

Banking

# Market development



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#### 1. **Summary**

Danish banking institutions doubled their pre-tax profits in 2021 compared to 2020. Their total pre-tax profit was thus DKK 34 billion. The increase was primarily driven by lower impairments than the previous year, but higher basic earnings and increased price adjustments also contributed.

The low interest rates have been putting pressure on the earnings of banks for many years. Several banks have therefore introduced negative deposit rates for private customers to a greater extent and at lower thresholds during 2021. Despite these measures, net interest income fell by DKK 0.5 billion to DKK 31.5 billion, but the decrease would have been greater if the institutions had not introduced negative deposit rates to a greater extent.

The banks' total lending grew by approx. DKK 50 billion, corresponding to 3.7 percent, and all size groups of banks experienced positive lending growth. The increase should be seen in the light of higher credit demand for repayment of government bailout packages, and by the fact that the economic uncertainty in 2021 was no longer as great as during the first phase of the COVID-19 crisis.

Lending by banks to the energy industry increased the most, relative to the development of the institutions' lending volume to other industries. New lending to the transport, hospitality and hospitality industries remained at a low level.

There were very low loan impairments across the institutions. The share of non-performing loans (NPLs) also fell – and most recently especially for agriculture.

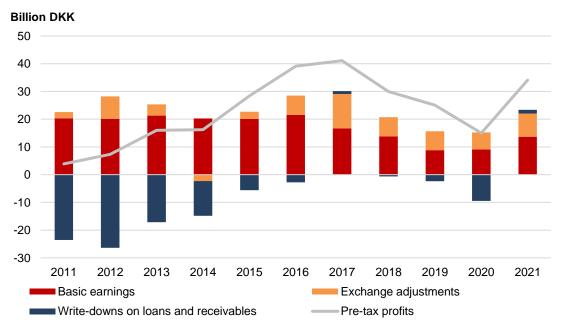
The institutions' deposit surplus excluding repos fell from the record high of DKK 657 billion at the end of 2020 to DKK 620 billion at the end of 2021. The decrease is partly due to a decrease in the deposits of the largest institutions and partly to the fact that total lending in the sector grew more than total deposits over the same period.



#### 2. Earnings

The institutions' pre-tax profits increased from DKK 15 billion in 2020 to DKK 34 billion in 2021, corresponding to 127 percent, see Figure 1. The increase was mainly due to lower impairments and an increase in basic earnings. Rate adjustments also contributed positively, as they increased from DKK 6.1 billion to DKK 8.2 billion in the same period.

Figure 1: The institutions' profits are now higher than in the years before the COVID-19 crisis



Note: Basic earnings consist of net interest and fee income, personnel and administrative expenses, and other operating income and expenses. This is an expression of the core business of credit institutions. Note the transition to IFRS9 in early 2018, which may have resulted in higher impairments. Source: Reports to the Danish FSA.

The institutions' basic earnings increased by DKK 4.6 billion, which is an increase of 51 percent. The increase comes after basic earnings have been declining since 2016; see Figure 2.

Staff and administrative expenses is the largest item of expenditure for banking institutions. They increased by DKK 600 million, corresponding to 1.5 percent. The development should be seen in the light of the fact that the collectively agreed wage increase in 2021 was 1.2 percent.<sup>1</sup>

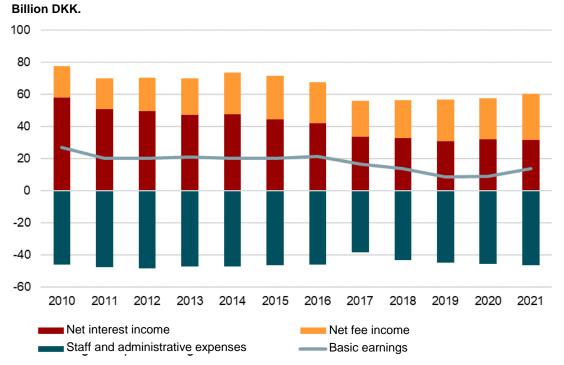
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<sup>&</sup>lt;sup>1</sup> https://www.finansforbundet.dk/dk/dine-rettigheder/ok-2020/



Figure 2: Increase in basic earnings



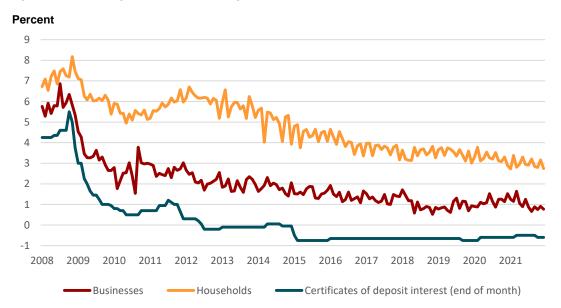
Source: Reports to the Danish FSA.

The institutions' earnings have been under pressure from the low interest rate situation for many years. From 2020 to 2021, net interest income decreased by DKK 0.5 billion to DKK 31.5 billion. Interest income decreased by DKK 3.3 billion, corresponding to 7.4 percent, while interest expenses decreased by DKK 2.8 billion, corresponding to 22 percent. A wider spread of negative deposit rates for both households and firms, taken in isolation, contributed to improving net interest income, although this could not stop the decline. In general, the institutions reduced the thresholds for deposits that receive negative interest.

Since 2012, the institutions' lending rates and the general interest rate level have mostly only decreased; see Figure 3. This, combined with a negative certificate of deposit rate at Danmark's National Bank of between -0.75 and -0.5 percent since 2015, has put the institutions' lending margin under pressure. The development in lending margins can be partly explained by increased competition for customers in a market characterised by declining demand for loans. In this regard, it is worth noting that lending increased again in 2021.



