

Mortgage-credit institutions

Market developments 2014

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Market developments for mortgage-credit institutions in 2014

1. Summary

In 2014, mortgage-credit institutions generated profits before tax of DKK 9.5 bn. against profits of DKK 8.2 bn. in 2013. Most of this improvement is attributable to increased net interest income. In 2014, net interest income amounted to DKK 22.3 bn. against DKK 21 bn. in 2013, corresponding to an increase of 6.1%. The increase was mainly due to higher administration margins.

Results were pushed further in a positive direction as a consequence of lower commission expenses, which were DKK 2.1 bn. in 2014 compared with DKK 2.4 bn. in 2013.

Profits from equity investments for subsidiary undertakings moved profits downwards with losses of DKK 0.4 bn. in 2014 compared with profits in 2013 of DKK 0.7 bn. Value adjustments also developed negatively in relation to the previous year.

The annual impairment loss ratio for mortgage-credit institutions was 0.19% in 2014. This is unchanged compared with the previous year. Arrears are also at the same level as the previous year.

Core earnings of mortgage-credit institutions in relation to lending rose from 0.5% in 2013 to 0.6% in 2014.

Overall, mortgage-credit institutions have excess capital proportionate to the current capital requirements. With their level of own funds at the end of 2014, all institutions are in a position to comply with the fully phased-in capital requirements laid down by CRR and CRD IV. For some institutions, the excess capital buffers will be limited, however, which makes it necessary to increase own funds up to 2019. Furthermore, mortgage-credit institutions must also take into account a future debt buffer requirement, as well as requirements from credit ratings agencies in relation to the credit rating of bonds.

At the end of 2014, the Danish FSA introduced a supervisory diamond for mortgage-credit institutions. The mortgage-credit diamond includes five indicators which address a number of very important risks, including limits for floating-rate loans and non-repayment loans. The purpose of the diamond is to create a more robust mortgage-credit sector. In order to adjust to the new indicators and the associated limit values, the supervisory diamond is being phased in over a number of years and it will be implemented for the first indicators from 2018.

The very low interest rates in recent years have raised the matter of negative interest rates in connection with mortgage-credit issuances and mortgage-credit loans. A forward-looking model for managing risk with negative interest rates must comply with the balance principle. This means that a negative interest-rate scenario must not impose an interest-rate risk or liquidity risk on mortgage-credit institutions for their lending activities. On 5

February 2015, the Danish Minister for Business and Growth set up a working group tasked to analyse this matter and make suggestions for any adjustments to existing legislation. The report by the working group was published on 28 April 2015.

2. Main trends in the financial statements of mortgage-credit institutions

In 2014, mortgage-credit institutions generated net profits after tax of DKK 7.1 bn., see table 1. This is an increase of DKK 0.7 bn. compared with 2013 and corresponds to an increase of 11%. The progress was particularly triggered by increased net interest income as well as positive developments in net fee and commission income. However, lower impairment charges and staff costs also contributed to the positive results. Conversely, value adjustments and profits from equity investments contributed negatively to net profits/losses for 2014.

Table 1: Financial statements of mortgage-credit institutions 2010-2014

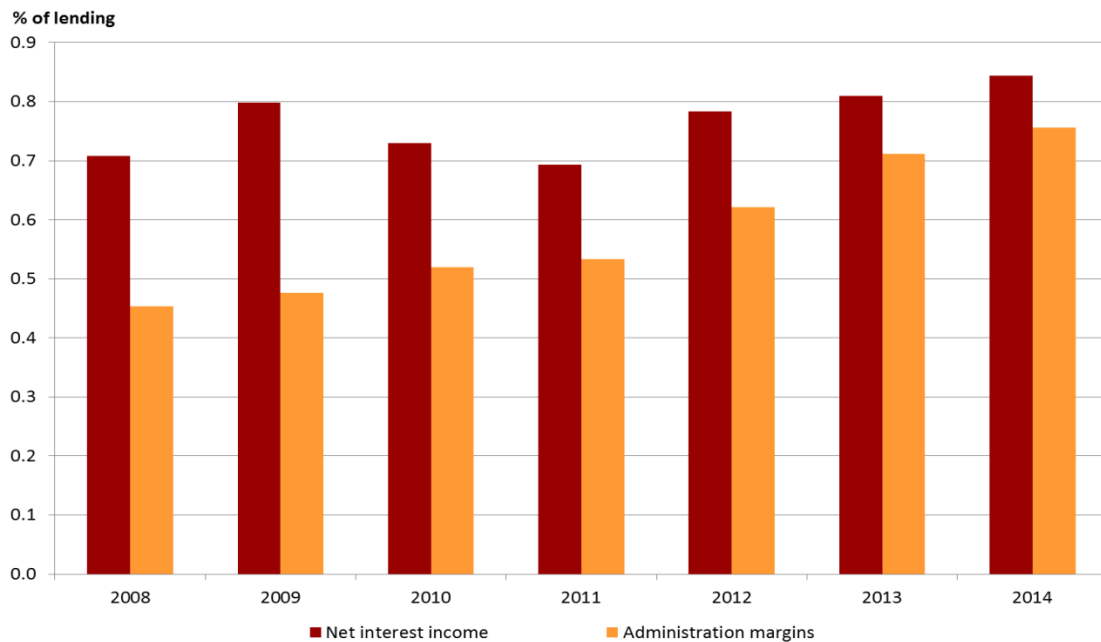
DKK mill.	2010	2011	2012	2013	2014	Change	
						2010-2014	2013-2014
Income statement items (extract)							
Net interest income	17,589	17,353	20,273	20,974	22,259	4.8%	6.1%
Dividends from shares etc.	69	74	115	240	74	1.4%	-69.2%
Net fee and commission income	-1,526	-1,884	-1,636	-2,374	-2,086	-6.5%	12.1%
Net interest and fee and commission income	16,133	15,543	18,752	18,839	20,247	4.6%	7.5%
Value adjustments	-1,222	-2,761	-952	-620	-746	9.4%	-20.3%
Staff and administrative expenses	5,064	5,131	4,860	5,008	4,780	-1.1%	-4.6%
Impairments on loans etc.	2,431	2,841	3,922	4,811	4,707	14.1%	-2.2%
Income from associates and group undertakings	2,640	650	668	685	-374	*	*
Profit before tax	9,542	4,812	9,002	8,190	9,450	-0.2%	15.4%
Tax	1,714	884	1,998	1,758	2,307	6.1%	31.2%
Net profit for the year	7,827	3,929	7,004	6,433	7,143	-1.8%	11.0%
Balance sheet items (extract)							
Due from credit institutions	585,169	623,011	677,770	714,365	781,905	6.0%	9.5%
Lending	2,409,608	2,501,477	2,587,598	2,589,292	2,636,353	1.8%	1.8%
Bonds	175,771	188,376	177,186	195,020	234,826	6.0%	20.4%
Shares etc.	5,705	4,265	4,120	3,831	4,379	-5.2%	14.3%
Due to credit institutions	633,018	663,536	660,380	669,549	698,974	2.0%	4.4%
Issued bonds	2,362,252	2,473,733	2,609,150	2,664,798	2,782,031	3.3%	4.4%
Subordinated debt	23,294	23,954	19,392	16,914	16,505	-6.7%	-2.4%
Equity	146,719	150,429	158,140	162,521	168,483	2.8%	3.7%
Balance sheet total	3,239,355	3,387,676	3,512,976	3,565,792	3,718,335	2.8%	4.3%

Note: In 2014, the mortgage-credit sector comprised Nykredit Realkredit, Realkredit Danmark, Totalkredit, BRFkredit, DLR Kredit, LR Realkredit and Nordea Kredit. Totalkredit is included twice in the income from associates and group undertakings and equity as it is part of the Nykredit group.

Source: Reports to the Danish FSA.

