DET SYSTEMISKE RISIKORÅD

Recommendation

26 March 2019

Increase of the countercyclical capital buffer rate

The Systemic Risk Council, the Council, recommends that the Minister for Industry, Business and Financial Affairs increase the countercyclical capital buffer rate in Denmark from 1.0 per cent to 1.5 per cent from 30 June 2020.[1]

The Council expects to recommend a further increase of the buffer rate by 0.5 percentage point in the 3rd quarter of 2019 unless the risk build-up in the financial system slows down considerably. The incremental increases follow the Council's strategy to increase the buffer rate gradually.

The Council is ready to recommend a reduction of the buffer rate with immediate effect if stress occurs in the financial system and there is a risk of severe tightening of lending to households and firms.

Every quarter, the Council assesses what is a suitable level for the countercyclical capital buffer. When the Council finds that the rate should be changed, it will publish a recommendation addressed to the Minister for Industry, Business and Financial Affairs. The Minister is responsible for setting the buffer rate in Denmark. The Minister is required, within a period of three months, to either comply with the recommendation or present a statement explaining why the recommendation has not been complied with.

The buffer should be built up before the tide turns

The countercyclical capital buffer must be of a certain size to make a difference. That is why the build-up of the countercyclical capital buffer must continue before financial imbalances grow too large, making the financial sector vulnerable to negative shocks.

It is the assessment of the Council that risks are still building up in the financial system. Moreover, the conditions for further build-up of risks also exist. The Danish economy is still in an upswing, and the financial conditions are expansionary, although some indicators have slowed down. The Council thus follows its announced strategy to recommend an increase of the buffer rate in the current quarter. Unless the risk build-up in the financial system slows down considerably, the Council is of the opinion that the buffer rate should be built up to 2.5 per cent.

Risk build-up in the financial system

The Danish financial system is highly affected by international market developments. The risk appetite among investors is still notable, and risk perception in the financial markets remains low in a longer perspective, despite more pronounced uncertainty and volatility over the last half year. The risks for the global economy have increased during 2018 and in early 2019 due to heightened uncertainty about Brexit, the trade conflict and geopolitical tensions, among other factors. Market participants thus expect interest rates to remain low for quite some time to come.

1 The buffer rate applies to credit exposures in Denmark. A bank's institution-specific countercyclical buffer rate is a weighted average of the buffer rates in the countries where the bank has credit exposures. The institution-specific buffer is calculated by multiplying the weighted buffer rate by the bank's total risk-weighted exposures. In Denmark, banks, mortgage credit institutions and investment firms are required to maintain a countercyclical capital buffer.

Several large countries' fiscal and monetary policy scope has been limited by already high levels of debt and low interest rates. This reduces the scope for mitigating the negative effects which may arise if risks materialise. This emphasises the importance of credit institutions (banks and mortgage credit institutions) being resilient.

The Danish economy is still in an upswing, and asset prices are generally high. Prices have risen for several years in both the residential and the commercial real estate markets, but have flattened since mid-2018. Owner-occupied flats in the Copenhagen area have accounted for the strongest slowdown, but price levels in this segment remain high.

The institutions show signs of higher risk appetite, although overall credit growth is moderate. Driven by intensified competition for customers, several institutions have eased corporate credit standards for a relatively long period. Indeed, corporate credit growth has risen the most over the most recent period, with broadly based growth across institutions and industries.

The long period of low interest rates and expansionary financial conditions, combined with the upswing, provides a basis for further build-up of credit risk. Risks are amplified by the already high level of total lending. Hence, the pace of lending growth should not be as strong as in the pre-crisis years before the buffer is built up.

The Council's assessment of the buffer rate is based on an overall assessment of financial system developments. The Council's information basis includes a number of indicators providing information on, inter alia, risk perception in the financial markets, developments in the property market and credit developments, see the elaboration in Appendix A.[2] There is no mechanical relationship between the indicators and the buffer rate, given the uncertainty of measuring systemic risk developments, including that historical indicators are not necessarily adequate for indicating future developments. Consequently, the Council's recommended buffer rate is based on an overall assessment of the indicators and other relevant information.