Figure 3: Lending rates of banking institutions



Note: For the purpose of lending rates, the institutions' effective interest rate (percent) has been used on loans in total – new businesses excluding overdrafts (revolving loans) and overdrafts for households and non-financial corporations. Source: National bank.

Net fee income increased by DKK 3.5 billion, corresponding to 13.8 percent; see Figure 2. The increase was primarily driven by higher fee income on securities trading and deposits.

The development in fee income on securities trading and deposits is due to a higher willingness to invest among households than in previous years. The positive developments in the financial markets and the increased use of negative deposit rates by banks have led more private customers to invest in securities. Fee income from securities trading and custody increased from DKK 11.4 billion in 2020 to DKK 13.0 billion in 2021 (see Figure 4a) corresponding to an increase of 14 percent. The distribution of fees and commission income also shows that fee income from payment services saw an increase of DKK 0.5 billion.

Fee income on securities trading and deposits represented the largest share of the total fee income of Group 1 banks in 2021; see Figure 4b. In previous years, fee income on securities trading has also accounted for the largest share of fee income for these institutions, and the share has been growing over the last three years from 43% in 2019 to 47% in 2021. Fee income on securities trading and depositories increased from DKK 9.6 billion in 2020 to DKK 11.0 billion, corresponding to 15 percent.

For the banks in Group 2, fees and commission income from guarantee commissions amounted to DKK 3.8 billion of the total fee income. They thus accounted for the largest share with 40 percent, which was 16 percent higher than in 2020, when Group 2 institutions earned DKK 3.2 billion from fees and commission income from guarantee commissions.



Mia. kr. Percentage of revenue 40 90 35 80 30 70 25 60 20 50 40 15 30 10 20 5 10 0 0 201912 202012 201812 202112 Group 1 Group 2 Group 3 Group 4 Andet ■.Other ■ Garantiprovision ■ Guarantee commissions Betalingsformidling Payment processing ■ Værdipapirhandel og depoter ■ Securities trading and depositories

Figure 4: Positive growth for banking institutions fee income

Source: Reports to the Danish FSA.

#### 3. Development of credit

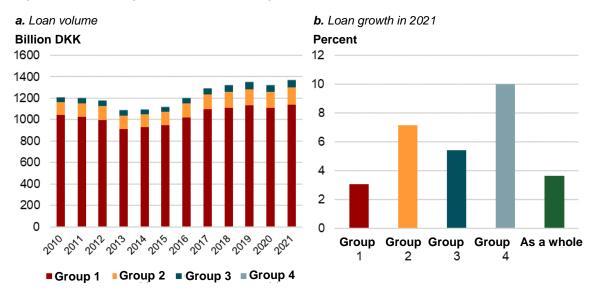
The Danish banking institutions' total lending, excluding repos, increased by 3.7 percent to DKK 1,368 billion in 2021, which is higher than in 2019 before the COVID-19 crisis; see Figure 5a. Growth was broad-based across groups, but Group 4 institutions had the highest overall lending growth of around 10%, while Group 1 institutions had the lowest lending growth of just over 3%; see Figure 5b.

The growth comes in the wake of 2020, which was a year of negative lending growth and an overall loan volume, which was the lowest since 2017.

The decrease in lending in 2020 should be seen, among other things, in relation to the government bailout packages that have made capital and liquidity available to companies in connection with the COVID-19 crisis. At the same time, the downturn and uncertainty about the economic situation meant that companies had less willingness to invest on borrowed money. When the deferred taxes have to be repaid, it can lead to an increased demand for credit at finacial institutions, which may be part of the reason for the positive lending growth in 2021.



Figure 14: Banking institution lending exceeded pre-COVID-19 crisis level



Note: Balance sheet lending excluding repos. The figure to the left is adjusted for the branchisation of Nordea in 2017. The figure to the right is adjusted for locked groups and mergers, so that the institutions' group in 2021 is also used in previous years.

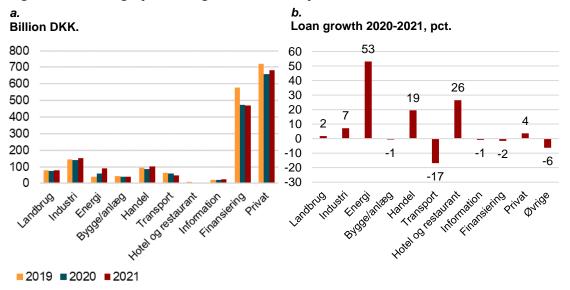
Source: Reports to the Danish FSA.

By branch, lending by banking institution has remained relatively constant, except for a few sectors with wide variations. Lending to the business community broadly continues to account for the largest share of lending at banking institutions. Loans to private households accounted for one third of total lending and increased from DKK 659 billion in 2020 to DKK 683 billion; see Figure 6a.

The hotel and restaurant industry accounted for the smallest share of the institutions' lending with DKK 6.7 billion in 2021, which is a decrease of DKK 0.5 billion from DKK 7.2 billion in 2020. Loans to the energy industry had the largest percentage growth, rising from DKK 58 billion in 2020 to DKK 89 billion, corresponding to 53 percent; see Figure 5. The transport industry experienced the biggest decline, as banking institution lending here fell from DKK 59.7 billion in 2020 to DKK 49.7 billion, corresponding to 16.9 percent.



Figure 6: Lending by banking institutions by selected sectors



Source: Reports to the Danish FSA.

