

Mortgage credit institutions

Market development 2020

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Summary

In 2020, mortgage credit institutions experienced a decline in the total profit before tax. The result was DKK 17.2 bn in 2020 against DKK 21.7 bn in 2019. The decline must be seen in the light of partly a high result in 2019 due to historically high remortgaging activity, and partly the effect of the COVID-19 crisis on impairments in 2020.

Mortgage credit institution loans increased by 3.5 percent in 2020, and the share of mortgage loans with fixed interest rates and installments continued to grow. However, the share of interest-only new loans for owner-occupied homes increased. Both the low interest rate level, the low interest rate spread and the best practice rules that limit borrowers' access to risky loans contributed to borrowers choosing loans with fixed interest rates to a greater extent.

Growth in mortgage loans for owner-occupied homes was positive in most of the municipalities in Denmark, although with large regional differences¹. The largest growth for mortgage loans for owner-occupied homes in combination with the largest house price growth was concentrated around the north-eastern part of Zealand.

Despite the COVID-19 crisis, housing prices increased in 2020 and sales periods decreased. The market for holiday homes was especially fast growing with prices increasing by 11 percent, and sales periods decreased by 28 percent. The low level of interest rates, stricter travel restrictions, shutdowns, government assistance packages, working from home and the payment of "frozen" holiday pay are believed to have contributed significantly to the development of the market for owner-occupied homes and holiday homes. The number of owner-occupied homes and holiday homes for sale also decreased in 2020, which since the summer could not be attributed to fewer new homes being put up for sale. The COVID-19 crisis has thus led to increased demand in the market for owner-occupied homes and holiday homes, both as a result of changed consumption habits and the historically low interest rate level.

Mortgage credit institution loans increased in 2020 for most of the business property categories, and overall, the COVID-19 crisis had no visible effect on the associated prices and the number of sales. At the top of the lending growth were private residential properties for rent, where lending increased by 11.3 percent. This brought the property category up to the level of mortgage loans for office and commercial properties, which otherwise in recent years has been the dominant category within mortgage loans to corporate customers. The Danish Financial Supervisory Authority (hereinafter "the DFSA") continuously monitors developments in the market for private residential properties for rent. This has i.a. given rise to risk information as a result of violations of the supervisory diamond benchmark for lending growth for commercial with residential purposes.

Office and commercial properties contain properties in industries that have been particularly impacted during the COVID-19 crisis, which contributed to an increase in the mortgage credit institutions' impairments in 2020. One of the concerns during the COVID-19 crisis was its significance for the extent of empty shops and business premises, which i.a. may put downward pressure on property prices and the borrowers' capacity to pay. However, the

¹ Cf. figure 22 in Annex 3.

supply percentage for retail and office premises ended up being relatively stable, e.g. as a result of government assistance packages.

The DFSA continuously monitors developments in the real estate market and credits issued by the mortgage credit institutions. The DFSA assesses that the Danish mortgage credit sector remains well-capitalised and well equipped to withstand and absorb losses.

In 2020-2021, the DFSA conducted a study of the mortgage credit institutions' new loan products with up to a 30-year interest-only period. The DFSA assesses that the special characteristics and conditions of the loans sharpen the need for guidance for borrowers. Increased spread of interest-only mortgages can also increase household indebtedness and vulnerability to negative financial shocks. The DFSA is therefore aware of the development within loans with an interest-only period of up to 30 years and recommends that mortgage credit institutions offer these loans to financially strong customers only.

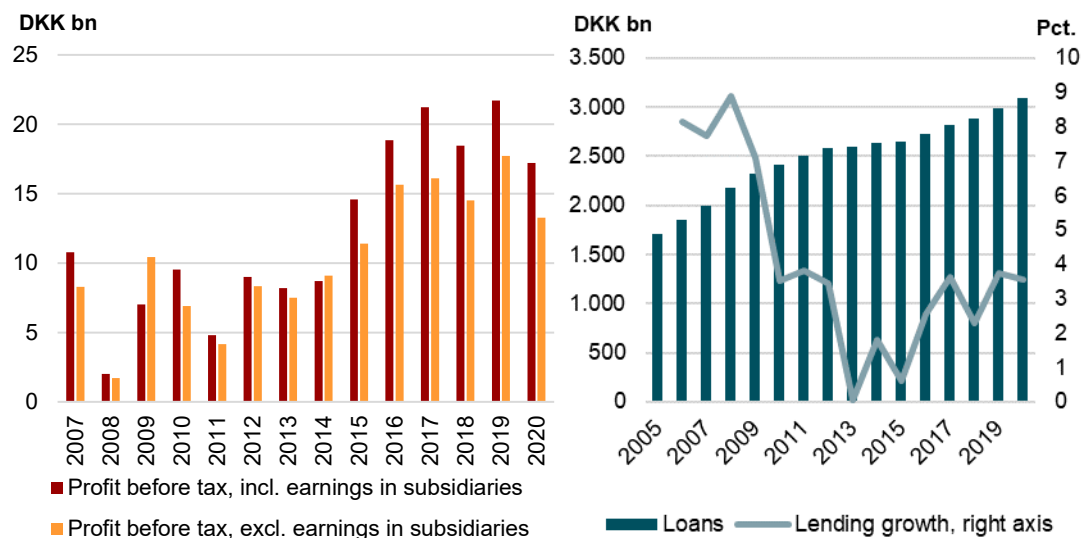
1. Mortgage credit institution earnings

Mortgage credit institution earnings decreased in 2020. The institutions' financial statements i.a. contain the following highlights for 2020²:

- Pre-tax profit increased by 20.7 percent. The pre-tax return on equity increased from 9.7 to 7.4 percent.
- The decrease in the result must be seen in the light of a high-level result in 2019 and can mainly be attributed to general decreases in income items, including in particular a decrease in other operating income and an increase in expenses for staff and administration as well as an increase in impairments due to the COVID-19 crisis.
- Net interest income decreased by 1.4 percent. There is thus still a relatively flat development in nominal income despite increasing underlying loans.
- Fees and commission income decreased by 18.2 per cent, and fees and commissions paid fell by 9.5 per cent. This led to a decrease in net fee income. However, this decrease must be seen in the light of historically high remortgaging activity in 2019.
- Loan impairments increased by 208.9 percent, but this happened from a low starting point. The increase in impairments was broadly based on several property categories for both residential and commercial purposes, including office and business properties as well as private residential properties for rent.
- Lending increased by 3.5 percent. Lending was supported by low bond yields and increasing prices for owner-occupied homes and holiday homes.

The mortgage credit institutions' total profit before tax was DKK 17.2 bn in 2020, cf. figure 1. Earnings decreased in relation to a profit before tax of DKK 21.7 bn in 2019. Lending continued to increase from DKK 2,992 bn in 2019 to DKK 3,098 bn in 2020.

Figure 1: Earnings and loans



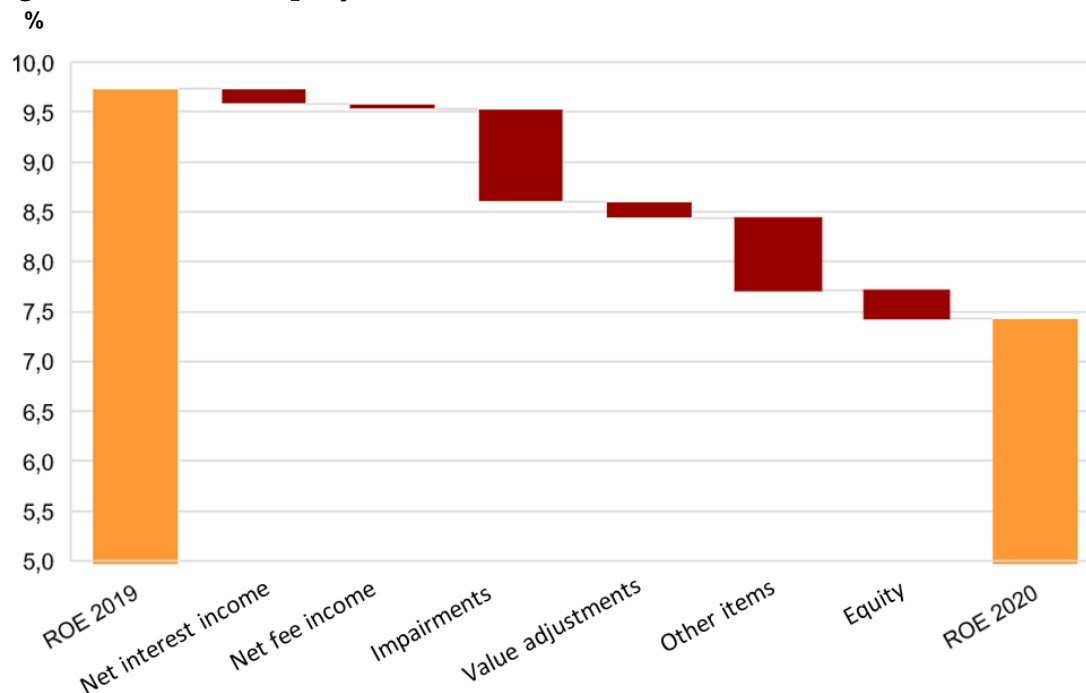
Note: The figure on the left shows the trend for the mortgage credit institutions' pre-tax profit, including and excluding the result of equity investments in associates and affiliates. Loans in the figure to the right are calculated after impairments and exclusive loans to other MFIs.

Source: Reports to the DFSA.

² The full financial statement and financial ratio table for mortgage credit institutions appear from Annexes 1 and 2.

Return on equity before tax (ROE) indicates how much of a return the owners have received on capital invested³. The decrease in the return on equity between 2019 and 2020 was driven by a decrease in all main income items and an increase in Impairments, cf. figure 2. The large impact through other items was primarily attributable to other operating income and expenses for staff and administration.

Figure 2: Return on equity before tax



Note: The figure illustrates how mortgage credit institutions' expenditure and income items affected the pre-tax return on equity between 2020 and 2019. Other items include the result of investments in associates, other operating income, other operating expenses, expenses for staff and administration, the result of activities in liquidation and amortisation and impairments on intangible and tangible assets.

