FINANSTILSYNET

Banks

Market development

Contents

1. Summary 3
2. Earnings 4
Figure 1: Bank profits were almost halved as a result of the COVID-19 crisis 4
Figure 2: Slight increase in core earnings 5
3. Development in lending 5
Figure 3: Bank lending decreased in 2020 6
Box1 : The banks' capacity to cover increased lending demand 7
Figure 4: Largest impairments in industries impacted by COVID-19 8
Figure 5: The NPL ratio increased significantly for industries impacted by COVID-19 9
Figure 6: Credit quality has not yet deteriorated 10
Box2: Risk classification study 11
4. Focus areas in selected studies 12
Box 3: Consumer loan banks 12
Box 4: Loans for rental properties and real estate projects 14
5. Deposit surplus 14
Figure 7: The deposit surplus increased significantly during the COVID-19 crisis 15
Box 5: Negative deposit rates and investments 16
6. Banks in the investment market 17
Box6: Procedures for approval of products 18
7. Strong liquidity positions despite the COVID-19 crisis 18
Figure 8: LCR levels were significantly above the statutory requirement in 2020 19
Box7: Examination of LCR denominator 20
8. Market risk due to the COVID-19 crisis 20
Figure 9: Negative exchange adjustments in the first quarter of 2020 for all bank groups .... **Fejl! Bogmærke er ikke defineret.**
Figure 10: Interest rate risk constitutes the largest risk exposure to market risk 21
9. Annexes 22
Annex 1: Annual accounts for banks 2020-2018 22
Annex 2: Key figures for banks 2016-2020 24
Annex 3: Grouping, 2020 25

1. Summary

The year 2020 was marked by the COVID-19 crisis. It also affected the Danish financial institutions (hereinafter “banks”), which experienced a decline in profits. The banks came out of the year with a profit of DKK 15 bn, corresponding to a decrease of 40 percent compared to 2019. The decline was primarily driven by a large increase in impairments. A total of DKK 9.5 bn was written down in 2020, while impairments before the COVID-19 crisis were historically low. Although banks have taken large impairments, they are still far from the level during the financial crisis.

The low interest rate environment has for many years put pressure on bank earnings, but net interest income increased by 4 percent in 2020 to DKK 32 bn. Although interest income decreased markedly, interest expenses were reduced even more. This was primarily due to the fact that interest expenses on deposits and other debt decreased by DKK 3.9 bn and thus was more than halved. The reduction in interest expenses is partly due to the effect of the spread of negative interest rates on private customer deposits.

The banks' total lending decreased by DKK 30 bn, corresponding to 2.5 percent, and both group 1, 2 and 3 banks experienced negative lending growth. The decline in lending must be seen in relation to the COVID-19 crisis. The government assistance packages in connection with the crisis reduced corporate borrowing needs, and the economic uncertainty reduced the companies' desire to invest for borrowed money.

In particular, the banks' lending to COVID-19-affected industries was affected. The largest impairments were on loans to transport, hotels and restaurants. Here, a total of DKK 3.5 bn was impaired, which amounted to 40 percent of the total impairments. Impairments on loans to industry and private individuals were also at a high level and were characterised by a large increase compared to 2019. On loans to transport, hotels and restaurants, the share of non-performing loans (NPL ratio) increased by 3 percentage points. This is thus the area with the highest NPL ratio with 18.4 percent. Agriculture has historically had the most non-performing loans, but the NPL ratio has been reduced from 24 to 17 percent in the past two years. However, the level is still high.

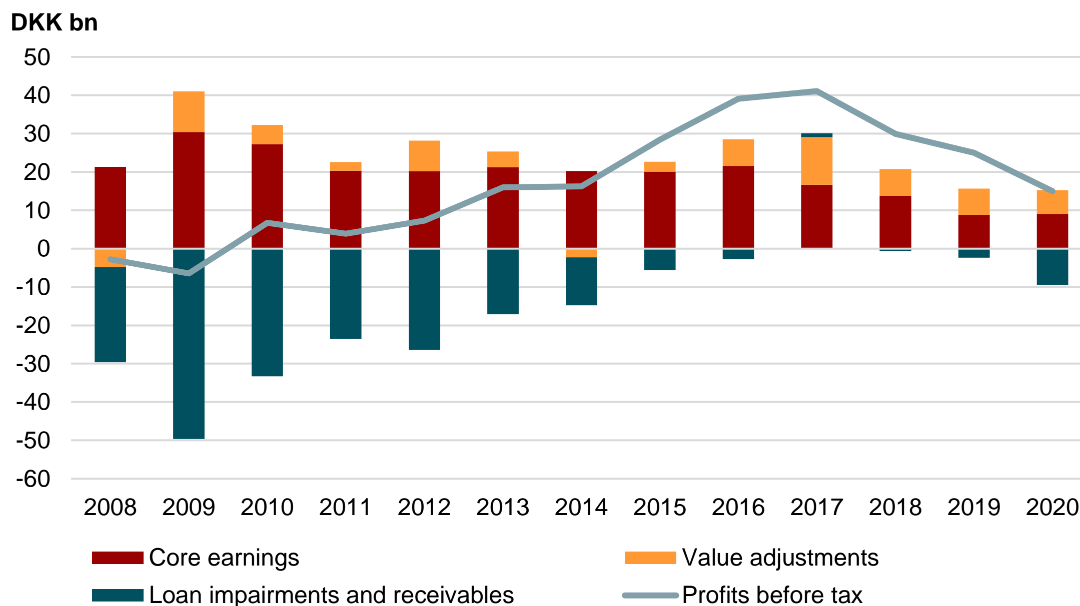
The banks' deposit surplus excluding repo transactions increased in 2020 by 79 percent to DKK 657 bn. This is partly due to lower private consumption as a result of the closure of society, the payment of ‘frozen’ holiday pay and government assistance packages to the business community.

The banks held strong liquidity positions throughout 2020. They were thus well equipped at the beginning of the year, when there was great turmoil in the financial markets when the COVID-19 crisis broke out. The market turmoil resulted in exchange losses in the first quarter for the banks, but the trend reversed, so that the banks had good earnings on value adjustments for the rest of the year.

2. Earnings

The banks' profits decreased from DKK 25 bn in 2019 to DKK 15 bn in 2020, corresponding to 40 percent, cf. figure 1. This decrease was primarily due to impairments of DKK 9.5 bn as a result of the COVID-19 crisis. By comparison, the impairments were DKK 2.4 bn in 2019. The profit was also affected by the fact that earnings in subsidiaries decreased by DKK 2.5 bn. Although the banks have taken large impairments, they are still far from the level in the wake of the financial crisis (2008-09).