Translation: Landbrug = Agriculture, Industri = Industry, Energi = Energy, Bygge/anlæg = Construction, Handel = Trade, Hotel og restaurant = Hotel and restaurant, Information = Information, Finansiering = Finance, Privat = Private, Øvrige = Other.

Banking institutions increased loan impairments in the early phase of the COVID-19 crisis in 2020, largely through management estimates, against the background of the markedly deteriorating cyclical outlook.

Total write-downs decreased and all in-house groups had negative net write-downs<sup>2</sup>; cf. Figure 7a. In 2021, very low impairments (de facto net reversals) were also seen in several industries, see Figure 7b, which shows the five industries with the largest reversals in the year. In general, the managerial estimates have not been reversed, but the "Industry" sector had the largest reversals. Thus, the institutions have reversed part of the industrial write-downs they recorded for operations in 2020 for this sector.

<sup>&</sup>lt;sup>2</sup> Write-downs in the period may be net negative (and thereby recognised as revenue in the profit and loss account), e.g. where reversed write-downs exceed new write-downs.



Billion DKK. Percentage of loans and guarantees 1,5 1,2 1.0 1.0 8.0 0,6 0,5 0,4 0,2 0,0 0,0 -0,2 -0,5 🔇 -0,4 -0,6 Gruppe 1 Gruppe 2 Gruppe 3 Gruppe 4 -1,0 I alt **2020 2021 ■**2020 **■**2021

Figure 7: Negative net write-downs across banking institutions after the crisis

Note: The figure to the left shows the operational write-downs and provisions in relation to loans and guarantees by group of institutions. The operational write-downs are a net figure. The figure to the right shows the operational write-downs and provisions for the five sectors, which had the lowest loan impairments in 2021. Source: Reports to the Danish FSA.

Translation: I alt = in total, gruppe = group. industri = Industry, fast ejendom = real estate, information = information, landbrug = agriculture, hotel og restaurant = hotel and restaurant.

The banking institutions' share of non-performing loans (NPLs) for businesses declined after increasing during the COVID-19 crisis. This shows that the economy has come through the crisis better than initially expected. The NPL share fell for trade, transport, hotels and restaurants, which were under financial pressure during the COVID-19 crisis. For trade, the NPL share decreased by 2 percentage points in 2021, while the NPL share for transport, hotels and restaurants decreased by 4 percentage points; see Figure 8.

The proportion of non-performing loan for agriculture has been at a high level compared to other sectors for many years, but has declined in recent years. From 2020 to 2021, the NPL share for agriculture was reduced from 17.5% to 12.4%. This reflects better earnings and consolidation in agriculture over some years, and that agriculture has not been as badly affected by the COVID-19 crisis as many other industries. However, rising energy and commodity prices as a result of the war in Ukraine are likely to impose higher costs on agriculture in the future. It is therefore positive that the agricultural starting point has improved. However, the rise in prices is to some extent also matched by higher product prices for agriculture. Compared to 2017, the NPL share for agriculture has halved.



30 25 20 15 10 5

Figure 8: NPL share decreased across sectors

Note: Includes institutions in group 1-3. A loan is defined as non-performing (NPL) if payments on the loan are overdue by more than 90 days, or if it is considered unlikely that the debtor will fully meet their payment obligations without realization of collateral.

**2020** 

**2021** 

■2019

Kilde: Indberetninger til Finanstilsynet.

2018

**2017** 

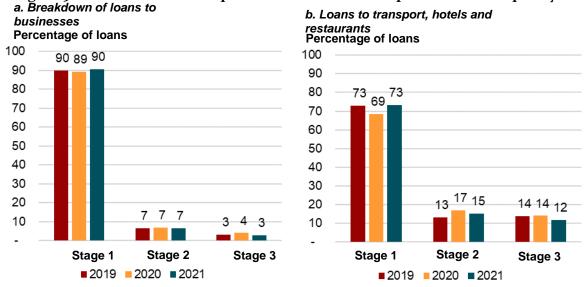
There were generally no significant changes in the distribution of stages<sup>3</sup> of the institutions' loans to businesses; see Figure 9. The figure shows that stage 1 loans accounted for 90% of total loans at the end of the year, which is 1 percentage point higher than at the end of 2020 and at the end of 2019. Stage 2 loans, which are loans with a significant increase in credit risk, remained at 7% of loans at the end of 2021. This corresponds to the levels before the COVID-19 crisis. Stage 3 lending, which is impaired loans, has remained stable at a low level for the past three years. Stage 3 lending accounted for 3% of total loans at the end of 2021. This is 1 percentage point lower than at the end of 2020 and at the end of 2019.

Some parts of the business community have been hit harder by the COVID-19 crisis than others. This applies, for example, to companies in the transport, hotel and restaurant industry. Their credit quality declined significantly at the start of the crisis. In 2021, stage 1 loans amounted to 73%. This is 4 percentage points higher than in 2020, when 31% of the loans to these companies were assessed as either having increased credit risk or being severely downgraded (stages 2 and 3 loans). In 2021, this share was reduced to 27%; see Figure 9b.

<sup>&</sup>lt;sup>3</sup> See Box 1 for a more detailed description of the stage placement of lending.



Figure 9: Loans to business experienced a stable development in credit quality



Note: The breakdown of loans is for the end of the year.

Source: Reports to the Danish FSA.

Although a relatively small proportion of total business loans were in stage 3, the spread was quite wide in terms of individual institutions; see Figure 10a. Lending to the transport, hospitality and catering sector, which is in stage 3, had an even greater spread across banks; see Figure 10b. However, the volume of these loans in relation to the institutions' total business loans was extremely limited. For example, these loans accounted for only more than 5% of total corporate lending in one institution, while for most institutions they accounted for less than 1% of corporate lending; see Figure 10b.