The institutions have capital to meet the requirement

There are no Danish institutions that breach their capital requirements as a result of an increase in the countercyclical capital buffer to 1.5 per cent.[3] The higher buffer requirement enters into force 12 months after the Minister has announced an increase.

A 0.5 percentage point increase of the buffer rate will add kr. 7 billion to the total regulatory equity requirement for Danish institutions. By comparison, earnings totalled kr. 32 billion in 2018, and the sector's excess capital adequacy totalled kr. 112 billion at end-2018.

As a result of the higher requirement, a larger share of the institutions' balance sheets needs to be financed by equity. This can be achieved by retaining earnings rather than distributing earnings as dividends or share buy-backs. In 2018, the institutions' dividends totalled kr. 17 billion and their share buy-backs totalled kr. 10 billion. Earnings always belong to the shareholders, irrespective of whether they are distributed or retained.

The requirement that the institutions must maintain a countercyclical capital buffer is not a "hard" requirement, meaning that institutions in breach of the requirement will not lose their banking licences. Instead, they will be required to submit a capital conservation plan to the Danish Financial Supervisory Authority,

2 See also the Council's buffer assessment method at the Council's website http://www.risikoraad.dk/english/.
3 The institutions must meet the countercyclical capital buffer requirement with Common Equity Tier 1 capital.

and bonus and dividend payments etc. may also be limited if they fail to comply with the combined capital buffer requirement.[4]

The buffer is to reinforce the institutions' resilience

The countercyclical capital buffer should contribute to limiting the negative effects on the real economy of a future financial crisis. The buffer should therefore be built up before financial imbalances become too large. The aim is for the institutions to be more resilient whenever risks materialise, e.g. in the event of a negative shock to the financial system. In that situation, the buffer can be reduced. This will release capital for use by the institutions. In so far as the institutions do not use the released capital for absorbing losses, it may be used for new lending or as a contribution to their excess capital adequacy. This helps the credit institutions to maintain a suitable level of lending in periods of stress in the financial system.

The Council's strategy is a gradual phasing-in of the buffer . This makes it easier for the institutions to adapt to the new, higher capital requirements e.g. by retaining earnings. The Council thus expects the potential impact on lending by credit institutions to be limited.[5]

The buffer is primarily an instrument for strengthening the resilience of the credit institutions. It cannot be used as an instrument to manage the business cycle, either in an upswing or in a downturn. The buffer must be released if there is a risk of severe tightening of lending to households and firms, not just in an economic slowdown situation.

The countercyclical capital buffer was introduced in international regulation after the financial crisis as part of an extensive set of reforms to make the financial sector more resilient.

Other capital requirements

The Council also includes other policy initiatives in its considerations regarding the countercyclical buffer rate, including the phasing-in of future requirements. At end-2018, the Danish institutionshad, in general, sufficient capital to meet the total fully phased-in buffer requirements[6] and a countercyclical capital buffer of 1.5 per cent in Denmark. The countercyclical capital buffer differs from other buffer requirements in that it can be eased in times of financial stress, whereas the other requirements apply in both good and bad times.

Besides the buffer requirements, the institutions will be subject to other forthcoming requirements, including the requirement that a bank must have a certain volume of capital and debt instruments that can absorb losses in a crisis situation, known as the MREL.[7] The purpose of the MREL differs from the purpose of the countercyclical capital buffer, cf. also Appendix A.

The Danish Financial Supervisory Authority's overall assessment is that the phasing-in of the individual MRELs by 2023 will have little impact on the banks' ability to meet a countercyclical capital buffer of 1.5 per cent. The Danish Financial Supervisory Authority expects the small banks to be able to meet their MRELs via their existing capital base as well as retained earnings, while the large

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4 In addition to the countercyclical capital buffer, the combined capital buffer requirement comprises the capital conservation buffer and the systemic buffer, cf. Executive Order no. 1349 of 12 December 2014 on calculation of the combined buffer requirement, the maximum distributable amount and the content of a capital conservation plan for certain financial enterprises and the Danish Financial Supervisory Authority's memo, "Bestemmelser om kapitalbevaringsplan og opgørelse af det maksimale udlodningsbeløb" (Provisions on a capital conservation plan and calculation of the maximum distributable amount) at the Danish Financial Supervisory Authority's website.