Figure 1: Bank profits were almost halved as a result of the COVID-19 crisis



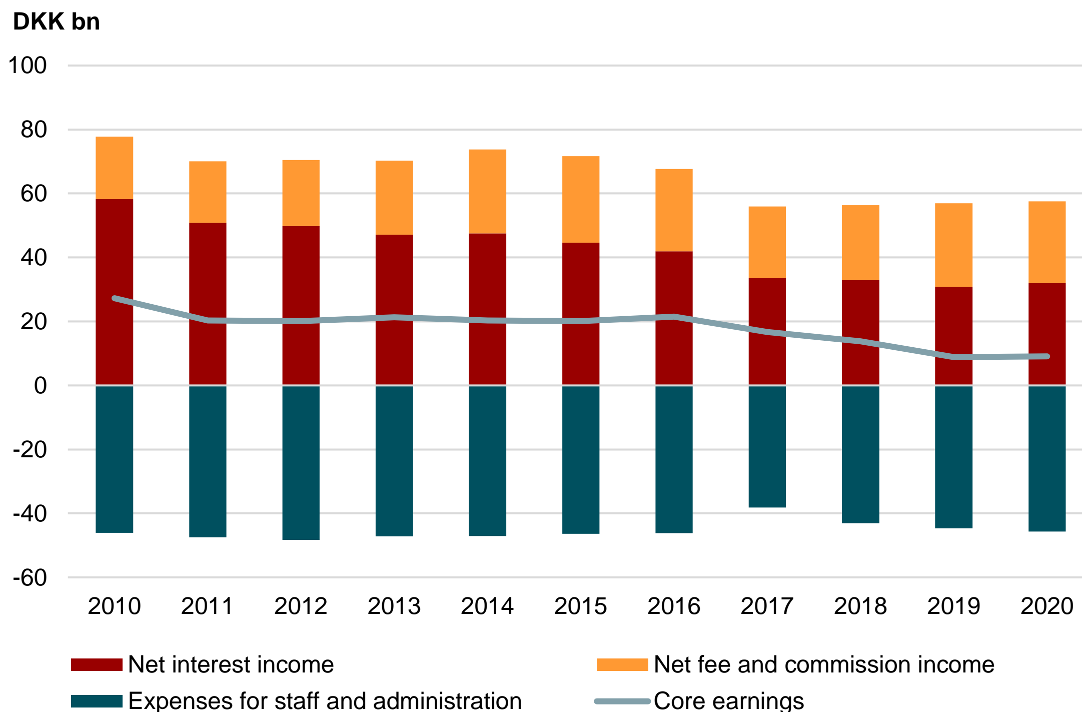
Note: Core earnings are net interest and fee income, staff and administration expenses and other operation income and costs. It is a measure for banks' core business. Note the transition to IFRS9 primo 2018 which may have lead to larger imairments
Source: Reports to the FSA.

The banks' core earnings increased slightly in 2020 to DKK 9.1 bn, which is the first increase since 2016, cf. figure 2. The low interest rate environment has for many years put pressure on bank earnings, but net interest income increased by 4 percent to DKK 32 bn. Although interest income declined markedly by DKK 4.5 bn, corresponding to 9.2 percent compared to 2019, interest expenses were reduced even more by DKK 5.8 bn, corresponding to 31.5 percent. This was due to interest expenses on deposits and other debt decreasing by DKK 3.9 bn and thus being more than halved. This decrease can partly be attributed to the effect of the spread of negative interest rates on deposits for private customers.

Net fee income decreased by 2.6 percent in 2020, which was due to increased fees and commission expenses. Fee income increased slightly. This increase was primarily driven by higher fee income on securities trading and depositaries, which may be due to more investments with predominantly increasing share prices compared with incentives to invest due to negative deposit rates.

In addition, expenditure on personnel and administration is the largest component of core earnings, and these expenses increased by DKK 1 bn.

Figure 2: Slight increase in core earnings



Source: Reports to the FSA

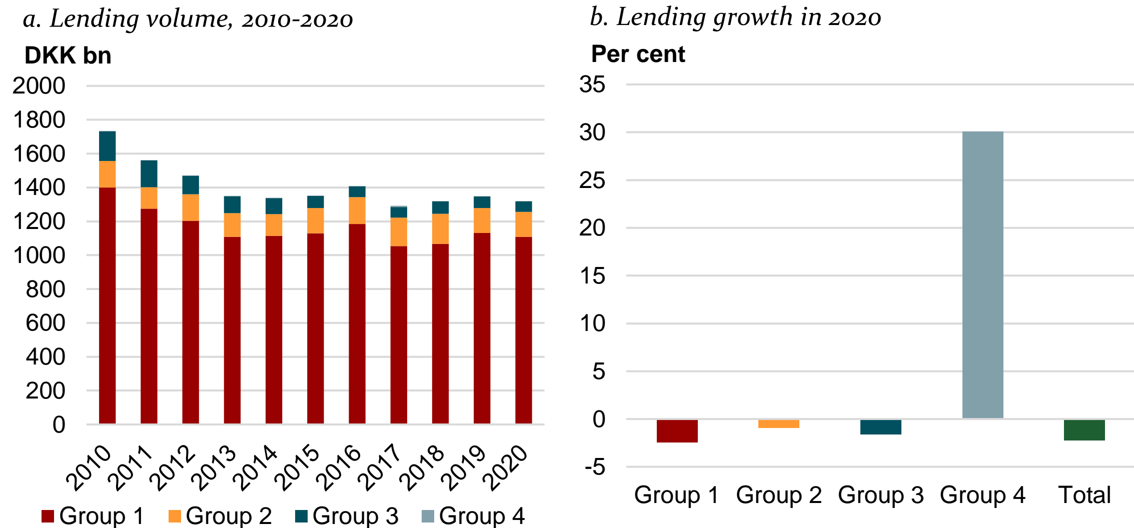
3. Development in lending

The banks' total lending decreased by DKK 30 bn in 2020, corresponding to 2.5 percent, cf. figure 3. This decrease is the first since 2014 when adjustments are made for the branching of Nordea. Both the group 1, 2 and 3 banks experienced a negative lending growth, with group 1 having the largest. Group 4 had a positive lending growth of 30 percent, which, however, was due to newly started banks experiencing strong growth during 2020, and which have therefore been promoted to group 3 in 2021.

The decrease in lending must i.e. be seen in relation to the government assistance packages that have made capital and liquidity available to companies in connection with the COVID-19 crisis. At the same time, the downturn and the uncertainty about the financial situation meant that companies were expected to have less desire to invest for borrowed money. When the deferred taxes are to be paid, this could increase the demand for credit with credit institutions.

The Danish Financial Supervisory Authority (hereinafter “the FSA”) assesses that the institutions have a sufficient capital adequacy ratio (hereinafter “CAR”) for the regulatory requirements to be able to increase their lending volume to a level that is significantly above the liquidity pull which the deferred tax payments could entail, cf. Box 1.

Figure 3: Bank lending decreased in 2020



Note: Balanced loans excluding repo transactions. In the figure to the left, the decrease in 2017 is due to the branching of Nordea. The figure on the right show adjustments for locked groups and mergers.
Source: Reports to the FSA.

Box 1 : The banks' capacity to cover increased lending demand

The Danish Ministry of Finance estimates that the extension of companies' payment deadlines regarding tax and VAT have strengthened the liquidity of the companies by a total of approx. DKK 125 bn.

As lending by banks decreased during the same period, it is assumed that the liquidity needs of non-financial corporations are not greater than those provided through the above financial assistance packages. Realistically, it is much smaller, and a large part must be expected to be picked up via corporate deposits. Therefore, DKK 125 bn is assumed as an upper limit for how much increased lending may be needed when the deferred tax and VAT payments are to be paid. At the same time, it is assumed that the need for credit that may arise will take the form of bank loans and not mortgages. Therefore, the banks' average risk weights are used, which - all other things being equal - are higher than those of the mortgage credit institutions.*

An increase in lending by banks by DKK 125 bn will reduce the Danish banks' capital adequacy ratio (CAR) from 6.3 percent to between 5.6 and 4.9 percent, depending on how high the new exposures are risk-weighted, cf. table 1. As mentioned, the effects must be expected to be somewhat lower, as some will be repaid with declining deposits, and some have already been repaid in 2020.

Table 1: The solvency effect of an increase in lending of DKK 125 bn.