The net interest income of mortgage-credit institutions rose from DKK 21 bn. in 2013 to DKK 22.3 bn. in 2014, corresponding to an increase of 6.1%. Total net interest income as a percentage of lending was 0.84% in 2014, which is slightly higher than the 2013 figure of 0.81%, see figure 1. This is the highest percentage compared with lending since 2008.

Figure 1: Development in net interest income and administration margins, 2008-2014



Source: Reports to the Danish FSA

The increase in net interest income is attributable in particular to increased administration margins. In 2014, the administration margins of mortgage-credit institutions came to DKK 19.9 bn. against DKK 18.4 bn. in the previous year, corresponding to an increase of 8.2%. Among other things, this is due to increasing lending. Seen in relation to lending, the administration margins have been increasing since 2008, and in 2014, the administration margins was 0.76% against 0.71% in 2013. The increasing administration margins have compensated for the lower impacts of other income.

Mortgage-credit institutions are net payers of commissions, as customers often take out mortgage-credit loans through banks, and these carry out much of the administration for mortgage-credit institutions. In 2014, mortgage-credit institutions paid net fee expenses of DKK 2.1 bn. against DKK 2.4 bn. in 2013. The falling net fee expenses are primarily attributable to an increase in fee and commission income (loan conversions etc.).

Overall, net interest and fee and commission income came to DKK 20.2 bn. in 2014 against DKK 18.8 bn. in 2013, corresponding to an increase of 7.5%.

In 2014, value adjustments constituted a loss of DKK 0.7 bn. against a loss of DKK 0.6 bn. in the previous year. Among other things, this fall is attributable to losses on currency and interest-rate contracts etc. as well as on derivative financial instruments. In contrast,

mortgage-credit institutions yielded capital gains on their bonds portfolios and these have offset some of the fall.

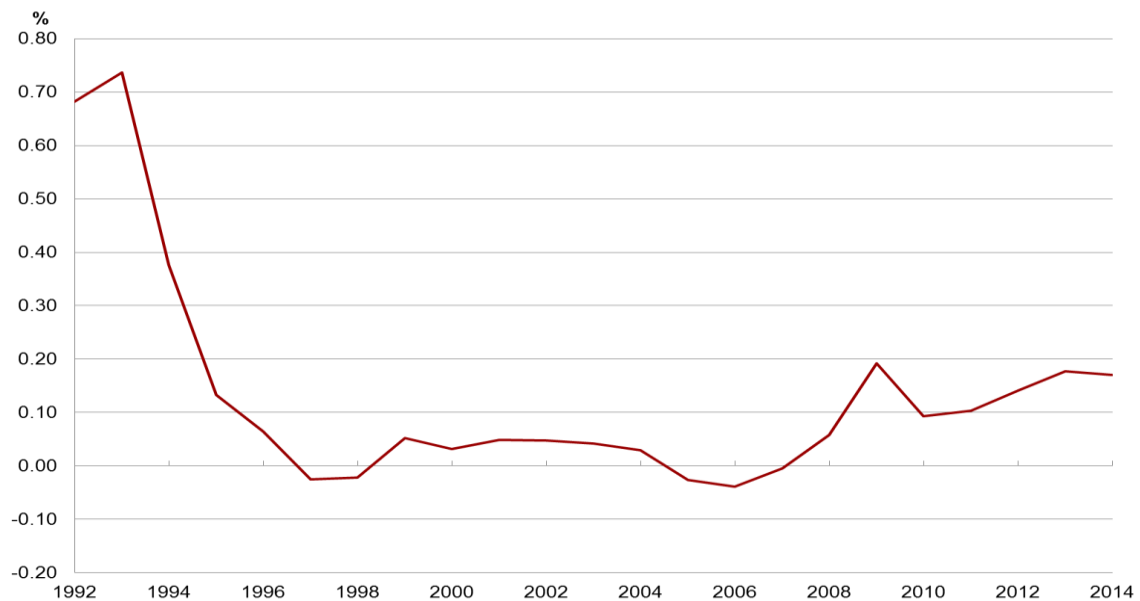
Income from associates and group undertakings contributed negatively with DKK 0.4 bn. in 2014 against a positive result of DKK 0.7 bn. in 2013. The negative result derives particularly from two institutions where the income from associates and group undertakings contributed negatively (see Appendix 2).

Lending by mortgage-credit institutions amounted to DKK 2,636 bn. in 2014 against DKK 2,589 bn. in 2013. This is an increase of 1.8%. Loans for owner-occupied residences and recreational properties came to 56.3%, whilst corporate segments came to 43.7%.

Impairment charges

Impairment on loans by mortgage-credit institutions amounted to DKK 4.7 bn. in 2014, which is a decrease of 2.2% compared with the previous year, see figure 2. The annual impairment loss ratio (annual impairment losses charged as a % of lending) was 0.19% in 2014 and thus unchanged compared with the previous year. In a historical perspective, the impairment loss ratio of mortgage-credit institutions continues to be low. For comparison, in the early 1990s, the annual impairment loss ratio was around 0.7%.

Figure 2: Annual impairment loss ratio of mortgage-credit institutions, 1992-2014

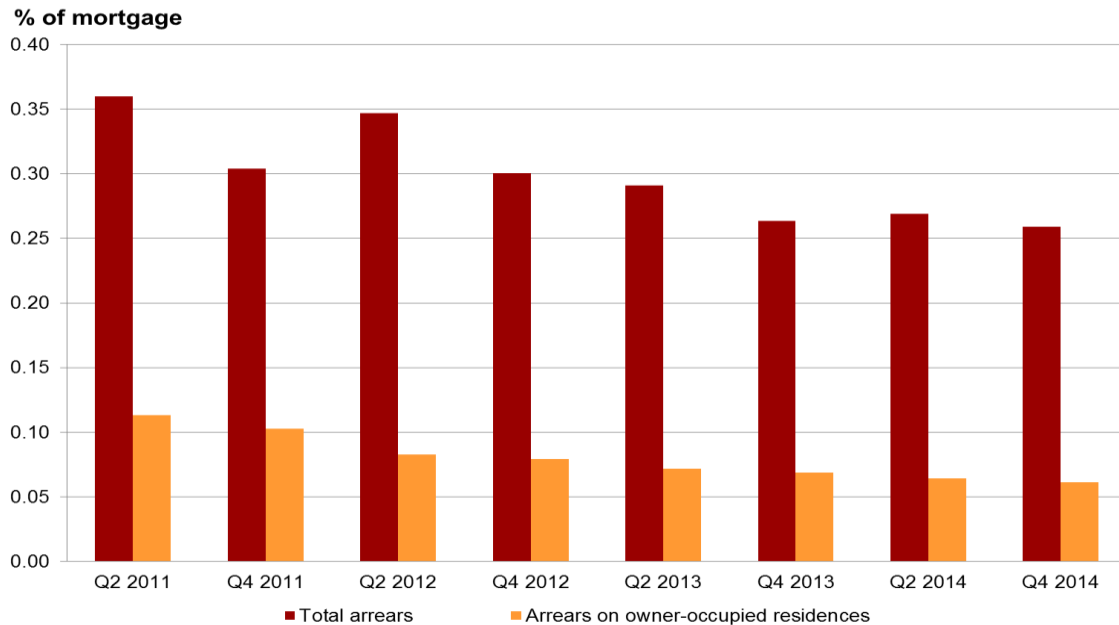


Source: Annual reports and statements to the Danish FSA

Arrears

The extent of arrears (i.e. repayments not paid in due time) was 0.26% of the overall mortgage payments in Q4 2014, see figure 3. This is somewhat lower than in Q2 2014 and unchanged compared with Q4 2013.

Figure 3: Developments in the arrears of mortgage-credit institutions in relation to mortgage payments, 2011-2014



Note: Arrears are calculated as the sum of arrears of 3½ months, 6½ months and 12½ months.