5 Danish experience shows that the increased capital requirements introduced under the international post-crisis regulation have not resulted in declining lending, cf. Brian Liltoft Andreasen and Pia Mølgaard, Capital requirements for banks – myths and facts, *Danmarks Nationalbank Analysis*, No. 8, June 2018.

6 The buffer requirements comprise the capital conservation buffer for all institutions and a SIFI buffer for systemically important financial institutions, SIFIs.

7 MREL stands for minimum requirements of eligible liabilities. They are own funds and eligible liabilities which can absorb losses and recapitalise an institution in a resolution situation. The MREL will be phased in by 2023 as a main rule.

institutions will extensively be able to meet the requirement by issuing MREL instruments.

Another future requirement is a minimum leverage ratio requirement for the institutions, expected to be met as from 2021 when new EU regulation enters into force. The countercyclical capital buffer will not increase the leverage ratio requirement. While the buffer is calculated as a ratio of risk-weighted exposures, the leverage ratio is calculated relative to unweighted exposures. It is, in particular, large institutions with large shares of assets with low risk weights which may be affected by the leverage requirement.

The Council's recommendation is in compliance with current legislation.

Lars Rohde, Chairman of the Systemic Risk Council

Statement from the representatives of the ministries on the Council

"It follows from the legislation on the Systemic Risk Council that recommendations addressed to the government must include a statement by the representatives of the ministries on the Council. The representatives of the ministries and the Danish Financial Supervisory Authority have no voting rights in relation to recommendations addressed to the government.

The government will use the three months period stipulated in legislation to consider the recommendation from the Systemic Risk Council."

Appendix A: Elaboration on the information basis

Indicators

The Council includes selected key indicators in its assessment of the buffer rate to capture the build-up of systemic risk at various stages of financial development. Supplementary indicators and other relevant information are also taken into account in the assessment to provide a more detailed picture than that painted by the key indicators.

The early stage of a financial upswing is often characterised by increasing risk appetite among investors.[8] This is reflected in higher asset prices, including prices of residential and commercial properties, and eased credit standards for households and firms. At a later stage, households and firms may increase their debt in the expectation that property prices will continue to rise. This means that some indicators, such as property prices, signal the build-up of systemic risk ahead of other indicators, e.g. lending to households and firms.

The indicators included by the Council in the information basis are outlined below, divided into relevant categories.[9]

Risk perception

The financial stress indicator is at a low level and has been so for a number of years. The last half year has seen slightly more pronounced volatility and uncertainty in the financial markets, but risk perception remains low in a longer perspective, and the risk appetite among investors is still notable. The low risk perception is reflected in e.g. low implied volatility in the bond and equity markets and narrow credit spreads.

Real estate market

In the housing market, prices for owner-occupied flats, especially in Copenhagen City, have slowed down since mid-2018, and trading activity has declined. However, prices remain high after several years of strong growth.

Single-family houses have shown more moderate growth in prices and activity during the economic upswing. Growth has spread from the Copenhagen area to the rest of Denmark. Over the last half year, price growth has been lower while trading activity has been stable. House price confidence indicators show expectations of continued house price growth nationwide, but at a slower pace, in future.[10]

Activity and prices in the commercial real estate market remain high despite a flattening in 2018. The required rates of return on rental properties are generally low, driven by the low level of interest rates and high demand from Danish and foreign investors.

Credit standards and credit developments

Total lending by credit institutions to households and firms is high, having risen moderately since 2015. Lending growth is higher for corporate lending than for lending to households.

There are signs of the riskiness of corporate credit allocation having risen since 2013. Moderate lending growth may mask build-up of riskiness e.g. if credit standards are eased and new loans are allocated to riskier firms. There are limited indicators for capturing these risks, but according to Danmarks Nationalbank's lending survey, the institutions have – viewed over the entire

8 For further details, see the Council's method paper on the countercyclical capital buffer at the Council's website http://www.risikoraad.dk/english/.

9 The categories are described in the Council's method paper on the countercyclical capital buffer, see www.risikoraad.dk.