	Today	RW = 50%	RW = 75%	RW = 100%
Total RWE (DKK bn)	1,934	1,997	2,028	2,059
Total solvency ratio	22.6	21.9	21.5	21.2
CAR (%)	**6.3**	**5.6**	**5.3**	**4.9**

Note: The calculation is made on the assumption that the credit institutions' capital does not change. This could be done through current profits (or deficits), or by the banks issuing new capital. The CAR is defined as the total solvency ratio minus the regulatory requirement of 16.3 percent. The figures are based on the total bank sector, i.e. incl. mortgage credit institutions.
Source: Reports to the FSA.

During the COVID-19 crisis, the Danish credit institutions have improved their CAR. This is partly due to the fact that they have withheld dividends, and partly due to the fact that the countercyclical capital buffer (of 1 percent on Danish exposures) has been released. At the end of 2019, the CAR was 4.5 percent against 6.3 percent at the end of 2020. An increase in lending is thus not expected to reduce the CAR to less than before the COVID-19 crisis.

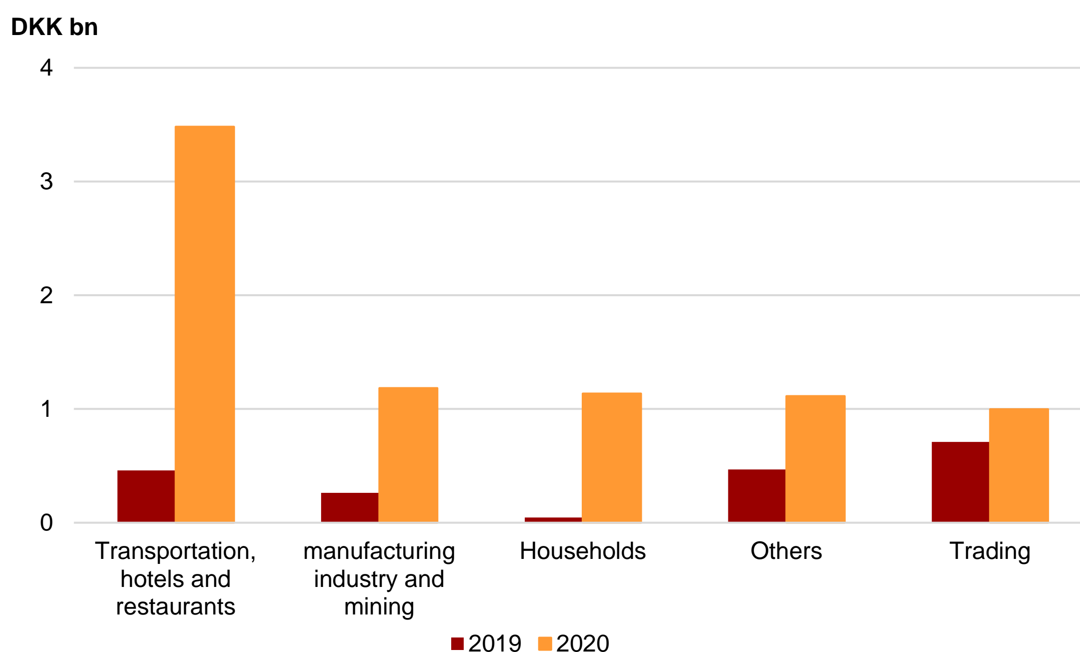
Overall, the FSA assesses that the solvency of the institutions is not a restriction on increased lending. Nor will it be a problem in terms of liquidity, as the banks have a large deposit surplus and also had this before the COVID-19 crisis. However, in order for companies' credit demand to be met after the expiry of the financial assistance packages, they must be assessed as creditworthy by the banks.

*) For the banks' corporate exposures on the standard method, the average risk weight is 53.4 percent, while exposures on the IRB method have an average risk weight of 29.1 percent. Overall, the average risk weight for the banks' corporate exposures is 34.4 percent.

At the same time as lending decreased, impairments increased significantly. The expensed write-down ratio increased from 0.1 percent in 2019 to 0.5 percent in 2020. The largest institutions took the largest impairments, but relative to lending, the group 3 and 4 institutions took significantly more.

The industries that had the largest expensed impairments were largely affected by the COVID-19 crisis, cf. figure 4. Impairments for transport, hotels and restaurants amounted to DKK 3.5 bn and amounted to 40 percent of the total impairments. Impairments on loans to industry and private individuals also increased significantly compared with 2019, which can probably be attributed to lower exports and redundancies in certain professional groups and general uncertainty in the economy.

Figure 4: Largest impairments in industries impacted by COVID-19

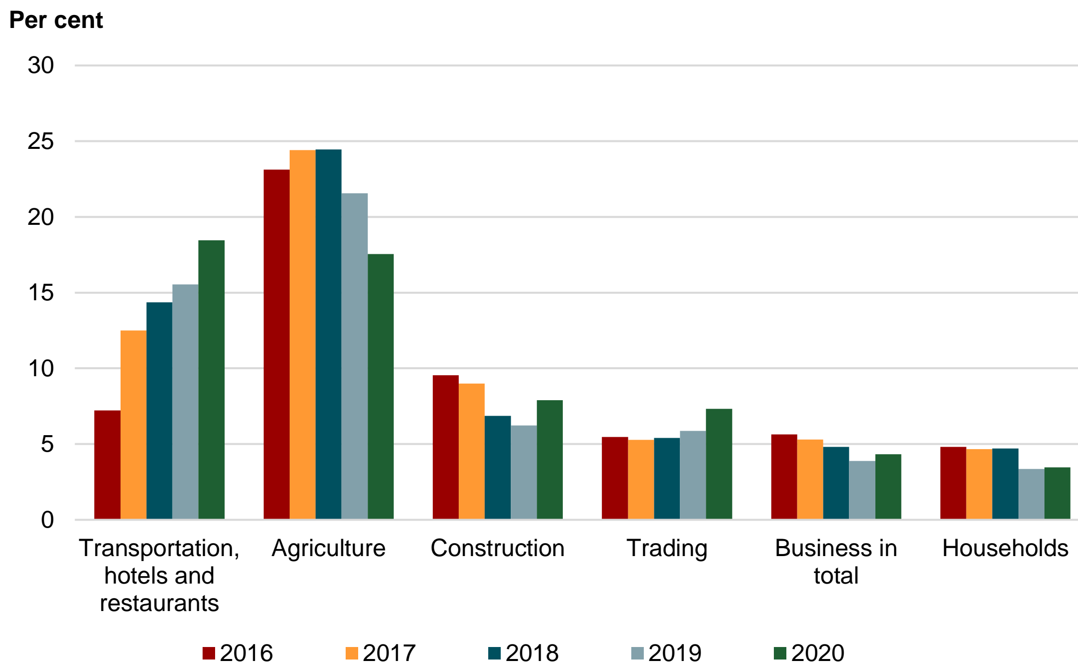


Note: Expensed impairments for the five industires with the largest loan impariments in 2020.
Source: Reports to the FSA.

Banks' share of non-performing loans (NPLs) to businesses increased following a decrease for a number of years. For industries impacted by COVID-19, the NPL ratio increased significantly. For transport, hotels and restaurants, the NPL ratio increased by 3 percentage points. This is the area that with 18.4 percent had the highest NPL ratio in 2020, cf. figure 5. Relative to the level and the other industries, this share for trade and construction increased significantly by approximately 1.5 percentage point.

The share of non-performing loans for agriculture has been high for many years, but was reduced from 24 to 17 percent from 2018 to 2020. This reflects better earnings in agriculture and the fact that agriculture has not been as badly affected by the COVID-19 crisis as many other industries. However, the level of NPL is still high.

