended up being 11.6 per cent compared to 7.1 per cent in 2022, cf. Figure 6. The main driving force between the increase in profitability was the higher net interest incomes which contributed with 5.7 percentage points to the increase. Higher earnings on price adjustments also made a positive contribution of 2.3 percentage points. Conversely, lower net fee revenue, higher costs, high tax costs and more equity pulled the result down. The credit institutions' total return on equity was at the highest level since 2006, where it was at 12.7 per cent. Among other things, this is a reflection of the long period with negative interest rates which for multiple reasons had negative impacts on the return on equity.

Figure 6: Driving forces in the changes to the return on equity, 2022-2023



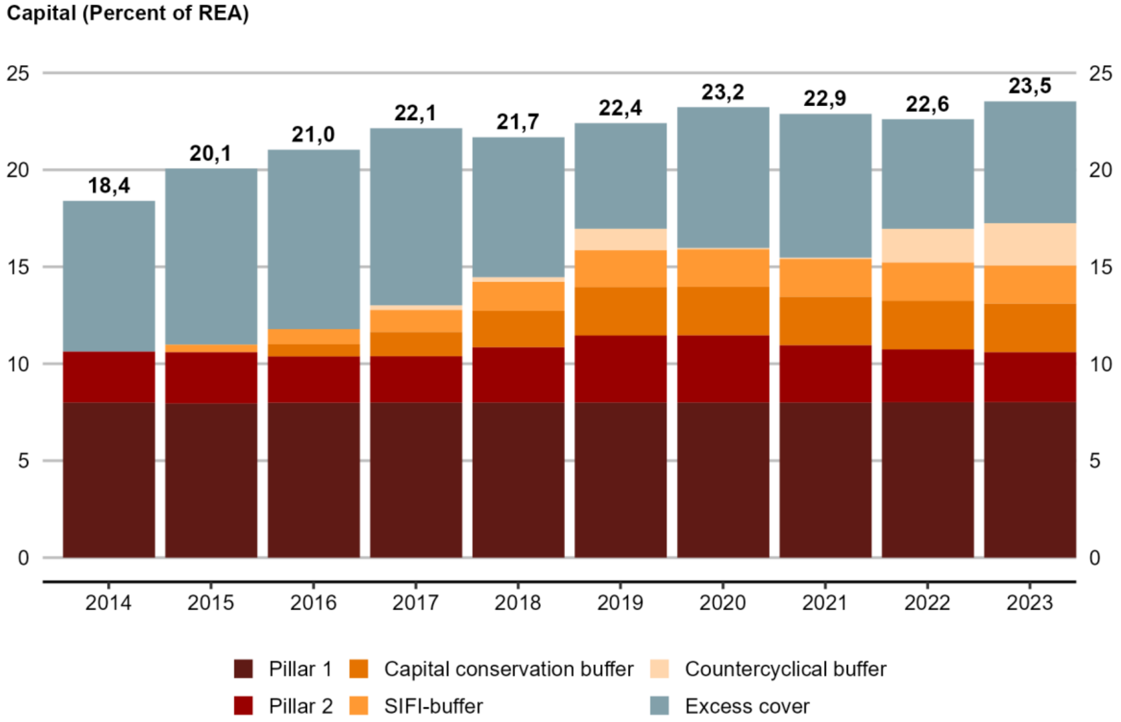
Note: The figure shows the factors that impacted the return on equity (ROE) after tax from 2022 to 2023. The green columns represent positive contributions while the red columns represent factors that contribute to reducing the return on equity. “Costs” include staff and administrative expenses, depreciation and amortisation of intangible and tangible assets and other operating expenses. “Other” includes taxes, other operating income, profit/loss from shares in associated and group companies, the profit/loss of assets being divested and dividend income from shares.
Source: Reports to the Danish FSA.

2. Credit institutions, capital matters

The total capital percentage of credit institutions grew to 23.5 per cent in 2023, cf. Figure 7. This corresponds to an increase of 0.9 percentage points from 2022. The institution's excess cover in relation to the total capital requirement was, however, only increased by 0.6 percentage points to 6.3 per cent as the contra-cyclical capital buffer at the end of March 2023 was increased to 2.5 per cent. Between 2020 and 2022, the credit institution's total capital percentage fell, but the increase in 2023 has resulted in the highest capital percentage measured under the currently applicable capital regulation. The increase can be attributed to the credit institutions increasing their total capital by DKK 21 billion to DKK 487 billion. The credit institution's risk-weighted exposures grew to DKK 2,069 billion, an increase of DKK 7 billion.

It is critical that the individual credit institution is ensuring that their capital situation is robust and will remain robust in a stress scenario so that the institution can absorb large unforeseen losses. It is good business practice for the institutions to build up capital during periods with strong earnings such as was the case in 2023.

Figure 7: Capital requirements for credit institutions



Note: The excess cover includes the institutions' excess cover of genuine core capital (Common Equity Tier 1/CET1), plus additional and hybrid core capital (AT1 and T2). The individual solvency requirement consists of an 8 per cent pillar 1 requirement and an institution-specific pillar 2 requirement. All figures are as a percentage of risk-weighted exposures (RWE). The contra-cyclical buffer can be marginally positive during periods where the buffer is set to 0 per cent in Denmark. This is because the credit institutions' foreign exposures may be subject to a counter-cyclical buffer requirement.
Source: Reports to the Danish FSA.

Box 2: The systemic buffer for exposures to real estate companies

The Danish Minister of Industry, Business and Financial Affairs decided on 26 April 2024 to implement a systemic buffer of 7 per cent for exposures towards Danish real estate companies. Real estate companies are companies whose primary business is to own and rent out properties for residential or commercial purposes and to develop and complete construction projects with a view towards a subsequent sale. Lending to real estate companies covers lending to the 'real estate' and 'completion of construction projects' industries. The part of the covered exposures which have a loan to value (LTV) ratio of under 15 per cent are exempt from the buffer. The decision to introduce a systemic buffer follows from a recommendation from the Danish Systemic Risk Council on 3 October 2023[3.] The buffer is to address higher risks associated with the credit institutions' lending to real estate companies. Among other things, the higher risk is a result of high levels of sensitivity to interest rates for the real estate companies, a significantly growing lending to these companies among certain institutions and significant impairments on lending to real estate companies in previous crises.

Credit institutions with exposures to Danish real estate companies must meet the buffer requirements from 30 June 2024.

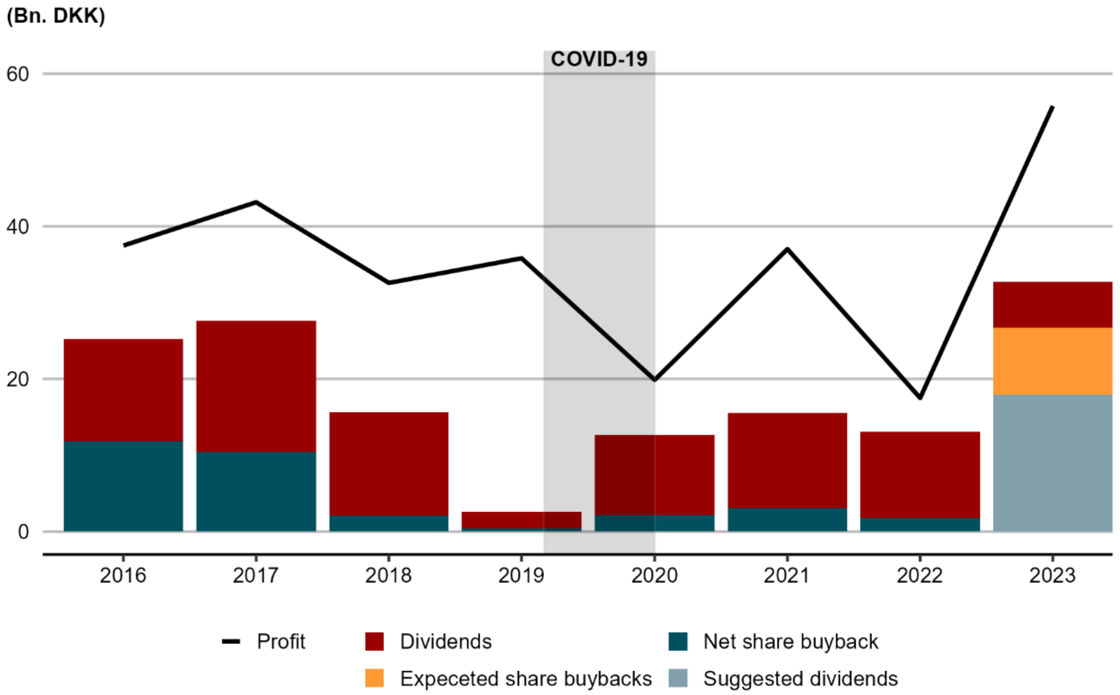
Status on dividends

In 2024, credit institutions distributed dividends of DKK 6 billion based on their results for 2023, cf. Figure 8. On top of this, there are expected to be DKK 26.7 billion in proposed dividends and expected net share buybacks[4.] Among the institutions which paid out dividends based on their 2023 results, the total dividends amounted to up to 85 per cent of the result after tax. Since 2016, the total dividends have amounted to between 42 and 75 per cent of the sector's annual result. However, 2019 is an exception because the Danish FSA in March 2020 asked the credit institutions to be reticent about paying dividends due to the uncertainty of the economic situation in light of the outbreak of the COVID-19 pandemic.

[3] You can read the recommendation here: link

[4] Dividends and share buyback programmes are as a general rule based on the result of the year before, and therefore at present it is only possible to say something about expected dividends based on the proposed dividends and expected share buybacks. The information about expected share buybacks is retrieved from the SIFI's annual report and expected share buybacks from non-SIFI institutions are not included.

Figure 8: Capital allocation of credit institutions for the individual financial years



Note: Normally, the allocation of capital is based on the result of the year before. Therefore, dividends and net dividends from share buyback programmes have generally been in line with the result of the year before. In cases where the result from the year before was negative, it is assumed that any potential capital distribution will be related to the current year, as there is no profit to distribute. The expected share buybacks include the value of the SIFI's announced share buyback programmes which will be completed in 2024 pursuant to their 2023 annual reports. Reservations are made for the uncertainty factor inherent in relation to the final distributions.
Source: Reports to the Danish FSA and SIFI's annual reports for 2023.

Leverage

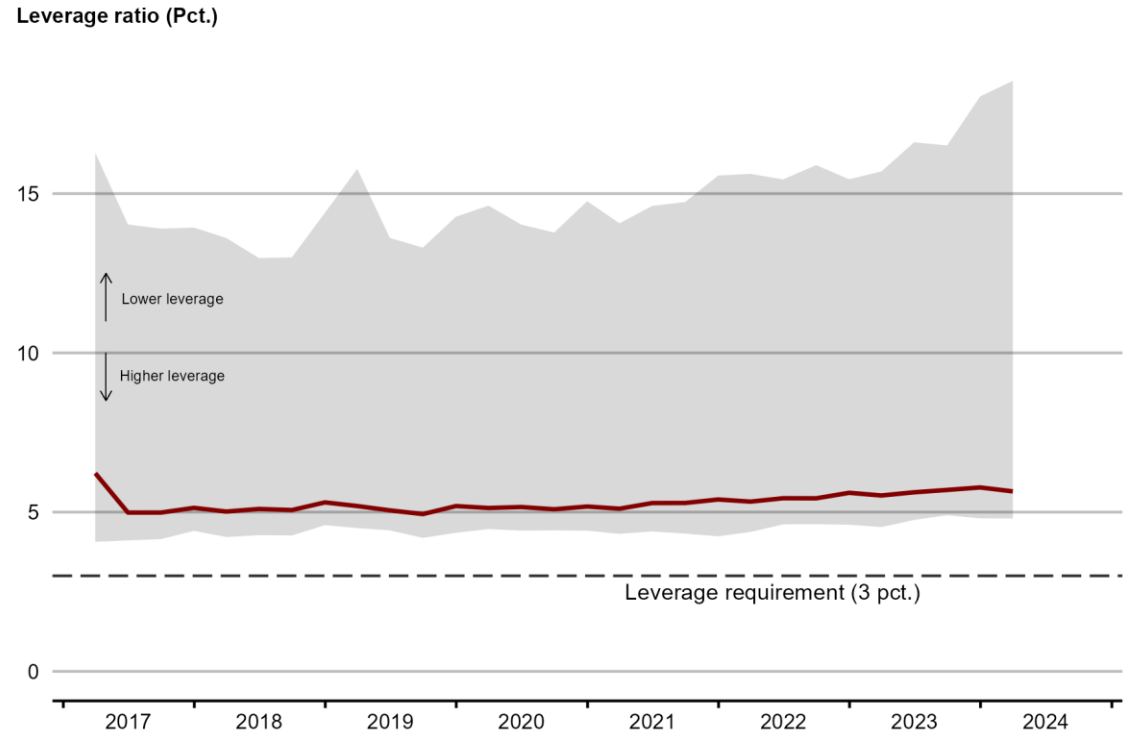
In 2021, the Danish Parliament introduced a so-called leverage requirement for the Danish credit institutions. The requirement means that the leverage ratio, which measures an institution's core capital[5] in relation to the non-risk-weighted exposures, must be at least 3 per cent. The requirement came as part of the tightened capital regulation following the financial crisis in 2008 and is intended as a kind of backstop for institutions that would otherwise be able to operate with a relatively high leverage ratio only on the basis of a risk-weighted capital requirement.