#### Box 1: Stage placement of lending

The current rules for the institutions' write-downs on loans etc. based on the international accounting standard IFRS 9 were introduced on 1 January 2018. The rules are laid out in the Executive Order on Accounts for Banking Institutions and others, including Appendix 10-11 and the associated Guidelines on assessment of significant increases in credit risk and credit impairment.

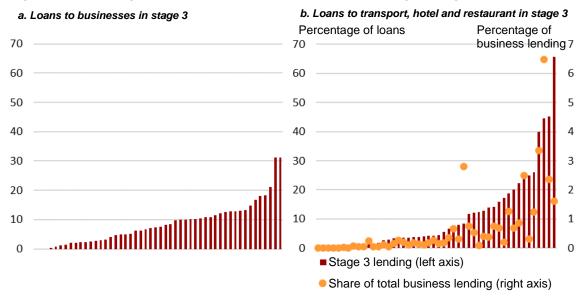
**Stage 1:** Includes loans etc. where the credit risk has not increased significantly since the first recognition, i.e. since the customer received the loan.

**Stage 2:** Contains loans etc. where the credit risk has increased significantly since the first recognition, but where the loan has not deteriorated credit. Stage 2 consists of "stage 2 normal" and "stage 2 weak". "Stage 2 weak" includes, inter alia, lending with indications of credit impairment in the form of the customer having been granted lenient terms by the institution or other lenders due to his financial difficulties or the customer experiencing significant financial difficulties. In order for the loan to be in "Stage 2 weak" and not to be moved to stage 3, it is required that the institution is more likely not to incur losses on the loan than to incur losses.

**Stage 3:** Consists of all loans etc. with indication of credit downgrading in that the customer has committed a significant breach of contract, e.g. by non-compliance with the obligation to pay instalments and interest, or that it is likely that the customer will go bankrupt or be subject to other financial restructuring. These loans are categorised as stage 3 regardless of whether the institution is most likely to incur a loss on the loan or not to incur losses. In addition, stage 3 contains loans with an indication of credit impairment in that the customer has been given more lenient terms by the institution or other lenders due to its financial difficulties or the customer experiencing significant financial difficulties and where the institution is more likely to incur a loss on the loan than not to incur losses.



Figure 10: Banking institutions' shares of business lending in stage 3 in 2021

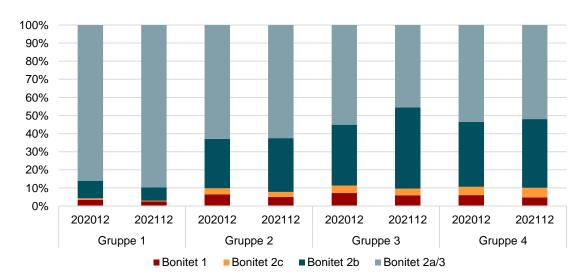


Note: Each pillar represents a banking institution's share of loans to Businesses (left) or to Transport, hotels and restaurants (right), which are in stage 3. The dots in the figure to the right indicate the proportion of loans to transport, hotels and restaurants in stage 3 in the institution's total lending to businesses. Niche banks are not included in the figures.

Source: Reports to the Danish FSA.

For all groups of institutions, lending with the worst credit ratio (1 and 2c) was reduced from 2020 to 2021; see Figure 11.

Figure 11: Lending creditworthiness improved



Note: Creditworthiness is an expression of the borrower's ability to repay a loan. The creditworthiness categories are as follows. 3: Customers with undoubted good quality, 2a: Customers with normal quality, 2b: Customers with certain signs of weakness, 2c: Customers with significant signs of weakness but without objective indication of credit impairment (OIC), 1: Customers with objective indication of credit impairment (OIC).

Source: Reports to the Danish FSA.

Translation: Bonitet = Creditworthiness



#### Box 2: Creditworthiness assessment of customers prior to granting loans

Through the rules on good practice, the Financial Supervisory Authority ensures that banks and other lending companies comply with the rules of the Credit Agreement Act, including the requirement to properly assess a customer's creditworthiness prior to granting a loan.

A creditworthiness assessment consists of assessing whether the consumer will be able to pay the required instalments on the loan. This must be assessed before the credit agreement is signed. The assessment is independent of the risk appetite of the lender.

The requirement that a lender must assess the creditworthiness of the customer and grant a loan only if the lender expects the customer to repay the loan under the agreement is the main weapon in the fight against consumer over-indebtedness. The rules are intended to ensure that a consumer cannot incur more debts than they are able to repay.

The Danish FSA focuses on ensuring that banks and consumer loan companies have business procedures and internal procedures to ensure that the company carries out a correct creditworthiness assessment.

A number of cases brought by the Consumer Ombudsman combined with the Financial Supervisory Authority's focus on financial company compliance with the requirement for creditworthiness assessments, including in connection with applying for a permit as a consumer loan company, have led to a need for more specific guidelines on the minimum requirements that creditworthiness assessments must meet. The Financial Supervisory Authority, in cooperation with the Consumer Ombudsman, issued guidance on creditworthiness assessments in the spring of 2021.

The guidelines describe the legal requirements for a creditworthiness assessment and provides instructions on how to prepare it. The guidelines do not require all creditors to use a specific methodology to carry out the assessments. Nor does it preclude the granting of credit to consumers with a low availability amount if the creditor has assessed, on the basis of adequate information, that the consumer concerned will be able to pay the services, including the repayment of the new credit, in view of his financial situation.