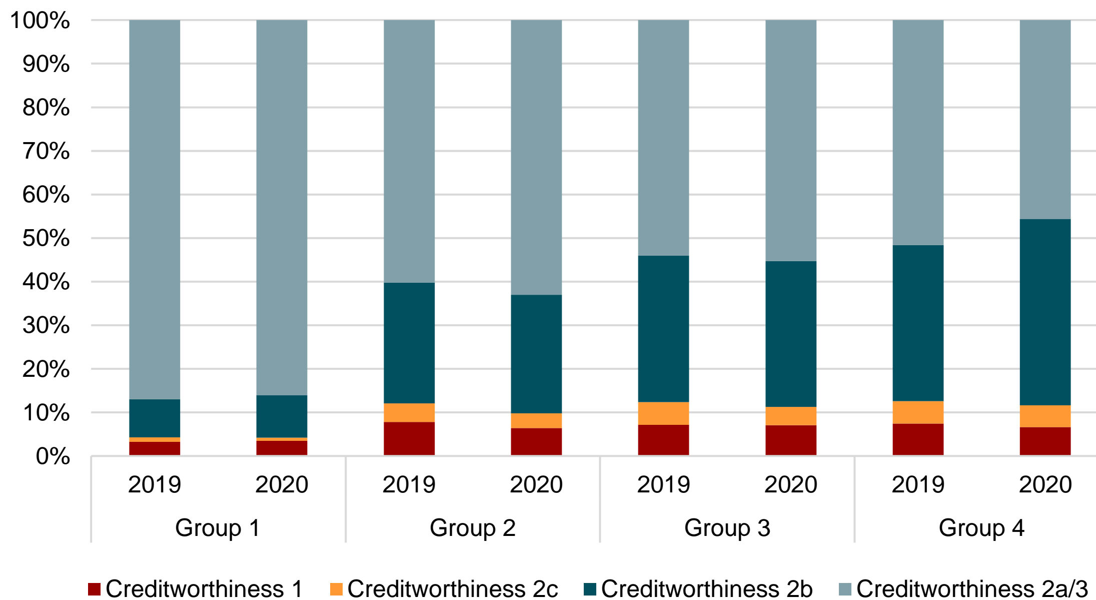
Figure 5: The NPL ratio increased significantly for industries impacted by COVID-19



Note: Includes banks in group 1-3. Non-performing loans (NPL) are loans that are more than 90 days past-due or the debtor is assesed as unlikely to pay its credit obligations in full without realisation of collateral.
Source: Reports to the FSA.

Despite the deteriorating financial situation, lending decreased with the worst credit rating (1 and 2c) for groups 1, 2, and 3, cf. figure 6. This probably most of all reflects the fact that the banks' statement cannot adequately take into account the current economic changes and uncertainties in this regard. The banks have been and continue to be challenged in their calculations and distribution of impairments on customers, which is why many COVID-19-related impairments have been taken as management estimates.

Figure 6: Credit quality has not yet deteriorated



Note: Creditworthiness categories are: 3 - Customers with unquestionably good creditworthiness, 2a - Customers with normal creditworthiness, 2b - Customers with certain weakness indicators, 2c - Customers with severe weakness indicators, but with no objective indication of credit deterioration (OIK), 1 - Customers with objective indication of credit deterioration (OIK)
Source: Reports to the FSA.

Risk classification of customers is a central and essential element in the banks' ongoing operations and risk management. Risk classification has i.e. significance for the banks' impairments and calculation of the sufficient capital base. It is important that the risk classification does not give a too positive picture of the individual customer's health status. In addition, banks must continuously check and test that the risk classifications are correct.

In 2020, the FSA examined practices in this area and in this connection published a memorandum on focus areas and good practice, cf. box2.

Box2: Risk classification study

The study showed that the banks do not carry out checks on data on which the risk classification is based. This places greater demands on the subsequent control. The study showed high error rates in the random checks carried out by the bank after granting and executing exposures. In addition, there are large differences in the scope of random checks and the depth of the checks performed, just as there are differences in where in the organisation the checks are performed.

It is good practice for the banks to have clarified in business procedures how the checks are to be carried out and documented, including specified selection criteria and the size of the random checks. The banks must ensure that the results of their checks provide a statistically reliable result in relation to assessing their ability to classify risk correctly.

The random check must be carried out by an independent party that is not part of the function that carries out the risk classification. If this is not possible, for example due to the size of a bank, it must have implemented compensatory measures.

Banks typically carry out risk classification of corporate customers at least annually, while there are large differences in how often risk classification of private customers is carried out. Several banks lacked business procedures for when a customer's risk classification should be updated. It is good practice for the banks to have business procedures in place for this, as it ensures that a customer's risk classification is always correct.

The study showed that the banks' risk classification of customers is generally positively affected by an upward economic situation. This entails a risk that cyclically sensitive customers will appear very solid during a boom, even though they may become weak shortly after an economic turnaround. This could e.g. be the case for customers in the real estate segment. Some banks are aware of this risk and include it in credit management.

It is good practice for banks to include these effects in ongoing credit management and risk reporting. In addition, the risk of misleading risk classifications in a boom should be included when management determines its strategy.

The study also showed that there are large differences in how much space risk classification takes up in the work of the risk management function and internal audit. The FSA notes that both functions plays a significant role in ensuring that the banks' risk classification of customers is correct and that the risk classification tools used function satisfactorily.

4. Focus areas in selected studies

Consumer loan banks

The FSA and the Consumer Ombudsman have published a new guide on credit rating. The motivation for preparing this is, i.e. that the Consumer Ombudsman in the autumn of 2020 assessed that 166 loans from consumer and quick loan companies to customers in Denmark were illegal. The cases had in common the fact that the credit companies had not sufficiently assessed the customers' credit.

Based on this guide, the FSA has mapped the market for consumer loans in Danish banks[1], cf. box 3.

Box 3: Consumer loan banks

At the end of 2019, the total consumer loan in the Danish banks was approx. DKK 28 bn distributed among a little over 600,000 private individuals. The consumer loan banks covered approx. 79 percent of the market. Most consumer loan customers had a single consumer loan in a single bank. However, there was a significant group of private individuals, who simultaneously took out consumer loans in several different banks. Some individuals had taken out up to 23 different consumer loans in nine different banks.

Of the private individuals who took out consumer loans in consumer loan banks and the remaining banks, respectively, the share of customers in arrears in the consumer loan banks was almost twice as high as in the remaining banks. This could reflect both the quality of the credit processing and differences in the nature of the customers applying for a loan.

Second-priority mortgaging of owner-occupied homes

In the autumn of 2019, the FSA initiated an investigation into a number of banks' non-mortgage-like lending in the form of the outermost mortgaging of owner-occupied housing in development areas. The study was launched to shed light on whether the existing regulation and new framework for lending in the area of mortgage-like loans has resulted in increased competition for the outermost mortgage, typically in the form of the second-priority mortgaging, where the risk is higher.

Overall, the study does not indicate that there has been a general unhealthy development in credit terms in the market for the outermost mortgage granted in connection with the purchase of owner-occupied housing or additional mortgaging. However, there are indicators showing that small and medium-sized banks in particular grant new loans for owner-occupied housing in development areas to customers with a more vulnerable credit quality.

[1] Based on the reported data, the FSA has defined consumer loans as follows: Unsecured loans for the purpose of consumption for private individuals excl. overdrafts and credit cards.

Although the study did not indicate a generally unhealthy competition between the banks, some of them exhibited aggressive behaviour, e.g. by lowering interest rates from an already low starting point in order to attract more new customers.