The overall leverage ratio of the credit institutions was 5.8 per cent in 2023 compared to 5.6 per cent in 2022, cf. Figure 9. This reflects a lower degree of leverage among Danish credit institutions, which once again reflects a moderate improvement in the core capital and a relatively constant level of lending. Comparing the spread to the weighted average shows that it is the large Danish mortgage banks which operate with relatively high levels of leverage and also shows that some institutions have a much lower level of leverage than the average.

[5] Core capital, also known as Tier 1 capital, consists of genuine core capital (CET1) and hybrid core capital (AT1). CET1 is the highest quality of capital and can absorb losses instantly. This type of capital
includes share, guarantor and share capital, retained profits, accumulated other total income and other reserves. AT1 consists of hybrid capital instruments, which are subordinated loans and as a general rule without maturity which can be used to cover losses and, for example, be written down or converted into CET 1 capital.

None of the Danish institutions are currently close to violating the regulatory leverage requirement of 3 per cent.

Figure 9: Credit institution leverage and diversification



Note: The figure shows the credit institutions' total leverage ratio (red line) and the spread measured in the 0 and 95th percentiles (grey area). Niche institutions and institutions younger than 3 years are excluded from the calculation. The dotted line illustrates the gearing requirement of 3 per cent.
Source: Reports to the Danish FSA.

Box 3: An update to the solvency requirement guideline and the gearing guideline
The solvency requirement guideline has been updated in December 2023 with a number of new requirements about calculation related to interest risk outside of the trading portfolio.

The changes reflect a new regulation, for example, the new IRRBB guidelines which entered into force in 2023, and the new regulatory technical standards (RTS's) which as of early May 2024 are ready to be adopted. The changes also reflect that interest rate hikes in 2022 and 2023 resulted in a higher supply of products which introduce interest risk outside of the trading portfolio and new risks which have not been relevant for many years. The capital effect is expected to be limited for most institutions.

For the mortgage banks and the large banks, the requirements for sensitivity calculations for interest risk will be expanded upon. In addition, the calculation of the solvency requirement associated with IT risks has been simplified.

In the gearing guidelines, the most significant change is that non-SIFIs (non-systemically important financial institutions) will from now on also have to assess whether their gearing risk, and thus the need for managing it, is significant. This must be done on the basis of their gearing ratio and their compliance with the gearing requirements for stress scenarios.

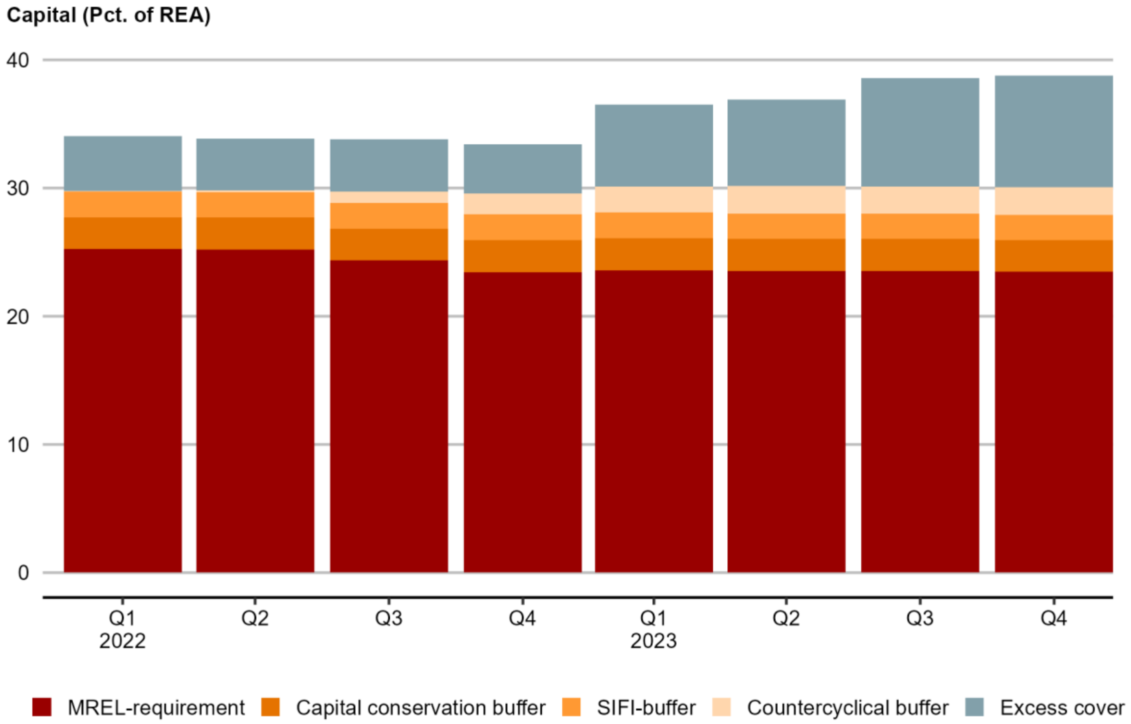
Minimum Requirement for Eligible Liabilities (MREL) and debt buffer requirements

The Danish FSA will specify an MREL requirement for the Danish banks to be able to address the serious consequences which future financial and economic crises may have for the Danish economy and its financial stability. The Danish mortgage banks are also subject to a debt buffer requirement. The MREL requirement will vary depending on whether a bank is categorised as a SIFI or not. For SIFIs, the MREL requirement is two times the solvency requirement plus the combined buffer requirement excluding the contra-cyclical buffer. Non-SIFIs will be specified an individual MREL requirement by the Danish FSA[6.] Overall, this means that the MREL requirement for SIFIs is significantly higher than for non-SIFIs.

The banks' total MREL funds amounted to 38.8 per cent of the risk-weighted exposures at the end of 2023, cf. Figure 10. For comparison, the banks' total MREL fund amounted to 33.4 per cent of the risk-weighted exposures at the end of 2022. The increase is due to the capital growing by DKK 60 billion. The MREL requirement was reduced in 2023 compared to the year before while the total buffer requirement grew due to the contra-cyclical buffer. The total excess cover for the MREL requirement and the buffer requirement therefore grew to 8.7 per cent at the end of the year. It is important that institutions have a solid excess cover for the MREL requirement. The Danish FSA has therefore published a guide for how to ensure a sound financing structure in relation to the MREL and debt buffer requirements which, among other things, includes considerations about what the institutions should include when they specify their targets for the excess cover for the MREL requirement.

[6] The individual MREL requirement consists of two main components: the loss-absorbing amount and the recapitalisation amount (the MREL supplement). The loss-absorbing amount is the institution's individual solvency needs (pillar 1 and 2). The recapitalisation amount consists of three additional sub-components: recapitalisation floor, recapitalisation surcharge and a potential size surcharge. The recapitalisation surcharge consists of the part of the institution's activities that cannot be resold immediately and must therefore be continued by Finansiel Stabilitet. The recapitalisation floor covers those exposures to which there is considerable uncertainty about whether the activities can be resold. If the institution has a balance sheet in excess of EUR 3 billion, they will also be subject to a size surcharge requirement. This covers, on the one hand, the costs associated with the fact that the divestment of assets will be more difficult the larger the institution is, and, on the other hand, that for these institutions there is no prior approval from the European Commission that the liquidation assets can be used. Read more here: Link.

Figure 10: Banks' MREL requirements



Note: Both capital and risk-weighted exposure are calculated at liquidation group level. The consolidation only includes companies that are subject to an MREL requirement. For example, mortgage banks are not subject to an MREL requirement, but only a debt buffer requirement. The excess cover includes the institutions' excess cover of genuine core capital (Common Equity Tier 1/CET1), additional and hybrid core capital (AT1 and T2) and MREL instruments. All figures are as a percentage of risk-weighted exposures (RWE).
Source: Reports to the Danish FSA and the FSA's MREL decisions.

Box 4: The MREL guide

In November 2023, the Danish FSA published a guide on how to ensure a sound financing structure for MREL and debt buffer requirements. The purpose of the guide is to make it clearer which a reasonable target for excess cover for the MREL and debt buffer requirements are. The MREL and debt buffer requirements are intended to ensure that an institution can be crisis managed without the need for public funding. It is therefore critical that the institutions are always in compliance with the requirements - also in periods where it may be difficult to access the capital markets and refinance the issuance of MREL and debt buffer requirements.

The guide contains specific considerations for what the institutions should take into account when they specify a target for the excess cover for the MREL and debt buffer requirements. The institutions' targets for the excess cover must be able to address a hard macro-economic stress scenario, both for the market in general and the institution more specifically. The institutions must also take into account the refinancing risk associated with the institution's issuances during such a period. They should realistically assess their approach to refinancing during a hard stress scenario where market access may be limited. Smaller institutions which only have a few issuances aimed at a more niche investor segment should expect to lose market access quickly and for a longer period as, for example, was seen during the financial crisis.

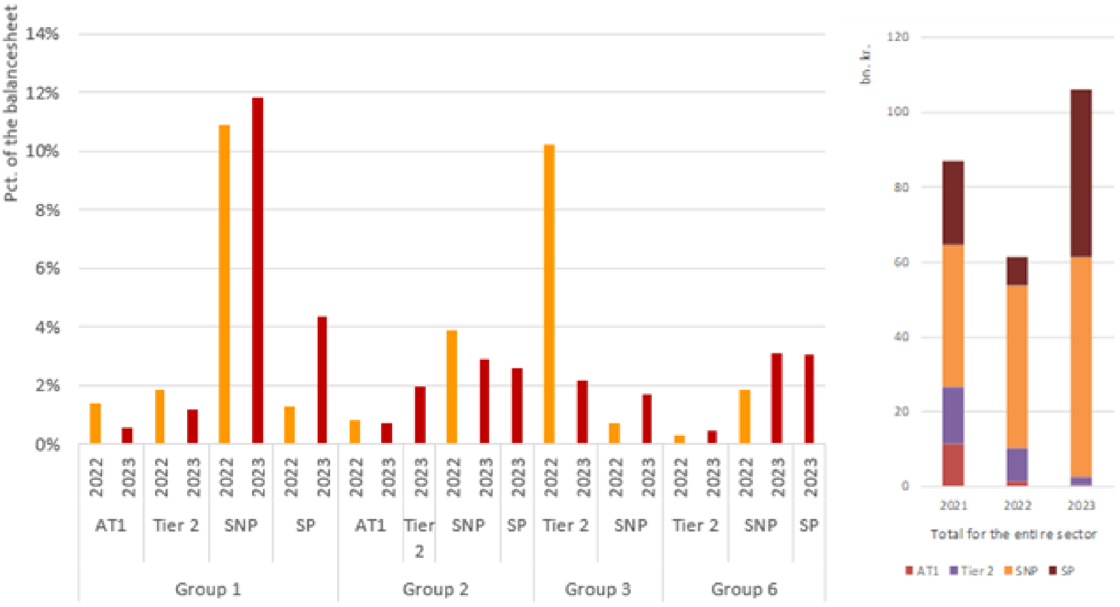
3. The liquidity of funding of the credit institutions

The funding markets were characterised by higher interest rates throughout the year. In addition, particularly the market for hybrid core capital was hit by uncertainty as Credit Suisse was crisis managed by the Swiss authorities. This resulted in a full impairment of the hybrid core capital without a prior full impairment of the genuine core capital. The credit hierarchy was thus not managed as the market had expected, because the specific hybrid core capital instruments for Credit Suisse had the opportunity to be permanently written down.

In 2023, Danish credit institutions mainly issued debt instruments in the form of senior debt, cf. Figure 11. For the vast majority of credit institutions, the primary market for debt instruments was open though, for a period due to the events concerning Credit Suisse, it was more difficult to issue hybrid core capital.

The total capital and debt issuance of the credit institutions was DKK 106 billion. Of this, capital issuances amounted to DKK 3 billion, which is significantly lower than in 2022 and 2021. The total level of issuances was, however, significantly higher than in 2022 where the institutions' total capital and debt issuances amounted to DKK 61 billion. The increase is mainly due to a higher issuance volume of debt instruments to cover the MREL requirement which for most institutions was phased in at the start of 2024. In particular, the institutions issued more senior preferred debt than before. Only the SIFIs can use senior preferred debt to cover part of the MREL requirement, and the increased volume of such debt is driven by the SIFI's issuances.

Figure 11: Capital and debt issuance by credit institutions



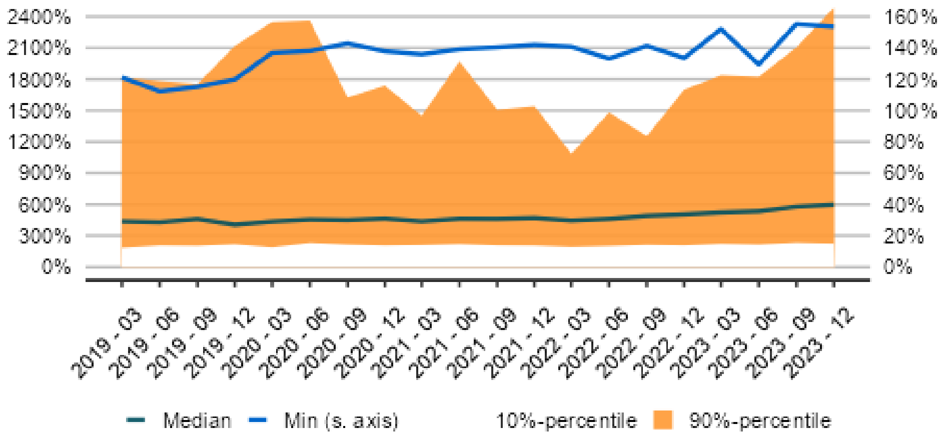
Note: The capital structure of credit institutions consists of genuine core capital (CET1), hybrid core capital (AT1) and supplementary capital (T2), respectively. In addition, the institutions can issue, respectively, senior preferred (SP) and senior non-preferred debt (SNP) to cover their MREL requirement. Only the very large credit institutions can use SP to cover part of their MREL requirement.