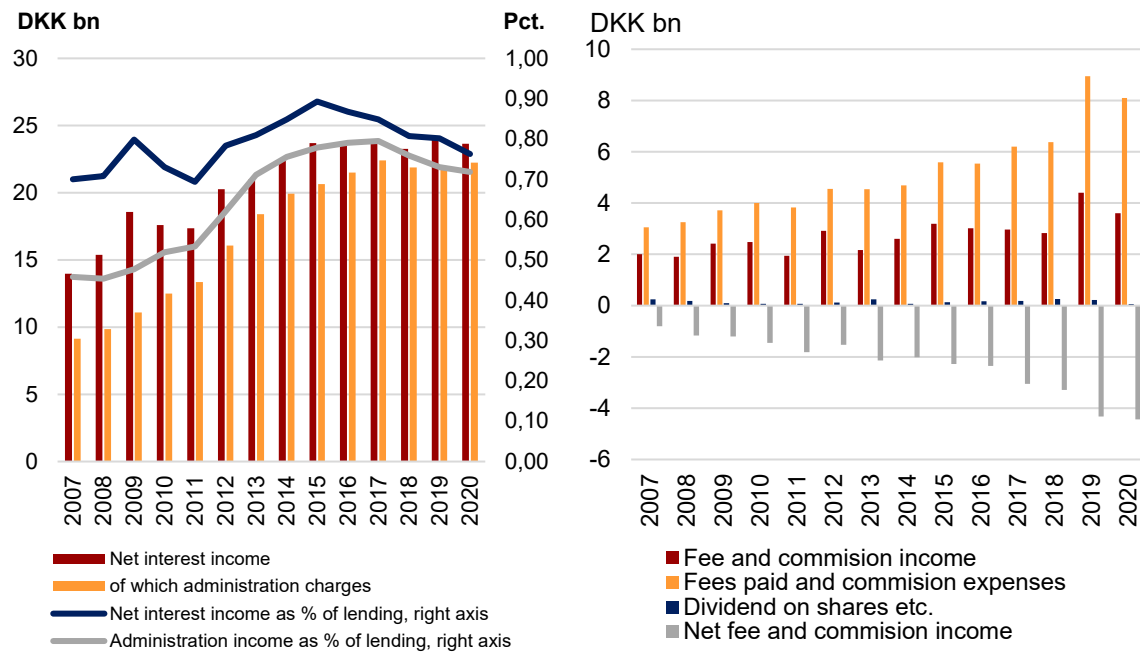
Source: Reports to the DFSA.

Administration charges in relation to loans decreased marginally in 2020, cf. figure 3. The continued decrease can be attributed to the fact that borrowers generally chose safer loan types with lower administration rates. Figure 3 also shows that fee income and expenses decrease in 2020, which, however, must be seen in the light of the historically high remortgaging activity in 2019⁴.

³ Profit before tax in relation to equity.

⁴ Mortgage credit institutions routinely pass on a portion of their core earnings to the intermediary banks, which is included in the item fees and commission expenses. This generally supports the large difference between fees and commission income and paid fees and commission expenses.

Figure 3: Net interest and fee income

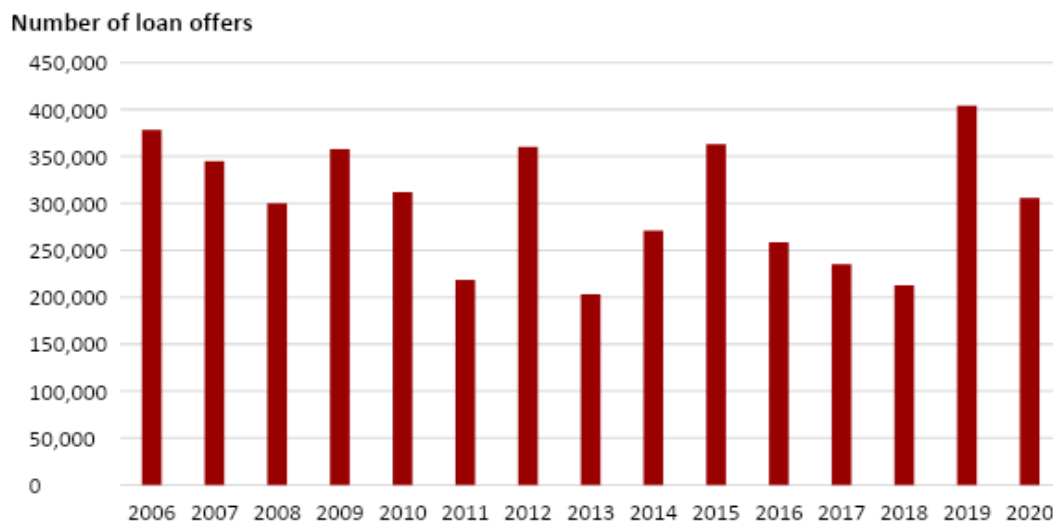


Note: Loans in the left graph are calculated after impairments and exclusive loans to other MFIs. Net interest earnings as % of lending and administration revenue as % of lending are shown on the right axis.

Source: Reports to the DFSA.

The continued high level of mortgage credit institutions' fee income and expenses was supported by the fact that in 2020, compared with recent years, mortgage banks made relatively many loan offers for restructuring, supplementary loans and home purchases despite the COVID-19 crisis, cf. figure 4⁵.

Figure 4: Loan offers made by mortgage credit institutions



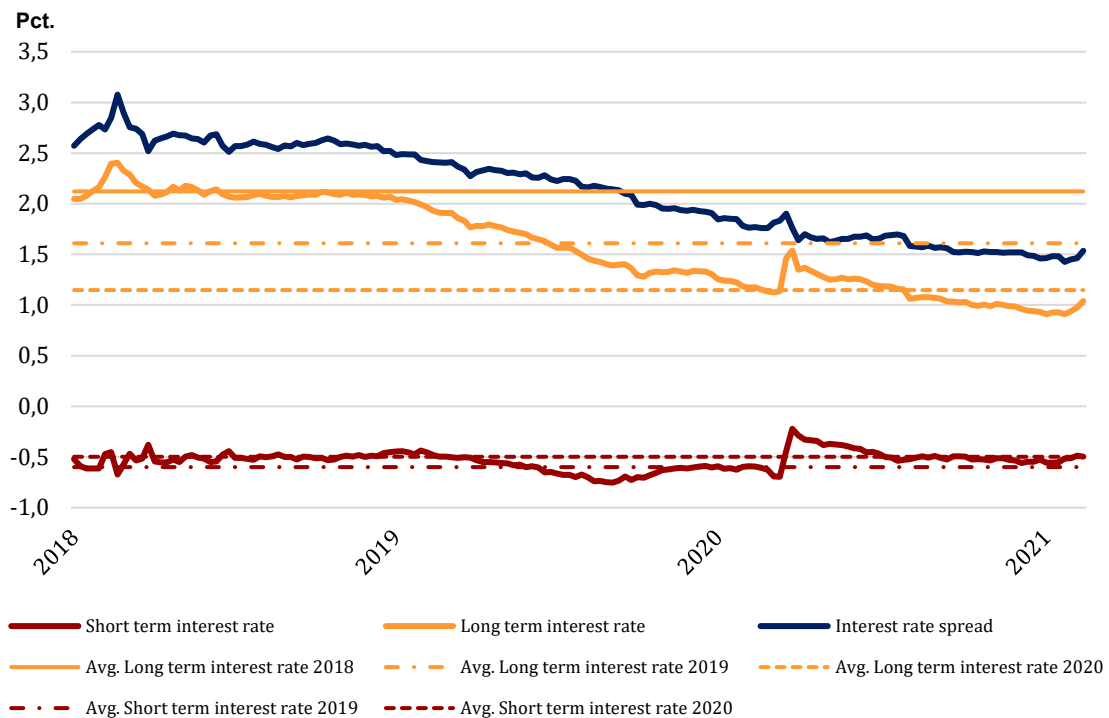
Source: Finance Denmark.

⁵ A high number of loan offers does not in itself equate high lending activity and thus fee income and expenses, but it could be an indication thereof.

2. Lending

The level of long-term mortgage rates continued to decrease in 2020, while the level of short-term mortgage rates increased slightly, cf. figure 5. The increase in interest rates in March 2020 can be attributed to the time when Denmark and Europe were seriously affected by the COVID-19 crisis, which generally resulted in large value adjustments, e.g. for equities, credit bonds and government and mortgage bonds.

Figure 5: Interest rate development



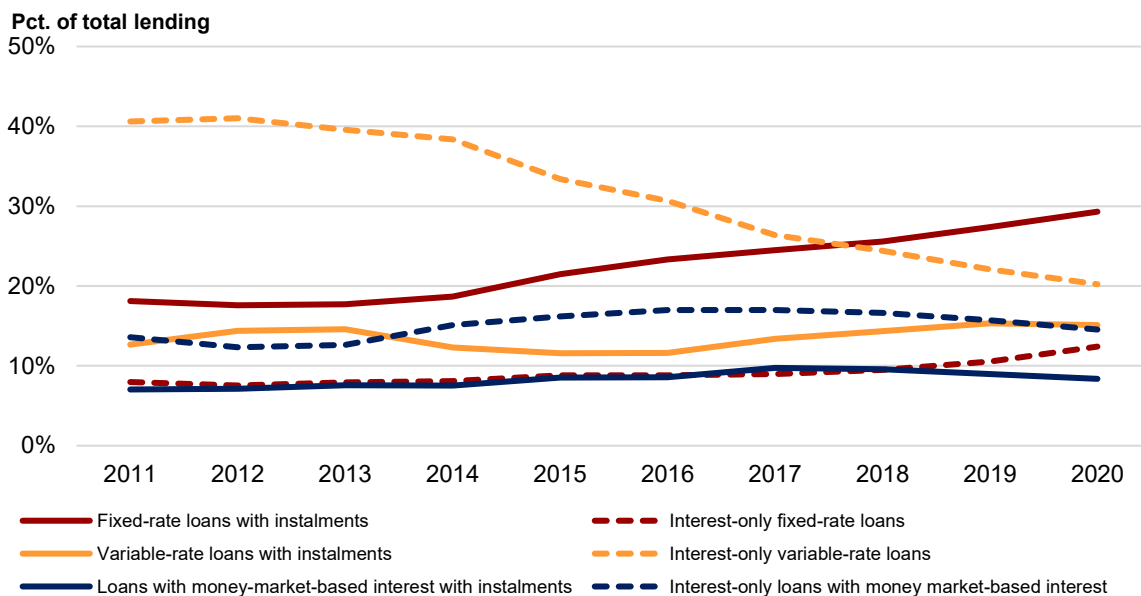
Note: The long-term interest rate covers 30-year fixed-rate, convertible newly-issued mortgage bonds during the relevant week. The short-term interest rate covers the one and two-year non-convertible newly issued mortgage bonds during the relevant week, which form the basis of repayment of variable-rate mortgages. The average long-term interest rate was 2.12 for 2018, 1.61 for 2019 and 1.15 for 2020. The average long-term interest rate was -0.51 for 2018, -0.60 for 2019 and -0.50 for 2020.

Source: Finance Denmark.

The low interest rate level in 2020 coincided with positive lending growth for the mortgage credit institutions. In 2020, the majority of mortgage credit institutions' lending consisted of loans involving fixed interest rates and installments, cf. figure 6. The amount of outstanding variable interest rate loans continued to decrease. Loans with installments increased from 51.7 percent of the mortgage credit institutions' loan portfolio in 2019 to 52.8 percent in 2020. Reports to the FSA show, however, that the share of interest-only new loans for owner-occupied homes increased in 2020. Fixed-rate loans increased from 37.9 percent in 2019 to 41.7 percent in 2020. Both the low interest rate level, the low interest rate spread and the good practice rules that limit borrowers' access to risky loans contributed to borrowers choosing loans with fixed interest rates to a greater extent⁶.

⁶ The interest rate spread is calculated as the difference between the long and short mortgage rate.

Figure 6: Mortgage lending by type of loan



Note: The shares are calculated as the mortgage banks' lending in the type of loan in question in percent of total mortgage lending. Lending is calculated before impairments at fair value at the end of the period. Index loans are not included. Mortgage loans with a grace period include both mortgage loans with a forbearance period where the option is currently exercised and mortgage loans with a forbearance period where the option is not currently exercised.