When granting a loan, institutions must assess the borrower's financial situation in order to best assess whether the borrower can pay interest, amortisation and any fees. This creditworthiness assessment is an important part of consumer protection and is regulated by law. The Danish Financial Supervisory Authority has tightened up the rules on creditworthiness assessment; see Box 2.



The guidelines emphasise that the creditor must always assess the consumer's creditworthiness regardless of the amount of credit offered. The creditworthiness assessment must be based on the individual consumer's financial circumstances. The creditor shall obtain adequate information on the consumer's income, expenses and debts for the purposes of the assessment. This means, among other things, that the creditor cannot use statistical information on consumption for the assessment, but must have documented information about the borrower's actual fixed expenses.

The creditworthiness assessments shall be based on:

- information on the personal situation of the consumer
- information and documentation on the consumer's income
- information and documentation on the consumer's debts
- information and documentation on the consumer's expenses.

The information obtained is used to calculate the consumer's available amount.

The guidelines do not set out an actual framework for the amount available, but emphasises that the creditor must assess whether the available amount is sufficient for the consumer to be able to pay the instalments on the credit on time and still maintain a modest standard of living.

At the end of 2021, the FSA published a number of orders for banks whose creditworthiness assessment procedures did not sufficiently ensure that they in all cases adequately assessed the creditworthiness of specific consumers. In the future, the FSA will continue to focus on ensuring that banks and other companies that provide loans to consumers carry out a sound creditworthiness assessment and thus effectively contribute to preventing excessive indebtedness.

Creditworthiness assessments are an important part of the process when institutions have to provide loans to private individuals, e.g. in connection with home purchases.

In the summer of 2021, the FSA initiated a thematic inspection of lending institutions for their customers' home purchase, in light of the rising house prices during the COVID-19 crisis. The inspection will e.g. provide insight into whether the institutions' risk appetite in the housing market has increased. This is described in more detail in Box 3.



# Box 3: Thematic inspection of increased risk appetite in the housing market by granting loans for home purchasing

In the summer of 2021, the FSA initiated inspections on the risk appetite of a number of institutions that grant home loans for the purchase of owner-occupied and leisure homes. The inspections were launched to shed light on whether rising house prices in most of the country have led to increased risk appetite. To this end, the FSA examines whether the institutions' lending comply with the points in the growth guidelines (for the purchase of homes in areas of growth) and good practice for housing credit, with regard to the rules on risky loans and customer self-financing.

Not all the banking institutions have yet been investigated. However, preliminary observations indicate that only a small proportion of lending does not comply with the minimum requirements laid down in the rules. However, there are both large and small banks that issue home loans for the purchase of owner-occupied homes to customers with a negative or weak wealth base. These customers are thus not resilient to future falls in house prices.

Based on the banks examined so far, a picture emerges that some are not taking adequacy seriously, for self-financing customers who intend to purchase a home. These banks only require self-financing of 5 percent of the purchase price. The mortgage on the home will therefore be very high, as these banks also finance the costs associated with the purchase.

The rise in house prices in recent years has made it important and relevant that the banking institutions' credit ratings include an analysis of the consequences of falls in house prices. The Financial Supervisory Authority estimates that some of the customers who have bought homes in recent years will become technically insolvent due to only minor falls in the price of housing.

The preliminary observations also show that there is a need to improve data quality because there are many errors and deficiencies in the institutions' basis for decision-making. The errors may affect the credit decision.



#### 4. Deposit surplus, liquidity and funding

In 2021, the institutions' deposit surplus – excluding repos – fell by 5.5 percent to DKK 620 billion. This followed a rise in deposit surpluses to historically high levels in 2020. Prior to 2020, the deposit surplus had remained relatively stable since 2013; see Figure 12. The decrease in deposit surplus in 2021 is due to the fact that lending grew by DKK 48 billion, or 3.7 percent, while deposits only grew by DKK 12 billion, corresponding to 0.6 percent.

Billion DKK. 700 600 500 400 300 200 100 0 -100 -200 -300 2010 2011 2013 2015 2016 2018 2020 2021 2017 2019 Group 1 Group 3 Group 4 Group 2 Total

Figure 12: Deposit surplus fell in the wake of the COVID-19 crisis

Note: The deposit surplus is calculated as deposits minus loans. Deposits and loans, excluding repos. A deposit surplus exists when the curve is above 0.

Source: Reports to the Danish FSA.

Group 1 institutions' total deposits decreased by DKK 19 billion, corresponding to a decrease of 1 percent from 2020 to 2021, while deposits grew between 6 and 8 percent for the other groups; see Figure 13. For Group 2, deposits increased by DKK 22 billion, for Group 3 by DKK 9 billion and for Group 4 by DKK 240 million.



Index, 2018=100 140 130 120 110 100 90 2018 2019 2020 2021 Group 1 Group 2 Group 3 •Total -Group 4

Figure 13: Deposits continued to grow in group 2-4 institutions

Note: Deposit is exclusive of repos. Source: Reports to the Danish FSA.

Since 2012, the certificate of deposit rate in Denmark has been predominantly negative. However, it was not until 2019 that many banks introduced negative interest rates for private customers. Initially, negative interest rates only applied to private customers with large deposits, e.g. more than DKK 750 000. Since then, the limits on when customers must pay negative interest rates have been lowered several times. Today, private customers have to pay a negative interest rate, typically around minus 0.70 percent of deposits larger than DKK 100 000, and several institutions charge negative interest on the entire amount if the customer has no other customer relationship with the institution.

According to figures from Finance Denmark, 31 percent of all adult Danes in 2021 paid negative interest<sup>4</sup>. Of the affected bank customers, just over half paid less than DKK 600 in interest during 2021, while 6 percent of all adult Danes paid more than DKK 2400 in interest.