Source: Reports to the Danish FSA and own calculations.

Liquidity of the banks

The banks' liquidity and excess cover for the regulator liquidity coverage requirement (LCR requirement) of 100 per cent was quite significant in 2023, cf. Figure 12.

Figure 12: Development in banks' LCR



Note: LCR is "liquidity coverage ratio".
Source: Reports to the Danish FSA.

It is particularly the small deposit-funded institutions which have a high level of excess cover in relation to the liquidity requirement. Deposits are largely covered by the deposit guarantee and are therefore less volatile in a liquidity crisis.

The limited transmission of the rising money market rates for the banks' deposit interest rates on credit accounts resulted in more term deposits in 2023 while the DKK volume of these is still at a relatively modest level. Term deposits are generally more volatile. It is necessary for the institutions to take into account the risk of term deposits and that they, among other things, manage the flow profile. Term deposits with more than 30 days to expiry may be exempted from the LCR calculation if they cannot be withdrawn ahead of time or if withdrawing ahead of time involves a significant reduction[7]. In relation to liquidity risks, the Danish FSA will be focused on deposits excluded from the LCR calculation.

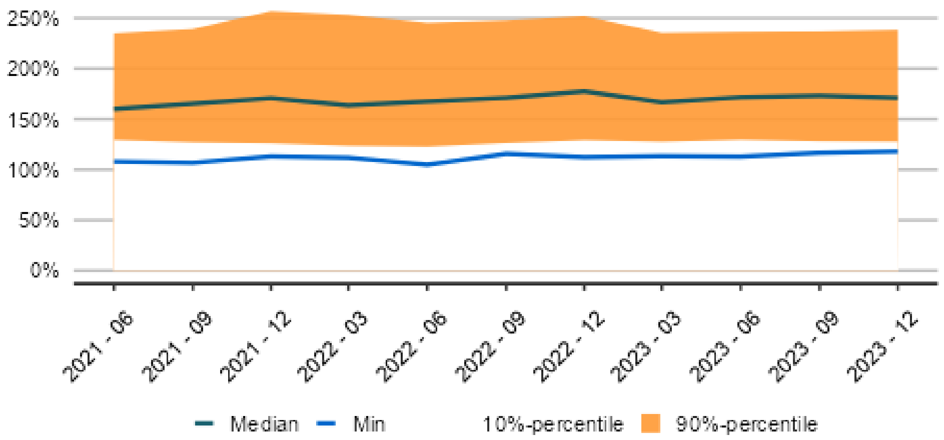
The larger institutions rely more on wholesale funding which can be difficult to refinance in a n uncertain situation. Institutions with a high share of wholesale funding and a correspondingly lower share of deposits operate with structurally lower LCR levels and therefore manage liquidity more closely.

The vast majority of institutions have a large excess cover for the net table funding ratio (NSFR) requirement, cf. Figure 13. The NSFR illustrates how much stable funding the institutions have available. As with the LCR, it means that the institutions which are financed by deposits generally have the highest level of excess cover in relation to the NSFR

[7] An account of a thematic study on the calculation of the LCR denominator: link

requirement. All else being equal, a drawdown of deposits and credit in a recession will reduce the NSFR of institutions.

Figure 13: Development in banks' NSFR



Source: Reports to the Danish FSA.

Box 5: Risks related to liquidity and funding for uncovered commercial deposits

In the second half of 2023, the Danish FSA investigated the management of liquidity and funding risks for large commercial deposits and six large and medium-sized banks.

The investigation should be viewed in the light of the events that occurred on the financial market in March 2023 where it was particularly large uncovered commercial deposits that proved to be volatile within a short period of time. This happened to, for example, Silicon Valley bank in the United States. The events of this period also showed that high concentrations of deposits from particularly vulnerable industries or only having a few commercial customers can contribute to the deposit base eroding faster when there is turmoil in the financial markets.

As a whole there is not the same degree of vulnerability in the deposit financing among the Danish banks as there was in certain US banks in March 2023. Uncovered deposits from commercial customers are not as large in Danish institutions as they were in, for example, Silicon Valley Bank.

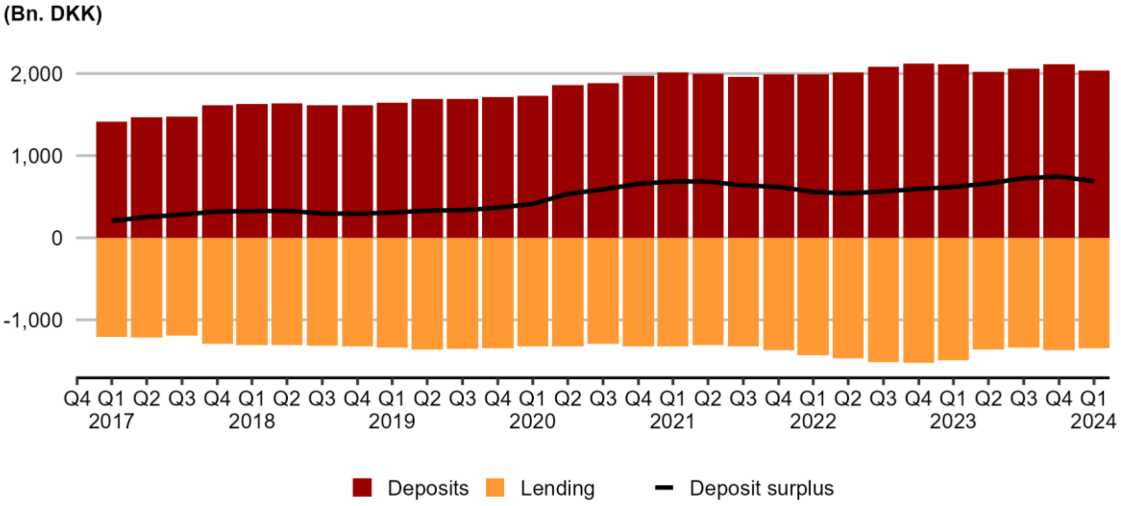
However, there are still potential liquidity and funding risks associated with uncovered commercial deposits in Danish banks and there is room for improvement when it comes to managing these risks. Several institutions could benefit from strengthening their supervision of commercial deposits. Banks that do not have a sufficient overview of the industries associated with their uncovered commercial deposits should get a better overview when they monitor and report internally so that they are better able to identify the industries involved and thus become better at spotting potential vulnerabilities in the stability of their deposits.

Some of these investigated banks adjust their liquidity stress test with considerations about outflows of commercial deposits not covered by the deposit guarantee. All other things being equal, this contributes to a better identification and monitoring of risks. Other institutions also have a weakness in terms of them not differentiating between whether deposits are from private or commercial customers or if deposits are covered by the deposit guarantee or not. The assumptions related to withdrawals must in such cases then be so conservative as to sufficiently reflect the appropriate withdrawal assumptions for uncovered commercial deposits. In institutions where uncovered commercial deposits are a major proportion of the deposit financing, this may amount to a significant deficiency in the risk management.

Deposits in banks

The banks' total deposits amounted to DKK 2,113 billion at the end of 2023. This is a small decrease of DKK 6 billion compared to the year before, cf. Figure 14. The banks' lending fell significantly in the same period[8]. The deposit surplus thus increased to DKK 745 billion.

Figure 14: Deposit surplus in banks



Note: The deposit surplus is defined as the difference between the total deposits and issued loans in the banks. Both deposits and issued loans are calculated without including repo transactions.
Source: Reports to the Danish FSA.

[8] This is particularly due to Danske Bank having divested itself of its Norwegian business, cf. Section 5 for a more in-depth explanation.

Box 6: The obligation of financial institutions to provide advice in the event of changes in interest rates which are detrimental to their clients and an investigation of advice given to customers on the placement of deposits

In the fall of 2023, the Danish FSA investigated how certain banks advise their customers on the opportunity to get a higher interest on their deposits by moving funds from their accounts with no or low interest to accounts with a higher interest.

Based on the responses, the Danish FSA was able to conclude that the investigated banks did not systematically advise their customers about the opportunity to get higher interest unless the individual customers independently contacted the institutions about this exact matter. The duty to advise, however, applies in all situations where the banks, regardless of the reason, are in contact with a customer and at the same time processing or otherwise reviewing the customer's financial situation.

Based on the investigation, the Danish FSA made it clear that the banks need to advise their customers about interest on their deposits when the institutions:

- specifically process data about a customer's financial situation
- is otherwise in contact with a customer and has access to information about the customer's finances
- markets themselves with a special type of advisor concept or policy.

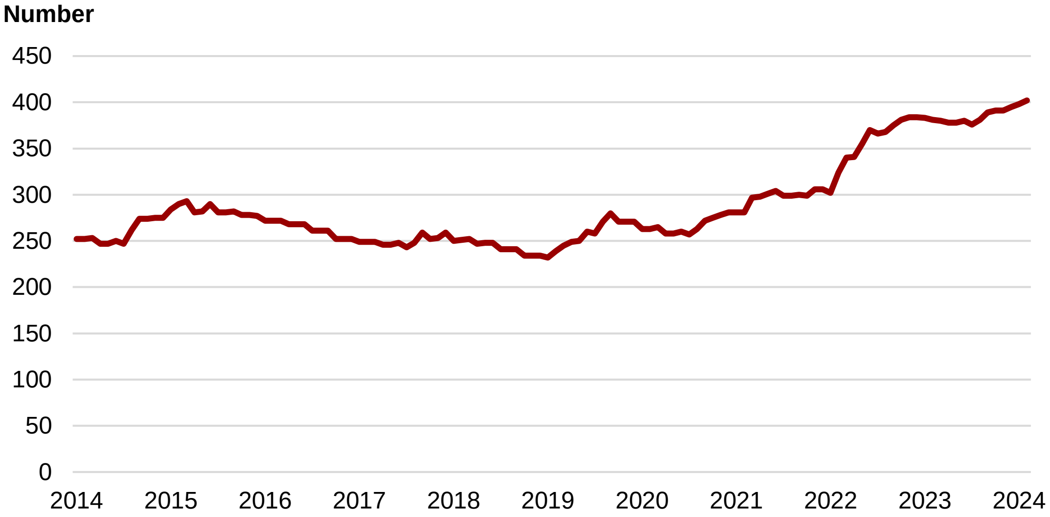
The rules for giving advise apply to all types of customers, regardless of the size of their assets.

Liquidity in the mortgage market

The liquidity in the Danish mortgage market has been under pressure in recent years. At the start of the COVID-19 crisis in March 2020, it was particularly the interest rates on the convertible mortgage bonds that rose significantly and the price for the leading convertible mortgage bond fell by almost 10 basis points in a few days. However, the market corrected itself soon after.

Since then, the mortgage credit market has for some periods been characterised by declining liquidity. The inflationary pressure and rising interest rates made 2022 a turbulent year for the convertible bonds. With inflation there quickly followed rising interest rates which once again resulted in a lot of conversion activity and many new bond series in 2022, cf. Figure 15.

Figure 15: Number of outstanding convertible mortgage bonds



Note: There has been included mortgage series with a circulating amount of over DKK 100 million.
Source: The securities statistic, Danmarks Nationalbank.

The series were only open for a short period of time before their issuance was closed. Therefore, several series did not reach a sufficient size to qualify them for being included in the credit institutions' regulatory liquidity buffer. The demand, and thus the liquidity, for small series is generally less than it is for the large bond series.

It is clearly a greater challenge for the smaller mortgage banks to build up series of the required size[9.] Small series also involve a risk of being locked in, i.e. the bonds may be hard to procure if customers want to restructure their loans and thus a need arises to buy back the underlying bonds. The price for loan restructuring is therefore typically higher for these series.

Many new bond series also present challenges to the market makers. The market makers do not have all issued bond series in their portfolio. Their willingness to price bonds that they do not already own depends on how easy they are to procure - and at what price. There is a trend of some market makers prioritising to support liquidity in bonds issues from intra-group mortgage banks rather than bonds issued by other mortgage banks. This may have a negative impact on market liquidity, if fewer market makers are willing to price all bond series.

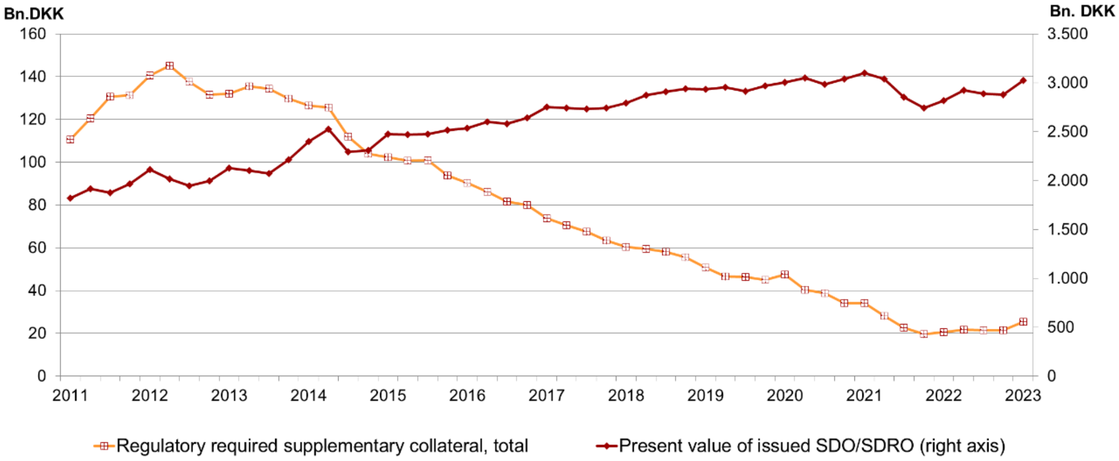
The liquidity returned in 2023 as the interest rate levels stabilised. Even if the market is currently functioning well, these many bond series pose a potential challenge for liquidity in the mortgage bond market. A liquid market is an important parameter for investor because it ensures that the bonds can quickly be sold without major price losses. Liquidity is therefore a prerequisite for a well-functioning mortgage bond market and therefore also for the financing of real estate in Denmark.