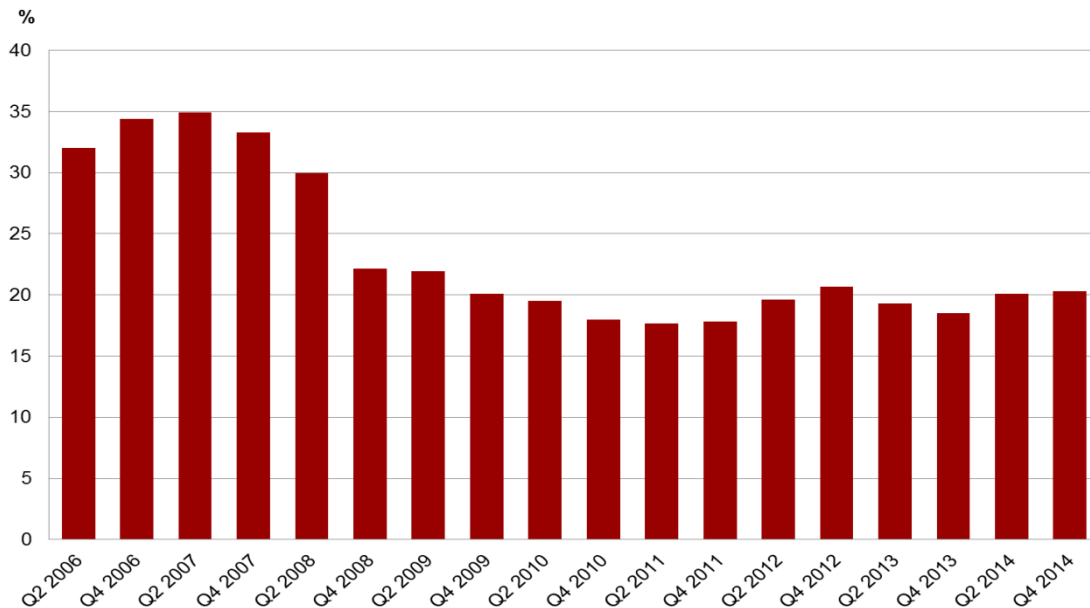
Source: Reports to the Danish FSA

Coverage ratio

Coverage ratio is a measurement of the extent of impairment losses on bad loans. The financial ratio is calculated as total accumulated impairment losses (on individually assessed loans) in relation to the part of the loan portfolio which has been subject to impairment. The larger the coverage ratio, the greater the coverage in the form of impairment charges on the bad loans.

At the end of 2014, mortgage-credit institutions had a coverage ratio of 20.3% against 18.5% at the end of 2013, see figure 4. Since the 2008 financial crisis, when both impairment charges and lending subject to impairment were rising, the coverage ratio of mortgage-credit institutions has been fairly stable at around 20% compared with a higher level in the years before the crisis.

Figure 4: Coverage ratio for mortgage-credit institutions, 2006-2014



Source: Reports to the Danish FSA

Selected financial ratios

In 2014, the total capital ratio of mortgage-credit institutions was 20.8%, see table 2. This is an increase of 1.2 percentage points compared with end-2013. During the same period, the Tier 1 capital ratio increased from 19.1% to 20%, whereas the Common Equity Tier 1 ratio increased from 18.3% at the end of 2013 to 19% at the end of 2014.

Table 2: Selected financial ratios

%	2010	2011	2012	2013	2014
Ratio of operating income to operating expenses (DKK)	2.17	1.55	1.94	1.76	1.97
Return on equity before tax	6.69	3.25	5.84	5.09	5.72
Total capital ratio	19.95	18.87	19.36	19.55	20.77
Tier 1 capital ratio	19.59	18.52	18.92	19.13	19.95
Common Equity Tier 1 ratio	17.53	16.64	17.75	18.34	19.02

Source: Reports to the Danish FSA

Note that lending increased more than capital in the period 2010-2014. However, the increase in the total risk exposure is limited and capital ratios increased for the whole period (see also Appendix 3).

Mortgage-credit institutions' ratio of operating income to operating expenses (i.e. total DKK earned for each DKK spent) increased from DKK 1.76 at the end of 2013 to DKK 1.97 at the end of 2014.

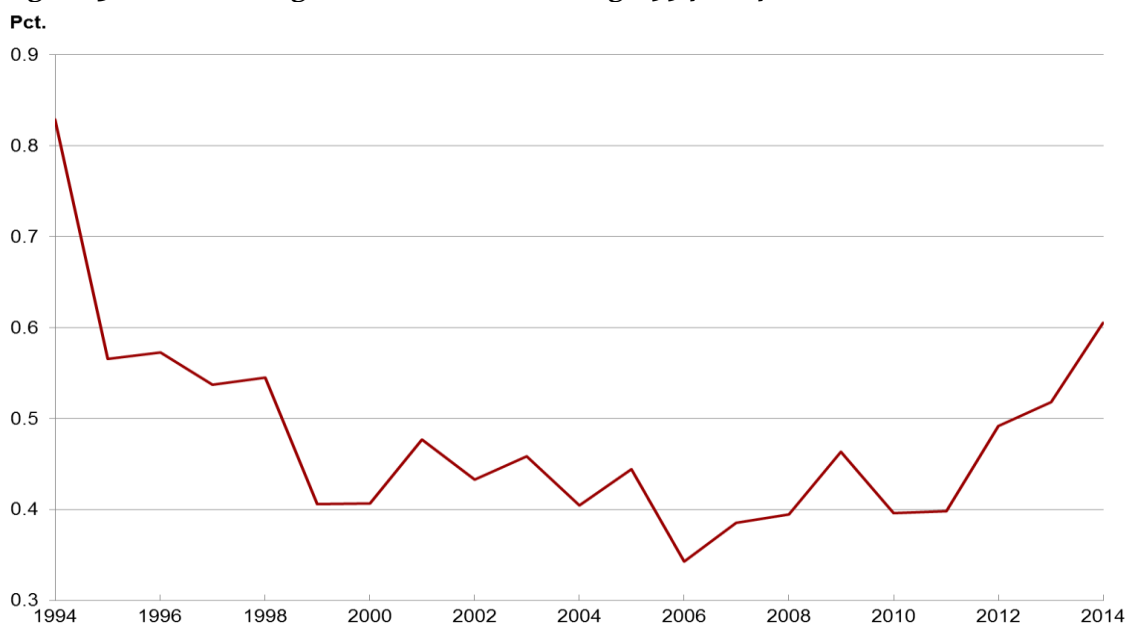
Core earnings

Core earnings are the mortgage-credit institutions' profits/losses before impairment losses, market value adjustments, and profits/losses on participating interests. Core earnings should be able to cover the expected losses on lending activities, such that only large unexpected losses need to be absorbed by equity.

Compared with banks, mortgage-credit institutions generally have lower core earnings in relation to lending. This is because, historically, credit losses for mortgage-credit institutions have been lower than credit losses for banks. Over the past 20 years, impairment charges by mortgage-credit institutions have on average been at 0.08% of total lending, against 0.6% for banks in the same period.

Figure 5 shows a simple average of the core earnings of mortgage-credit institutions over the past 20 years measured in relation to lending. From 2011 and onwards, core earnings as a percentage of lending have increased and in 2014 they increased to 0.6% from 0.5% in 2013. Core earnings in relation to lending fell during the 1990s, while they remained stable at between 0.3-0.5% from the start of 2000 up to 2011.

Figure 5: Core earnings in relation to lending, 1994-2014



Note: Core earnings contain all income-statement items except impairments on loans, market value adjustments and profits/losses on participating interests. In the 1990s, LR Realkredit had very high core earnings in relation to lending and is not included in the average.