Real estate financing

In 2020, the FSA investigated the largest Danish banks' granting of loans for rental properties and real estate projects, cf. box 4. Focus on risk appetite and soundness in financing of properties was and is particularly important due to the historically low interest rates and the hitherto abundant market liquidity. Investor search for investment alternatives to securities and the possibilities for loans at low interest rates have contributed to real estate for rent being built and traded to a greater extent and to significantly higher values than before. Real estate loans make up a significant proportion of the sector's loans. This is typically also a loan with a long term and a dependence on the operation of the property, so it can be particularly difficult for a bank to take significant credit management measures after the loan has been issued.

The investigations included loans granted before the COVID-19 crisis. The long-term effects on e.g. price developments on different types of rental properties are still uncertain. The FSA assumes that conclusions about soundness in analyses and credit policy approaches, etc. in the future may be even more relevant in the light of the crisis and the long-term consequences it may have for developments in the real estate market.

In 2021, the FSA expects to publish guidelines on the financing of rental properties and real estate projects.

Box 4: Loans for rental properties and real estate projects

A bank's board of directors must approve the bank's credit policy in order to ensure that loans are sound and adapted to the risk desired by the board of directors. The investigations showed that some banks deviated from their credit policy without approval from the bank's board before granting a loan. One bank had a very lenient credit policy in this area, and other banks' credit policies entailed ambiguities. The FSA therefore ordered the banks to tighten up their credit policy guidelines.

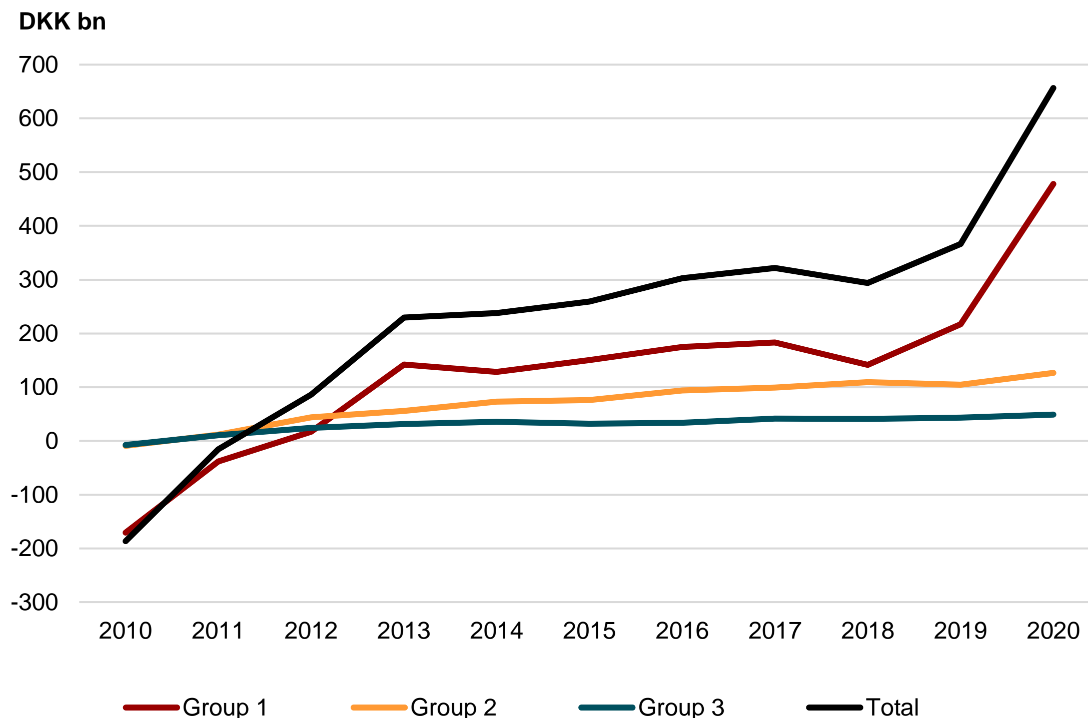
The FSA also assessed that the banks should improve their risk analysis to ensure that customers are sufficiently robust and can service debt if the economic situation becomes more difficult. This applies e.g. to the question of whether it is realistic in the long term to obtain high rental rates while the interest rate level being low at the same time. It is also necessary for banks to use sufficiently severe stress in their analyses to assess whether it e.g. is necessary to demand more self-financing.

In order to reduce the risk of losses in the event of a subsequent decrease in property prices, it is important for the banks focus on loan repayment and interest rate hedging. A significant grace period and a short, variable loan interest rate increase the risk of loss. If the debt is only reduced modestly, it may become more difficult to make loan repayments through the operation of the property if the loan interest rate increases at a later point in time. This applies in particular where a newly built property or property under construction or development has not been pre-sold, or where there may be uncertainty about the property's rental income in the long term. At the same time, the effect of an increasing interest rate level is that experience has shown that property values decrease in line with the increase in interest rates.

5. Deposit surplus

The banks' deposit surplus excluding repo transactions increased in 2020 by 79 percent to DKK 657 bn after having been relatively constant since 2013, cf. figure 7. This development was primarily due to the fact that deposits increased by DKK 260 bn. Deposits from private individuals, which make up the vast majority, increased significantly during the COVID-19 crisis. Thus was i.e. due to lower private consumption as a result of the closure of society and the payment of ‘frozen’ holiday pay. Deposits from corporate customers were positively affected by the government assistance packages.

Figure 7: The deposit surplus increased significantly during the COVID-19 crisis



Note: The deposit surplus is calculated as balanced surplus towards balanced loans excluding repo transactions.
Source: Reports to the FSA.

Since 2012, the certificate of deposit (CD) rate in Denmark has been predominantly negative. However, it was not until 2019 that many banks introduced negative interest rates for private customers. In the beginning, negative interest rates applied only to private customers with large deposits, e.g. more than DKK 750,000. Since then, the limits for when customers have to pay negative interest rates have been lowered several times. Today, private individuals have to pay a negative interest rate, typically around minus 0.60 percent on deposits larger than DKK 100,000 or DKK 250,000, and several banks charge negative interest on the entire amount if the customer has no other customer relationship with the bank.

According to Finance Denmark, approximately 16 pct. of all adult Danes at the beginning of 2021 paid negative interest rates, while the rest were not affected by negative interest rates on deposits[2]. The introduction of negative deposit rates has for several private customers affected the incentive to invest in e.g. shares or mutual fund certificates. However, there is not an insignificant risk associated with this, which both the bank and customers should be aware of, cf.box 5.

[2] https://finansdanmark.dk/nyheder/2021/langt-de-fleste-skal-ikke-betale-negative-renter-i-banken/

Box 5: Negative deposit rates and investments

The negative interest rate level has given banks an incentive to get customers with deposits to buy the bank's investment products on which the bank makes money, rather than leaving the funds in a deposit account - where banks have often paid more than the money market interest rate at zero. As banks have introduced negative interest rates for private customers and lowered the limit for when individuals must pay negative interest rates, customers have been given an incentive to invest in order to avoid paying negative interest rates.

Combined with a longer period of predominantly increasing share prices, this has probably led to more customers - perhaps advised by the bank - choosing to invest free funds in investment products or invest on their own.

Investment poses a risk to the customer. In the case of investment advice and the sale of portfolio management products, banks and securities dealers are therefore subject to the regulation in the Danish Executive Order on Investor Protection. The regulation must ensure that products are suitable for the customer, just as the banks must consider which customers are - and are not - in the target group for a given product. This applies to personal advice and when customers invest via investment robots.