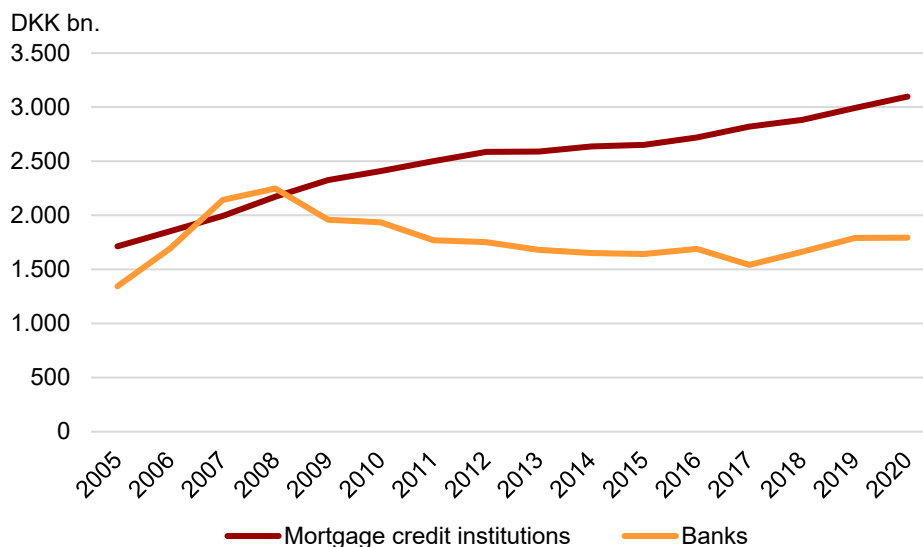
Source: Reports to the FSA.

Lending moved from banks to mortgage credit institutions

Since the financial crisis, there have been signs that part of the banks' lending has been transferred to the mortgage credit institutions, cf. figure 7. Priority loans have e.g. moved from banks to mortgage credit institutions, which take over and finance them through bond issues⁷. Such a transfer of loans can lead to greater risk-taking and lower creditworthiness for both banks and mortgage credit institutions - even if the overall customer portfolio does not change, see Annex 4 for a stylised example of this.

⁷ This form of switching loans from banks to mortgage credit institutions is referred to as 'joint funding'.

Figure 7: Lending growth for banks and mortgage credit institutions



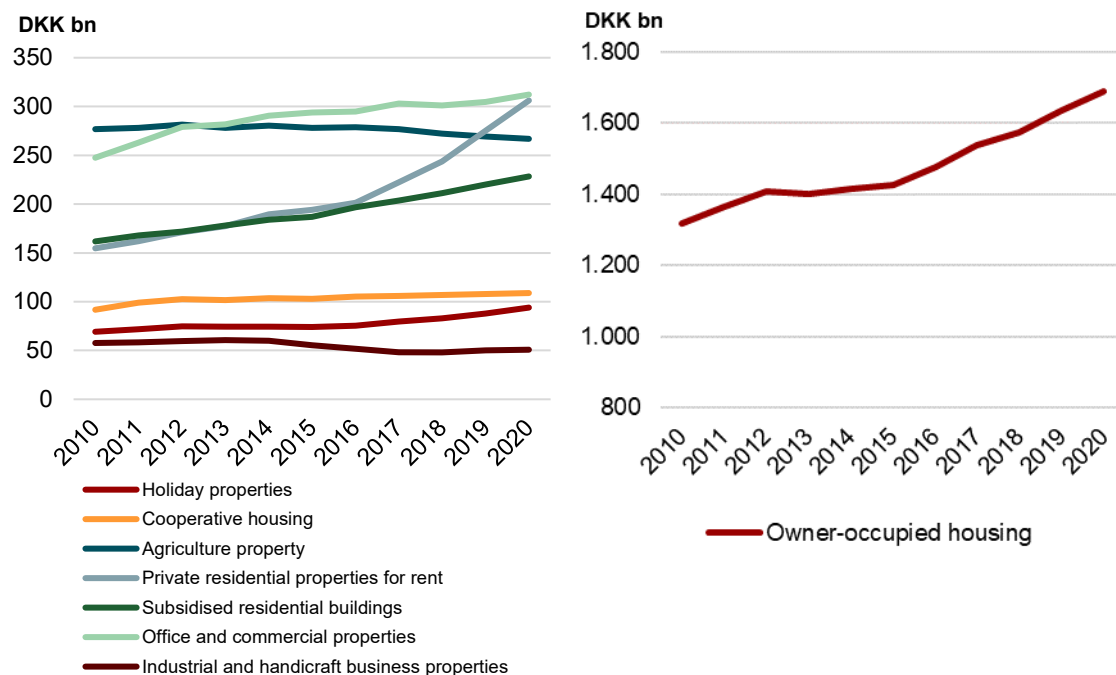
Note: The figure shows the development in Danish banks' total lending by Danish credit institutions, including branches in Denmark of foreign credit institutions. Total lending is calculated including repo lending, excluding guarantees, after impairments and excluding lending to other MFIs.

Source: Reports to the FSA.

Mortgage loans divided into property categories

Mortgage credit institutions' loans increased in 2020 for the majority of property categories, cf. figure 8. The only exception was agricultural properties, where lending decreased by 0.9 percent. Loans for private residential properties for rent and holiday homes relatively increased the most, by 11.3 percent and 7.1 percent, respectively. The growth in mortgage lending for private residential properties for rent brought the property category up to the level of mortgage lending for office and commercial properties, which otherwise in recent years has been the dominant category within mortgage loans to business customers.

Figure 8: Loans divided into property categories



Note: Lending is calculated as the mortgage credit institutions' loans before impairments at fair value at the end of the period. Index loans are not included. Industrial and handcraft business properties, as well as properties for social, cultural and educational purposes are not included in the figure, as mortgage loans for both of these property categories were below DKK 50 bn in 2020.

Source: Reports to the FSA.

Private residential properties for rent (residential rental properties)

Mortgage loans for residential rental properties increased by 52 percent between 2016 and 2020. The development was supported by several factors, see box 1.

The FSA continuously monitors developments in the market for residential rental properties. This has i.a. given rise to risk information as a result of overruns of the supervisory diamond benchmark for lending growth for businesses for residential purposes, cf. section 6.

Box 1: Lending development for residential rental properties

Based on the FSA's observations, data from Statistics Denmark and reports to the FSA, the development in mortgage lending for residential rental properties in the period from 2016 to the second quarter of 2020 may have been affected in an upward direction by:

- Relatively high prices and number of sales;
- Several completed constructions;
- That the larger cities attracted more investors.

Developments in mortgage lending for residential rental properties in the same period may have been affected in a downward direction by:

- Fewer commenced multi-storey constructions.

However, the increased mortgage lending could not be attributed to higher loan-to-value ratios for new loans.

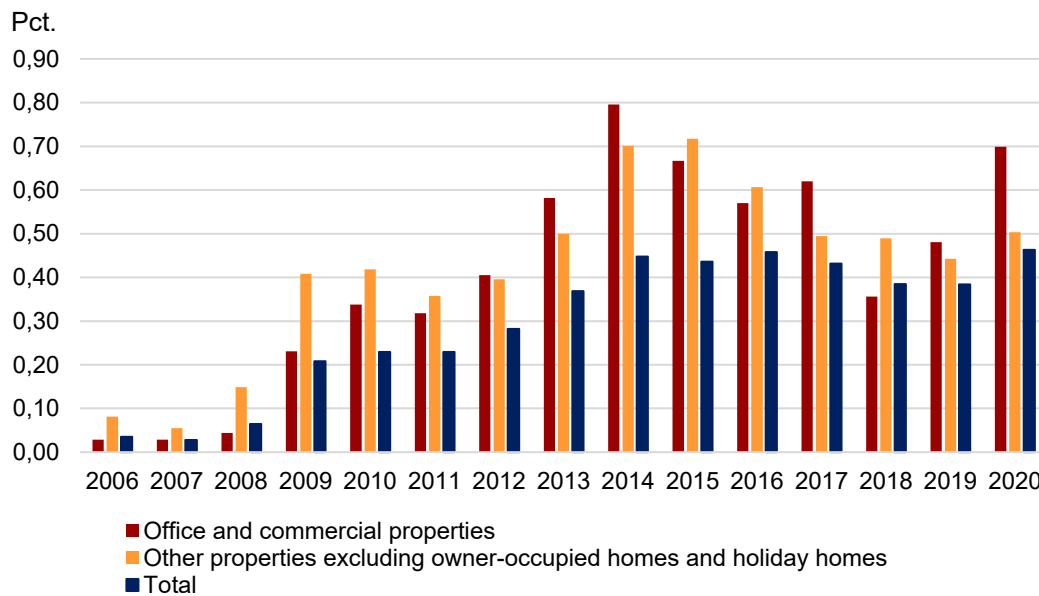
Office and commercial properties

Office and commercial properties cover i.a. retail stores, restaurants, hotels, resorts, convention and conference centres. All properties in industries that have been particularly impacted during the COVID-19 crisis, which contributed to an increase in the mortgage credit institutions' impairment rates in 2020, cf. figure 9.

The mortgage credit institutions are exposed through lack of loan services from the borrower and decreasing property prices⁸. The impairment rate may thus increase further as a consequence of the COVID-19 crisis, e.g. as a result of bankruptcies.

⁸ Mortgage credit institutions, however, to a large extent hedge loans for office and commercial properties against decreasing property prices through a loan limit of 70 percent and loss guarantees from banks on the outermost part of the mortgage loan.

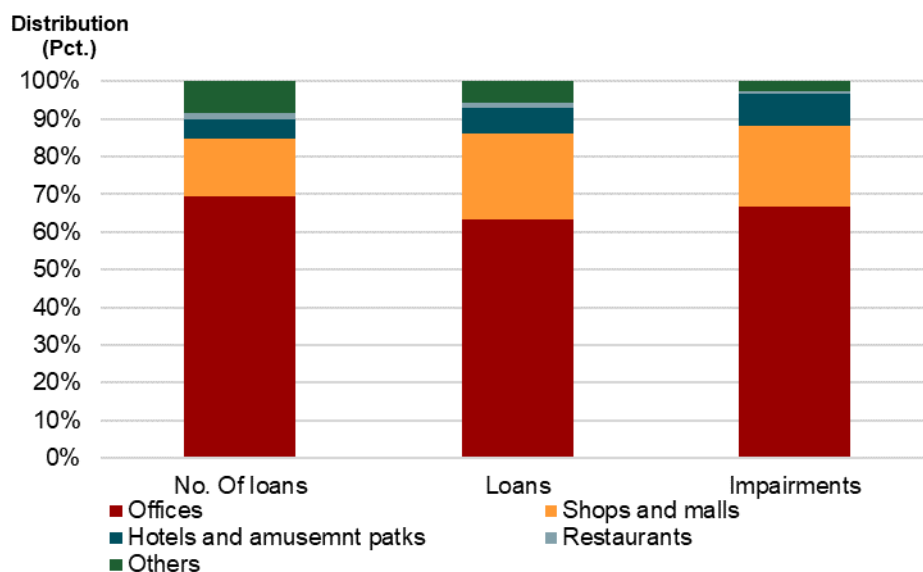
Figure 9: Accumulated impairment rates



Note: The impairment rate is defined as the accumulated impairments for the year in relation to mortgage credit loans before impairments. Other properties, excluding owner-occupied homes and holiday homes, cover mortgage loans for subsidized buildings for housing, co-operative housing, private residential rental properties, industrial and handicraft association properties, agricultural properties, social, cultural and educational properties, as well as other properties. In total, mortgage credit loans for owner-occupied homes and holiday homes are also included.
Source: Reports to the FSA.