10 Cf. Nykredits Huspristillid (the Nykredit house price confidence indicator) and Greens Analyseinstitut for dagbladet Børsen (the Green analysis institute for the daily Børsen).

period – eased credit standards for corporate customers, mainly motivated by intensified competition. According to a new indicator of the riskiness of corporate credit allocation, recently published by Danmarks Nationalbank, risks will typically rise in an upswing.[11] The indicator has risen from 2013, meaning that, on average, the firms with the highest debt increases have become more leveraged than those with the lowest debt increases. At the same time, the indicator suggests a lower riskiness of credit allocation than in the pre-crisis years. The data behind the indicator is only available until end-2017. Moreover, a survey published by the Danish Financial Supervisory Authority in November 2018 points to increased risk appetite behind the loans granted by several of the large institutions for company acquisitions.[12]

Every quarter, all EU member states must calculate and publish a "credit-to-GDP gap" and a buffer guide calculated on the basis of the credit-to-GDP gap. The background is that the credit-to-GDP gap has been a good indicator for predicting systemic bank crises across a number of countries in retrospective analyses.[13] However, using the credit-to-GDP gap as an indicator of current credit developments presents a challenge. One of the weaknesses of the indicator is that it relies on a statistically calculated trend that is boosted by the very high lending growth and resulting high level of lending in the pre-crisis years. This entails a highly negative credit-to-GDP gap in Denmark.[14] The credit-to-GDP gap is also negative in several other countries, including in countries with positive countercyclical buffer rates.[15] Due to the challenges of using the credit-to-GDP gap as an indicator of the current credit development, the Council includes various credit development indicators in its assessment.

Risk build-up in credit institutions

Favourable developments in the financial sector in recent years – together with large customer funding surpluses in several institutions – have contributed to the build-up of significant capacity to increase lending among the institutions in general. Combined with limited growth in demand for loans, this has intensified competition for customers. Combined with optimism and a stronger risk appetite, this could lead to lower credit quality and easing of credit standards.

The institutions' return on equity fell in 2018, but from a high 2017 level. Their earnings thus remained high, and the listed institutions continue to distribute large shares of their earnings to the shareholders in the form of dividends or share buy-backs.

Model-based indicators

The Council uses two different estimates of the financial cycle in Denmark as input for its overall assessment of the current financial situation. Analyses of the financial cycle in Denmark show that the cycle is driven primarily by fluctuations in house prices and lending and that house prices have a tendency to move ahead of lending.[16] One of the financial cycle estimates shows that it has turned and is now in the middle of the upswing. Another estimate shows that the cycle reached the trough in 2014 and has been flat since then. The estimates should be interpreted with caution as they do not provide an accurate picture of the current financial cycle due to estimation uncertainty at the end of the reference period (end-point problems).

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11 Danmarks Nationalbank, The riskiness of corporate credit allocation is increasing, *Danmarks Nationalbank Analysis*, No. 4, February 2019.

12 See notification from the Danish Financial Supervisory Authority, *Banker mere risikovillige ved lån til virksomhedskøb* (Banks' risk appetite is higher for lending for company acquisitions), 22 November 2018.

13 In principle, the buffer guide should function as a common point of departure for when to activate the buffer and the level of the buffer rate. In order to avoid "inaction bias", the credit-to-GDP gap and buffer guide played a key role in international recommendations and legislation on the countercyclical capital buffer. The recommendations and legislation also state that decisions on the buffer rate should not be based only on the buffer guide, but that other quantitative and qualitative information must be included and published. For sources for recommendations and legislation, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/.

14 The buffer guide is currently 0 per cent. According to the mechanical calculation, it will not be positive until the credit-to-GDP gap exceeds 2 percentage points. The credit-to-GDP gap is seen in the chart pack in Chart A.4 (right).

15 See e.g. European Systemic Risk Board, *A Review of Macroprudential Policy in the EU in 2017*, April 2018.

16 See Oliver Juhler Grinderslev, Paul Lassenius Kramp, Anders Kronborg and Jesper Pedersen, Financial Cycles: What are they and what do they look like in Denmark?, *Danmarks Nationalbank Working Paper*, No. 115, June 2017.

Other information

Besides indicators, the Council includes other relevant information in its assessment of the buffer rate, including other policy measures. The purposes of some of the forthcoming requirements differ from that of the countercyclical capital buffer.