Source: Reports to the Danish FSA

3. Capitalisation and capital in excess

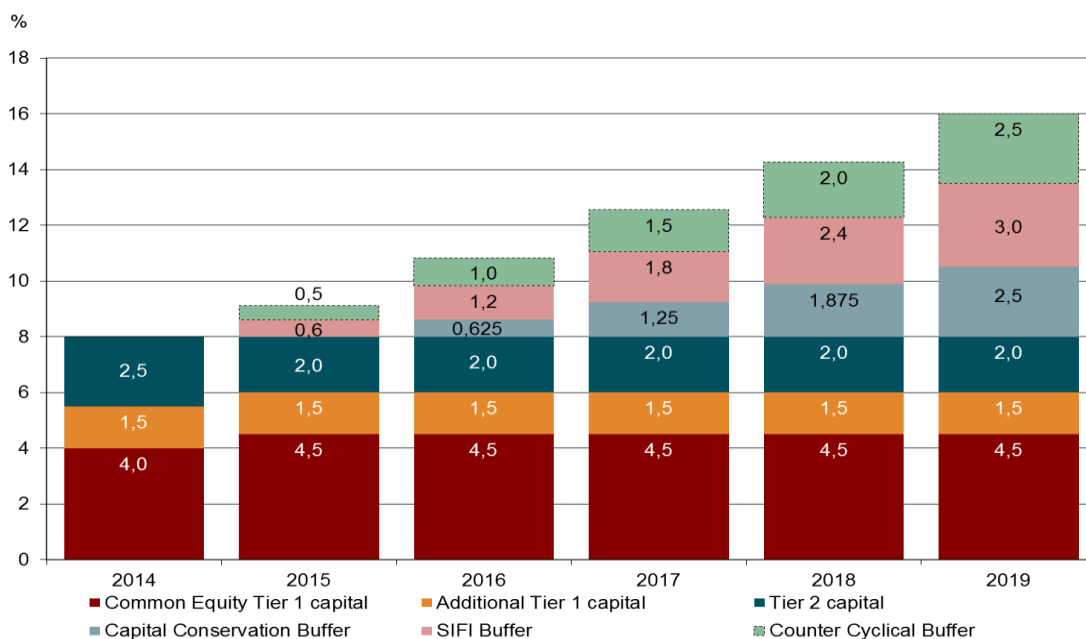
With the transition to CRR and implementation of CRD IV in Danish legislation, new capital requirements were introduced for Danish credit institutions, including mortgage-credit institutions. The requirements include stricter requirements on both the quality of institutions' capital and on their total own funds.

The transition to CRR tightened the requirements for the capital used to meet the capital requirement of 8% of the total risk exposure. Today a minimum of 4.5% of the total risk

exposure can be met with Common Equity Tier 1 capital. Up to 2014, the corresponding requirement was 2% of the total risk exposure.

Implementation of CRD IV will introduce four capital buffers and these will be fully implemented in 2019, see figure 6. These are the capital conservation buffer, the countercyclical buffer and a systemic buffer. The fourth buffer is a G-SIFI buffer for globally systemically important financial institutions (G-SIFIs). There is no prospect of G-SIFIs being designated in Denmark and therefore the final buffer is not expected to be used. This is because the current threshold (the degree of systemic importance) for designating G-SIFIs is considerably higher than the current G-SIFI systemicness of Danish SIFIs.

Figure 6: Minimum capital requirement and phase-in of capital buffers after CRR and CRD IV



Note: The Pillar II requirement has not been included as it is measured individually for each institution.

Source: Danish FSA.

The size of the systemic buffer depends on the degree of the systemic importance of the individual institution. In 2019, the systemic buffer will be 1% to 3% of the total risk exposure. In 2019, the capital conservation buffer will amount to 2.5% of the total risk exposure. The countercyclical capital buffer can be activated by the Minister for Business and Growth. In 2019, the buffer can be set at a maximum of 2.5% of the total risk exposure.

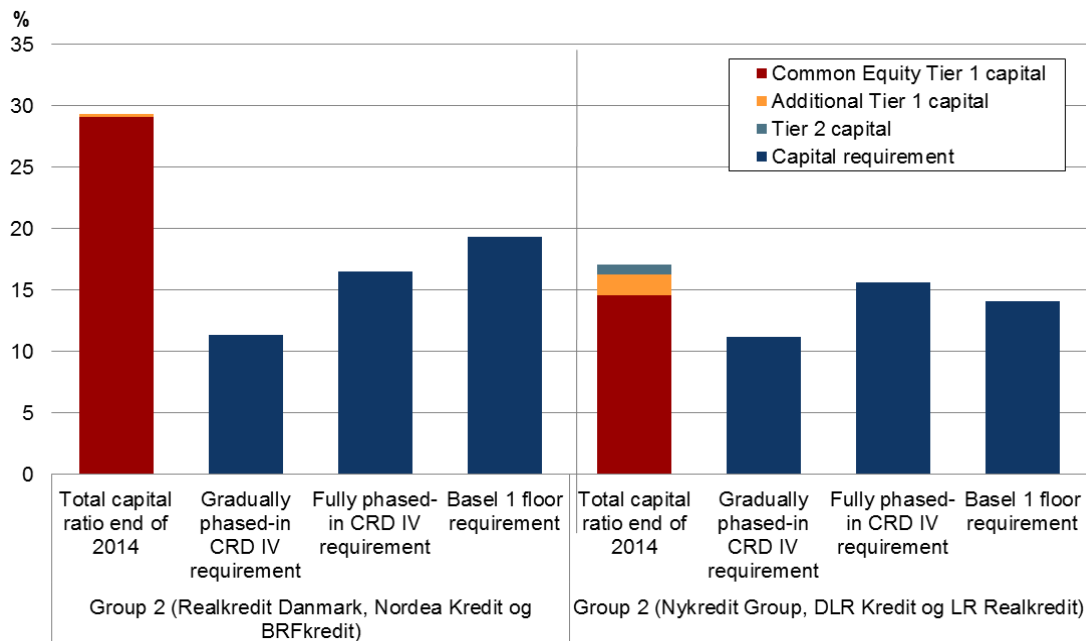
The buffer requirements will be phased in gradually up to 2019 and are to be met with Common Equity Tier 1 capital.

The Basel 1 floor requirement can be higher than the regulatory capital requirement, as outlined in figure 7.

Capitalisation of mortgage-credit institutions

The figure below shows the capital position of mortgage-credit institutions today and what their capital position will be when all of the buffer requirements have been fully phased in, in 2019. Mortgage-credit institutions have been divided into two groups in the figure. Group 1 is mortgage-credit institutions which are bank subsidiaries and it includes Realkredit Danmark, Nordea Kredit and BRFkredit, while group 2 is for the other mortgage-credit institutions such as the Nykredit group, DLR Kredit and LR Realkredit. The division into two groups is to make it clear that the mortgage-credit institutions have different challenges with regard to capital. However, there can also be differences in the capital challenges for individual mortgage-credit institutions within a specific group.

Figure 7: Capital ratio and capital requirement of mortgage-credit institutions (gradually and fully phased-in CRR and CRD IV, respectively, as well as Basel 1 floor requirement), end of 2014



Note: The figures have been calculated at group level. Capital ratio and capital requirement have been calculated as a weighted average for the group. Capital requirements include the minimum capital requirement (Pillar I), Pillar II requirement and capital conservation and SIFI buffers.

Source: Reports to the Danish FSA.

The fully phased-in CRD IV requirement has been calculated on the basis of the assumption that the total risk exposure is identical to the level at the end of 2014.

As the projection shows, both group 1 and group 2 will be able to meet the capital requirements from CRR and CRD IV when they have been fully phased in with the institutions' current level of own funds. This also applies at individual institution level. A relatively high percentage of the own funds of mortgage-credit institutions is Common Equity Tier 1 capital. Therefore institutions can also already meet the fully phased-in requirements for Common Equity Tier 1 capital.

The figure also shows that the Basel 1 floor requirement is on average the binding requirement for group 1, even after full phase-in of CRD IV. Note, however, that these institutions are parts of groups, and this will not be the case at group level. For these groups, the capital requirement for their mortgage-credit activities will increase as a consequence of CRD IV, even though this is not apparent at individual mortgage-credit institution level.