Offices, shops and shopping centred took up the majority of mortgage loans for office and commercial properties in 2020, cf. figure 10. It was also these property categories that experienced most impairments. Restaurants filled only a marginal part of the impairments, which can be attributed to relatively modest loans thereto.

Figure 10: Office and commercial real estate lending distributed on vulnerable industries

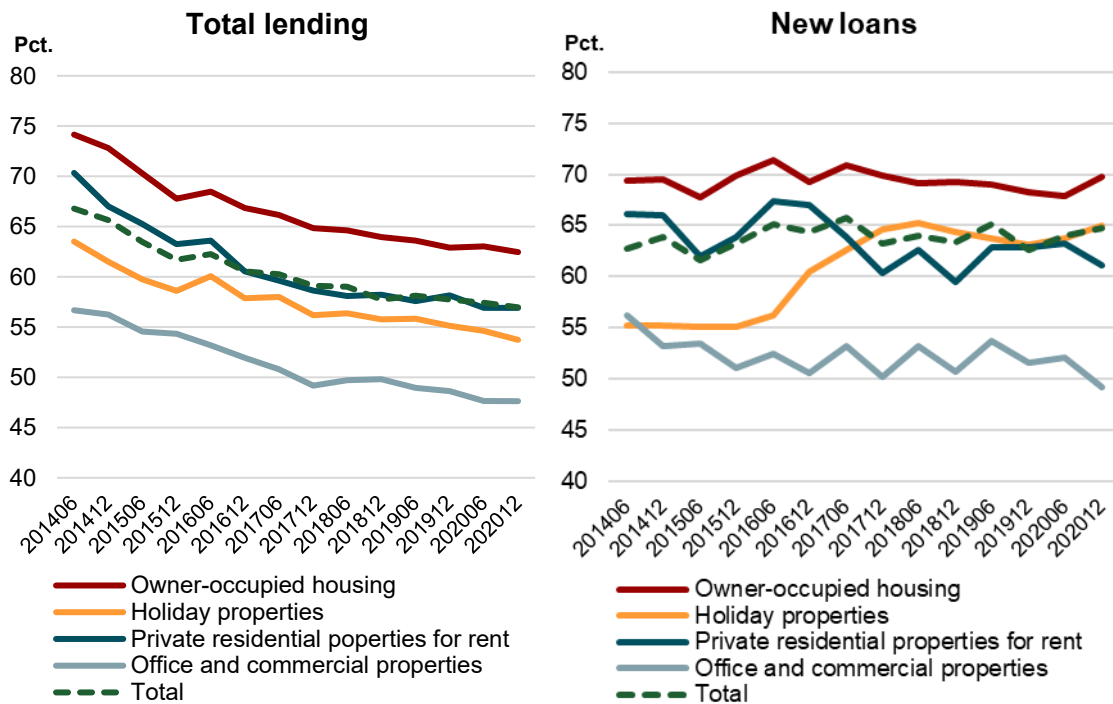


Note: Loan is calculated after impairments. Reservations are made for the delimitation of property categories, e.g. restaurants can also be part of shopping centres or mixed properties.
Source: The Danish credit register.

Mortgage rates

Mortgage credit institutions' loan-to-value (LTV) ratio expresses the ratio of the loans for properties to the values of these properties. For total mortgage lending, the exposure-weighted LTV has generally been decreasing since 2014, cf. figure 11, as a result of increasing property prices and installments. The exposure-weighted LTV for new loans increased in 2020 for both owner-occupied homes and holiday homes, but decreased for private residential properties for rent and office and commercial properties.

Figure 11: Exposure weighted LTV for selected property categories



Source: Reports to the FSA.

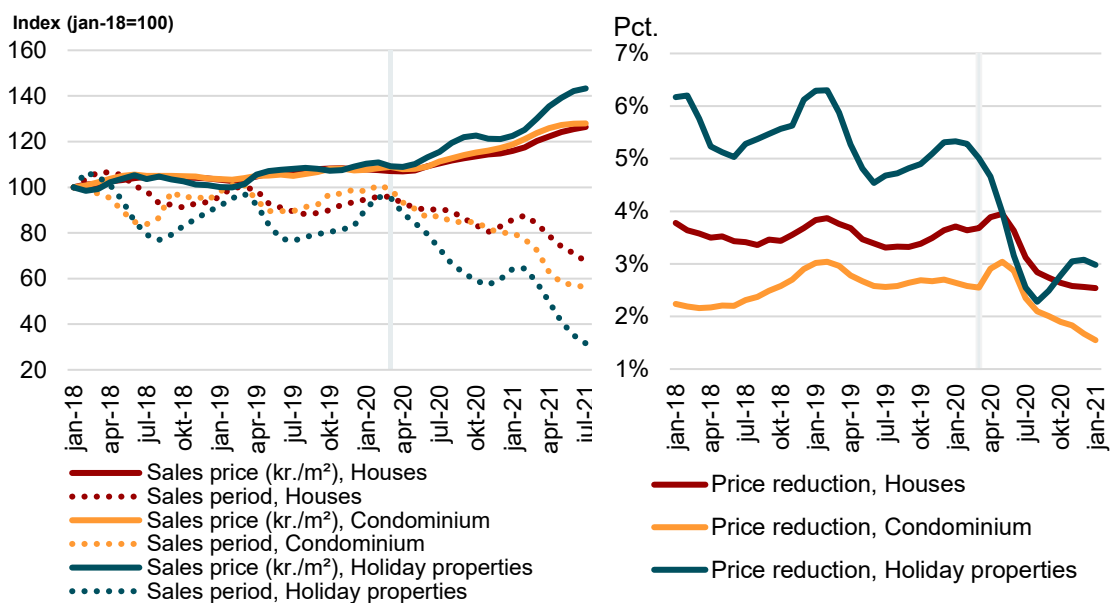
3. The real estate market

Owner-occupied homes and holiday homes

When the COVID-19 crisis really hit Denmark at the beginning of March 2020, the expectation was that housing prices would decrease as a result of a new economic crisis. However, after the initial shock, the housing market took an unexpected turn with large price increases and decreases in sales periods, cf. figure 12. In the same way, the change between the most recent offer price and the sale price (discount) decreased significantly during 2020, which meant that fewer people received a reduction in the price when buying a new home.

The holiday home market was especially hot with prices increasing by 11 percent, and sale periods decreasing by 28 percent in 2020. It is assumed that the tightened travel restrictions have greatly contributed to this development.

Figure 12: Sales data



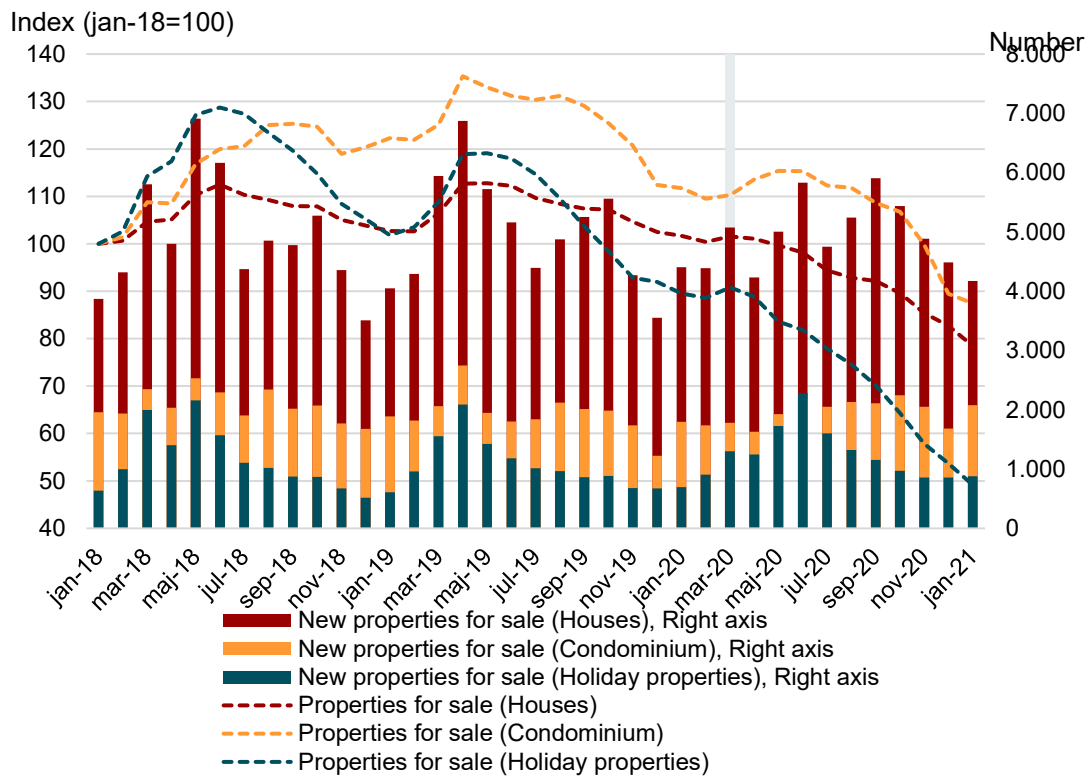
Note: Discounts are calculated as the change between the most recent offer price and the sales price in percent. The vertical line marks March 2020.

Source: Market Index on Boligsiden.dk.

The price increases since March 2020 are supported by a lower number of owner-occupied homes and holiday homes for sale, cf. figures 13 and 14. Although homeowners were a bit reluctant to put owner-occupied homes and holiday homes up for sale at the start of the COVID-19 crisis, the desire to sell quickly picked up again, and since June 2020, several new villas, owner-occupied flats and holiday homes have been put up for sale compared to the same month the year before, cf. figure 14⁹. The price increases were thus an expression of increased demand from buyers and not a reduced supply.

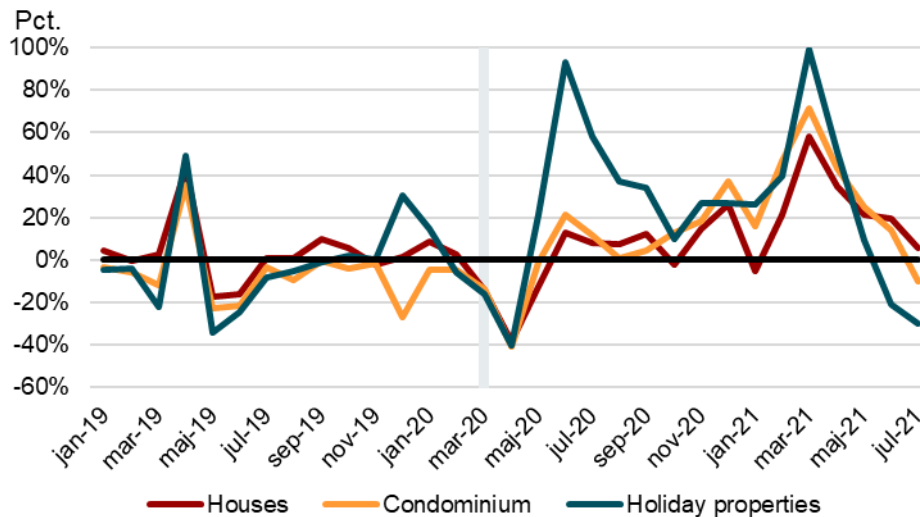
⁹ With small short-term declines for houses.