[9] Mortgage bonds with a series size of more than EUR 500 million (approximately DKK 3,750 billion) can be included in the regulatory liquidity buffer of the banks with a deduction in the value of 7 per cent, but they may not exceed 70 per cent of the total liquidity buffer of the institution. Mortgage bonds with an outstanding issue of more than EUR 250 million but less than EUR 500 million may be included in the regulatory liquidity buffers of the banks with a deduction in the value of 15 per cent, but may not exceed 15 per cent of the total liquidity buffer of the institution. Regardless of the size of the series, it is a requirement that the bonds have a high credit rating.

Supplementary collateral

Mortgage banks must provide supplementary collateral if the lending limit for their outstanding loans has been exceeded. This requirement applies if the loans are financed via the issuance of special covered bonds (SDOs). The requirement for supplementary collateral has decreased from a total requirement across the sector of approximately DKK 140 billion in 2012 to around DKK 20 billion in recent years, cf. Figure 16. This has taken place concurrently with loans financed by SDOs having risen significantly. An important factor is the developments in the real estate market. The housing price increases in recent years are the most important reason for the large decrease in supplementary collateral.

Figure 16: Supplementary collateral



Source: Reports to the Danish FSA.

All other things being equal, if the real estate market enters a downturn the requirement for supplementary collateral will also rise. Mortgage banks must therefore have a target for the size of their ability to provide supplementary collateral if real estate prices fall.

It is also realistic that such price decrease may occur simultaneously with challenges in the bond markets and that the price decreases thus limit the mortgage banks' market access.

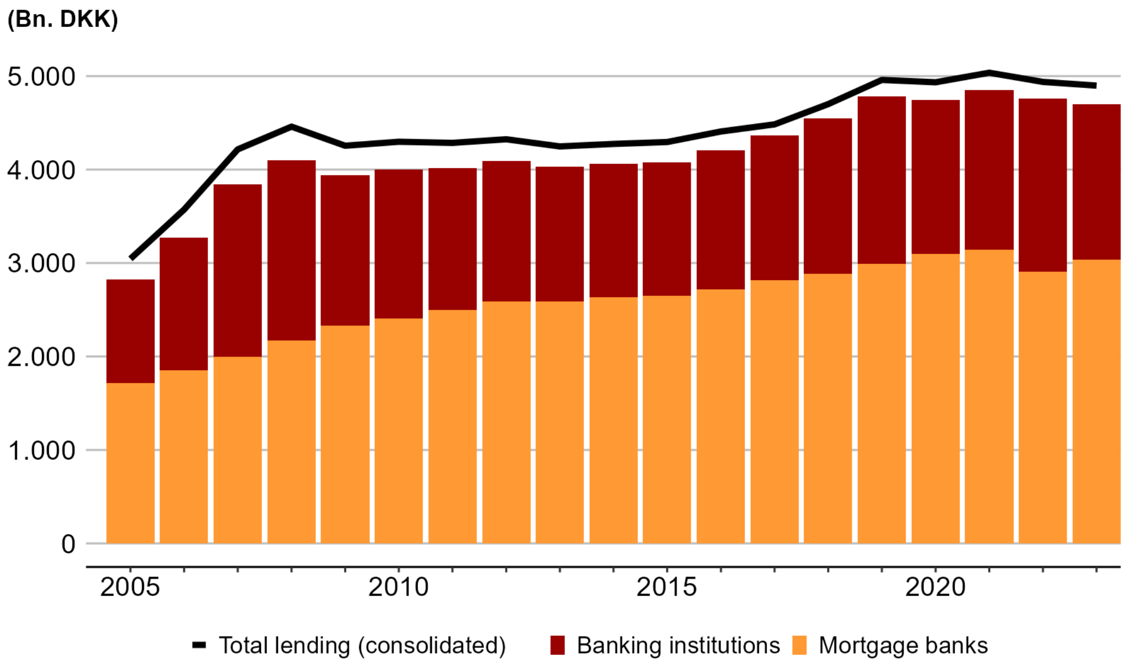
The individual institution must therefore realistically assess their market approach during time of financial hardship. The institution must also both be aware of the risk of general market stress which negatively impacts their market access in line with the rest of the sector and the risk of institution-specific matters impacting the institution's market access negatively for a short or long period of time.

4. Lending by banks and mortgage banks

The total lending among credit institutions was at DKK 4,898 billion at the end of 2023, cf. Figure 17. This is a decrease of DKK 39 billion (0.7 per cent) compared to the year before.

Up until 2019, the total lending volume was increasing. The increase was mainly driven by the mortgage banks. The lending of banks was generally declining in the years following the financial crisis. Mortgage bank lending amounted to 65 per cent of the total lending among credit institutions at the end of 2023.

Figure 17: Lending for banks and mortgage banks



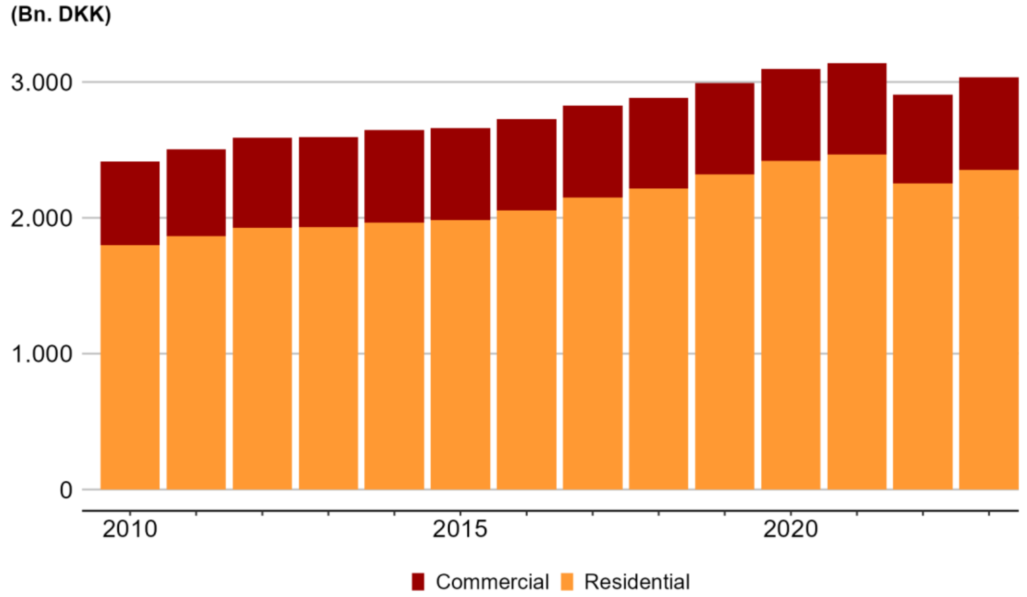
Note: Loans and guarantees excluding repos, registration and conversion guarantees. Please note that the sum of lending from, respectively, banks and mortgage banks is not equal to the consolidated lending for credit institutions. This is due to the fact that more activities are included in the consolidated figures, e.g. subsidiaries abroad.
Source: Reports to the Danish FSA.

Mortgage bank lending

The lending of mortgage banks amounted to DKK 3,033 billion at the end of 2023, cf. Figure 18. This is an increase of 4 per cent compared to the year before. Despite this increase, the lending volume did not reach the 2021 level of DKK 3,141 billion where the value of the mortgage banks' lending was at the highest level ever. The mortgage banks' lending is calculated by using the market value of the underlying bonds. In 2022 there was a decrease in lending which can be attributed to the falling market value of mortgage bonds due to interest rate increases. Fixed interest loans protect the real estate equity from falling housing prices in terms of interest rates. Mortgage loans for residential properties that contain both owner-occupied homes and rental properties are the category of real estate lending which represent the greatest portion of the total lending of mortgage banks.

Lending to residential properties and commercial properties grew by, respectively, DKK 100 billion and 27 billion in 2023. This represents an increase of 4 per cent for both types of real estate.

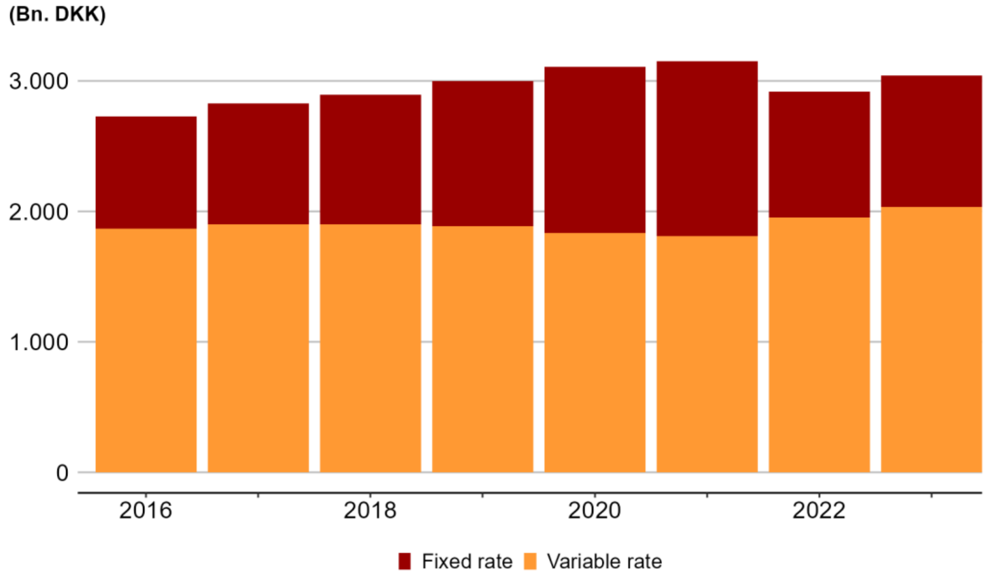
Figure 18: Mortgage bank lending by type of real estate



Note: Commercial properties are defined as other properties and unbuilt land, properties for social, cultural and educational purposes, industrial and craftsman properties, office and commercial properties and agricultural properties, etc. Residential properties include housing cooperatives, private residential properties intended for renting, leisure homes, owner-occupied properties and residential construction projects with subsidies.
Source: Reports to the Danish FSA.

The mortgage loans are currently using variable interest rates to a large extent. In 2023, this type of lending amounted to DKK 2,034 billion, cf. Figure 19. This represents 67 per cent of the total mortgage lending at the end of the year and is an increase of 4 per cent compared to the year before. With the rising interest rates, borrowers with a fixed low interest loan have been able to realise a capital gain by restructuring their home loans. This has largely occurred through restructuring to a variable rate mortgage loan or to a priority loan in a bank, called an ‘oblique conversion’ in Denmark.

Figure 19: Mortgage lending, by fixed or variable interest rates



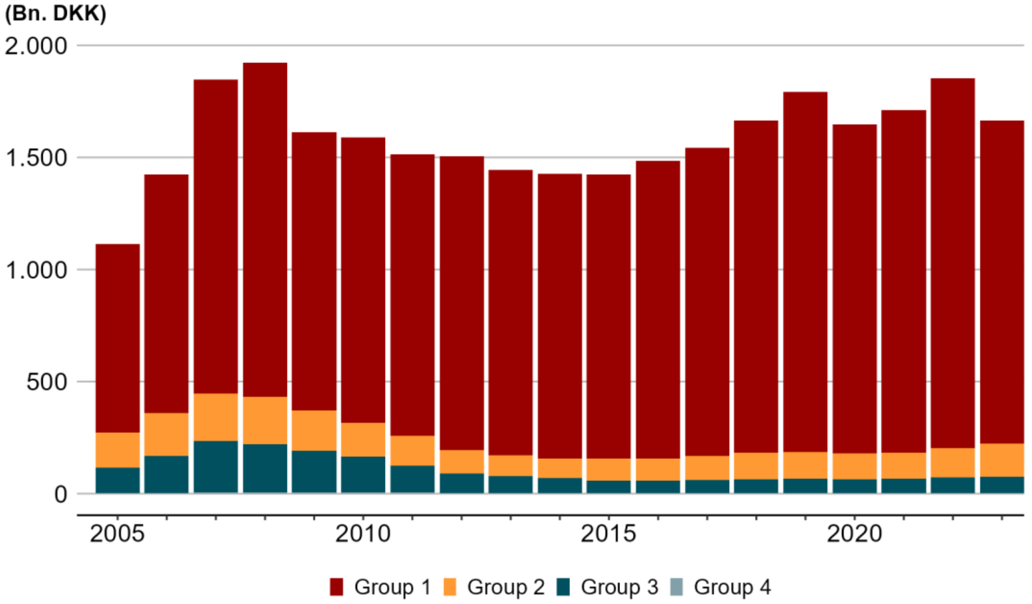
Note: Variable interest rate mortgages include index loans, interest adjustment loans and loan with money market based interest rates.
Source: Reports to the Danish FSA.

Lending by banks

The lending of banks amounted to DKK 1,663 billion at the end of 2023, cf. Figure 20. This is a decrease of 10 per cent compared to the year before. A large part of the decrease can be attributed to Group 1 institutions with branch activities in Norway and Sweden. Currency exchange rate developments caused these activities to lose value when measured in DKK as the Danish krone strengthened against the Swedish and Norwegian krone in 2023. On top of this, Danske Bank divested itself of its portfolio of private customer in Norway. If the figures are corrected for foreign branches, the lending was slightly higher than in 2021 but still lower than at the end of 2022.