However, for several institutions, the surplus will be limited, and this will make it necessary to increase own funds up to 2019. The figure shows that group 1 has a far higher surplus than group 2, despite the phased-in and higher Basel 1 floor requirement. The higher surplus is therefore due to higher own funds. However, there are differences between the own funds of the individual mortgage-credit institutions within the individual groups. With regard to both groups, the own funds can be increased using retained earnings. All else being equal, it is likely that the mortgage-credit institutions in group 1 will have more options to raise capital from their owners.

The individual mortgage-credit institution can also have internal capital targets in addition to the capital requirements.

Finally, credit ratings agencies have requirements for the excess of capital if individual mortgage-credit institutions are to obtain a certain rating for their mortgage-credit bonds.

Debt buffer requirement

The new Danish Winding-up Act makes mortgage-credit institutions subject to the requirement for a debt buffer. The debt buffer will be phased in up to 2024 and it will ensure that there is adequate capital or debt to be able to restructure or wind-up a mortgage-credit institution deemed to be in distress or likely to become distressed.

The debt buffer requirement entails that the mortgage-credit institutions must have a buffer of 2% of their total unweighted loans. The requirement can be met with Common Equity Tier 1 capital, Additional Tier 1 capital, Tier 2 capital or senior unsecured debt.

The requirement cannot be met with the part of the own funds used to comply with other statutory capital requirements, although this does not apply for requirements for supplementary collateral.

At the end of 2014, total lending by mortgage-credit institutions amounted to DKK 2,636.4 bn. At the end of 2014 the debt buffer of 2% of the total unweighted loans would therefore have been DKK 52.7 bn., if the debt buffer requirement had applied at this time.

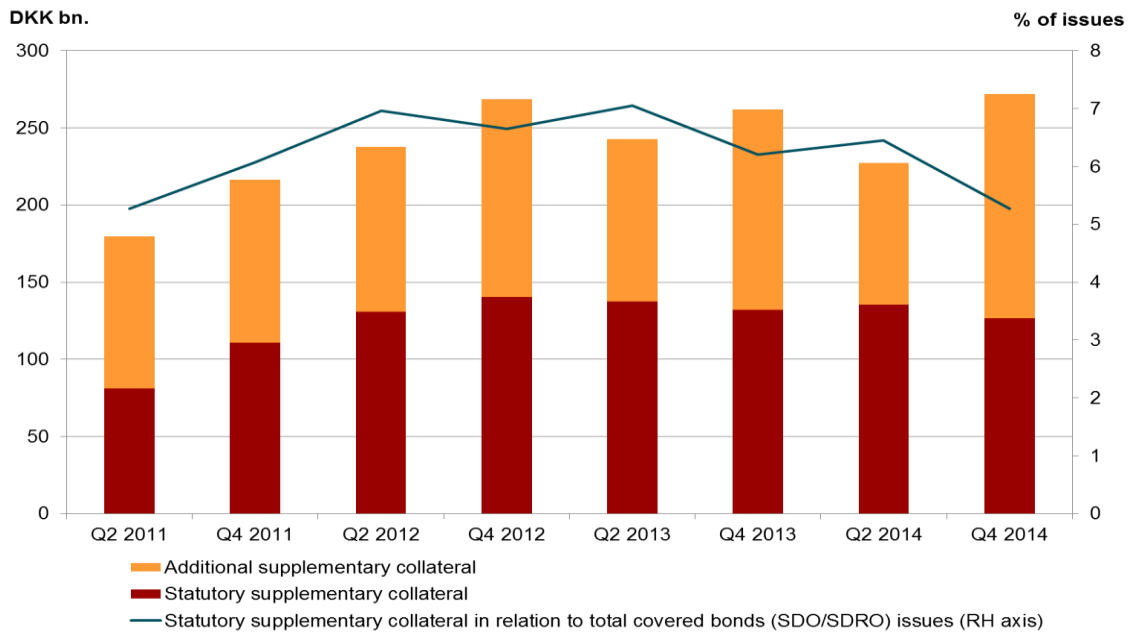
Supplementary collateral

In 2007, mortgage-credit institutions were able to finance their loans with covered bonds (SDOs/SDROs). For investors, these bonds are more secure than traditional mortgage-credit bonds and are therefore weighted less in investors' total risk exposure. Conversely, mortgage-credit institutions issuing SDOs/SDROs must put up supplementary collateral in connection with drops in property prices.

In Q4 2014, the supplementary collateral was DKK 272 bn.; the highest level since 2011. However, the 2014 level is not far from Q4 in 2012 and Q4 2013.

At the end of 2014, as a consequence of exceeding lending limits on loans financed by mortgage-credit institutions with SDOs/SDROs, statutory supplementary collateral was put up for just over DKK 127 bn., see figure 8. In relative terms, this corresponds to 5.3% of total issues. Statutory supplementary collateral for owner-occupied residences amounts to 52% of this collateral.

Figure 8: Total supplementary collateral for SDO/SDRO issues 2011-2014



Source: Reports to the Danish FSA.

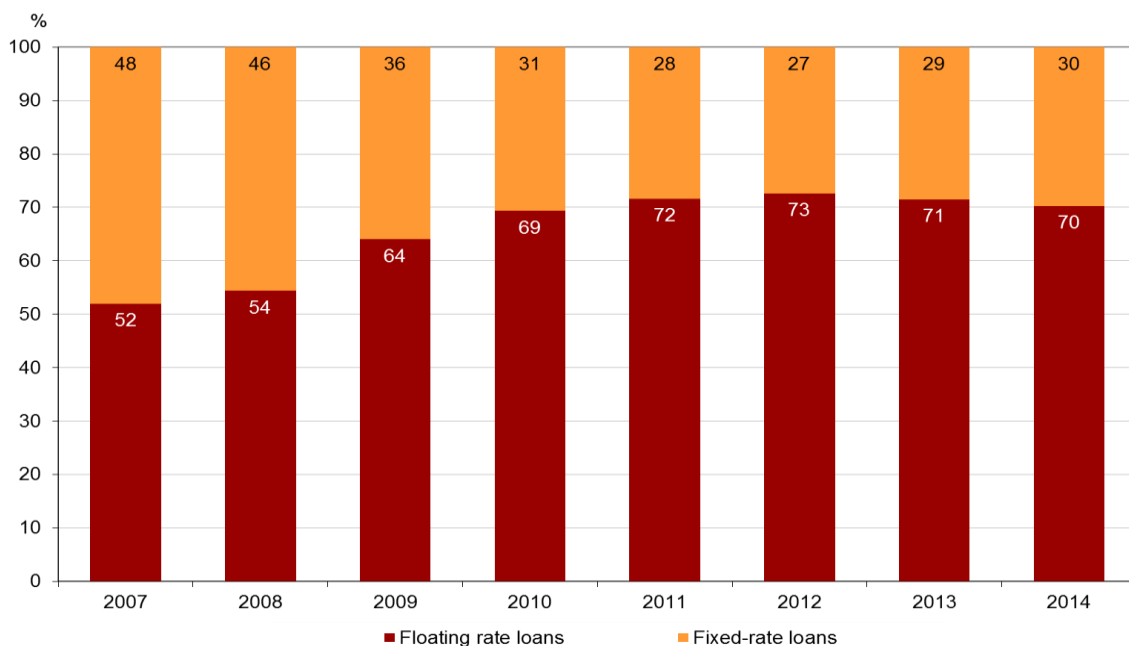
In addition to the statutory supplementary collateral, mortgage-credit institutions put up additional supplementary collateral of DKK 145 bn. in Q4 2014 in order to obtain satisfactory investor assessments of their bonds.