Figure 13: Supply data



Note: The vertical line marks March 2020.
Source: Market Index on Boligsiden.dk.

Figure 14: New homes for sale - change compared to the same month the year before



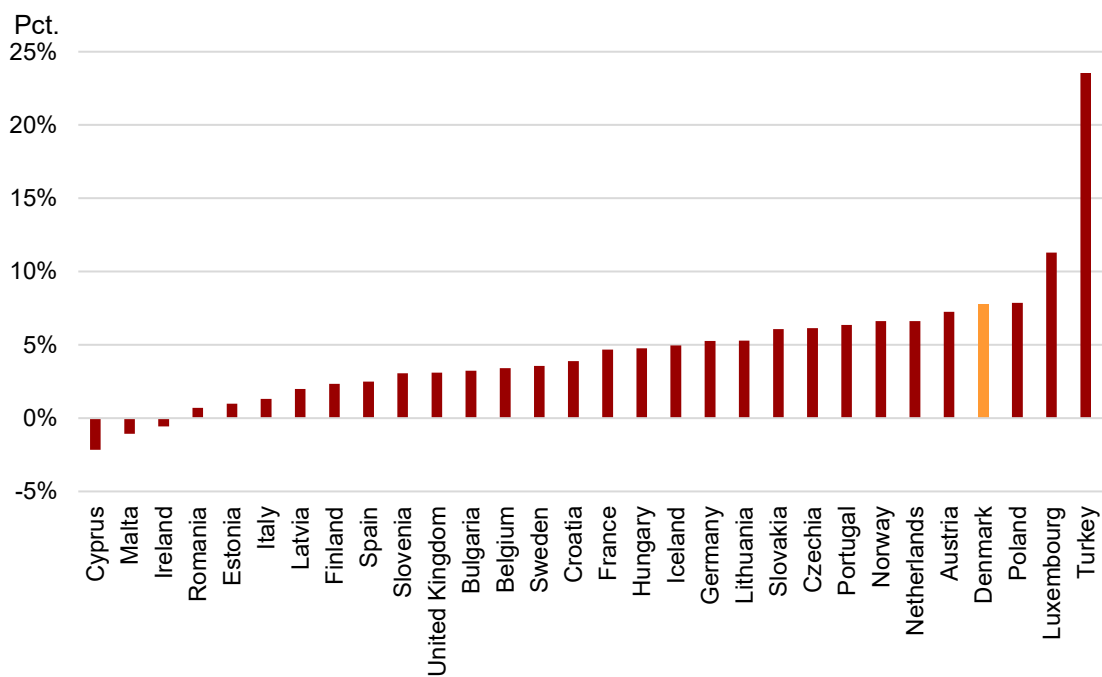
Note: The vertical line marks March 2020.
Source: Market Index on Boligsiden.dk.

Several factors applied to the price increases for owner-occupied homes and holiday homes in addition to the continued low interest rate level. During the COVID-19 crisis, assistance packages have kept pace with income for both employees and businesses in the vulnerable occupations, homebuyers have had better room in their economy (e.g. through savings on

trips and payment of “frozen” holiday pay), and repatriation may have affected housing demand in a positive direction. It is still unknown how a continuation of restrictions or return to more normal conditions will affect house prices in the future, but the FSA is following developments closely.

Between the fourth quarter of 2019 and the third quarter of 2020, the EU harmonised house price index increased more in Denmark (approx. 8 percent) than in most of the other EU countries (as well as the United Kingdom, Iceland, Norway and Turkey), cf. figure 15. In comparison, the price index in Norway increased by approx. 7 pct. and in Sweden by approx. 4 pct. Only three countries experienced a definite decrease in the EU harmonised house price index. There is thus much to suggest that the COVID-19 crisis has generally had a positive effect on housing demand across countries. This combined with historically low interest rates has led to increasing house prices.

Figure 15: House price growth for the fourth quarter of 2019 - third quarter of 2020 across countries



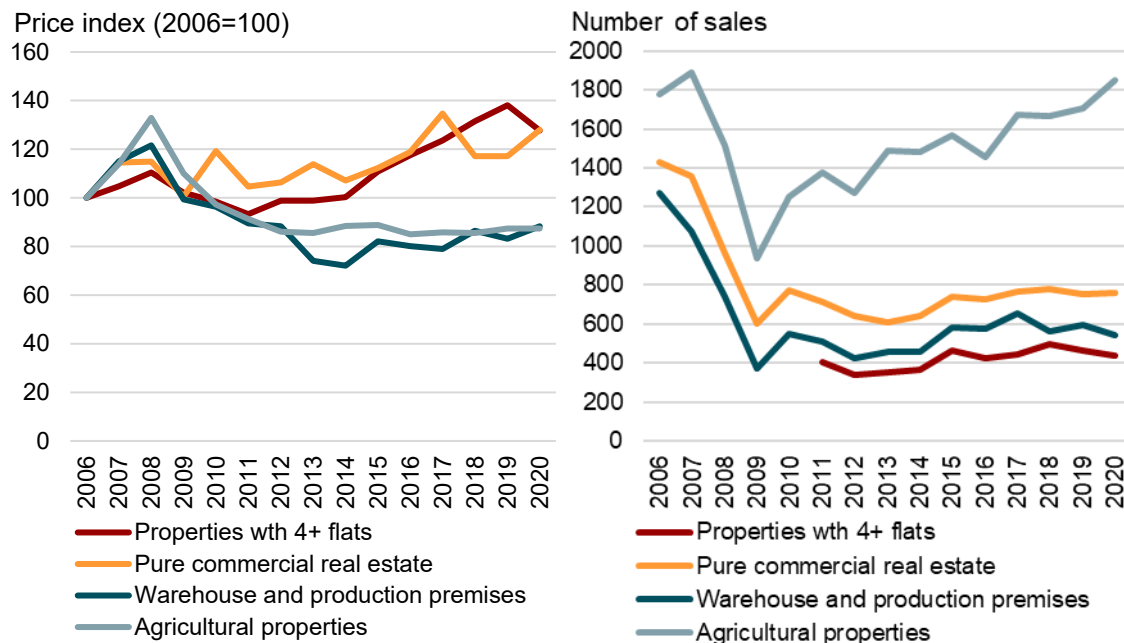
Note: Growth in the EU harmonised house price index between the fourth quarter of 2019 and the third quarter of 2020. The house price index is not available for Greece.
Source: Eurostat.

Real estate, business

Overall, the COVID-19 crisis did not have a visible impact on prices and the number of sales of commercial properties, cf. figure 16. Prices for properties with four flats or more decreased in 2020, but this happened after a long period of price increases, and prices remained at a relatively high level. Prices for pure commercial real estate increased in 2020, despite the fact that this real estate category includes several COVID-19 vulnerable industries¹⁰.

¹⁰ Pure commercial properties are a complex property category, which covers shops and offices as well as hotels and restaurants etc.

Figure 16: Price index for real estate, business



Note: Properties with four flats or more are used as measures for the development of residential rental properties. The figure on the right shows the number of sales as the number of sales in ordinary free trade when calculating prices. Source: Statistics Denmark.

One of the concerns during the COVID-19 crisis was its significance for the extent of empty shops and business premises, which i.a. may put downward pressure on property prices and the borrowers' capacity to pay. However, the supply percentages for retail, office, warehouse and production premises ended up being relatively stable between February 2020 and February 2021, cf. figure 17¹¹. At the national level, 3.2 percent of the retail premises, 8.1 percent of the office premises and 2.6 percent of the warehouse and production premises in supply as of February 2021. The corresponding figures for February 2020 were 3.5 percent and 7.6 percent and 2.6 percent, respectively.

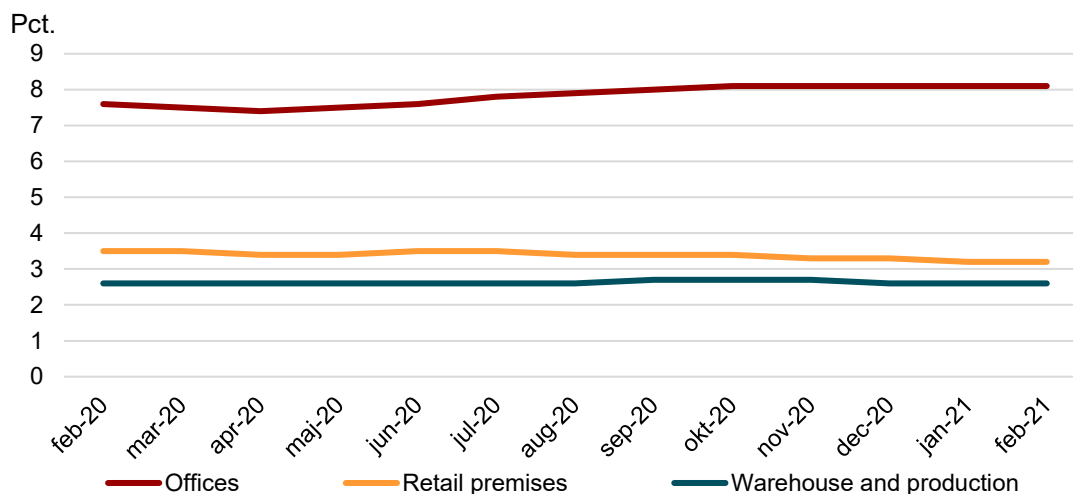
Although the supply percentage for retail premises decreased, it remained at one of the highest levels in 17 years¹². The stable level during the COVID-19 crisis must be seen in the light of the fact that assistance packages and payment of the "frozen" holiday pay have kept the retail trade running.

The smaller increase in the supply percentage for office premises may be due to a greater extent of people working from home and thus less need for office space during the period.

¹¹ The development in the supply percentages in the figure must be read with the proviso that improvements have been made to the data material, which has been in force since the fourth quarter of 2020.

¹² Source: Ejendomstorvet's market index, supply statistics fourth quarter 2020: https://www.de.dk/media/mtzkiamt/ejendomstorvet_statistikken_4_kvartal_2020_v2.pdf

Figure 17: Supply percentages



Note: The supply statistics are calculated, cf. box 2. The development must be read with the proviso that improvements have been made to the data material, valid from and including the fourth quarter of 2020.
 Source: Ejendomstorvet.dk.