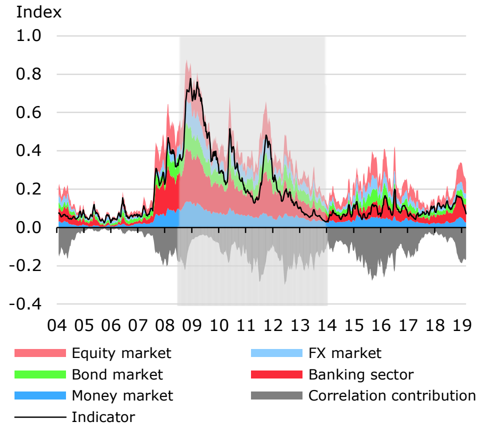
The MREL is a minimum requirement of the institutions' eligible liabilities, to be phased in by 2023 as a main rule. Eligible liabilities can absorb losses and recapitalise an institution in a resolution. The MREL differs significantly from the countercyclical buffer. The purpose of the MREL is to ensure that institutions can be restructured or resolved without the use of government funds, without such resolution having any substantial negative impact on financial stability. This differs from the purpose of the countercyclical capital buffer, which is to make it easier for the credit institutions to maintain a suitable level of lending in periods of stress in the financial system. The buffer should preferably be built up before such a period begins. The MREL may be met using several types of capital and debt instruments, whereas the buffer requirements can be met using Common Equity Tier 1 capital only.

Among the forthcoming requirements for institutions are the Basel Committee's recommendations for adjustment of the capital requirements, published in December 2017. According to the Basel Committee, the purpose is to ensure more harmonised calculation of risk-weighted exposures across countries. The requirements to be adjusted are of a permanent nature, whereas the countercyclical buffer can be reduced when risks materialise. The Basel Committee envisages phasing-in of the adjusted requirements from 2022 to 2027. The requirements must be adopted by the EU before they are imposed on Danish institutions.

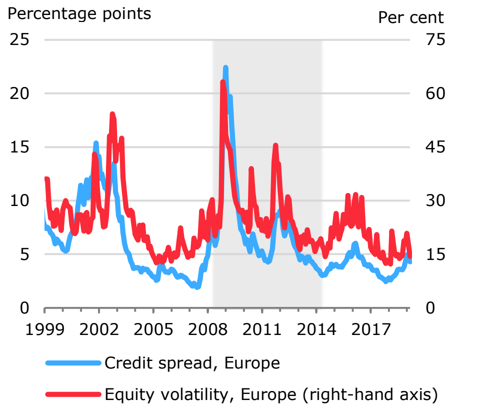
Chart pack: indicators

Risk perception | Chart A.1

Financial stress indicator



Credit spread and equity volatility

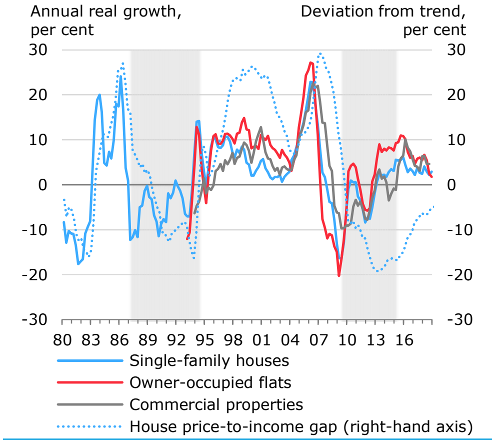


Note: Grey markings indicate financial crises. 4-week moving averages. The financial stress indicator aggregates the level of stress in five key submarkets/sectors, taking into account that simultaneous stress in several submarkets is a greater challenge to the financial system. A value of 0 indicates very low volatility and strong confidence in the financial system, while a value of 1 indicates that the five submarkets are all extremely dysfunctional and at the same time market participants are nervous. For further details, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from 3 March 2019 for the financial stress indicator and February 2019 for credit spreads and equity volatility.