4. Types of loans and supervisory diamond

Floating-rate loans

Since 2007, floating-rate loans have made up the majority of mortgage-credit institution lending, see figure 9, and in 2014 floating-rate loans accounted for 70% of total mortgage-credit institution lending. The percentage of fixed-rate loans in total lending has been increasing slowly since 2012, and in 2014 they made up 30% of lending; an increase of 1 percentage point compared with the previous year.

Figure 9: Floating-rate lending and fixed-rate lending by mortgage-credit institutions as a percentage of total lending, 2007-2014



Note: Floating-rate lending includes variable-interest loans linked to a referenced interest rate (CITA/CIBOR), and variable-interest loans with an interest rate cap (not reached).

Source: Danmarks Nationalbank, MFI statistics.

The percentage of borrowers with variable-interest loans with a fixed-interest period of more than one year now makes up 37.2% of total lending and this is considerably higher than the 2008 level when the corresponding figure was 23.5%, see table 3. A total of 62.8% of variable-interest loans had term to maturity up to and including one year.

Table 3: Percentage of variable-interest loans with fixed-interest period up to and including one year, 2004-2014

%	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Maturity up to and incl. 1 year	57.9	72.1	75.7	76.2	76.5	75.8	73.1	71.7	69.9	65.4	62.8
Maturity more than 1 year	42.1	27.9	24.3	23.8	23.5	24.2	26.9	28.3	30.1	34.6	37.2

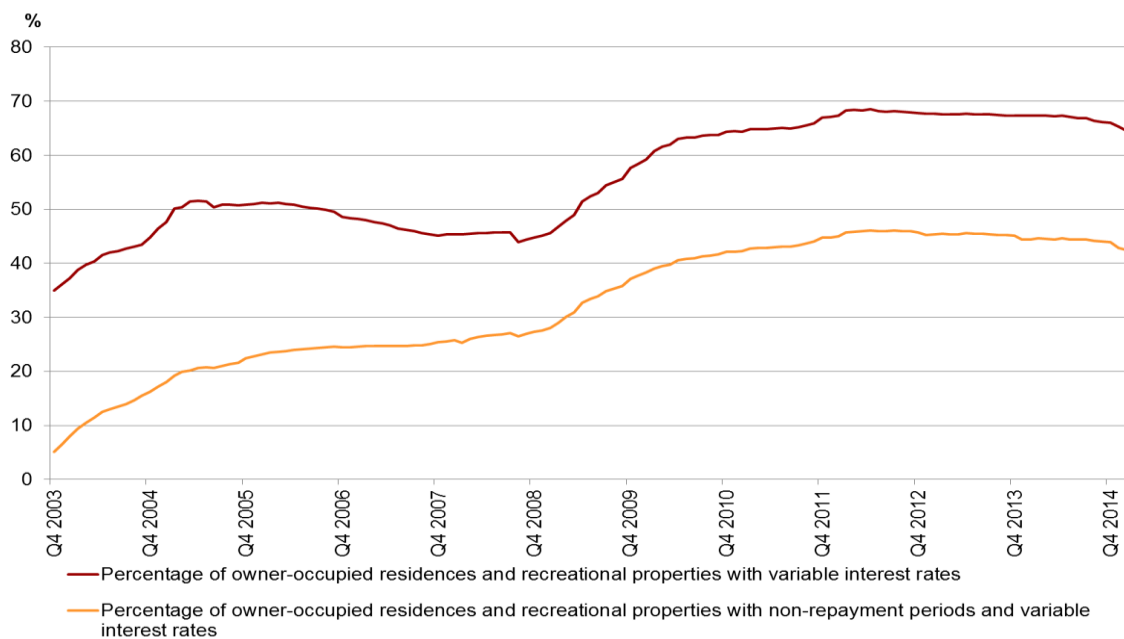
Note: Variable-interest loans are ordinary floating-rate loans as well as variable loans with an interest rate cap.

Source: Danmarks Nationalbank, MFI statistics.

Fixed-rate loans

Floating-rate loans and other variable-interest loans made up 66% of total lending for owner-occupied residences and recreational properties in 2014, see figure 10. Of these, at the end of 2014, approx. 67% had a non-repayment (interest only) period. Around 45% of total loans for owner-occupied residences and recreational properties had a floating-rate and a non-repayment period.

Figure 10: Percentage of variable fixed-interest loans for owner-occupied residences and recreational properties in relation to total lending of mortgage-credit institutions for owner-occupied residences and recreational properties, 2004-2014



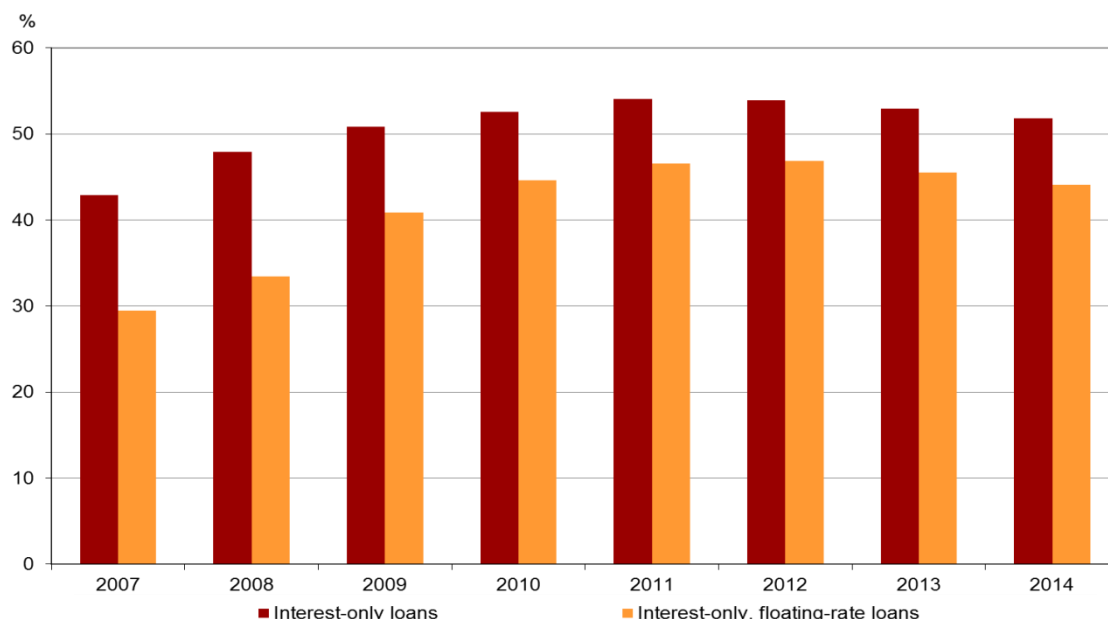
Note: Both percentages are in relation to total lending of mortgage-credit institutions for owner-occupied residences and recreational properties.

Source: Danmarks Nationalbank, MFI statistics.

Interest-only loans

At the end of 2014, interest-only loans amounted to 52% of total mortgage-credit lending, and this is a drop of about 1 percentage point compared with the end of 2013, see figure 11. As a percentage of total lending, the percentage of interest-only loans has remained more or less constant over the past five years at slightly more than 50%. Of total interest-only loans, 79% were floating-rate loans.

Figure 11: Percentage of interest-only loans and interest-only, floating-rate loans in relation to total lending by mortgage-credit institutions 2007-2014



Source: Danmarks Nationalbank, MFI statistics.

Percentage of interest-only loans for owner-occupied residences and recreational properties was 61%, see table 4. Of these, almost 80% were floating-rate loans. In addition, broken down between private rental residences, agriculture, and offices and shops, the percentage was between 11% and 13%. For all of these groups, the majority of loans were floating-rate.

Table 4: Percentage of interest-only loans out of the total portfolio of interest-only loans by category of property, end of 2014

%	Private Rental properties	Owner-occupied residences and recreational properties	Agriculture	Offices and shops	Other	Total
Percentage of interest-only	12.9	60.6	12.9	11.1	2.5	100.0
- of which, floating-rate	90.8	79.3	94.6	97.7	94.0	85.2

Source: Danmarks Nationalbank, MFI statistics.