Box 2: Ejendomstorvet’s market index - Supply statistics

Ejendomstorvet’s market index - Supply statistics map the supply of Danish commercial buildings every quarter, divided into offices, shops and warehouse/production premises - and calculated as offered premises measured in relation to the total stock of buildings (square meters). The statistics cover a considerable part of the business premises in Denmark and are published by the Danish Real Estate Association in collaboration between the business portal Ejendomstorvet.dk and EjendomDanmark.

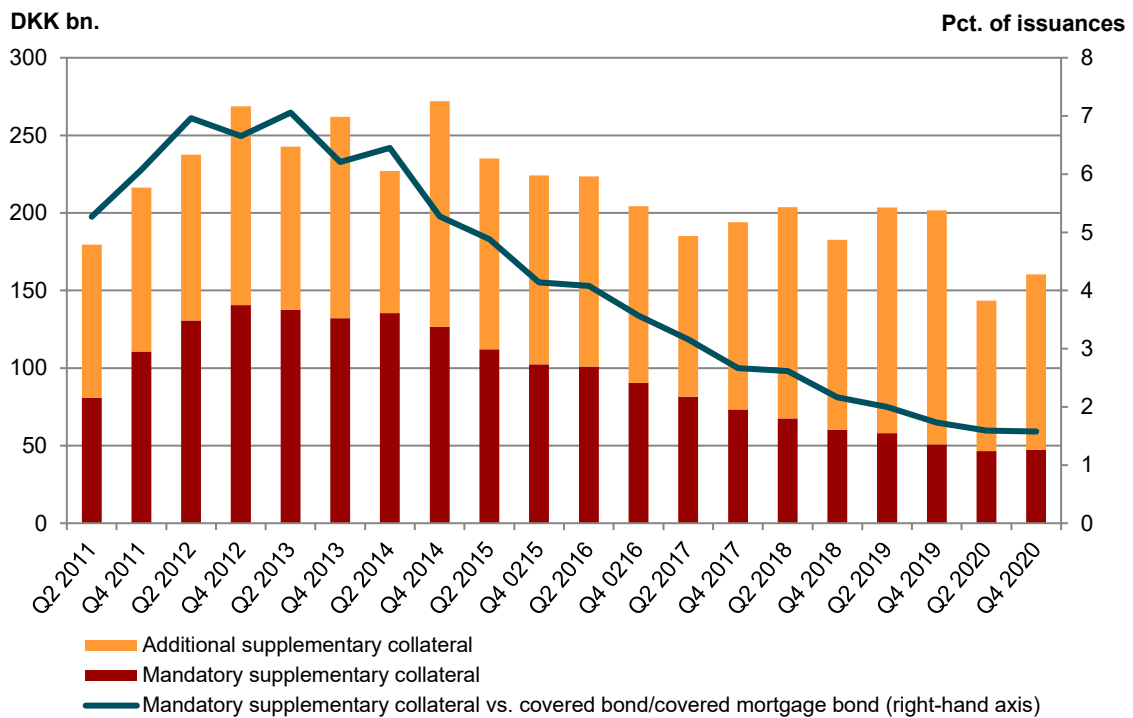
Source: <https://www.ejendomstorvet.dk/statistik/udbudsstatistik>

4. Supplementary collateral

The requirement for supplementary collateral under Danish covered bonds legislation obliges mortgage credit institutions issuing covered bonds and specially covered mortgage bonds to provide compensatory collateral to bond holders if property prices fall so much that the loan limit is exceeded. Conversely, a favourable economic climate with increasing property prices can reduce the need to post supplementary collateral for mortgage credit institutions when the level of lending is unchanged. Figure 18 shows that the statutory requirement for supplementary collateral has declined since late 2012 with signs of equalising in 2020.

Mortgage credit institutions typically have a capital adequacy ratio (CAR) in relation to the statutory requirement for supplementary collateral. Additional supplementary collateral for Q4 2020 amounted to DKK 113 bn, as opposed to DKK 151 bn for the same period the previous year.

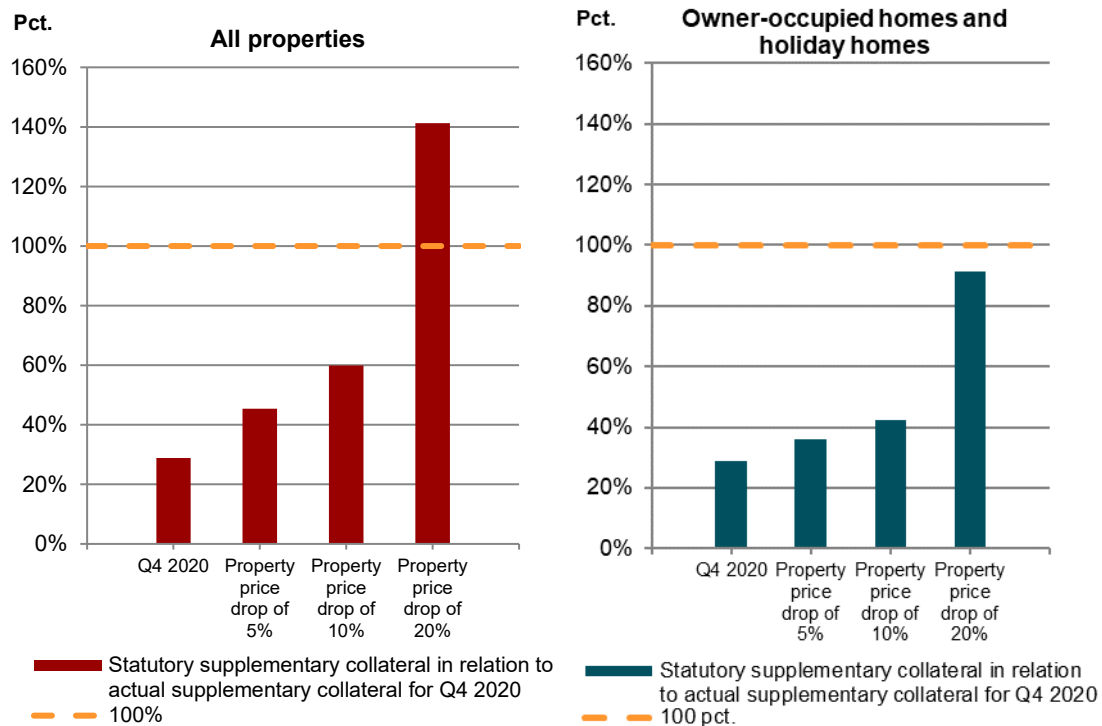
Figure 18: Supplementary collateral



Note: The decrease in supplementary collateral between 2019 and 2020 can be attributed to an adjusted and more accurate calculation method for one of the mortgage credit institutions.
Source: Reports to the FSA.

Mortgage credit institutions stress-test and annually assess the impact of a property price drop on their statutory supplementary collateral. Figure 19 shows the impact that a decrease in prices on owner-occupied homes and holiday homes of 5, 10 and 20 percent, respectively, is expected to have on the mortgage credit institutions' statutory requirement to provide supplementary collateral in relation to the actual supplementary collateral posted as at Q4 2020, when all other factors are retained. If the value is above 100 percent, the institutes as a whole need to obtain extra supplementary collateral in order to be able to withstand a given decrease in housing prices.

Figure 19: Mortgage credit institutions could face larger price decreases



Note: The figure shows the statutory obligation in relation to the additional collateral actually provided as at fourth quarter 2020 in the event of a decrease in property prices and a decrease in prices on owner-occupied homes and holiday home of 5, 10 and 20 percent, respectively, which are estimated by selected mortgage credit institutions.
 Source: Reports to the FSA.

At sector level, the selected mortgage credit institutions still expect to be able to absorb a property price drop of more than 10 percent with their most recently reported supplementary collateral, when all other factors are retained. A general property price drop of 20 percent will, on the other hand, entail that the statutory requirement for supplementary collateral will be greater than the mortgage credit institutions initially envisaged at the end of 2020, cf. figure 19.

Considering an isolated shock to the prices of owner-occupied homes and holiday homes, the mortgage banks expected in 2020 to be able to cope with a decrease in property prices of more than 20 percent with their most recently reported supplementary collateral when all other factors, incl. other property prices, being maintained.

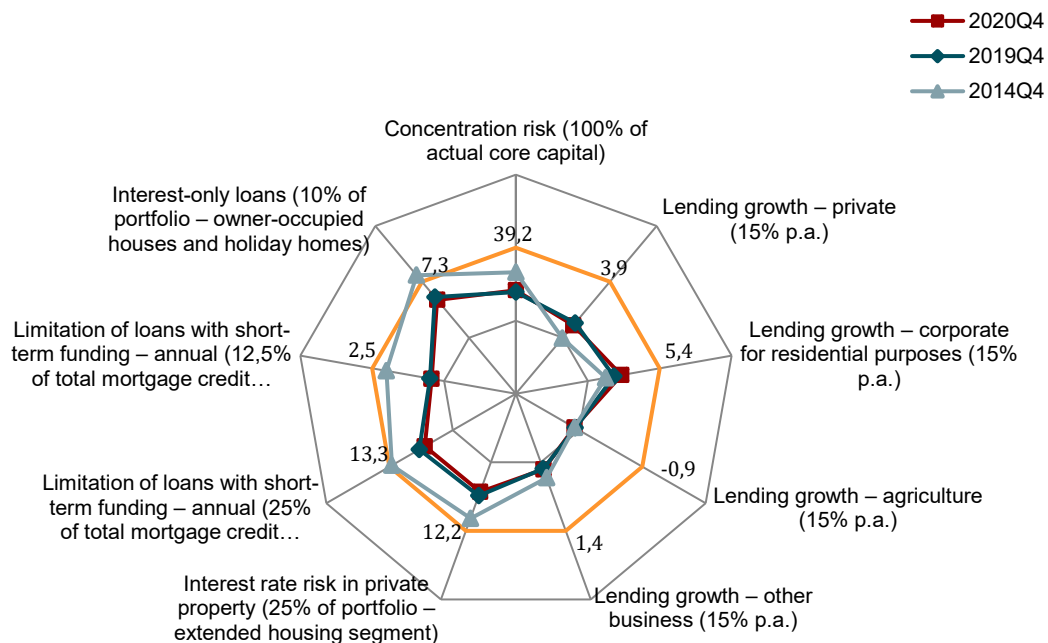
5. Supervision and regulation

The Supervisory Diamond

The Supervisory Diamond for mortgage credit institutions is a supervisory instrument designed to prevent excessive risk taking by individual mortgage credit institutions. It was introduced in 2014 with partial effect from 2018 and full effect from 2020. It contains five benchmarks, cf. box 3.

In the Q4 of 2020, the mortgage credit institutions were at sector level within all the benchmarks of the supervisory diamond, cf. figure 20¹³. Since 2014, mortgage credit institutions at sector level have moved further within the framework for the majority of benchmarks. Two mortgage credit institutions have received risk information since 2018, both as a result of exceeding the lending growth to businesses for residential purposes.

Figure 20: The Supervisory Diamond for the mortgage credit sector



Note: The figure shows where mortgage credit institutions were placed at sector level in 2014, 2019 and 2020 (grey, blue and red lines), in relation to the benchmarks in the Supervisory Diamond (yellow line). The benchmark for lending growth and loans with short-term funding is divided into subcategories. The values in the figure belong to the red line – Q4 2020.