If a customer chooses to invest on their own, it is the customer's own responsibility to relate to e.g. risk and time horizon. In the case of complex products, however, the bank must always carry out an appropriateness test. This means that the department must assess whether the customer both possesses knowledge of the product's risks and has experience with the product in question. If the bank deems that the product is not suitable for the customer, the bank must send the customer a warning to this effect. However, this warning does not prevent the customer from completing the transaction.

The FSA focuses on the banks' advice to consumers. However, the FSA also encourages consumers who invest to consider what risk they run and whether they can afford to lose all or part of the invested funds, or whether they are better served by paying negative interest rates in exchange for security for their deposits when covered by the Danish Guarantee Fund up to approximately. DKK 750,000. Investors should also consider their time horizon, i.e. whether and, if so, when they expect to use the invested funds. The longer the time horizon, the more time there will, all other things being equal, be to make up for any losses due to declines in the market. Finally, investors should be aware that most investment solutions have a price in the form of costs to be paid, regardless of whether the investment provides a positive or negative return.

6. Banks in the investment market

Banks are an important player in the investment market, not least in connection with investor protection. Banks are, i.e. together with stockbrokers, often distributors of financial products and thus the part of the chain that has the direct contact with consumers and investors. Banks therefore play a crucial role when it comes to consumer and investor confidence in the financial sector. One of the FSA's focus areas is to help ensure that financial companies only sell products that are transparent, reliable and adapted to customers' financial conditions. In continuation of this, the FSA has, among other things, placed focus on commission payments. In 2018, a partial ban was introduced in the form of a requirement that banks etc. can receive commissions only on the provision of investment advice or on the sale of investment products online if they provide a proportionate quality-enhancing service to the customer.

An essential element of investor protection is transparency concerning the costs which customers pay to their bank. Banks must send information to customers regarding the costs and fees which customers have paid in connection with i.a. the implementation of investments.

The overview created by this disclosure requirement gives the individual customer a starting point for acting and deciding on their continued ongoing investment, e.g. in cases where the actual costs and fees are not in line with the customer's expectations. The longer the time that elapses from the period to which the costs relate to the time when the customer receives information about them, the less the information is worth to the customer. It is therefore crucial that information on costs and fees is received by the customer as soon as possible after the end of the period to which they relate. The FSA assesses that information received by a customer later than three months after the end of the accounting period has been delivered too late.

Box6: Procedures for approval of products

The rules on product approval for securities traders (Executive Order no. 922/2017 on product approval procedures) support that banks only develop or distribute investment products (financial instruments and structured deposits) that are adapted to customer needs.

The executive order generally requires that developers and distributors of investment products define a target group for each investment product. This means that - prior to offering a financial product - they must define a group whose needs, characteristics and investment purposes are compatible with the product. In the same way, the bank establishes an appropriate distribution strategy. The role as a distributor typically lies with a bank that - in addition to having ongoing contact with consumers - also makes distribution platforms such as online banking available to investors. The executive order must help to ensure that customers only buy products that are suitable for them. This includes i.a. that they have the necessary knowledge and that their financial situation is otherwise appropriate in relation to the selected products.

The rules require that product developers and distributors continuously assess whether a product continues to meet the needs of the target group. If this is not the case, the target group must be adapted or the form of distribution changed.

In 2020-21, the FSA will conduct a thematic study of product approval procedure in selected banks. In 2021, the FSA expects to issue a thematic report based on this study.

At the beginning of 2021, the European Securities and Markets Authority (ESMA) launched a joint thematic study on product approval procedures. The study has i.a. focus on how product developers ensure that costs and fees are compatible with a target group's needs, investment objectives and characteristics, and on the periodic review of financial products and their target group. The FSA participates in this study.

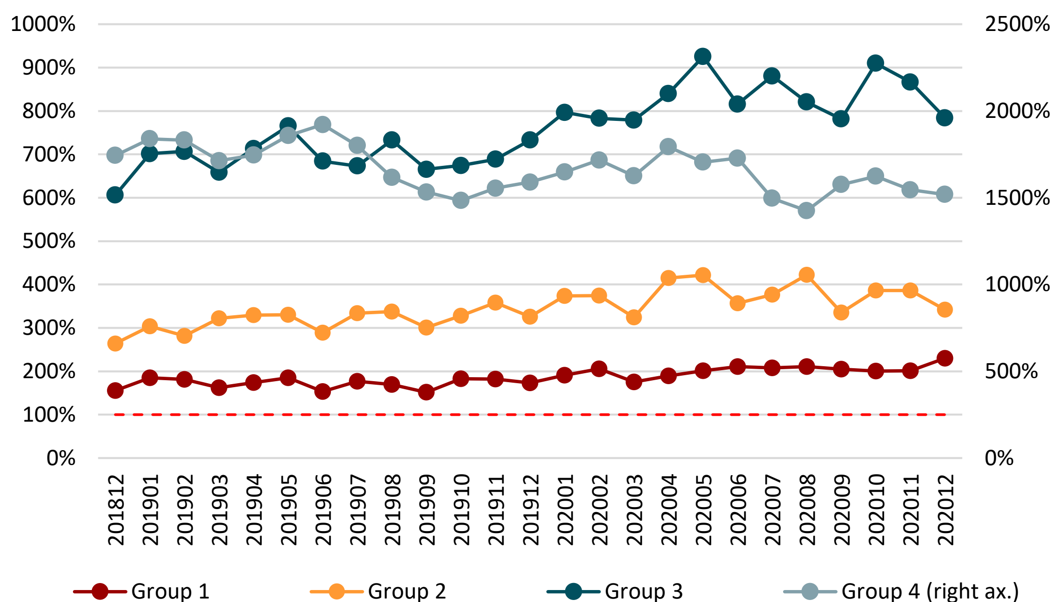
7. Strong liquidity positions despite the COVID-19 crisis

Danish banks generally held strong liquidity positions throughout 2020. In particular, the large deposit surplus contributed to the banks being well equipped at the beginning of the year and thus having a good starting point prior to the outbreak of the COVID-19 crisis and the general market turmoil that arose in March and April 2020. The crisis led to short-term pressure on the markets and the banks' liquidity, but the strong liquidity positions meant that the statutory liquidity requirement, LCR (liquidity coverage ratio), was and continues to be complied with by a significant margin for all banks, cf. figure 8. As a result, the Danish banks did not find themselves in a situation during the year where there was a need to use the liquidity buffers.

For the vast majority of banks, deposits are the largest and most important source of funding. The introduction of negative deposit rates has had some effect on the volume of total deposits, but not enough to jeopardise the liquidity situation and the deposit surplus in the banks. Retail deposits make up a large part of the deposit base, which contributes to a liquidity robustness in the banks.

The liquidity support measures from the state to the business community totalling DKK 300 bn has contributed to expanding the banks' buffers, as increased liquidity in Danish kroner will generally find its way to the balance sheets and lead to an increased deposit surplus.[3].

Figure 8: LCR levels were significantly above the statutory requirement in 2020



Note: The figure shows the simple averahe of LCR levels on a monthly basis. The red dotted line indicates the legal LCR-requirment of 100 per cent.
Source: Reports to the FSA.

[3] Figures from the Danish Ministry of Finance, January 2021, https://fm.dk/nyheder/nyhedsarkiv/2021/januar/ny-hjaelp-til-smv-er-bringer-samlet-likviditetsstoette-til-erhvervslivet-op-paa-300-mia -kroner /

The strong liquidity positions also give the banks the resilience to be able to withstand a hard liquidity stress, both in the short and long term. In the short term, e.g. corporate payments of deferred tax and VAT payments and the phasing out of government assistance packages could potentially lead to decreasing deposits, increased lending and increased overdrafts on unused credit facilities.