The supervisory diamond

In December 2014, on the basis of recommendations from the Rangvid Committee, the Danish FSA introduced a supervisory diamond for mortgage-credit institutions (see description in box 1). The objective of the diamond is to establish a more robust and sustainable mortgage-credit sector which can address a number of important risks for mortgage-credit institutions.

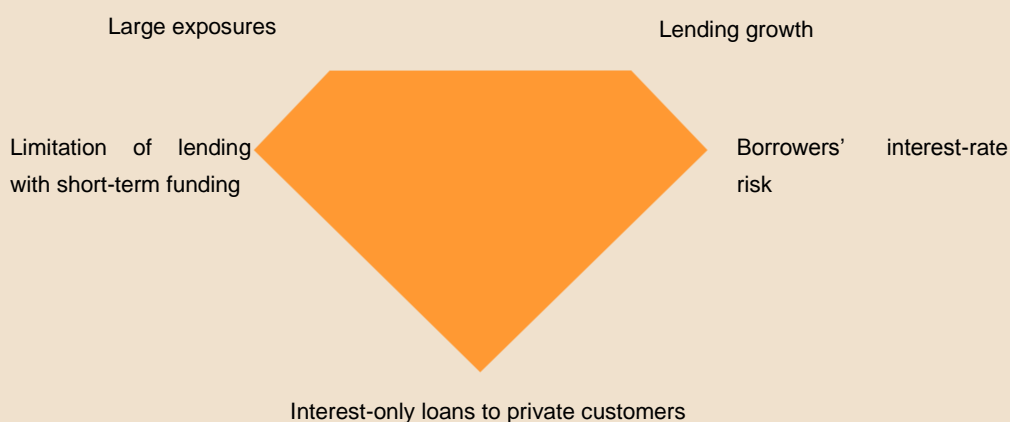
On the basis of the current position (and the adjustments already initiated) for mortgage-credit institutions, as well as the reports which have supported the calibration and limit

values linked to the individual indicators, it is likely that mortgage-credit institutions will be able to be ready before the indicators in the supervisory diamond enter into force.

Box 1: Supervisory diamond for mortgage-credit institutions

A supervisory diamond is a supervisory tool aimed at limiting excessive risk and it contributes to the obligation of the Danish FSA pursuant to section 344 of the Financial Business Act to focus its supervisory activity on an assessment of the sustainability of the individual financial undertaking's business model. The diamond is a supplement to the existing solvency rules and addresses risks associated with an unsustainable business model. For instance risks which, due to their scope, cannot be overcome simply with more capital.

The supervisory diamond sets out five indicators that the Danish FSA initially considers to be mortgage-credit activities with a higher risk profile:



- P1. Large exposures:** The sum of the 20 largest exposures must not be larger than the actual equity.
- P2. Lending growth:** Lending growth in individual segments must not be higher than 15% per year. The segments are private, corporate with housing objects, agriculture and other corporate.
- P3. Borrowers' interest-rate risk:** The percentage of loans in which LTV exceeds 75% of the lending limit, and for which the interest rate is only frozen for up to two years must not be more than 25%. The extended housing segment is composed of private and corporate with housing objects.
- P4. Interest-only loans to private customers:** Percentage of interest-only loans in the LTV band exceeding 75% of the lending limit must not be more than 10% of total lending.
- P5. Limitation of lending with short-term funding:** The percentage of lending which is refinanced must be less than 25% annually and less than 12.5% per quarter of the total lending portfolio.

Institutions that exceed one or more indicators may receive a notice to issue public risk information after an individual assessment. In more serious cases the institution may be ordered to prepare a statement or ultimately receive an order aiming at reducing risk assumption. However, in all cases this will be based on an individual, concrete assessment according to the rules in relevant legislation. This means that there are no automatic sanctions associated with exceeding a

5. About the statistics

This article on market developments has been based on financial statements etc. for mortgage-credit institutions in Denmark. Figures are at non-consolidated (solo) level, unless otherwise stated.

This article focuses on developments in selected accounts items and financial ratios at sector level and on the underlying developments in the individual mortgage-credit institutions. At a later stage, the Danish FSA will publish "Statistical data for mortgage-credit institutions". This publication will contain more data from mortgage-credit institutions' submissions for 2014. Moreover an update will follow of financial ratios in the five-year financial summary analysed by the individual institutions in the financial ratios database on the Danish FSA website.

All mortgage-credit institutions are covered by the statistics.

6. Appendices

Box 2: Negative interest rates

The very low interest rates in recent years have raised the matter of negative interest rates in connection with mortgage-credit issuances and mortgage-credit loans.

Can borrowers demand negative interest rates? Are investors in bonds obligated to pay?

Loans/bonds for which the interest rate is set in relation to a referenced interest rate (e.g. CITA/ CIBOR) plus a supplement are particularly exposed to this issue.

The existing variable-interest loans are managed by the individual mortgage-credit institutions on the basis of a legal assessment of the loan terms etc. Most institutions have reported that the current loan terms, prospectuses and bond terms do not provide a basis for paying negative interest. An interest floor rate of zero is applied. This means that in circumstances where the referenced interest rate and supplement is negative, the interest rate is set at zero. Borrowers and/or investors who may disagree with an institution's interpretation can enter a dialogue with the institution regarding management of negative interest rates on their loans. Ultimately, it is possible to complain in accordance with the relevant regulations.

On 5 February 2015, the Danish Minister for Business and Growth set up a working group tasked to analyse this matter and make suggestions for any adjustments to be made in existing legislation. The report by the working group was published on 28 April 2015.

Solution going forward

There are several aspects to be addressed in a solution:

One of the cornerstones of the Danish mortgage-credit system in the balance principle which set strict limits on the scope of market risks and liquidity risks a mortgage-credit institution may accept in connection with its lending activities and bonds issuances.

A forward-looking model for managing risk with negative interest rates must comply with the balance principle. This means that a negative interest rate scenario must not impose an interest-rate risk or liquidity risk on mortgage-credit institutions on their lending activities, if these risks go beyond the balance principle. If the balance principle is to be observed, the interest borrowers could possibly receive must be paid by the owner of the bonds, either as a direct payment, as a reduction in the outstanding debt, or as a capital gain.

The model has to be robust in a forward-looking perspective. This means that the solution must be able to cover various scenarios independently of interest rates and the size of the affected loans/bonds.

There are technical difficulties in reversing the cash flows. The solution going forward must be technically manageable.

Today, bonds with a negative coupon cannot be mortgaged in the ECB. If a solution is chosen whereby a negative coupon is possible, it may lead to less demand for the bonds.