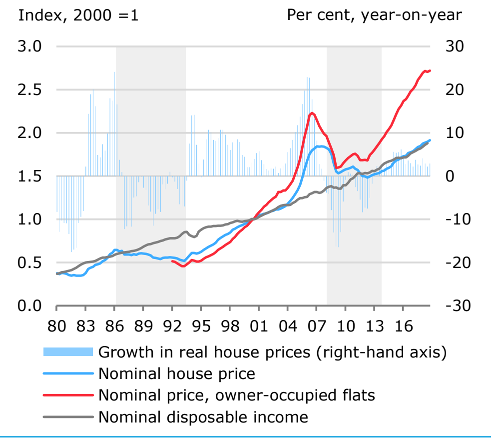
Source: Bloomberg, Nordea Analytics, Thomson Reuters and Danmarks Nationalbank.

Property prices | Chart A.2

Property prices



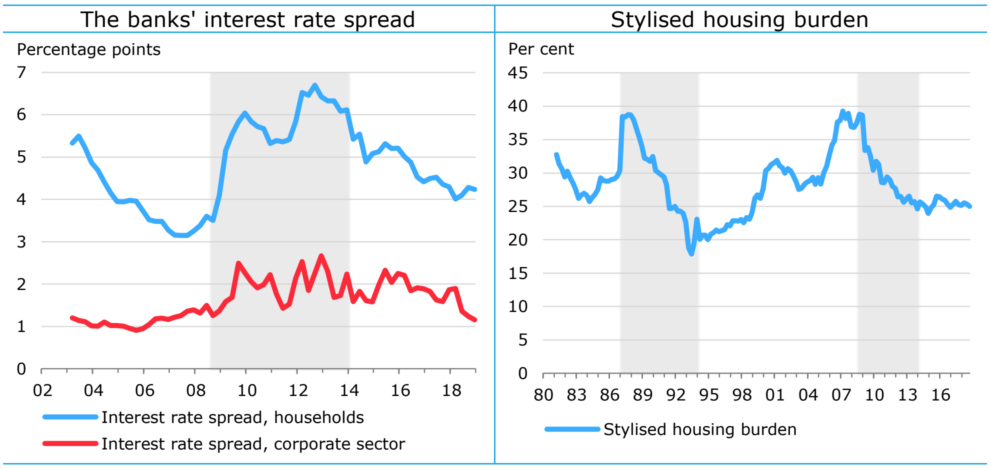
House prices and disposable incomes



Note: Grey markings indicate financial crises. The house price-to-income gap is defined as deviations of the house price-to-disposable-income ratio from its long-term trend (estimated by means of a recursive HP filter, lambda = 400,000), the house price being the cash price for a single-family house. For further details, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from the 3rd quarter of 2018 for the house price-to-income gap, real commercial property prices and nominal disposable income and from the 4th quarter of 2018 for the remaining series.

Source: Statistics Denmark, the MONA databank and own calculations.

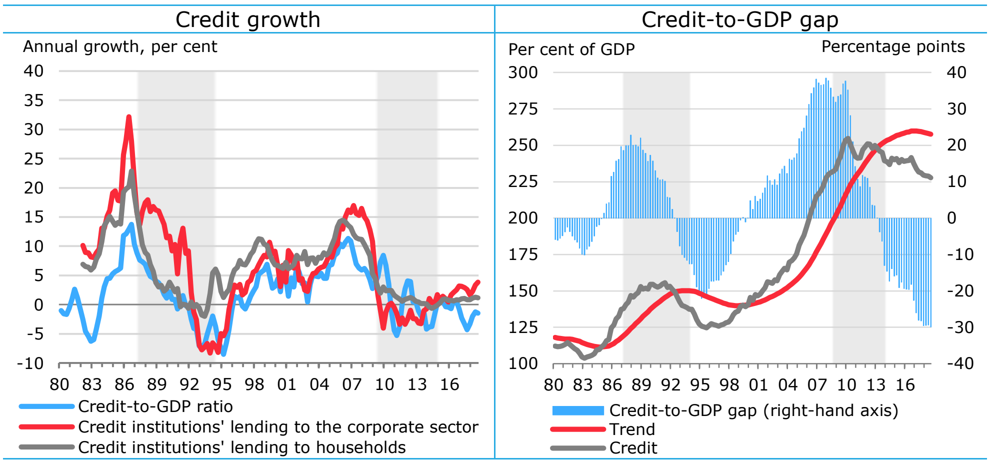
Credit standards — Chart A.3



Note: Grey markings indicate financial crises. *Left-hand chart:* 3-month moving averages. The interest rate spread is defined as the banks' lending rate on new lending, excluding overdrafts, relative to Danmarks Nationalbank's rate of interest on certificates of deposit (Danmarks Nationalbank's lending rate before 2009). *Right-hand chart:* The housing burden is a stylised calculation of the financing costs when buying a single-family house as a share of average disposable household income. For further details, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from the January 2019 for the banks' interest rate spread and the 3rd quarter of 2018 for the stylised housing burden.