Box7: Examination of LCR denominator

In the spring and summer of 2020, the FSA conducted a study of selected banks' calculations of certain outgoing and incoming cash flows, which are included in the calculation of the statutory liquidity requirement for the institution; the LCR requirement.

It is important that the banks calculate the cash flows in accordance with the LCR Regulation, such that the LCR key figure gives a true and fair view of the banks' ability to cope with liquidity stress.

The focus was placed especially on the banks' categorisation of retail deposits, which for the vast majority of institutions constitute a very significant share of the funding. The focus was placed also on outgoing and incoming cash flows in connection with derivative transactions, etc. and fulfilment of basic criteria for the recognition of contractual cash flows.

Banks generally comply with the provisions of the LCR Regulation when assessing the cash flows examined. However, errors were found in the calculation of selected liquidity flows. In the current situation with large liquidity reserves, the identified errors and deficiencies do not affect the banks' compliance with the regulatory LCR requirement, but they may, under a possible liquidity crisis create doubts about the banks' actual liquidity preparedness. Banks should therefore use the favourable liquidity situation to correct errors and shortcomings in order to underpin confidence in their liquidity and robustness.

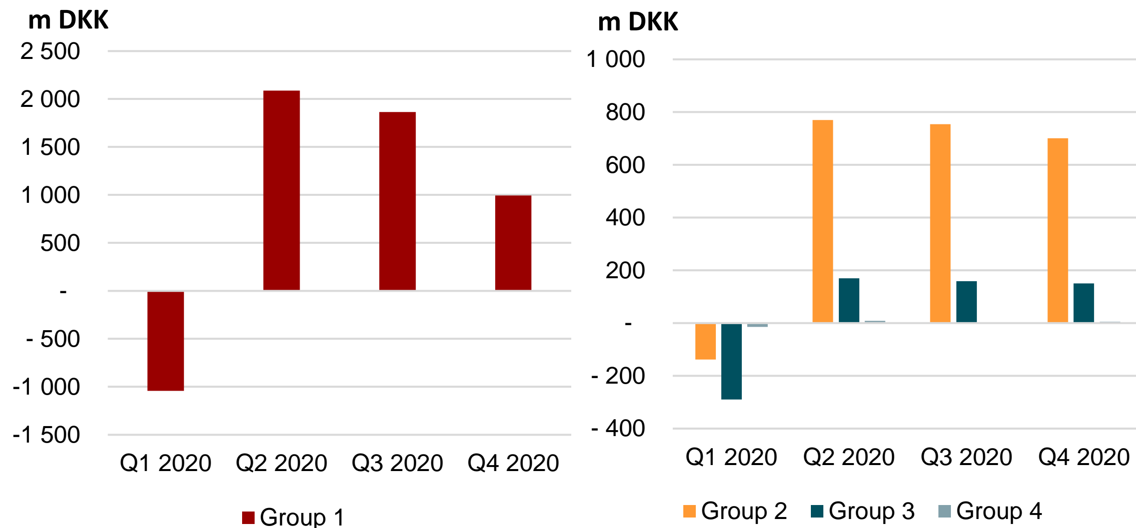
8. Market risk due to the COVID-19 crisis

The outbreak of the COVID-19 crisis in the first quarter of 2020 caused great turmoil in the financial markets. The stock and bond markets were both exposed to significant price declines, and stock market volatility rose to the same level as during the financial crisis. The financial markets have since recovered and volatility has decreased again. However, volatility for the remainder of 2020 remained higher than in 2019.

The market turmoil resulted in negative value adjustments in the first quarter across the financial sector. Part of the losses for the banks were due to exchange losses on mortgage bonds. However, the banks generally had good earnings on value adjustments for the rest

of the year, cf. **Fejl! Henvisningskilde ikke fundet.**, as a result of a reversal of the negative market development in March.

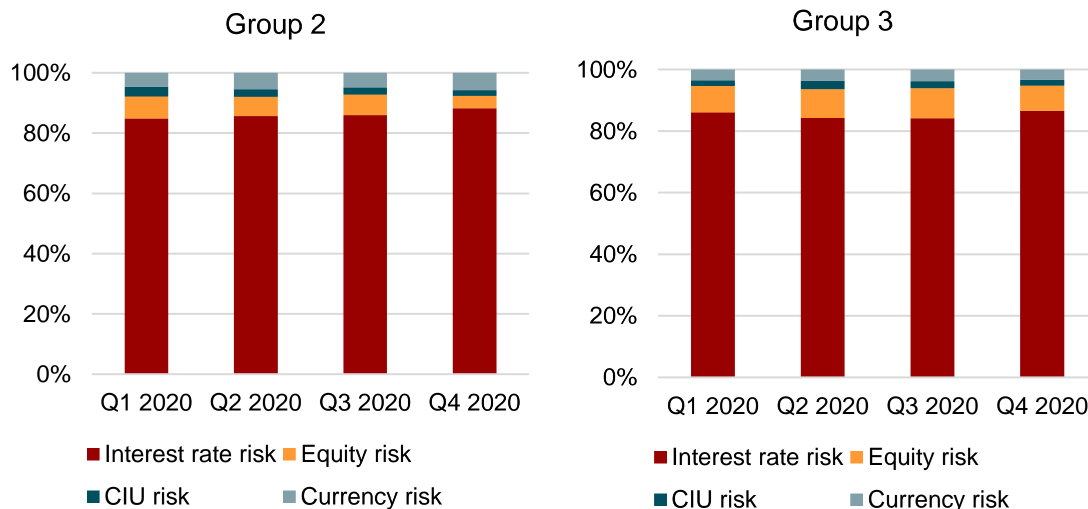
Figure 9: Negative value adjustments in the first quarter of 2020 for all bank groups



Note: Value adjustments include all value adjustments of assets and liabilities measured at fair value.
Source: Reports to the FSA.

The banks are generally exposed to interest rate risk, while other types of market risks take up considerably less space, cf. figure 10. The relative distribution between different types of exposure has remained largely unchanged during 2020. The COVID-19 crisis has thus not given rise to significant shifts across types of exposure for group 2 and 3 banks.

Figure 10: Interest rate risk constitutes the largest risk exposure to market risk



Note: The CIU risk is linked to investments in collective investment schemes, which in turn may be related to interest rate, equity or currency risks, but where it is not possible to see which type.
Risk-weighted exposures calculated according to the standard method.
Source: Data reported to the FSA.

9. Annexes

Annex 1: Annual accounts for banks 2016-2020

	2016	2017	2018	2019	2020	Change, 1 year	Change, 5 years
Income statement	*DKK millions*					*%*	
Interest income	57,318	46,945	49,528	49,134	44,615	-9.20	-22.16
Interest expenses	15,407	13,377	16,576	18,331	12,560	-31.48	-18.48
Net interest income	***41,910***	***33,568***	***32,952***	***30,803***	***32,055***	***4.06***	***-23.52***
Dividends from assets, etc.	893	543	525	1,060	598	-43.54	-33.02
Fee and commission income	31,022	27,070	28,354	30,420	30,633	0.70	-1.25
Fee expenses and commission	6,175	5,236	5,515	5,321	5,762	8.29	-6.69
Net interest and fee income	***67,651***	***55,945***	***56,316***	***56,962***	***57,524***	***0.99***	***-14.97***
Expenses for staff and administration	46,149	38,200	43,104	44,657	45,647	2.22	-1.09
Other operating income	3,415	2,206	3,994	2,570	2,315	-9.94	-32.22
Other operating expenses	213	240	178	182	269	47.77	26.22
Amortisation and impairments of intangible and tangible assets	3,160	3,059	3,231	5,842	4,846	-17.05	53.38
Core earnings	***21,545***	***16,653***	***13,797***	***8,851***	***9,077***	***2.55***	***-57.87***
Value adjustments	6,940	12,437	6,935	6,781	6,170	-9.02	-11.10
Loan impairments and receivables, etc.	2,752	- 1,009	609	2,376	9,486	299.15	244.67
Profit from investments in associates	13,368	10,988	9,830	11,775	9,258	-21.38	-30.74
Profits before tax	**39,101**	**41,087**	**29,954**	**25,031**	**15,019**	-40.00	-61.59
Tax	5,362	6,033	4,181	- 1,483	1,562		-70.87
Net profit for the year	**33,739**	**35,054**	**25,773**	**26,514**	**13,457**	-49.25	-60.11