Appendix 1: Financial statements of mortgage-credit institutions 2010-2014

<i>DKK mill.</i>	2010	2011	2012	2013	2014	Change	
						2010-2014	2013-2014
Income statement items (extract)							
Net interest income	17,589	17,353	20,273	20,974	22,259	4.8%	6.1%
Dividends from shares etc.	69	74	115	240	74	1.4%	-69.2%
Net fee and commission income	-1,526	-1,884	-1,636	-2,374	-2,086	-6.5%	12.1%
Net interest and fee income	16,133	15,543	18,752	18,839	20,247	4.6%	7.5%
Value adjustments	-1,222	-2,761	-952	-620	-746	9.4%	-20.3%
Staff and administrative expenses	5,064	5,131	4,860	5,008	4,780	-1.1%	-4.6%
Impairments on loans etc.	2,431	2,841	3,922	4,811	4,707	14.1%	-2.2%
Income from associates and group undertakings	2,640	650	668	685	-374	*	*
Profit before tax	9,542	4,812	9,002	8,190	9,450	-0.2%	15.4%
Tax	1,714	884	1,998	1,758	2,307	6.1%	31.2%
Net profit for the year	7,827	3,929	7,004	6,433	7,143	-1.8%	11.0%
Balance sheet items (extract)							
Due from credit institutions	585,169	623,011	677,770	714,365	781,905	6.0%	9.5%
Lending	2,409,608	2,501,477	2,587,598	2,589,292	2,636,353	1.8%	1.8%
Bonds	175,771	188,376	177,186	195,020	234,826	6.0%	20.4%
Shares etc.	5,705	4,265	4,120	3,831	4,379	-5.2%	14.3%
Holdings in associated undertakings	230	227	233	144	147	-8.6%	2.1%
Assets held temporarily	1,640	1,835	1,337	1,005	880	-11.7%	-12.4%
Other assets	24,909	27,130	25,066	22,227	22,739	-1.8%	2.3%
Total assets	3,239,355	3,387,676	3,512,976	3,565,792	3,718,335	2.8%	4.3%
Due to credit institutions	633,018	663,536	660,380	669,549	698,974	2.0%	4.4%
Issued bonds	2,362,252	2,473,733	2,609,150	2,664,798	2,782,031	3.3%	4.4%
Other non-deriv. finan. liabs. at fair value	4,394	4,421	2,025	862	1,188	-23.0%	37.8%
Current tax liabilities	421	228	43	25	169	-16.7%	576.0%
Other liabilities	65,460	67,536	60,375	50,218	50,204	-5.2%	0.0%
Total debt	3,067,944	3,211,921	3,334,387	3,385,481	3,532,623	2.9%	4.3%
Total provisions	1,398	1,371	1,057	876	723	-12.4%	-17.5%
Subordinated debt	23,294	23,954	19,392	16,914	16,505	-6.7%	-2.4%
Share/cooperative/guarantee capital	5,260	5,275	5,388	5,324	6,324	3.8%	18.8%
Other reserves	106,222	121,769	121,911	112,204	113,126	1.3%	0.8%
Retained earnings or losses	35,053	23,199	29,801	44,813	48,829	6.9%	9.0%
Equity	146,719	150,429	158,140	162,521	168,483	2.8%	3.7%
Balance sheet	3,239,355	3,387,676	3,512,976	3,565,792	3,718,335	2.8%	4.3%

Source: Reports to the Danish FSA.

Appendix 2: Financial statements for mortgage-credit institutions at institution level, end 2014

<i>DKK mill.</i>	Nykredit Realkredit	Realkredit Danmark	BRF Kredit	Totalkredit	DLR Kredit	LR Realkredit	Nordea Kredit	All
Income statement items (extract)								
Net interest income	4,449	6,990	1,971	4,454	1,564	152	2,679	22,259
Dividends from shares etc.	55	0	4	0	1	14	0	74
Net fee and commission income	725	-524	151	-1,632	-172	-21	-613	-2,086
Net interest and fee income	5,229	6,466	2,127	2,822	1,393	145	2,066	20,248
Value adjustments	359	-583	-598	-96	-188	86	274	-746
Staff and administrative expenses	2,389	705	857	388	211	29	201	4,780
Impairments on loans etc.	1,723	1,170	843	406	191	9	366	4,708
Income from associates and group undertakings	-225	17	-168	0	0	0	2	-374
Profit before tax	1,030	4,025	-321	1,932	817	192	1,776	9,451
Tax	215	969	-34	474	201	47	435	2,307
Net profit for the year	815	3,056	-287	1,458	616	145	1,340	7,143
Balance sheet items (extract)								
Cash at bank and in hand and demand deposits with central banks	227	244	501	0	48	0	3	1,023
Due from credit institutions and central banks	639,444	25,594	7,075	23,607	14,553	1,171	70,461	781,905
Lending	583,133	745,385	220,340	555,820	133,219	17,402	381,056	2,636,355
Bonds	47,745	59,801	25,557	91,795	9,166	738	25	234,827
Shares etc.	3,069	0	235	0	68	1,007	0	4,379
Holdings in associated undertakings	119	15	0	0	0	0	13	147
Holdings in group undertakings	30,456	129	976	0	0	0	0	31,561
Total land and buildings	16	140	394	0	99	0	0	649
Other tangible assets	235	5	7	0	6	1	0	254
Current tax assets	13	137	1	0	14	5	0	170
Deferred tax assets	126	0	21	2	2	6	0	157
Assets held temporarily	476	106	201	29	31	0	38	881
Other assets	14,642	3,029	799	3,495	416	33	324	22,738
Prepayments	190	6	30	6	16	0	6	254
Total assets	1,322,918	834,591	256,145	674,753	157,637	20,364	451,927	3,718,335
Due to credit institutions and central banks	22,811	10,018	11,931	609,964	2,000	0	42,250	698,974
Issued bonds	1,208,313	766,774	229,129	36,229	138,524	15,957	387,106	2,782,032
Other non-deriv. finan. liabs. at fair value	1,188	0	0	0	0	0	0	1,188
Current tax liabilities	0	0	0	143	0	0	26	169
Other liabilities	19,268	9,743	3,904	8,200	4,430	989	3,671	50,205
Deferred income	0	0	8	0	3	0	36	47
Total debt	1,251,580	786,535	244,981	654,535	144,958	16,946	433,089	3,532,624
Total provisions	485	148	80	6	5	0	0	724
Subordinated debt	11,350	0	0	3,100	2,055	0	0	16,505
Share/cooperative/guarantee capital	1,182	630	1,306	848	570	70	1,717	6,323
Share premium account	0	0	102	0	0	0	0	102
Accumulated value changes	2	33	25	0	48	0	0	108
Other reserves	34,122	47,246	9,939	14,806	2,338	3,203	14	111,668
Retained earnings or losses	24,197	0	-287	1,458	7,663	145	17,107	50,283
Equity	59,502	47,909	11,084	17,113	10,619	3,418	18,838	168,483
Balance sheet	1,322,918	834,591	256,145	674,753	157,637	20,364	451,927	3,718,335

Note: Nykredit Realkredit issues bonds which finance lending by Totalkredit. This is included as a receivable from credit institutions in the balance sheet.

Source: Reports to the Danish FSA.

Appendix 3: Changes in capital and total risk exposure amount, 2010-2014

<i>DKK mill.</i>	2010	2011	2012	2013	2014	Change	
						2010-2014	2013-2014
Tier 1 capital	158,437	161,494	162,187	163,959	168,837	1.3%	3.0%
Own funds	161,287	164,602	165,867	167,643	175,790	1.7%	4.9%
Total risk exposure amount	808,009	871,528	856,380	857,073	846,329	0.9%	-1.3%
Balance sheet total	3,239,355	3,387,676	3,512,976	3,565,792	3,718,335	2.8%	4.3%

Source: Reports to the Danish FSA.

Appendix 4: Financial ratios of mortgage-credit institutions 2010-2014

%	2010	2011	2012	2013	2014
Total capital ratio	19.95	18.87	19.36	19.55	20.77
Tier 1 capital ratio	19.59	18.52	18.92	19.13	19.95
Common Equity Tier 1 ratio	17.53	16.64	17.75	18.34	19.02
Return on equity before tax	6.69	3.25	5.84	5.09	5.72
Return on equity after tax	5.48	2.64	4.53	4.01	4.31
Ratio of op. income to op. expenses	2.17	1.55	1.94	1.76	1.97
Currency position	1.72	2.24	1.68	1.32	0.91
Accumulated impairment loss ratio	0.25	0.28	0.30	0.38	0.48
Loss and impairment loss ratio for the year	0.09	0.10	0.15	0.19	0.19
Lending growth for the year	3.21	2.03	2.64	1.13	0.88
Loans in relation to equity	16.43	16.57	16.34	15.91	15.57

Note: Financial ratios are calculated on the basis of the mortgage-credit institutions which existed in the individual years.

Lending growth for the year is based on nominal values.

Source: Reports to the Danish FSA