Group 1 banks' total lending amounted to DKK 1,440 billion at the end of the year. This represents 90 per cent of the total lending by Danish banks. The lending in Group 1 fell by 12.7 per cent compared to the year before but this can largely be attributed to the above-mentioned branch activities. Lending among Group 2 banks totaled DKK 147 billion at the end of the year, which is DKK 19 billion higher than in 2022. Thus, lending increased by 15 per cent in a year. This is cause for some concern in relation to the risk being assumed by the institutions. In its 'Supervisory Diamond', the Danish FSA has specified a 20 per cent limit for lending growth. Several Group 2 institutions exceeded this threshold in 2023. Group 3 banks' lending amounted to DKK 73 billion at the end of the year, which is an increase of 3 per cent compared to the year before. Group 4 banks' lending amounted to DKK 2 billion at the end of the year.

Figure 20: Bank lending, by group



Note: Loans and guarantees excluding repos, registration and conversion guarantees. The figure is adjusted for locked groups, i.e. the group to which the institutions belong at the end of 2023 is used as the institution's group in the past.
Source: Reports to the Danish FSA.

Corporate lending

The banks' corporate lending amounted to DKK 1,396 billion. This was a decrease of 3 per cent compared to 2022, cf. Table 1. Lending to all business sectors was reduced in 2023, except for "Information and communication" and "Other industries". Approximately half of this decrease can be attributed to the decrease in corporate lending among the banks' foreign branches. In relative terms, the lending fell the most of the energy supply industry as this decreased by 15 per cent or DKK 11 billion. Measured in absolute terms, the largest decrease was in lending to the "Real estate" sector. Here, lending fell by DKK 16 billion or 6 per cent. All in all, the banks have the most exposure towards the business sectors "Financing and insurance", "Real estate", "Industry and commodity extraction" and "Commerce".

Table 1: Bank lending and guarantees to the corporate sector, by industry

DKK billion	2022	2023	Change, DKK billion	Change, per cent
Building and construction	42.8	42.3	-0.5	-1.2
Energy supply	72.8	61.9	-11.0	-15.0
Real estate	258.0	241.6	-16.5	-6.4
Financing and insurance	480.0	471.7	-8.3	-1.7
Commerce	126.6	119.1	-7.5	-5.9
Industry and commodity extraction	186.0	178.1	-7.9	-4.3
Information and communication	30.7	31.3	0.5	1.7
Agriculture, hunting, forestry and fishing	77.0	76.3	-0.7	-0.9
Transportation, hotels and restaurants	56.8	54.6	-2.2	-3.9
Other industries	108.9	119.0	10.1	9.3
Total, commercial	1,439.7	1,395.7	-43.9	-3.1

Source: Reports to the Danish FSA.

It varies greatly which business sectors the banks have the most exposure to. Group 1 institutions are most exposed towards the business sector "Financing and insurance", Group 2 institutions are most exposed towards "Real estate" and Group 3 and 4 institutions are most exposed towards "Agriculture, hunting, forestry and fishing".

In 2023, the Danish FSA carried out a thematic study of lending to renewable energy. Box 7 contains an overview of the main conclusions resulting from the study.

Box 7: Study on the financing of renewable energy production

In anticipation of a growing demand for renewable energy, in the second half of 2023 the Danish FSA studied a number of large and small banks' financing of wind turbines, solar parks and biogas plants and district heating plants[1].

With the ongoing green transition, activities related to renewable energy should generally be expected to amount to a significantly larger share of the institutions' lending. Therefore, it becomes all the more important that the institutions handle the credit risk wisely. The Danish FSA has published a note with additional observations from the study.

The financing of renewable energy requires positive liquidity, just as with the financing of real estate. The uncertainty about the net payments during the period of financing is therefore a key element when making a credit assessment. The uncertainty is typically significantly greater than when financing real estate, as the expected production and electricity and gas prices have a decisive impact on the future liquidity. The positive liquidity can be seen as more likely if the liquidity remains positive during stress scenarios.

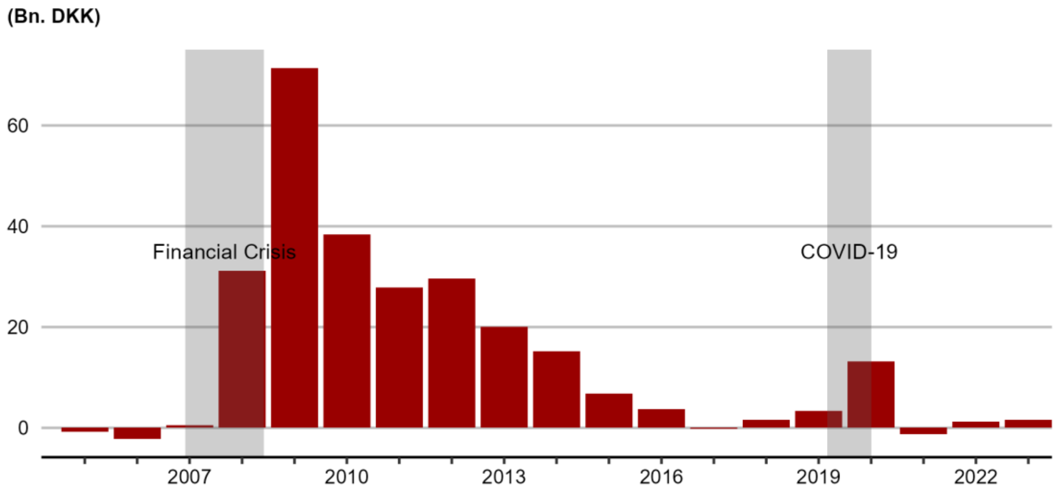
For example, the credit assessment should take into account the following elements:

- Any potential fixed price agreements
- Sensitivity calculations for the future liquidity and solvency for the customer or guarantor as a whole
- Professional knowledge among owners of biogas plants
- The customers' delivery and disposal agreements on biomass
- The collective ability of district heating users to pay and their desire to remain connected.

Impairments

The credit institutions' operational impairments have been at a low level for a number of years. An exception is the early period of the COVID-19 crisis where just the uncertainty in the risk picture resulted in a major increase in the institutions' impairments, cf. Figure 21. In 2023, the credit institutions implemented impairments of DKK 1.5 billion, which is an increase of DKK 310 million compared to 2022. However, the impairments were still at a very low level – and far from the levels seen in the years after the financial crisis.

Figure 21: Implemented impairments among credit institutions, 2005-2023



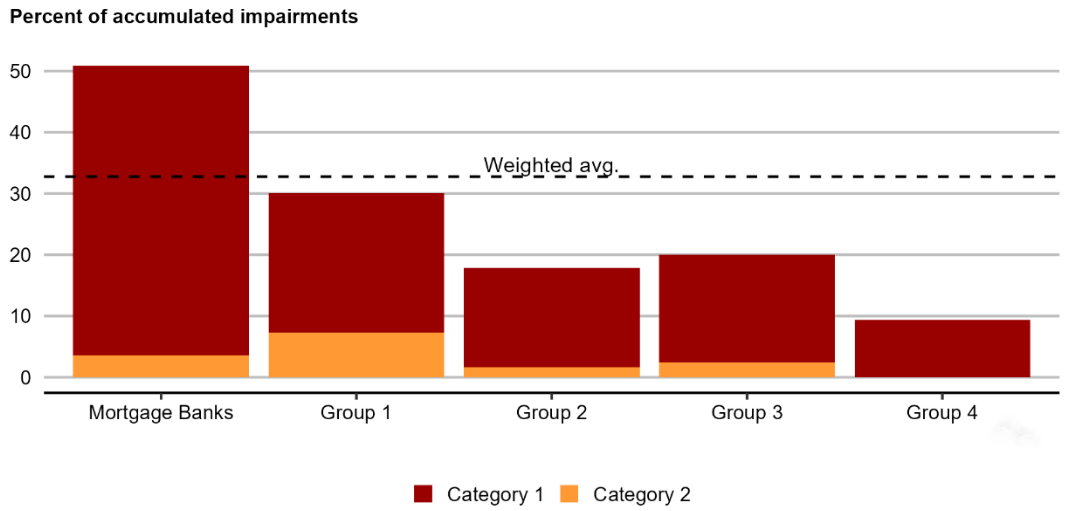
Note: The transition to IFRS 9 at the start of 2018 may have resulted in higher impairments.
Source: Reports to the Danish FSA.

Management estimates concerning impairments

The implications of the inflation and interest rate shocks for the institutions' customers are still not entirely clear. Among other things, this involves the long-term consequences for customers' finances and their ability to repay their loans. This means that management estimates remain an important tool to address this uncertainty.

Management estimates accounted for 32 per cent of the accumulated impairments among credit institutions in 2023, cf. Figure 22. It was particularly among the large banks (Group 1) and mortgage banks that management estimates represented a major proportion. 49 per cent of the mortgage banks' accumulated impairments were based on management estimates and of these 92 per cent were category 1 estimates. Category 1 estimates cover expected losses that are hard to calculate and they represent the majority of the management estimates. Category 2 estimates cover errors and deficiencies in models and data and represent a more modest proportion of the management estimates, particularly among the medium-sized banks and the mortgage banks. The smallest banks had no type 2 impairments. It is important that the credit institutions are attentive to the need to make impairments in a timely and fair manner and that they take into account weaknesses in model setups and the data.

Figure 22: Management estimates, 2023

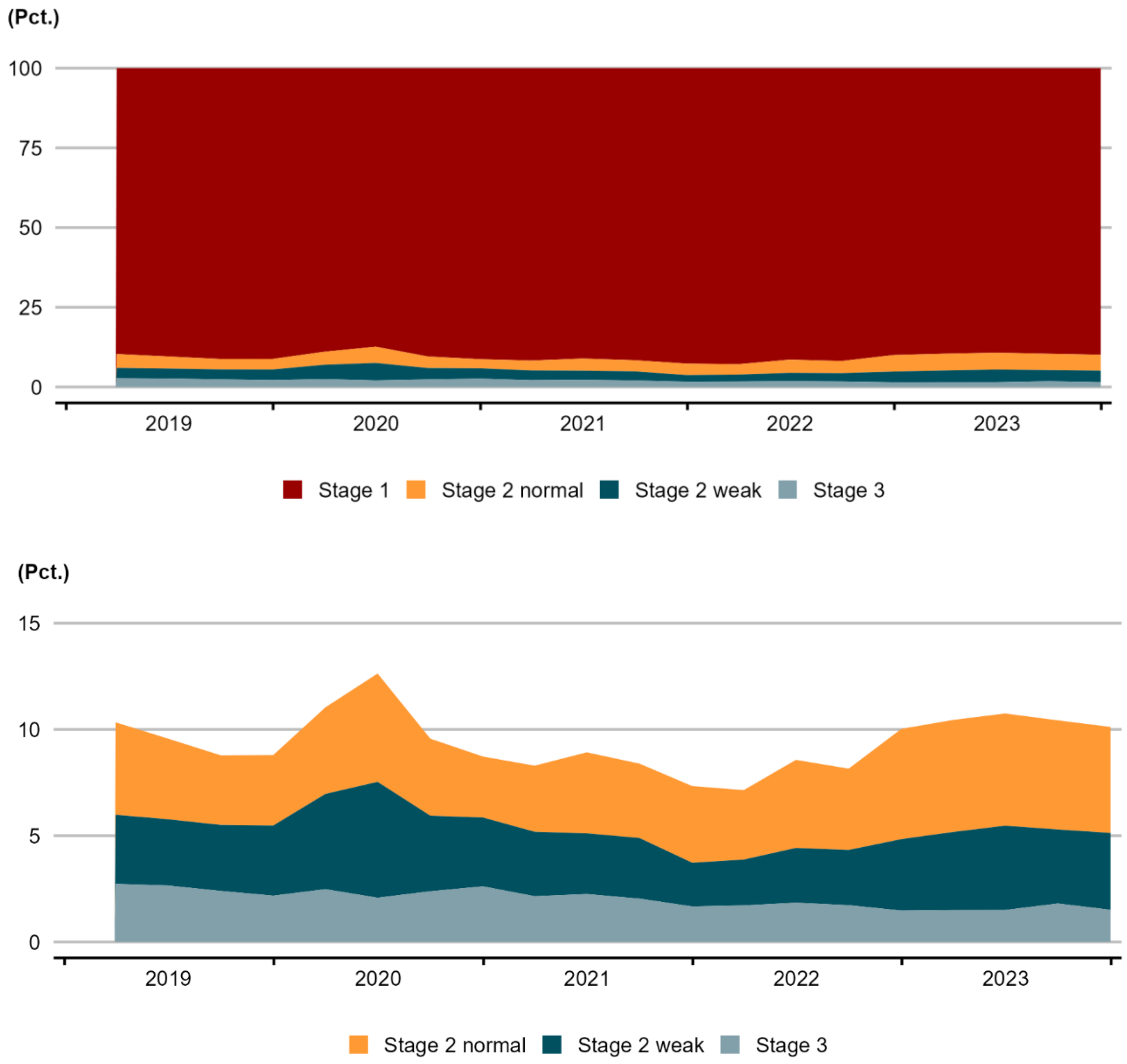


Note: Group 1 only includes group 1 banks. Category 1 of management estimates concern expected losses that are hard to calculate due to a changing world while category 2 estimates concern errors and deficiencies in the calculation of expected losses.
Source: Reports to the Danish FSA.