Source: Statistics Denmark, Association of Danish Mortgage Banks, Realkredit Danmark, SKAT (Danish tax authority), Danmarks Nationalbank and own calculations.

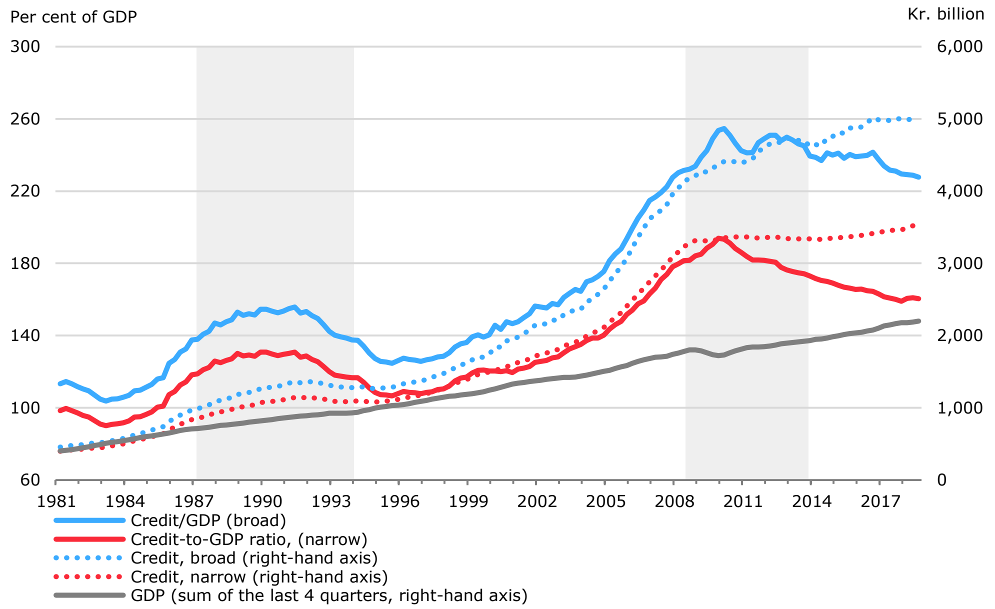
Credit developments — Chart A.4



Note: Grey markings indicate financial crises. *Left-hand chart:* In credit/GDP, lending is based on a broad definition of credit, while the other two lending series are based on a narrow definition. *Right-hand chart:* Lending is based on a broad definition of credit and the credit-to-GDP gap is defined as deviations between credit/GDP and a long-term trend (estimated by means of a recursive HP filter, lambda = 400,000). For further details and sources, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from January 2019 for lending by credit institutions to households and the corporate sector and the 3rd quarter of 2018 for credit/GDP and the credit-to-GDP gap.

Source: Kim Abildgren, Financial Liberalisation and Credit Dynamics in Denmark in the post-World War II Period, *Danmarks Nationalbank Working Paper*, No. 47, October 2007, Statistics Denmark, Danmarks Nationalbank, the MONA databank and own calculations.