Over the same period, household investment in equities and other risky securities increased, typically negatively affecting the institutions' deposit accounts. Danish households have purchased investment certificates for approx. DKK 89 billion and shares for DKK 26 billion over the past two years. This means that shares and investment

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<sup>&</sup>lt;sup>4</sup> https://finansdanmark.dk/nyheder/2022/de-fleste-af-os-betaler-ikke-negative-renter/



certificates today account for 41% of households' total financial assets, which is 6.7 percentage points higher than two years ago<sup>5</sup>.

In the summer of 2021, the NSFR Directive (*Net Stable Funding Ratio*) entered into force and it sets the rules on the relationship between the institutions' needs for stable funding and their available stable funding; see Box 4.

#### **Box 4: The new NSFR requirement**

The Net Stable Funding Ratio (NSFR) entered into force as an EU legal requirement on 28 June 2021. It has been introduced with the latest revision of the Capital Requirements Regulation II – CRR II on the basis of the Basel III standard on this subject.

When implementing the NSFR requirement, the funding ratio was ommitted at the same time as a benchmark in the supervisory diamond for the banks in Denmark (however, the Greenlandic and Faroese institutions are not yet covered by the NSFR and are therefore still covered by the funding ratio guideline). The benchmark had the same objective as NSFR in terms of ensuring adequate long-term financing of the institutions' loans. The banking institutions report NSFR to the Danish Financial Supervisory Authority on a quarterly basis.

The funding ratio of the supervisory diamond and the NSFR requirement are fundamentally different in their design. A crucial difference is that the funding ratio only sets requirements for how the loan is financed, while NSFR sets requirements for how the entire balance is financed. In addition, the individual assets and liabilities are weighted according to the degree of stability of the NSFR requirement, while this is not the case in the funding ratio.

The NSFR requirement is a fraction consisting of available stable funding (numerator) and necessary stable funding (denominator), which must always be greater than 100 percent. The available stable financing is calculated on the liability side of the balance sheet, while the necessary stable financing is calculated on the assets side.

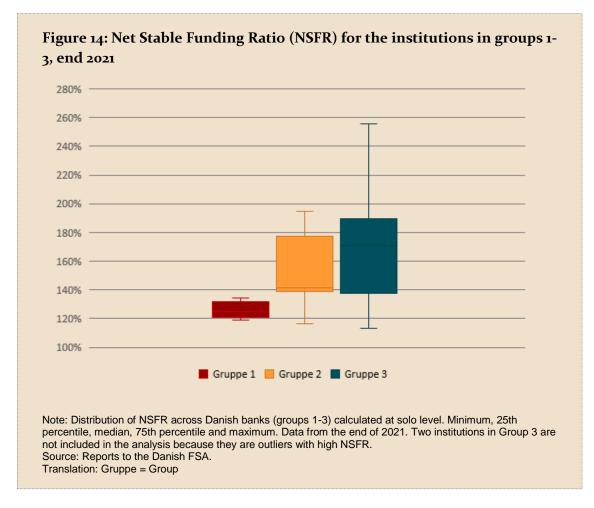
At the end of 2021, all Danish banks met the NSFR requirement and were comfortably above 100 percent; see Figure 14.

Deposits account for a larger proportion of financing in the smaller institutions than in the larger institutions. This helps to explain the difference in the NSFR key figure between the groups, because deposits weigh relatively highly as stable financing in the NSFR. The smaller institutions were generally better than the larger institutions based on the calculation of the funding ratio, because their lending, even before

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<sup>&</sup>lt;sup>5</sup> National Bank of Denmark: Danes invest a larger part of their own wealth, 23 December 2021





Since the summer of 2021, when NSFR came into force, until the end of the year, the institutions' total available funding increased by DKK 9 billion to a total of DKK 2.169 billion, corresponding to 0.4 percent, which was due to an increase in the available financing in Group 2 and Group 3 institutions.

One of the safer means of financing, seen through NSFR eyes, is stable retail deposits<sup>6</sup> Of these, 95 percent of the deposits can be included in the calculation of the available financing. These stable retail deposits account for around 40 percent of the total financing from the banking institutions.

From mid-to-end 2021, the institutions' total stable retail deposits increased by DKK 9 billion to DKK 797 billion. If other deposits are also included in addition to the stable retail deposits, the total stable financing amounted to DKK 1.072 billion at the end of the year.

The stable financing from retail deposits in banks in groups 2 and 3 decreased from DKK 247 billion to DKK 244 billion. By way of comparison, other deposits rose by DKK 7.5 billion to DKK 81 billion. With DKK 11.6 billion, the Group 1 institutions had the largest absolute

<sup>&</sup>lt;sup>6</sup> The term 'retail' is used to refer to households and businesses that are small enough that they are not expected to have a more professional approach or bargaining power vis-à-vis banking institutions. In practice, households account for the vast majority of retail deposits with banking institutions.



growth in stable retail deposits to DKK 550 billion. On the other hand, their retail deposits with less binding (i.e. deposits that can be withdrawn more easily and which therefore cannot be defined as stable deposits) fell by DKK 13.4 billion. This, along with other types of deposits, contributed to the decline in Group 1 institutions' total deposits. At the end of 2021, stable financing from retail deposits accounted for 43% of the Group 1 institutions' available stable financing.

The increase in private investment by households can therefore also be seen in the light of the fact that retail deposits with less binding in Group 1 institutions have decreased, where some of this financing may have been used to invest in securities to avoid paying negative interest rates. Some customers may also have moved to institutions in other groups, given that the other groups have increased their total financing from household deposits.