Stage distribution

The stage distribution distributes the banks' lending and guarantees after credit risks and expected losses. 2023 was not characterised by major distortions, cf. Figure 23. However, the credit risk for lending to commercial customers grew. 89.6 per cent of the commercial loans were in stage 1 (no significant increase in credit risk), which is a decrease of 1.9 percentage points from 91.5 per cent in 2022. The reason for this development is that more commercial lending moved over to stage 2 normal and stage 2 weak. The proportion of stage 2 lending grew from 4.1 per cent to 5.2 per cent while the proportion of stage 2 weak lending grew from 2.7 per cent to 3.7 per cent. Stage 2 normal covers lending with a significant increase in credit risk while stage 2 weak also covers lending to customers who also face significant financial difficulties. The proportion of commercial lending in stage 3 (lending with an objective indication of credit impairment) amounted to 1.6 per cent of the lending and was therefore unchanged compared to the year before.

Figure 23: Stage distribution of commercial lending



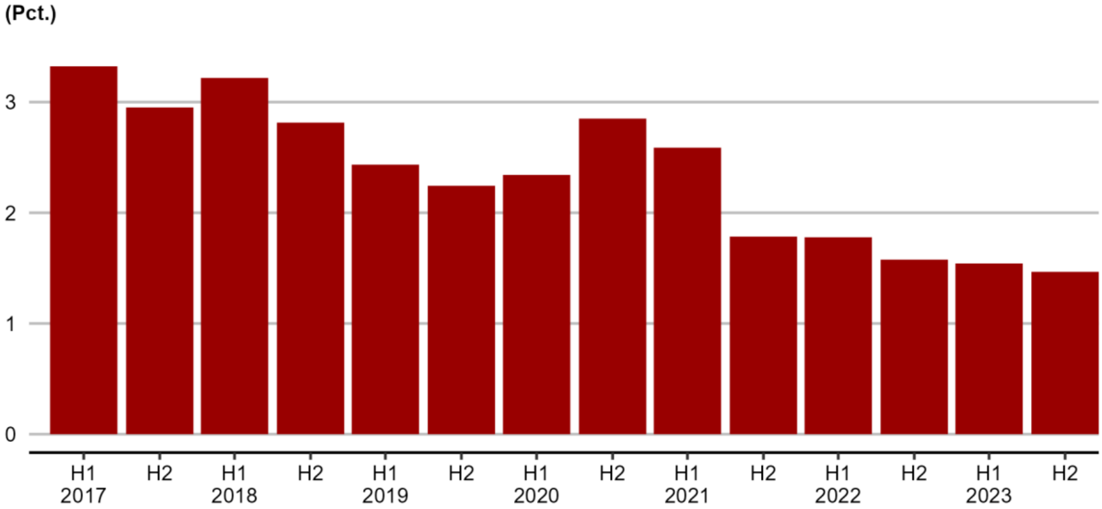
Note: Stage 1 covers lending where the credit risk has not risen significantly since the first recognition. Stage 2 normal covers lending where the credit risk has risen significantly but the loan is not yet credit impaired. Stage 2 weak covers lending where the credit risk has risen significantly and the customer is facing significant financial difficulties. Stage 3 cover lending with indications of credit impairment. For example, this is when there are significant breaches of contract or if it is likely that the customer will go bankrupt.
Source: Reports to the Danish FSA.

Non-performing loans and forbearance measures

The share of non-performing loans (NPLs) held by banks has generally decreased since 2018, with the exception of the years just around the COVID-19 crisis, see Figure 24. In 2023, the proportion of non-performing loans amounted to 1.5 per cent of the total commercial lending. NPLs are loans in stage 3 or loans where the borrow has not paid interest or principal payments for over 90 days or where it is assessed that it is unlikely that the borrower will be fully able to meet his/her payment obligations without selling collateral. In 2019, the Danish Parliament adopted a new regulation (the NPE backstop) which provides credit institutions with incentives to impairment their NPLs as they will receive a deduction in their own funds if the NPLs remain on their balance sheet[10].

Figure 24: Proportion of non-performing (NPL) commercial lending, banks

Note: Includes banks in groups 1-3. A loan is defined as non-performing (NPL) if it has been in default for more than 90



day or if it is assessed to be unlikely that the borrower will fully meet his/her payment obligations without having to sell collateral. Loans in stage 3 are always NPLs even if these criteria are not met.
Source: Reports to the Danish FSA.

[10] NPE stands for ‘non-performing exposures’. The NPE backstop is a requirement for the institutions’ minimum cover for losses for non-performing exposures. It is intended to encourage institutions to write down non-performing exposures in a timely and sufficient manner. It should in turn also create an incentive to resolve non-performing exposures at an early stage. The aim is to strengthen the institutions’ resiliency towards negative shocks and to reduce the need for public sector interventions. You can read more about the NPE backstop at https://www.finanstilsynet.dk/lov-givning/ny_eu_lovsamling/npe-bagstopper.

Box 8: New oversight with credit servicers and credit purchasers

The Danish Act on Credit Servicers and Credit Purchasers entered into force on 1 January 2024 and implements the EU Directive on Credit Servicers and Credit Purchasers (the NPL Directive[1]).

A credit servicer manages and fulfils rights and obligations in connection with a creditor's rights when a credit agreement is defaulted on. A credit purchaser buys a creditor's rights as part of its business practices.

The act is intended to promote the development of a secondary market for loans in default by creating appropriate regulatory frameworks that remove obstacles and specify protective measures when transferring loans in default from the credit institutions to the credit purchasers. The act also protects borrowers and consumers. It includes a new authorization regime or companies with credit service activities as their business area.

Permits for and registration of credit service servicers

Credit servicers must fulfil a number of requirements in order to get a permit from the Danish FSA. The companies must have robust governance, appropriate internal controls and suitable procedures for processing complaints. Finally, they must have policies that ensure that borrowers are treated in a fair and careful manner. In addition, members of management must also meet a number of fit & proper requirements.

The Danish FSA will keep a public register of companies with permits to operate as credit servicers and of foreign credit servicers who provide cross-border services in Denmark.

Duty to notify for credit institutions and credit purchasers

Two times per year, credit institutions and credit purchasers must report to the Danish FSA when they sell or resell loans in default to a credit purchaser. The law includes a duty to provide credit purchasers with all information needed to process a sale.

Transition scheme

Companies which before 30 December 2023 had a permit under the Danish Debt Collection Act can continue with their credit servicer activities up until 29 June 2024 if they have applied for a permit to carry out credit servicer activities by no later than 29 February. The Danish FSA has received several applications and is underway with the processing of them.

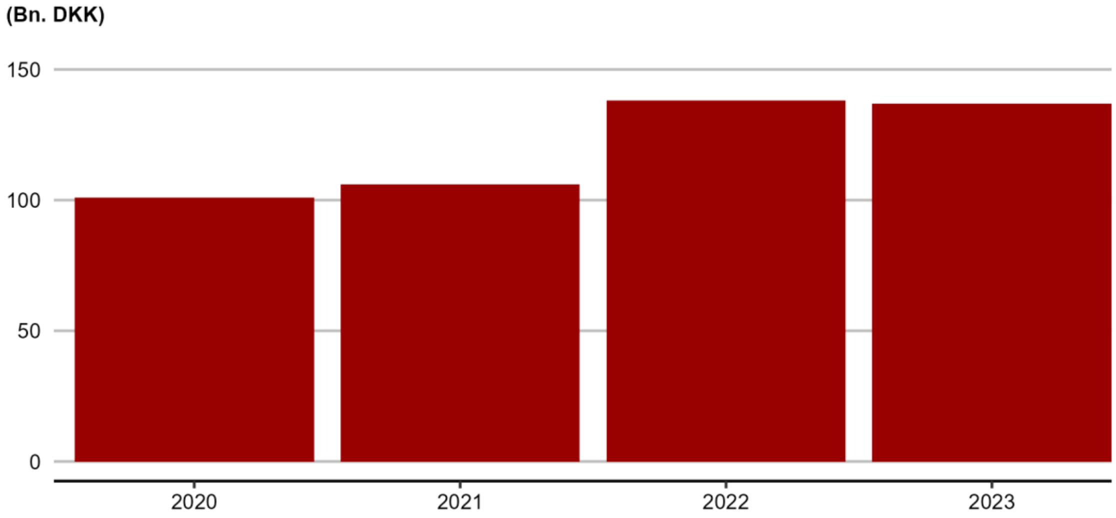
Priority loans

Several homeowners have in recent years chosen a priority loan which is more flexible than a mortgage loan - particularly if the homeowner is betting on imminent interest rate decreases[11.] Homeowners can either choose to take a priority loan to finance a home or to restructure an existing mortgage loan. Since 2020, the outstanding debt for priority loans has risen significantly, cf. Figure 25. This increases the risks for both the homeowner and the bank. Homeowners who restructure fixed interest rate mortgages to priority loans assume an interest rate risk if interest rates go up and the bank must finance the loan itself which also increases the funding risk for the institution.

[11] Priority loans resemble variable rate mortgages where the customers can repay their loan over 30 years and the bank gets a mortgage on the home.

Interest rate developments have provided homeowners with fixed interest loans with a capital gain which has helped to increase their net assets. Credit institutions should be particularly aware of the fact that the risk profile can change significantly for those homeowners who have chosen to restructure a fixed interest loan to a variable interest rate loan. A short-term capital gain can quickly disappear if interest rates continue to rise. This is particularly risky if debt increases as a result of the conversion.

Figure 25: Residual debt for priority loans to households

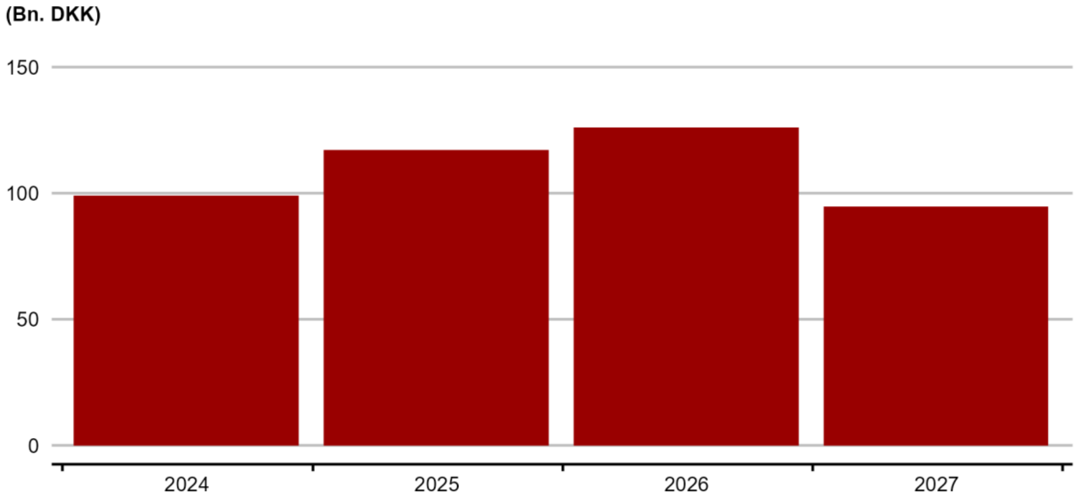


Note: Priority loans cover bank loans to households with mortgages on real estate which have preferred debt with a lending ratio of less than 20 per cent.
Source: Kreditregistreret (The Danish credit registry).

Housing loans with outstanding interest rate adjustments and risky loans

For those homeowners who have not yet refinanced their mortgages in 2022 and 2023, the full impact of the higher interest rates has not yet been felt. Between now and 2027, homeowners will be refinancing more than DKK 400 billion of loans with effective interest rates of between 0.2 and 1.5 per cent, which is significantly lower than the current interest rate levels. The refinancing may therefore result in a large increase in the liquidity burden for homeowners. Many homeowners therefore continue to face the prospect of a significant increase in interest expenses in the coming years, cf. Figure 26.

Figure 26: Residual debt for mortgages with outstanding interest rate adjustments

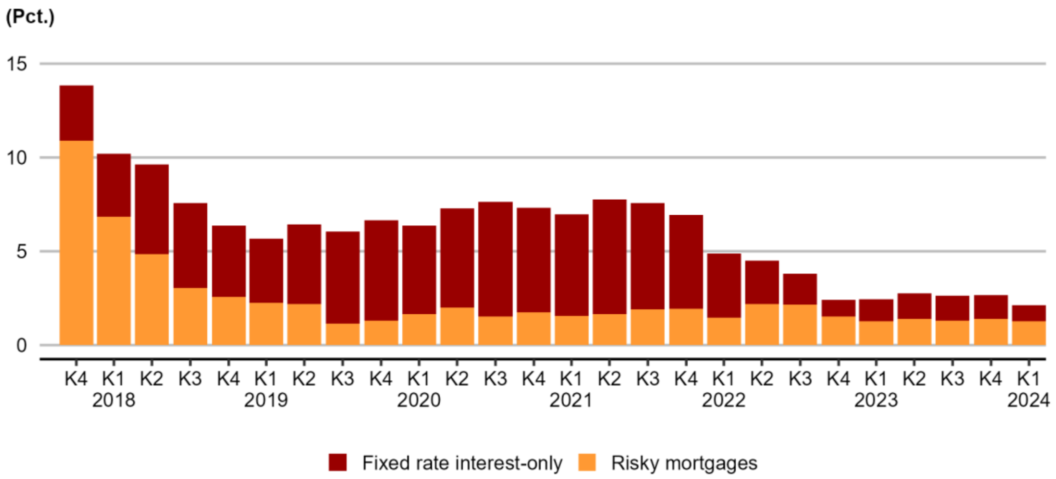


Note: The data covers the residual debt for households' variable interest rate mortgages for owner-occupied homes and leisure homes calculated after the year of refinancing. The X axis shows the year in which the debt is to be refinanced.
Source: Kreditregistreret (The Danish credit registry).