Source: Reports to the FSA.

¹³Sector level is calculated as all mortgage credit institutions combined.

Box 3: Supervisory diamond benchmarks

The supervisory diamond for mortgage credit institutions contains five benchmarks which indicate what the FSA considers a mortgage credit institution with an elevated risk.

1. Lending growth

Loans issued by mortgage credit institutions cannot increase by more than 15% per year in four areas since doing so may be at the cost of credit quality.

2. Debtor's interest rate risk

The proportion of variable rate loans with a fixed-interest term of up to two years and which exceed 75% of the property's value must be less than 25% of the total lending. This limits the amount of risky loans. The benchmark applies only to loans to private persons and tenanted residential properties.

3. Restriction of interest-only loans for private individuals

The proportion of interest-only loans which exceeds 75% of the value of the property must be less than 10% of total the total lending. This limits the credit risk for mortgage credit institutions.

4. Limitation of loans with short-term funding

Mortgage credit institutions cannot refinance more than 25% of their total lending portfolio each year, and no more than 12.5% per quarter. This limits the risk of debt at extraordinarily high interest rates being issued on refinancing.

5. Concentration risk

The sum of the 20 biggest net exposures must be lower than the institution's actual core capital. This reduces the risks associated with having a significant portion of lending distributed across a few large customers.

Mortgages with an interest-only period of up to 30 years

The FSA has examined the mortgage credit institutions' offers of mortgage loans with the option of an interest-only period of up to 30 years and variable interest rates, cf. box 4¹⁴.

The FSA assesses that the special characteristics of loans with an interest-only period of up to 30 years sharpen the need for guidance of borrowers. The study has thus led to a number of recommendations for the mortgage credit institutions' handling of the loans, cf. box 4.

Increased spread of interest-only mortgages can increase household indebtedness vulnerability to negative financial shocks. The FSA is therefore particularly aware of the prevalence, the more detailed characteristics and the customer segment that is offered loans with an interest-only period of up to 30 years.

¹⁴ The loan is now offered with both fixed and variable interest rates.

Box 4: Study of mortgages with an interest-only period of up to 30 years

In 2020/2021, the FSA has examined mortgages with an interest-only period of up to 30 years and with variable interest rates with the four largest providers of mortgage loans.

The FSA observed that the loans are generally granted with the following characteristics:

- Variable interest rate (subsequently it became possible to get a fixed interest rate)
- Maturity of 30 years
- Maximum loan-to-value ratio between 60 and 75 percent.
- Possibility of an interest-only period of up to 30 years, subject to a specified maximum loan-to-value ratio (up to 60 percent) on the forbearance part
- Possibility of outstanding debt at the expiry of the loan of up to 60 percent of the value of the property
- Under certain conditions, it is possible to terminate the term of the forbearance period on the part of the lender (for three out of four mortgage credit institutions)
- As a starting point, there is no access to post-financing in the mortgage credit institution/group.

The institutions informed the FSA that they limit the loan option to a narrow clientele, which are primarily consumers with experience in mortgage lending, and who have a significant equity in their property.

The FSA assesses that the product is suitable only for a limited customer segment and should be offered only to financially strong customers. The FSA has also noted that three institutions have a special condition which allows them to change the characteristics of the loan. Here, the institutions have access in certain cases to terminate the agreed interest-only period and demand repayment on the loan. It is an intrusive condition, and it is unusual in that the risk of a decrease in the value of the mortgage is passed on to the borrower. The FSA assesses that it places very high demands on the assessment of the borrower's financial situation - both when borrowing and 30 years ahead.

The FSA finds that good practice dictates that the institutions handle loans with interest-only periods of up to 30 years in the following way:

- The departments must have an instruction or similar to employees on guidance for loans with long interest-only periods.
- The borrower should be informed as early as possible when the mortgage credit institution finds that the loan-to-value ratio is developing in a negative direction.
- Reduced access to post-financing with a mortgage on the home should be highlighted and clarified to the borrower.
- It should not be possible for the borrower to opt out of guidance in connection with taking out a loan with a long interest-only period.

Status of best practice reports – addressing risky loans

The Executive Order on Best Practice for Mortgage Credit contains rules that restrict the possibilities of granting risky loans to consumers with high debt. The guidelines for the Executive Order define a number of loans as risky, cf. box 5. As a rule, credit institutions should not provide risky loans to high-debt customers.

Box 5: Best practice for risky loans

New rules on best practice for housing loans came into force on 1 January 2018. As a rule, they instructed the credit institutions not to grant risky housing loans if the borrower has a debt factor (debt to income) above 4 and a loan-to-value ratio of more than 60 percent.

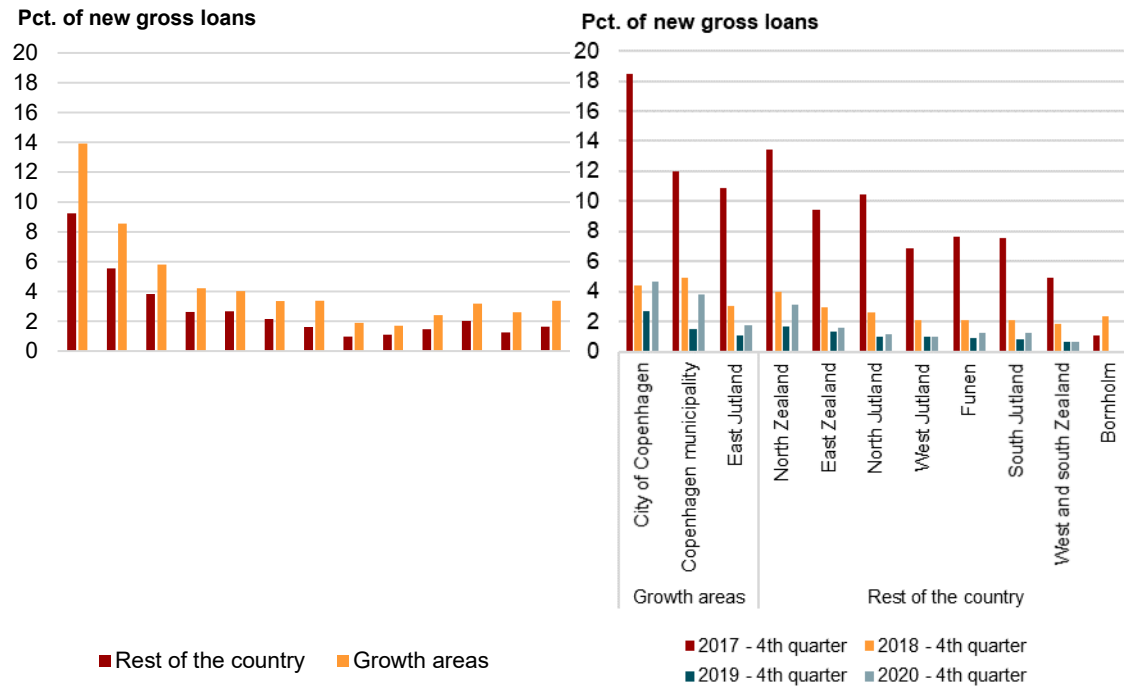
According to the guidelines for the rule, the following loans are considered risky:

- Loan with a variable-interest rate with a fixed-interest period of less than five years, with or without installments
- Loan with interest-only and variable-interest rate with a fixed-interest period of five years or more.

The objective of the new guidelines is to protect households with high debt so that they are able to withstand interest rate increases without getting into financial problems. Concurrently with publication of the new guidelines, the Minister for Industry, Business and Financial Affairs asked the FSA to monitor trends in risky loan types.

After a prolonged decline, the FSA observed an increase in the share of risky new mortgage loans in 2020. In growth areas, the share increased to 3.4 percent in the fourth quarter of 2020 against 1.7 percent in the fourth quarter of 2019, cf. figure 21. Outside growth areas, the share increased from 1.1 percent to 1.6 percent, which could mainly be attributed to an increase for North Zealand. The FSA assesses that the increase was due to permitted exceptions and not non-compliance with the guidelines. The FSA follows developments closely and is in constant dialogue with the institutions that are experiencing an increasing share of risky new loans.

Figure 21: Proportion of risky new mortgage loans



Note: New gross loan is calculated in accordance with the guidelines on mortgage loans for customers with a high debt factor: <https://www.finanstilsynet.dk/Ansoeg-og-Indberet/Indberetning-for-finansielle-virksomheder/System/KGFS>.

Source: Reports to the FSA.

6. Annex 1: Financial statements of mortgage credit institutions 2016 – 2020

<i>Mil. DKK.</i>	2016	2017	2018	2019	2020	Pct. change 2019-2020	Pct. change 2016-2020
Income statement							
Interest income	78.223	73.150	69.524	67.766	60.750	-10,4%	-22,3%
Interest fees	54.625	49.236	46.251	43.790	37.113	-15,2%	-32,1%
Net interest income	23.599	23.914	23.274	23.975	23.637	-1,4%	0,2%
Dividends from assets, etc.	173	177	252	217	58	-73,1%	-66,3%
Fee and commission income	3.013	2.973	2.833	4.409	3.605	-18,2%	19,6%
Fee expenses and commission	5.542	6.197	6.380	8.946	8.100	-9,5%	46,2%
Net interest and fee income	21.243	20.866	19.980	19.656	19.200	-2,3%	-9,6%
Expenses for staff and administration	5.876	5.561	5.373	5.077	5.775	13,7%	-1,7%
Other operating income	1.126	1.239	1.995	3.074	2.133	-30,6%	89,4%
Other operating expenses	266	202	162	204	177	-13,2%	-33,5%
Amortisation and impairments of intangible and tangible assets	176	237	99	284	256	-9,9%	45,6%
Core earnings	16.052	16.106	16.340	17.165	15.125	-11,9%	-5,8%
Value adjustments	805	870	-916	1.562	1.218	-22,0%	51,2%
Loan impairments and receivables, etc.	1.209	874	905	996	3.077	208,9%	154,5%
Profit from investments in associates	3.206	5.134	3.933	3.987	3.953	-0,9%	23,3%
Profits before tax	18.853	21.236	18.453	21.717	17.219	-20,7%	-8,7%
Tax	3.359	3.417	2.980	3.317	2.641	-20,4%	-21,4%
Net profit for the year	15.494	17.820	15.473	18.400	14.578	-20,8%	-5,9%

Note: The figures are based on the institutions that existed in the individual years. The table shows selected items. In 2020, the mortgage credit sector consisted of Nykredit Realkredit, Realkredit Danmark, Totalkredit, Jyske Realkredit, DLR Kredit, LR Realkredit and Nordea Kredit. In the profits from investments and equity, Totalkredit is a double entry due to it being part of the Nykredit Group. The profits from investments can mainly be attributed to subsidiaries in Nykredit Realkredit: Totalkredit and Nykredit Bank. Subsidiaries are included with their net earnings. This means that, in the part of the result attributable to Totalkredit, administration margin income and expenditure with banks are included in connection with distribution and administration for the mortgage credit institution. In Nykredit Bank, the net result is also affected by the mortgage credit business and customer relations, e.g. value adjustments of interest rate swap agreements entered into to hedge customers' interest rate risk.