Just as the NSFR requirement requires banking institutions to make themselves sufficiently independent of short-term and risky financing, the LCR (liquidity coverage ratio) standard requires institutions to hold a sufficiently large amount of liquid assets in the event of liquidity stress. Both are binding EU legal requirements, and institutions must e.g. ensure adequate overcollateralisation for potential liquidity stress as part of their risk management. In 2021, the FSA looked into this in a thematic study of the institutions' internal liquidity limits; see Box 5.



# Box 5: Thematic study on internal liquidity limits in small and medium-sized banking institutions

In the autumn of 2021, the FSA conducted a study of internal liquidity limits in a representative sample of small and medium-sized banks.

It is essential that individual institutions have sound internal liquidity limits to ensure sound liquidity. The board of directors sets the overall limits in the liquidity policy, the contingency plan and the recovery plan, respectively.

The study shows that banks need to be aware that there is consistency in which threshold is first, and thus whether it is contingency initiatives in the liquidity policy or measures related to a proper recovery of liquidity that are relevant in the event of a breach of one of these internal limits.

The internal limits of a liquidity policy should therefore be set in motion so that contingency initiatives are put in place before actual recovery measures in the recovery plan. The study also shows that banks need to be aware of setting appropriate internal limits based on stress tests.

This means that in a situation where, for example, a banking institution has to sell off its securities in order to repay loans or deposits to its customers due to an economic crisis, it is important that the bank has a robust liquidity preparedness if the economic crisis should prove to be more protracted.



Several of the small and medium-sized banks in the study have internal limits aimed at enabling the institution to comply with the LCR requirement for as little as three months under stress. In contrast, the other institutions in the study have a time period of six months or more.

If the LCR breaches this internal limit and an institution deems it necessary, that institution will have to initiate contingency initiatives to re-establish liquidity so that it again meets this limit.

In this connection, it is important that the department can implement sufficient contigency measures within these three months to ensure that the LCR requirement can also be complied with subsequently.

In general, a credit institution should therefore ensure that there is a reasonable correlation between overcollateralisation and survival horizon in a stress scenario in the light of the institution's possible contingency measures.

If this is not the case, the institution must either set a higher internal limit in time or supplement the contingency plan with additional measures that have sufficient effect.

The survey also shows that banks generally need to be aware of making a deeper assessment of the feasibility of the individual initiatives in the contingency plan.

For example, an institution that has market financing as a contingency initiative must be aware of having an assessment of its market access under stress and ability to obtain market financing as a regular part of its contingency plan.

Finally, the study shows that several of the small and medium-sized institutions in the study have started late in integrating the new NSFR requirement into their internal risk management, even though the requirement has been known for a long period of time.

The deficiencies observed in the institutions examined are also at risk of being present in the other small and medium-sized banking institutions. These institutions may wish to consider whether the same weaknesses apply in their own risk management in this area and have been invited to address this explicitly when preparing their annual liquidity risk assessment (ILAAP).



## 5. **Appendix**

### Appendix 1: Annual accounts of banking institutions, 2017–2021

Tippendix II Illinual accounts of building institution	2017	2018	2019	2020	2021	Change, 1 year	Change, 5 years
Income statement	million DKK					pct.	
Interest income	46.945	49.528	49.133	44.615	41.306	-7,41	-12,01
Interest costs	13.377	16.576	18.330	12.560	9.793	-22,03	-26,79
Net interest income	33.568	32.952	30.803	32.055	31.513	-1,69	-6,12
Dividends on shares, etc.	543	525	1.060	598	794	32,63	46,17
Income from fees and commissions	27.070	28.354	30.420	30.630	34.445	12,45	27,24
Paid fees and commissions	5.236	5.515	5.321	5.762	6.267	8,77	19,71
Net interest and fee income	55.945	56.316	56.962	57.521	60.484	5,15	8,11
Staff and administrative expenses	38.200	43.104	44.657	45.647	46.324	1,48	21,27
Other operating revenues	2.206	3.994	2.570	2.315	4.136	78,69	87,47
Other operating costs	240	178	182	269	241	-10,40	0,42
Depreciation and amortisation of intangible and tangible assets	3.059	3.231	5.842	4.846	4.381	-9,60	43,22
Basic earnings	16.653	13.797	8.851	9.073	13.675	50,72	-17,88
Exchange rate adjustments	12.437	6.935	6.781	6.170	8.358	35,47	-32,80
Write-downs on loans and receivables, etc.	- 1.009	609	2.376	9.486 -	1.350		33,71
Profit or loss on shares in affiliated and associated enterprises	10.988	9.830	11.775	9.258	10.714	15,73	-2,49
Pre-tax profits	41.087	29.954	25.031	15.016	34.097	127,08	-17,01
Tax	6.033	4.181 -	1.483	1.575	4.606	192,50	-23,65
Profit/loss for the period	35.054	25.773	26.514	13.441	29.491	119,41	-15,87