The share of risky new lending did not increase in 2023. The risky mortgage and mortgage-like new lending[12] amounted to 1.3 per cent of the total new lending, cf. Figure 27. The proportion of interest-only loans with fixed interest rates combined with a high debt factor (debt factor in relation to income is higher than 4) and a high lending ratio (the debt is higher than 60 per cent of the value of the home) also amounted to approximately 1.3 per cent of the newly issued debt during 2023 - except in the second quarter, where the proportion rose to 2.6 per cent.

[12] Mortgage-like loans are provided by banks with a mortgage in the real estate. The loans are similar to mortgages but they are not associated with the sale of bonds and can be terminated by the bank. The following loans with a debt factor of over 4 and a lending ratio of over 60 per cent are viewed as risky: 1) Loans with variable interest rates and loans with fixed rates for less than 5 years (with or without principal payments). 2) Interest-only variable-rate loans with a fixed interest for 5 years or more.

Figure 27: The proportion of risky mortgage and mortgage-like new lending

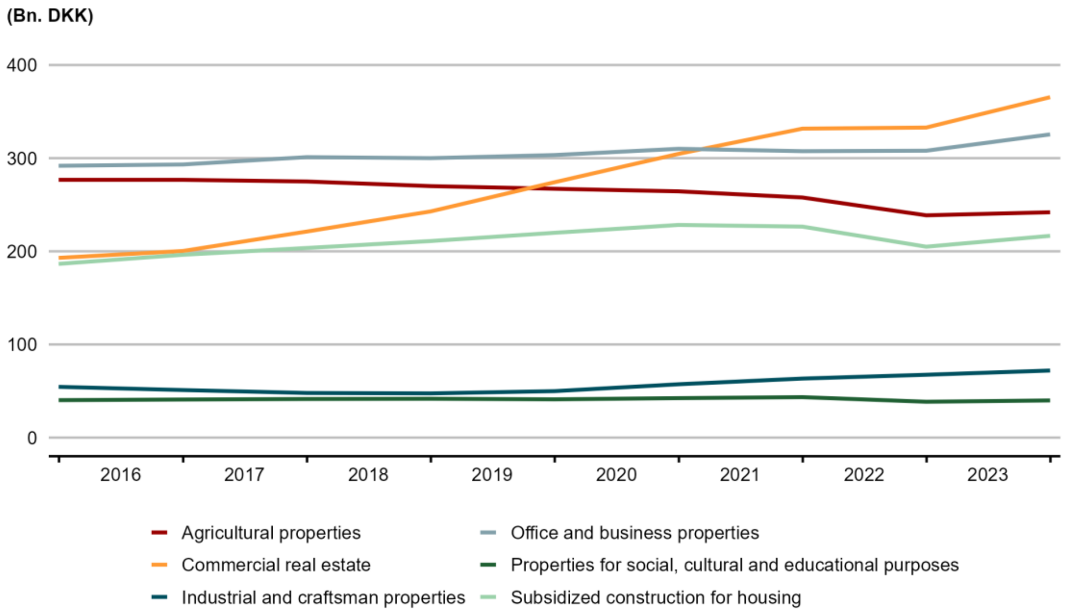


Note: The data includes the credit institutions' mortgage and mortgage-like loans. New lending (gross new lending) is calculated pursuant to the guide on home lending for customer with a high debt factor. Mortgage-like loan are defined in the Danish executive order on good practice for housing credit ('bekendtgørelsen om god skik for boligkredit') and covers loans provided by banks on mortgage-like terms.
Source: Reports to the Danish FSA.

Exposure to commercial real estate

The mortgage banks' lending to commercial real estate increased for all categories in 2023. The largest increase was among the commercial real estate properties. Here, lending increased by 10 per cent to a total of DKK 365 billion, cf. Figure 28. The lending for private rental homes thus increased by 82 per cent since 2016. Next there is lending to industrial and craftsman properties which increased by 7 per cent from 2022, while the lending to office and business properties and subsidized residential construction projects both increased by 6 per cent. Lending to agricultural properties increased by 1 per cent.

Figure 28: Mortgage lending by commercial property categories



Note: Lending is calculated as mortgage bank lending before impairments calculated at fair value at the end of the period. Index loans are not included.
Source: Reports to the Danish FSA.

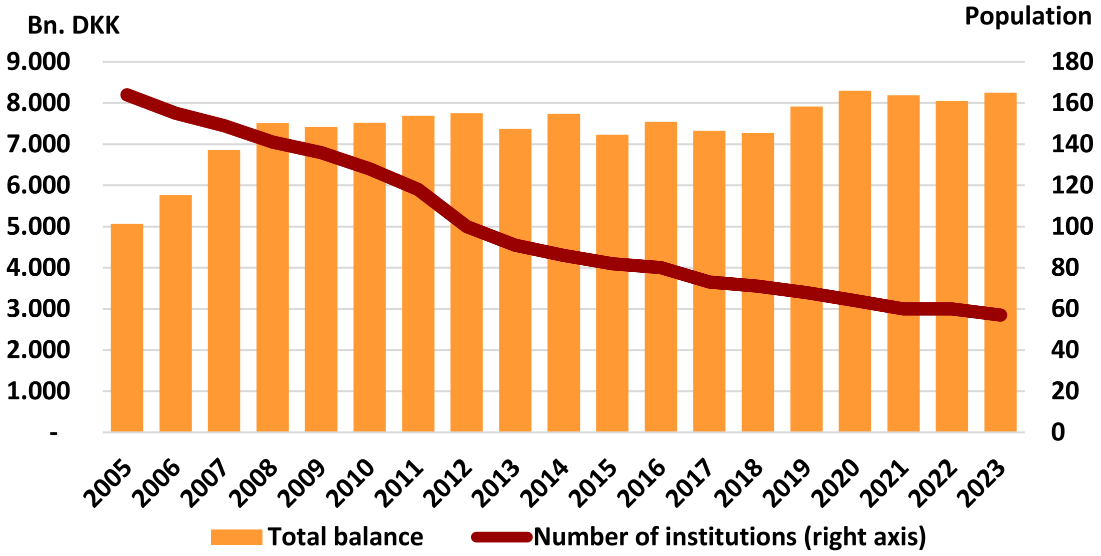
5. Structure

The number of credit institutions has fallen significantly since 2005, cf. Figure 29. In particular, there are now fewer banks. In 2023, the number of banks was reduced by an additional three as Frøs Sparekasse merged with Broager Sparekasse, Sparekassen Danmark merged with Totalbanken and Middelfart Sparekasse merged with Fanø Sparekasse[13]. The number of mortgage banks, however, has remained unchanged for a number of years and in 2023 there were six Danish mortgage banks[14].

[13] In 1986 there were 274 banks and 4 mortgage banks in Denmark. Over time, there has been multiple mergers among the large banks. The first consolidations took place in 1990 when Privatbanken (the third largest), Sparekassen SDS (the fourth largest) and Andelsbanken (the seventh largest) merged into Unibank (which later became Nordea in a Nordic bank merger) and Danske Bank (the largest) merged with Kjøbenhavns Handelsbank (the second largest) and Provinsbanken (the fifth largest).

[14] In the period leading up to 1989 the mortgage market was to a great extent dominated by Kreditforeningen Danmark (which would later become Realkredit Danmark), Nykredit Realkredit and BRFkredit (which would later become Jyske Realkredit). However, with an amendment to the Danish Mortgage Credit Act in 1989, new mortgage banks were allowed to be established. This meant that Danske Kredit (later part of Realkredit Danmark), Unikredit (later Nordea Kredit) and Totalkredit (which was a reactivation of Provinsbankernes Reallånefond) were established. The new mortgage banks gradually began to take on more market share in relation to the largest institutions. At the start of the 2000s, Danske Bank acquired RealDanmark while Nykredit Realkredit acquired Totalkredit.

Figure 29: Credit institutions in Denmark, total balance sheet and number



Note: The figure only shows Danish institutions.
Source: Reports to the Danish FSA.

In 2005, the credit institutions' total balance sheets amounted to DKK 5,000 billion of which the banks represented 60 per cent and the mortgage banks represented 40 per cent. In 2023, their balance sheet had grown to over DKK 8,000 billion, cf. Figure 29. The mortgage banks represented a little more than half.

The development among credit institutions is still characterised by consolidations. It is particularly among banks that ongoing mergers are occurring. Thus, the activity is distributed across still fewer - but larger - institutions.

Annexes

Annex 1: Grouping of credit institutions

Group 1 – SIFIs and subsidiaries of SIFIs			
1149	Saxo Bank A/S	20001	Nykredit Realkredit A/S
3000	Danske Bank A/S	20002	Realkredit Danmark A/S
5301	Aktieselskabet Arbejdernes Landsbank	20003	Jyske Realkredit A/S
7730	Vestjysk Bank A/S	20004	TOTALKREDIT A/S
7858	Jyske Bank A/S	20007	DLR Kredit A/S
8079	Sydbank A/S	20009	Nordea Kredit Realkreditaktieselskab
8117	Nykredit Bank A/S		
9380	Spar Nord Bank A/S		
Group 2 - Working capital over DKK 12 million			
400	Lån & Spar Bank A/S	7670	Ringkjøbing Landbobank A/S
522	Sparekassen Sjælland-Fyn A/S	9070	Sparekassen Danmark af 1871
755	Middelfart Sparekasse	9335	Sparekassen Kronjylland
Group 3 - Working capital over DKK 750 million			
537	Dragsholm Sparekasse	9090	Sparekassen Thy
844	Fynske Bank A/S	9133	Frøslev-Mollerup Sparekasse
847	Rise Flemløse Sparekasse	9137	Ekspres Bank A/S
5999	Danske Andelskassers Bank A/S	9312	Sparekassen Balling
6140	Møns Bank A/S	9354	Rønde Sparekasse
6520	Lollands Bank A/S	9388	Sparekassen Djursland
6620	Coop Bank A/S	9682	Sparekassen for Nørre Nebel og omegn
6771	Lægernes Bank A/S	9740	Sydjysk Sparekasse
6860	Aktieselskabet Nordfyns Bank	9827	Sparekassen Bredebro
7320	Djurslands Bank A/S	13080	Frørup Andelskasse
7500	Hvidbjerg Bank Aktieselskab	13460	Merkur Andelskasse
7570	Pensam Bank A/S	28002	Lunar Bank A/S
7780	Skjern Bank A/S	28003	Facit Bank A/S
7930	Kreditbanken A/S	28005	Kompasbank
Group 4 - Working capital over DKK 750 million			
1693	PFA Bank A/S	9634	Borbjerg Sparekasse
5125	Leasing Fyn Bank A/S	13070	Faster Andelskasse
9124	Sønderhå-Hørsted Sparekasse	13290	Andelskassen Fælleskassen
9135	Klim Sparekasse	28001	Maj Bank A/S
9629	Stadil Sparekasse		

Annex 2: Credit institutions’ income statements 2019-2023

Income statement	2019	2020	2021	2022	2023	Change, 1 year	Change, 5 years
	DKK million					*%*	
Interest income	112,215	100,955	96,923	121,737	222,333	83	98
Interest costs	53,211	40,910	37,623	55,445	130,882	136	146
Net interest income	***59,004***	***60,045***	**59,300**	***66,292***	***91,452***	***38***	***55***
Dividends from shares, etc.	1,243	657	936	1,223	1,167	-5	-6
Fees and commission income	37,477	38,497	42,724	43,269	39,846	-8	6
Paid fees and commissions	13,847	13,694	14,699	14,900	13,821	-7	0
Net interest and fee revenue	***83,878***	***85,505***	***88,261***	***95,884***	***118,643***	***24***	***41***
Staff and administrative costs	52,827	54,652	55,974	58,599	60,381	3	14
Other operating income	8,566	7,197	8,671	8,214	7,568	-8	-12
Other operating costs	419	513	539	14,392	1,249	-91	198
Depreciation and amortisation of intangible and tangible assets	9,569	8,732	8,315	8,557	8,319	-3	-13
Core earnings	***29,630***	***28,809***	***32,104***	***22,550***	***56,262***	***149***	***90***
Value adjustments	8,376	7,431	9,831	5,759	15,698	173	87
Impairments on loans and receivables, etc.	3,404	13,197	- 1,197	1.228	1,541	25	-55
Profit/loss on shares in associated enterprises	3,456	1,626	2,213	- 1,244	969		-72
Pre-tax profit/loss	**38,058**	**24,670**	**45,344**	**25,837**	**71,387**	**176**	**88**
Tax	2,695	5,134	8,719	8,458	16,125	91	498
Profit/loss for the period	35,363	19,536	36,625	17,380	55,261	218	56