Source: Reports to the FSA.

7. Annex 2: Balance sheet of mortgage credit institutions 2016 – 2020

<i>Mil. DKK.</i>	2016	2017	2018	2019	2020	Pct. change 2019-2020	Pct. change 2016-2020
Balance sheet items							
Cash in hand and demand deposits with central banks	853	898	809	295	347	17,6%	-59,3%
Receivables from credit institutions and central banks	793.107	851.461	844.379	1.099.373	1.045.844	-4,9%	31,9%
Loans	2.720.556	2.819.304	2.883.600	2.991.737	3.097.717	3,5%	13,9%
Loans excl. Repos	2.720.556	2.819.304	2.883.600	2.991.737	3.097.717	3,5%	13,9%
Bonds	204.058	205.372	167.003	211.208	193.270	-8,5%	-5,3%
Shares etc.	5.630	6.095	6.961	6.716	6.565	-2,2%	16,6%
Equity investments in associates	161	162	54	49	45	-8,2%	-72,0%
Equity investments in affiliates	39.303	47.360	49.851	59.260	62.844	6,0%	59,9%
Assets linked to pool schemes	-	-	-	-	-	-	-
Intangible assets	202	201	257	307	354	15,3%	75,2%
Land and buildings	523	545	141	795	684	-14,0%	30,8%
Other property, plant and equipment	166	112	113	159	190	19,5%	14,5%
Tax assets	172	605	387	273	90	-67,0%	-47,7%
Assets held temporarily	1	721	667	208	145	-30,3%	13057,9%
Other assets	14.976	12.594	10.174	12.379	10.230	-17,4%	-31,7%
Accruals and deferred income	273	334	424	464	476	2,6%	74,4%
Total assets	3.781.081	3.945.763	3.964.820	4.383.223	4.418.800	0,8%	16,9%
Debts to credit institutions and central banks	676.904	711.303	727.340	857.165	887.332	3,5%	31,1%
Deposits	-	-	10.500	11.950	7.200	-39,7%	-
Deposits excl. repos	-	-	-	-	-	-	-
Issued bonds	2.859.033	2.971.770	2.970.099	3.248.851	3.249.950	0,0%	13,7%
Other liabilities	-	8.501	3	3	1.137	37800,0%	-
Accruals and deferred income	45	39	26	36	36	0,0%	-20,0%
Total debt	3.569.879	3.720.646	3.734.095	4.142.826	4.168.794	0,6%	16,8%
Provisions	508	674	513	745	382	-48,7%	-24,8%
Subordinated debt	19.278	15.792	15.861	16.516	17.946	8,7%	-6,9%
Equity	191.416	208.651	214.350	223.136	231.678	3,8%	21,0%
Total liabilities	3.781.081	3.945.763	3.964.820	4.383.223	4.418.800	0,8%	16,9%

Note: The figures are based on the institutions that existed in the individual years. The table shows selected items. In 2020, the mortgage credit sector consisted of Nykredit Realkredit, Realkredit Danmark, Totalkredit, Jyske Realkredit, DLR Kredit, LR Realkredit and Nordea Kredit.

Source: Reports to the FSA.

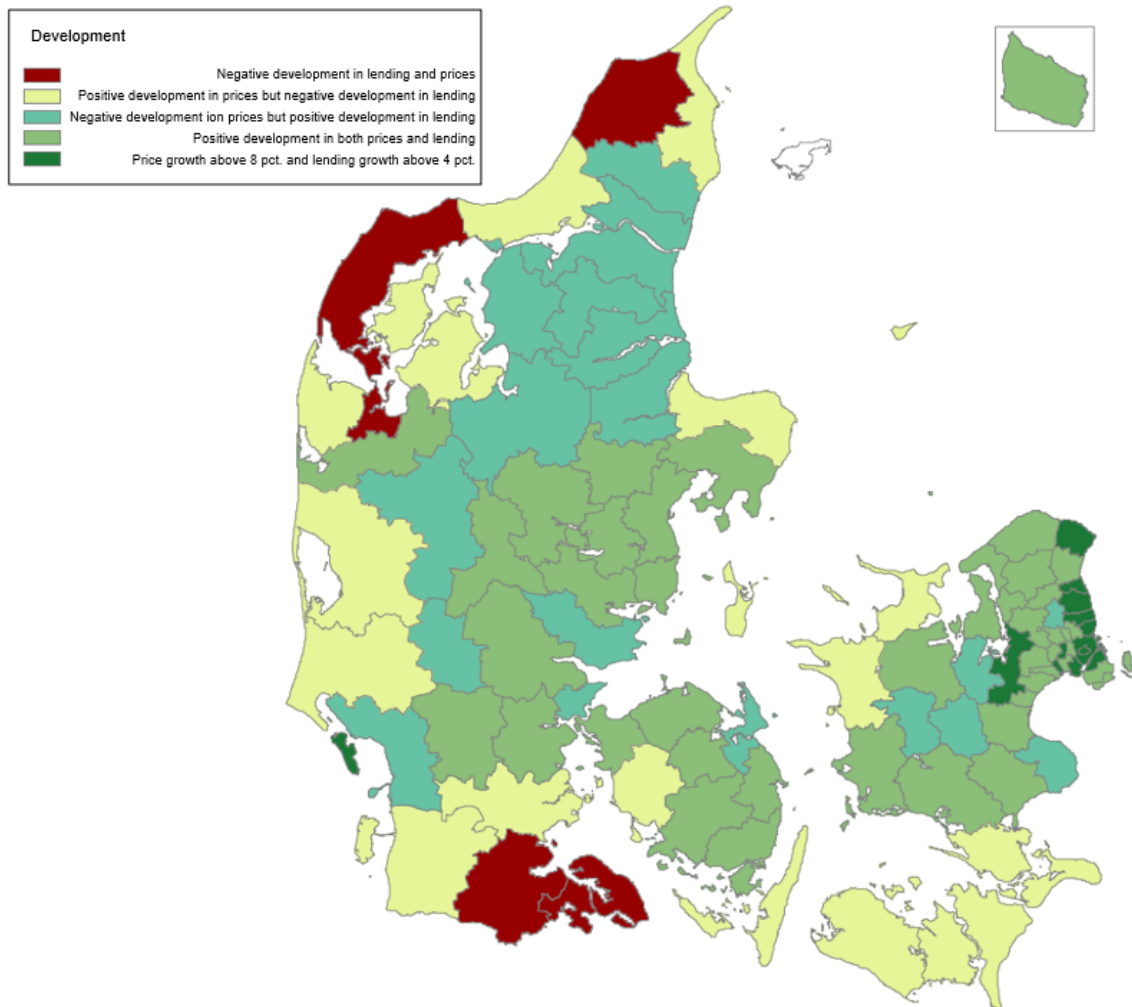
1. Annex 2: Mortgage credit institutions, financial ratios 2016 – 2020

	2016	2017	2018	2019	2020
Capital ratio	23.57	23.46	23.66	22.87	23.02
Tier 1 capital ratio	21.75	21.64	21.92	21.09	21.04
Actual tier 1 capital ratio	20.72	20.80	21.09	20.31	20.31
Return on equity before tax	9.85	10.18	8.61	9.73	7.43
Return on equity after tax	8.09	8.54	7.22	8.25	6.29
Profit per unit of costs (DKK)	3.35	4.08	4.16	4.19	2.87
Accumulated impairment rate	0.43	0.38	0.36	0.34	0.40
Impairment rate for the period	0.04	0.03	0.04	0.04	0.10
Loans in relation to equity (ratio)	14.21	13.51	13.45	13.41	13.37
Overall risk exposures (DKK bn)	864	909	929	1,003	1.057

Note: The table shows selected items. The figures are based on the institutions that existed in the individual years.
Source: Reports to the FSA.

2. Annex 3: Lending and price growth for owner-occupied homes, map of Denmark

Figure 22: Lending and price growth for owner-occupied homes, map of Denmark



Note: The figure shows the development in square metre prices for detached and terraced houses from the fourth quarter of 2019 to the fourth quarter of 2020 and the mortgage credit institution's lending growth for owner-occupied homes in 2020. Observations from Læsø Municipality are missing.

Source: Notifications to the FSA, Finance Denmark's housing market statistics.

3. Annex 4: Example of how an institution can increase credit risks without changing the overall customer portfolio?

A bank and mortgage credit institution have a total of eight equally large customers, four each. The risk linked to each customer is rated 1 (low) to 4 (high), with the mortgage credit institution's customers being less risky than the bank's. The average of the risk values indicates the overall risk for the institutions.

Before transferring loans:

- The mortgage credit institutions exclusively had customers with low risk values of 1-2.
- The bank exclusively had customers with high risk values of 2-4.

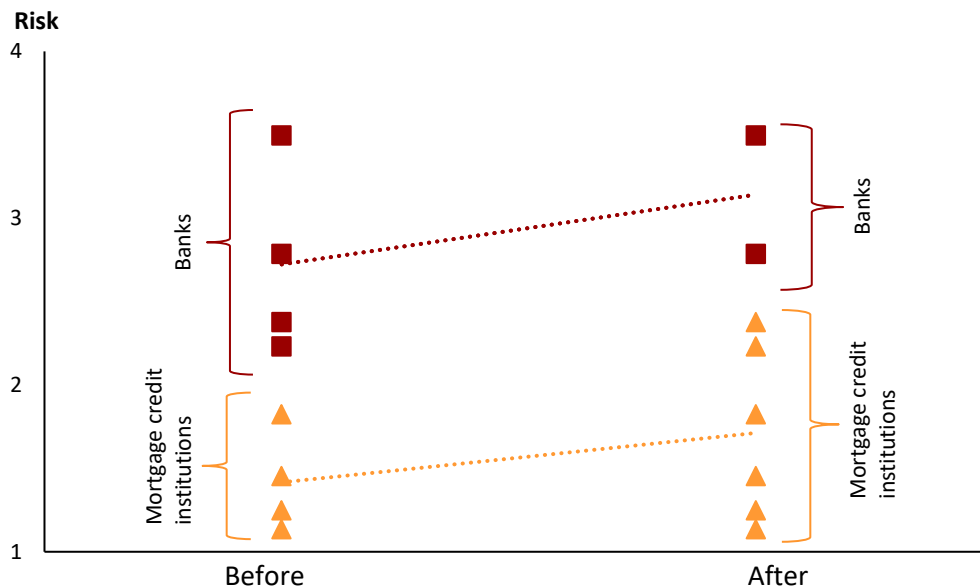
Transferring the loans:

- The bank moves its two least risky customers over to the mortgage credit institution.

After transfer of the loans:

- The mortgage credit institution's overall risk rises because the bank's best customers are, on average, not as good as the average level of the mortgage credit institution's original customers.
- The overall risk for the bank rises, as it has lost two of its best customers.

Figure 23: Example of transferring loans



Note: The first column indicates the scenario before transferring the loan and the second shows the scenario afterwards. Bank customers are marked by red squares, mortgage credit institution customers by yellow triangles. The second column shows the two most risky bank customers transferred to the mortgage credit institution (two squares have become triangles). The dotted lines show the general (average) risk for the bank and mortgage credit institution in each scenario.

Source: The Danish Financial Supervisory Authority