FINANSTILSYNET

	2016	2017	2018	2019	2020	Change, 1 year	Change, 5 years
Balance sheet items	*DKK millions*					*%*	
Cash in hand and demand deposits with central banks	48 379	97 809	47 775	106 630	346 894	225.32	617.03
Receivables from credit institutions and central banks	407 124	405 580	309 305	205 725	212 206	3.15	-47.88
Loans	1 689 317	1 543 397	1 664 321	1 792 228	1 647 927	-8.05	-2.45
Loans excl. repos	*1 408 636*	*1 291 786*	*1 320 320*	*1 349 393*	*1 319 658*	*-2.20*	*-6.32*
Bonds	801 874	690 538	661 093	706 531	840 405	18.95	4.81
Shares etc.	43 826	39 942	25 468	31 011	34 827	12.31	-20.53
Equity investments in associates	1 767	1 941	1 952	3 518	3 573	1.58	102.28
Equity investments in affiliates	157 103	114 555	118 856	123 861	127 122	2.63	-19.08
Assets linked to pool schemes	135 276	120 027	118 582	135 007	144 019	6.68	6.46
Intangible assets	11 661	10 355	11 561	12 110	12 853	6.13	10.21
Land and buildings	7 163	6 814	6 745	12 573	12 238	-2.67	70.86
Other property, plant and equipment	4 760	4 574	4 732	5 661	5 406	-4.51	13.57
Tax assets	2 541	2 959	4 194	5 315	7 583	42.67	198.43
Assets held temporarily	460	350	333	1 883	582	-69.09	26.43
Other assets	451 660	341 694	326 030	386 404	483 435	25.11	7.04
Accruals and deferred income	2 858	2 461	2 687	2 731	3 235	18.45	13.18
Total assets	**3 765 769**	**3 382 995**	**3 303 633**	**3 531 188**	**3 882 303**	9.94	3.09
Debts to credit institutions and central banks	464 930	349 339	362 970	342 168	361 852	5.75	-22.17
Deposits	1 797 322	1 756 102	1 784 500	1 899 053	2 123 100	11.80	18.13
Deposits excl. repos	1 711 466	*1 613 378*	*1 613 820*	*1 715 888*	*1 976 227*	*15.17*	*15.47*
Issued bonds	407 888	408 480	306 996	332 109	360 873	8.66	-11.53
Other liabilities	53 808	14 965	8 938	8 222	11 826	43.83	-78.02
Accruals and deferred income	1 472	1 161	1 007	936	848	-9.39	-42.40
Liabilities, total	***3 366 382***	***3 035 867***	***2 959 077***	***3 161 450***	***3 506 879***	***10.93***	***4.17***
Provisions	11 782	9 646	11 823	6 561	7 699	17.33	-34.66
Subordinated debt	55 142	39 926	33 918	45 340	46 278	2.07	-16.07
Equity	332 463	297 556	298 816	317 837	321 448	1.14	-3.31
Total liabilities	**3 765 769**	**3 382 995**	**3 303 633**	**3 531 188**	**3 882 303**	9.94	3.09

Annex 2: Key figures for banks 2016-2020

	2016	2017	2018	2019	2020
	%				
Capital ratio	23.24	23.83	23.31	24.64	25.27
Tier 1 capital ratio	20.68	21.35	21.50	22.02	22.53
Actual tier 1 capital ratio	18.32	19.29	19.02	19.53	20.61
Return on equity before tax	11.76	13.81	10.02	7.88	4.67
Return on equity after tax	10.15	11.78	8.63	8.34	4.19
Profit per unit of costs (DKK)	1.75	2.02	1.63	1.45	1.25
Accumulated write-down percentage	2.75	2.41	2.32	1.91	2.16
Write-down percentage for the period	0.14	-0.03	0.05	0.10	0.44
Loans in relation to equity (ratio)	4.24	4.34	4.42	4.25	4.11
Overall risk exposures (DKK bn)	1,496	1,270	1,286	1,328	1,342
Of which for credit risk	1,212	1,038	1,049	1,089	1,105
market risk	123	97	91	99	100
operational risk	149	127	133	128	127

Annex 3: Grouping, 2020

Group 1 - Working capital exceeding DKK 75 billion.

3000	Danske Bank A/S	8117	Nykredit Bank A/S
7858	Jyske Bank A/S	9380	Spar Nord Bank A/S
8079	Sydbank A/S		

Group 2 - Working capital exceeding DKK 12 billion.

5301	Aktieselskabet Arbejdernes Landsbank	9070	Sparekassen Vendsyssel
7670	Ringkjøbing Landbobank. Aktieselskab	7730	Vestjysk Bank A/S
1149	Saxo Bank A/S	9217	Jutlander Bank A/S
9335	Sparekassen Kronjylland	9686	Den Jyske Sparekasse A/S
522	Sparekassen Sjælland-Fyn A/S	755	Middelfart Sparekasse
400	Lån & Spar Bank A/S		

Group 3 - Working capital exceeding DKK 750 million.

5999	Danske Andelskassers Bank A/S	1671	Basisbank A/S
9090	Sparekassen Thy	9682	Sparekassen for Nr. Nebel og Omegı
7320	Djurslands Bank A/S	9797	Broager Sparekasse
6771	Lægernes Bank A/S	6620	Coop Bank A/S
844	Fynske Bank A/S	9388	Sparekassen Djursland
9740	Frøs Sparekasse	7570	PenSam Bank A/S
7780	Skjern Bank A/S	537	Dragsholm Sparekasse
6471	Grønlandsbanken, Aktieselskab	9827	Sparekassen Bredebro
9137	Ekspres Bank A/S	847	Rise Flemløse Sparekasse
7890	Salling Bank A/S	13080	Frørup Andelskasse
6520	Lollands Bank A/S	7500	Hvidbjerg Bank. Aktieselskab
7930	Kreditbanken A/S	9283	Langå Sparekasse
6860	Nordfyns Bank, Aktieselskabet	9312	Sparekassen Balling
13460	Merkur Andelskasse	9354	Rønde Sparekasse
6880	Totalbanken A/S	9860	Folkesparekassen
6140	Møns Bank A/S	9133	Frøslev-Mollerup Sparekasse

Group 4 - Working capital less than DKK 750 million.

13290	Andelskassen Fælleskassen	579	Sparekassen Den lille Bikube
9124	Sønderhå-Hørsted Sparekasse	5125	Leasing Fyn Bank A/S
9684	Fanø Sparekasse	13350	Østervrå Andelskasse
1693	PFA Bank A/S	28001	Maj Bank A/S
9135	Klim Sparekasse	9629	Stadil Sparekasse
9634	Borbjerg Sparekasse	28002	Lunar Bank
13070	Faster Andelskasse	28003	Facit Bank