Annex 3: Financial institutions' income statements 2019-2023	**2019**	**2020**	**2021**	**2022**	**2023**	**Change, 1 year**	**Change, 5 years**
Income statement	*DKK million*					*%*	
Interest income	49,133	44,615	41,306	57,044	116,044	103	136
Interest costs	18,330	12,560	9,793	19,941	58,098	191	217
Net interest income	***30,803***	***32,055***	***31,513***	***37,103***	***57,947***	***56***	***88***
Dividends from shares, etc.	1,060	598	794	1,037	932	-10	-12
Fees and commission income	30,420	30,630	34,445	35,107	33,341	-5	10
Paid fees and commissions	5,321	5,762	6,267	6,396	6,588	3	24
Net interest and fee revenue	***56,962***	***57,521***	***60,484***	***66,852***	***85,631***	***28***	***50***
Staff and administrative costs	44,657	45,647	46,320	48,637	50,442	4	13
Other operating income	2,570	2,315	4,136	2,460	2,742	11	7
Other operating costs	182	269	241	14,094	902	-94	396
Depreciation and amortisation of intangible and tangible assets	5,842	4,846	4,381	4,911	5,139	5	-12
Core earnings	***8,851***	***9,074***	***13,679***	***1,671***	***31,889***	***1,808***	***260***
Value adjustments	6,781	6,170	8,358	5,087	12,212	140	80
Impairments on loans and receivables, etc.	2,376	9,486	- 1,350	1,288	1,874	45	-21
Result from investments in group and associated companies	11,775	9,258	10,714	8,269	13,192	60	12
Pre-tax profit/loss	**25,031**	**15,016**	**34,101**	**13,738**	**55,419**	**303**	**121**
Tax	- 1,483	1,575	4,626	4,542	9,471	109	
Profit/loss for the period	26,514	13,441	29,475	9,197	45,948	400	73

Annex 4: Mortgage banks' income statements 2019-2023

Income statement	2019	2020	2021	2022	2023	Change, 1 year	Change, 5 years
	DKK million					*%*	
Interest income	67,766	60,750	59,519	69,491	121,476	75	79
Interest costs	43,790	37,113	35,822	45,233	94,061	108	115
Net interest income	***23,975***	***23,637***	***23,697***	***24,258***	***27,414***	***13***	***14***
Dividends from shares, etc.	217	58	150	185	234	26	8
Fees and commission income	4,409	3,605	4,365	5,306	4,085	-23	-7
Paid fees and commissions	8,946	8,100	9,104	9,904	8,445	-15	-6
Net interest and fee revenue	***19,656***	***19,200***	***19,107***	***19,844***	***23,288***	***17***	***18***
Staff and administrative costs	5,077	5,775	7,034	7,337	7,866	7	55
Other operating income	3,074	2,133	2,573	2,942	3,037	3	-1
Other operating costs	204	177	252	252	284	13	39
Depreciation and amortisation of intangible and tangible assets	284	256	410	258	236	-9	-17
Core earnings	***17,165***	***15,125***	***13,984***	***14,939***	***17,938***	***20***	***5***
Value adjustments	1,562	1,218	1,632	1,117	3,127	180	100
Impairments on loans and receivables, etc.	996	3,077	140	- 523	- 353		
Profit/loss on shares in associated enterprises	3,987	3,953	5,403	5,502	6,969	27	75
Pre-tax profit/loss	**21,717**	**17,219**	**20,879**	**22,083**	**28,387**	**29**	**31**
Tax	3,317	2,641	2,948	3,193	5,089	59	53
Profit/loss for the period	18,400	14,578	17,931	18,889	23,297	23	27

Annex 5: Balance sheet, credit institutions 2019-2023

	2019	2020	2021	2022	2023	Change, 1 year	Change, 5 years
Balance sheet items	*DKK million*					*%*	
Cash in hand and on-demand receivables with central banks	152,354	413,171	478,764	398,126	529,282	33	247
Receivables from credit institutions and central banks	312,084	263,892	166,308	155,586	194,988	25	-38
Lending	4,958,987	4,934,044	5,035,982	4,937,907	4,898,161	-1	-1
Lending, excluding repo	*4,564,900*	*4,643,047*	*4,743,661*	*4,647,988*	*4,636,603*	*0*	*2*
Bonds	839,473	972,155	874,346	886,018	868,497	-2	3
Shares, etc.	38,514	42,079	40,222	37,542	52,148	39	35
Shares in associated companies	3,461	3,505	2,721	3,103	3,128	1	-10
Shares in affiliated companies	20,491	22,013	23,700	19,509	20,430	5	0
Assets associated with pooled schemes	135,007	144,019	163,036	147,721	164,501	11	22
Intangible assets	13,689	13,896	15,234	17,885	17,370	-3	27
Land and buildings	16,576	16,023	14,932	14,232	16,316	15	-2
Other tangible assets	13,886	12,997	12,952	11,141	10,801	-3	-22
Tax assets	4,802	7,024	6,458	7,792	6,166	-21	28
Assets in temporary possession	3,768	1,740	7,220	213	110,637	51,842	2,836
Other assets	399,901	492,262	365,725	533,223	440,591	-17	10
Period accrual items	3,804	4,178	3,469	3,762	4,686	25	23
Total assets	6,916,797	7,342,998	7,211,070	7,173,760	7,337,703	2	6
Amounts owed to credit institutions and central banks	231,340	289,331	242,910	229,440	232,370	1	0
Deposits	2,021,848	2,250,375	2,251,920	2,341,444	2,361,326	1	17
Deposits, excluding repo	*2,216,963*	*2,404,447*	*2,379,979*	*2,443,361*	*2,486,097*	*2*	*12*
Bonds issued	3,566,839	3,627,500	3,638,521	3,333,210	3,498,619	5	-2
Other commitments	5,572	10,558	13,615	11,797	9,075	-23	63
Period accrual items	1,718	1,649	1,718	2,084	2,409	16	40
Total debt	***6,436,311***	***6,851,914***	***6,692,786***	***6,662,903***	***6,785,551***	***2***	***5***
Provisions	8,805	8,938	8,285	7,929	10,655	34	21
Subordinated capital injections	57,844	60,221	65,117	64,367	64,792	1	12
Equity	413,837	421,926	444,881	438,560	476,705	9	15
Total liabilities	6,916,797	7,342,998	7,211,070	7,173,760	7,337,703	2	6

Annex 6: Balance sheet, banks 2019-2023

	2019	2020	2021	2022	2023	Change, 1 year	Change, 5 years
Balance sheet items	*DKK million*					*%*	
Cash in hand and on-demand receivables with central banks	106,630	346,894	384,399	312,095	414,302	33	289
Receivables from credit institutions and central banks	205,725	212,206	157,666	146,498	214,699	47	4
Lending	1,792,228	1,647,927	1,711,097	1,852,091	1,663,228	-10	-7
Lending, excluding repo	*1,349,493*	*1,319,659*	*1,367,876*	*1,524,202*	*1,367,705*	*-10*	*1*
Bonds	706,531	840,405	744,412	752,143	719,373	-4	2
Shares, etc.	31,011	34,827	32,749	29,482	44,464	51	43
Shares in associated companies	3,518	3,573	2,808	3,221	3,255	1	-7
Shares in affiliated companies	123,861	127,122	134,175	131,513	133,482	1	8
Assets associated with pooled schemes	135,007	144,019	163,036	147,721	164,501	11	22
Intangible assets	12,110	12,853	14,267	17,194	16,617	-3	37
Land and buildings	12,573	12,238	11,356	10,635	12,131	14	-4
Other tangible assets	5,661	5,406	5,968	5,799	6,823	18	21
Tax assets	5,315	7,570	7,229	8,967	6,154	-31	16
Assets in temporary possession	1,883	582	2,582	143	110,628	77,262	5,775
Other assets	386,404	483,435	358,720	529,453	433,408	-18	12
Period accrual items	2,731	3,235	2,564	2,981	3,758	26	38
Total assets	3,531,188	3,882,291	3,733,029	3,949,937	3,946,825	0	12
Debts owed to banks and central banks	342,168	361,852	299,822	253,793	266,406	5	-22
Deposits	1,899,053	2,123,100	2,123,502	2,220,617	2,237,339	1	18
Deposits, excluding repo	*2,082,218*	*2,269,972*	*2,258,940*	*2,322,534*	*2,362,110*	*2*	*13*
Bonds issued	332,109	360,873	371,943	343,858	347,037	1	4
Other commitments	8,222	11,826	16,402	15,704	12,972	-17	58
Period accrual items	936	848	952	1,441	1,851	28	98
Total debt	***3,161,450***	***3,506,882***	***3,324,019***	***3,549,769***	***3,506,534***	***-1***	***11***
Provisions	6,561	7,699	7,177	7,303	10,313	41	57
Subordinated capital injections	45,340	46,278	53,530	51,608	52,024	1	15
Equity	317,837	321,432	348,303	341,257	377,953	11	19
Total liabilities	3,531,188	3,882,291	3,733,029	3,949,937	3,946,825	0	12

Annex 7: Balance sheet, mortgage banks 2019-2023

	2019	2020	2021	2022	2023	Change, 1 year	Change, 5 years
Balance sheet items	*DKK million*					*%*	
Cash in hand and on-demand receivables with central banks	295	347	22,225	37,420	57,312	53	19,328
Receivables from credit institutions and central banks	1,099,373	1,045,844	1,024,854	893,254	934,227	5	-15
Lending	2,991,737	3,097,717	3,142,182	2,906,974	3,034,737	4	1
Lending, excluding repo	*2,991,737*	*3,097,717*	*3,142,182*	*2,906,974*	*3,034,737*	*4*	*1*
Bonds	211,208	193,270	177,514	169,024	175,601	4	-17
Shares, etc.	6,716	6,565	6,766	7,425	7,061	-5	5
Shares in associated companies	49	45	53	52	51	-2	4
Shares in affiliated companies	59,260	62,844	70,477	71,580	78,252	9	32
Assets associated with pooled schemes	-	-	-	-	-		
Intangible assets	307	354	269	353	448	27	46
Land and buildings	795	684	526	382	600	57	-25
Other tangible assets	159	190	206	211	222	5	40
Tax assets	273	90	116	120	218	82	-20
Assets in temporary possession	208	145	76	57	68	19	-67
Other assets	12,379	10,230	8,705	13,408	16,862	26	36
Period accrual items	464	476	343	320	339	6	-27
Total assets	4,383,223	4,418,800	4,454,312	4,100,579	4,305,998	5	-2
Amounts owed to credit institutions and central banks	857,165	887,332	923,171	834,041	876,577	5	2
Deposits	11,950	7,200	-	-	-		
Deposits, excluding repo	-	-	-	-	-		
Bonds issued	3,248,851	3,249,950	3,252,282	2,973,215	3,112,835	5	-4
Other commitments	3	1,137	458	272	306	12	10,100
Period accrual items	36	36	29	38	18	-53	-50
Total debt	***4,142,826***	***4,168,794***	***4,198,514***	***3,841,354***	***4,034,605***	***5***	***-3***
Provisions	745	382	332	569	804	41	8
Subordinated capital injections	16,516	17,946	15,587	14,984	15,243	2	-8
Equity	223,136	231,678	239,879	243,671	255,346	5	14
Total liabilities	4,383,223	4,418,800	4,454,312	4,100,579	4,305,998	5	-2

Annex 8: Credit institutions, key figures 2019–2023

	2019	2020	2021	2022	2023
	%				
Capital ratio	22.41	23.23	22.88	22.57	23.49
Core capital ratio	19.89	20.53	20.33	20.06	21.08
Real core capital ratio	17.96	19.00	18.76	18.73	19.81
Return on equity before tax	9.20	5.85	10.19	5.89	14.98
Return on equity after tax	8.55	4.63	8.23	3.96	11.59
Earnings per cost krone (DKK)	1.57	1.32	1.65	1.34	2.00
Cumulative impairment rate	1.00	1.07	0.96	0.91	0.94
Impairment rate for the period	0.07	0.24	-0.01	0.03	0.03
Loans in relation to equity (ratio)	11.03	11.00	10.66	10.60	9.73
Total risk exposures (DKK billion)	**1,906**	**1,926**	**2,043**	**2,066**	**2,074**
Of which are for credit risk	*1,590*	*1,598*	*1,727*	*1,692*	*1,707*
market risk	119	129	107	131	110
operational risk	172	173	173	180	197

Annex 9: Banks, key figures 2019-2023

	2019	2020	2021	2022	2023
	%				
Capital ratio	24.64	25.28	25.51	24.48	26.34
Core capital ratio	22.02	22.54	22.90	21.98	23.83
Real core capital ratio	19.53	20.62	20.92	20.36	22.24
Return on equity before tax	7.88	4.67	9.79	4.03	14.66
Return on equity after tax	8.34	4.18	8.46	2.69	12.16
Earnings per cost krone (DKK)	1.47	1.25	1.60	1.20	1.95
Cumulative impairment rate	1.93	2.17	1.87	1.61	1.85
Impairment rate for the period	0.1	0.43	-0.04	0.05	0.09
Loans in relation to equity (ratio)	4.25	4.11	3.93	4.47	3.62
Total risk exposures (DKK billion)	**1,328**	**1,342**	**1,434**	**1,483**	**1,466**
Of which are for credit risk	*1,089*	*1,105*	*1,200*	*1,208*	*1,193*
market risk	99	100	90	101	91
operational risk	128	127	126	132	149

Annex 10: Mortgage banks, key figures 2019-2023

	2019	2020	2021	2022	2023
	%				
Capital ratio	22.87	23.02	21.88	23.19	23.39
Core capital ratio	21.09	21.04	20.18	21.45	21.94
Real core capital ratio	20.31	20.31	19.49	20.75	21.26
Return on equity before tax	9.73	7.43	8.70	9.06	11.12
Return on equity after tax	8.25	6.29	7.48	7.75	9.12
Earnings per cost krone (DKK)	4.31	2.85	3.66	3.51	4.17
Cumulative impairment rate	0.34	0.40	0.38	0.38	0.35
Impairment rate for the period	0.03	0.1	0	-0.02	-0.01
Loans in relation to equity (ratio)	13.41	13.37	13.10	11.93	11.88
Total risk exposures (DKK billion)	**1,003**	**1,057**	**1,114**	**1,085**	**1,119**
Of which are for credit risk	*941*	*985*	*1,051*	*995*	*1,043*
market risk	23	32	19	34	22
operational risk	40	40	40	41	41