	2017	2018	2019	2020	2021 (	Change, 1 year	Change, 5 years
Balance sheet items	million DKK				n	ct.	
Cash in hand and outstanding receivables with central banks	97.809	47.775	106.630	346.894	384.399	10,81	293,01
Receivables from credit institutions and central banks	405.580	309.305	205.725	212.206	157.666	-25,70	-61,13
Lending	1.543.397	1.664.321	1.792.228	1.647.927	1.711.097	3,83	10,87
Lending, excluding Repos	1.291.786	1.320.320	1.349.393	1.319.658	1.367.876	3,65	5,89
Bonds	690.538	661.093	706.531	840.405	744.412	-11,42	7,80
Shares, etc.	39.942	25.468	31.011	34.827	32.749	-5,97	-18,01
Equity participations in associated enterprises	1.941	1.952	3.518	3.573	2.808	-21,41	44,69
Shares in affiliated enterprises	114.555	118.856	123.861	127.122	134.175	5,55	17,13
Assets associated with pooled schemes	120.027	118.582	135.007	144.019	163.036	13,20	35,83
Intangible assets	10.355	11.561	12.110	12.853	14.263	10,97	37,74
Land and buildings	6.814	6.745	12.573	12.238	11.356	-7,21	66,65
Other tangible assets	4.574	4.732	5.661	5.406	5.968	10,41	30,48
Tax assets	2.959	4.194	5.315	7.570	7.260	-4,09	145,40
Assets in temporary possession	350	333	1.883	582	2.582	343,61	637,52
Other assets	341.694	326.030	386.404	483.435	358.720	-25,80	4,98
Period accrual items	2.461	2.687	2.731	3.235	2.564	-20,72	4,20
Total liabilities	3.382.995	3.303.633	3.531.188	3.882.291	3.733.057	-3,84	10,35
Debts owed to banking institutions and central banks	349.339	362.970	342.168	361.852	299.822	-17,14	-14,17
Deposits	1.756.102	1.784.500	1.899.053	2.123.100	2.123.502	0,02	20,92
Deposits, excluding Repos	1.613.378	1.613.820	1.715.888	1.976.227	1.988.064	0,60	23,22
Bonds issued	408.480	306.996	332.109	360.873	371.943	3,07	-8,94
Other commitments	14.965	8.938	8.222	11.826	16.402	38,70	9,60
Period accrual items	1.161	1.007	936	848	935	10,23	-19,51
Total debt	3.035.867	2.959.077	3.161.450	3.506.882	3.324.019	-5,21	9,49
Provisions for commitments	9.646	11.823	6.561	7.699	7.177	-6,77	-25,59
Subordinated capital injections	39.926	33.918	45.340	46.278	53.530	15,67	34,07
Equity	297.556	298.816	317.837	321.432	348.331	8,37	17,06
Total liabilities	3.382.995	3.303.633	3.531.188	3.882.291	3.733.057	-3,84	10,35



# Appendix 2: Key figures for banking institutions, 2017–2021

	2017	2018		2019	2020	2021
	pct.					
Capital ratio	23	83	23,31	24,64	25,28	25,48
Core capital ratio	21,	35	21,50	22,02	22,54	22,88
Real core capital ratio	19	29	19,02	19,53	20,62	20,89
Return on equity before tax	13	81	10,02	7,88	4,67	9,79
Return on equity after tax	11,	78	8,63	8,34	4,18	8,47
Earnings per cost-krone (DKK)	2	02	1,63	1,45	1,25	1,68
Cumulative impairment ratio	2	41	2,32	1,91	2,16	1,89
Impairment rate for the period	-0	03	0,05	0,10	0,44	-0,06
Loans in relation to equity (ratio)	4	34	4,42	4,25	4,11	3,93
Total risk exposures (DKK billion)	1.2	70	1.286	1.328	1.342	1.434
Of which is credit risk	1.0	38	1.049	1.089	1.105	1.200
market risk		97	91	99	100	90
operational risk	1	27	133	128	127	126



### Appendix 3: Group distribution, 2021

Group 1 - Working	Capital over I	DKK 75 billion
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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 over DKK 12 billion

5301 Aktieselskabet Arbejdernes Landsbank	9335 Sparekassen Kronjylland
7670 Ringkøbing Landbobank Aktieselskab	522 Sparekassen Sjælland-Fyn A/S
9070 Sparekassen Danmark af 1871	400 Lån & Spar Bank A/S
1149 Saxo Bank	755 Middelfart Sparekasse
7730 Vestjysk Bank A/S	5999 Danske Andelskassers Bank A/S

#### Group 3 - Working Capital over DKK 750 million

Croup C Working Capital Cro. Bitt. 100 million	
9090 Sparekassen Thy	9388 Sparekassen Djursland
7320 Djurslands Bank A/S	1671 Basisbank A/S
9137 Express Bank A/S	9797 Broager Sparekasse
7780 Skjern Bank A/S	6620 Coop Bank A/S
844 Fynske Bank A/S	9682 Sparekassen for Ndr. Nebel and Omegn
9740 Froese Savings Bank	7570 PenSam Bank A/S
6771 Lægernes Bank A/S	537 Dragsholm Sparekasse
6471 Grønlandsbanken, Aktieselskab	9827 Sparekassen Bredebro
28002 Lunar Bank A/S	13080 Frørup Andelskasse
7930 Kreditbanken A/S	847 Rise Sparekasse
6860 Nordfyns Bank, Aktieselskab	7500 HVIDBJERG BANK A/S
6520 Lollands Bank A/S	9312 Sparekassen Balling
13460 Merkur Andelskasse	9354 Rønde Sparekasse
6880 Totalbanken A/S	28003 Facit Bank A/S
6140 Møns Bank A/S	9133 Frøslev-Mollerup Sparekasse

#### Group 4 - Working Capital below DKK 750 million

9124 Sønderhå-Hørsted Sparekasse	9135 Klim Sparekasse	
13290 Andelskassen Fælleskassen	5125 Leasing Fyn Bank A/S	
1693 PFA Bank A/S	28001 Maj Bank A/S	
9684 Fanø Sparekasse	28005 Kompasbank A/S	
13070 Faster Andelskasse	9629 Stadil Sparekasse	
9634 Borbjerg Sparekasse		