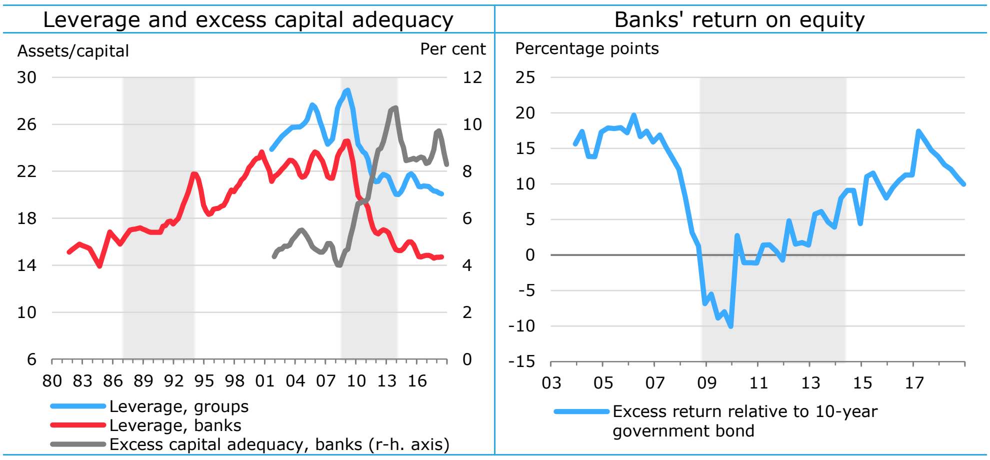
Lending and GDP — Chart A.5



Note: Grey markings indicate financial crises. For details on the narrow and broad credit definitions, see the Council's method paper on the countercyclical capital buffer at [www.risikoraad.dk.](http://www.risikoraad.dk) The most recent observations are from the 3rd quarter of 2018 for Credit/GDP (broad) and Credit (broad) and the 4th quarter of 2018 for Credit/GDP (narrow) and GDP and January 2019 for Credit (narrow).

Source: Kim Abildgren, Financial Liberalisation and Credit Dynamics in Denmark in the post-World War II Period, *Danmarks Nationalbank Working Paper*, No. 47, October 2007, Statistics Denmark, Danmarks Nationalbank, the MONA databank.

Risk build-up in credit institutions — Chart A.6

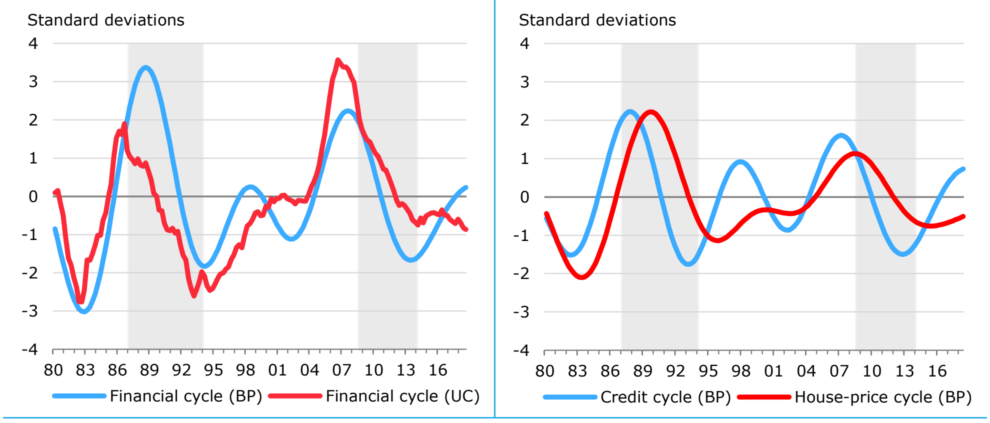


Note: Grey markings indicate financial crises. *Left-hand chart:* 4-quarter moving averages. Part of the increase in the excess capital adequacy from 2016 to 2017 is due to the fact that Nordea Bank Danmark is not included in the data since the 1st quarter of 2017. *Right-hand chart:* Annualised quarterly data for the banks' return on equity. For further details, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from the 4th quarter of 2018 for leverage, the banks' capital adequacy and return on equity.

Source: Danish Financial Supervisory Authority, Bloomberg and own calculations.

Model-based indicators Chart A.7

Estimates of the financial cycle | Sub-components of the financial cycle



Note: Grey markings indicate financial crises. Deviations from trend. *Left-hand chart*: BP indicates that the cycle has been estimated using a band-pass filter. UC indicates that the cycle has been estimated using an unobserved components model. *Right-hand chart:* House price cycle and credit cycle where the trend has been estimated using a BP filter. For further details, see the Council's method paper on the countercyclical capital buffer at http://www.risikoraad.dk/english/. The most recent observations are from the 3rd quarter of 2018.

Source: Danmarks Nationalbank, Statistics Denmark and own calculations.