DET SYSTEMISKE RISIKORÅD

Recommendation

25 September 2018

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 0.5 per cent to 1 per cent from 30 September 2019.[1]

The Council expects to recommend an increase of the buffer rate by 0.5 percentage point in the 1st quarter of 2019 unless the risk build-up in the financial system slows down considerably. The Council's strategy is to increase the buffer rate gradually.

The Council is ready to recommend a reduction of the buffer rate with immediate effect if substantial 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 Council finds it important to build up the countercyclical capital buffer in Denmark before financial imbalances grow large, making the financial sector vulnerable to negative shocks. Consequently, the buffer should be built up in periods like the current period with an economic upswing and substantial profits for credit institutions overall. This makes it easier for institutions to increase their capitalisation by retaining earnings.

Risks are still building up in the financial system

It is the assessment of the Council that risks are still building up in the financial system. The Danish financial system is highly affected by international market developments. Risk perception continues to be very low in the financial markets and the risk appetite among investors is still notable. The risks for the global economy have increased in 2018 due to, inter alia, the trade conflict and geopolitical tensions. In addition, several large countries' fiscal and monetary policy scope is limited by already high levels of debt and low interest rates. This reduces the possibilities of mitigating the potential adverse effects if risks materialise.

The Danish economy is in a solid upswing, and asset prices are generally high. Prices and activity in both the residential and commercial property markets have risen strongly in recent years. The rate of price increase for owner-occupied flats in the Copenhagen area has been declining in 2018, but price levels remain high.

1 The buffer rate applies to credit institutions' total credit exposures in Denmark. Credit institutions are banks, mortgage banks and investment firms.

There are signs of increasing risks in lending by credit institutions, although overall credit growth is modest. In general, the institutions have built up considerable capacity for increasing lending, and credit standards have been eased for corporate customers for a prolonged period. Increased competition for customers may lead to lower credit quality. The modest growth in total lending covers substantial differences across institutions, regions and industries.

The persistently low level of interest rates combined with the upswing, rising asset prices and intensified competition for in particular corporate customers may lead to a rapid rise in 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.

Broad information basis for the Council's assessment

The Council's assessment of the buffer rate is based on an overall assessment of developments in the financial system. 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. Consequently, the Council's recommended buffer rate is based on an overall assessment of the individual indicators and other relevant information.

Most credit institutions have enough capital to meet the requirement

Overall, the credit institutions are found to be well capitalised, and at the current capital level, the vast majority of the institutions would be able to comply with a requirement for a countercyclical capital buffer rate of 1 per cent.[3] The buffer requirement will not enter into force until 12 months after the Minister's announcement of an increase. This gives the institutions one year to meet the requirement. Gradual phasing-in of the buffer gives credit institutions more time to make the necessary adjustments. The Council thus expects the potential impact on lending by credit institutions to be limited.[4]

A 0.5 per cent increase of the buffer rate will add kr. 7 billion to the total regulatory equity requirement for Danish credit institutions. In comparison, earnings amounted to kr. 43 billion in 2017, and the sector's excess capital adequacy totalled kr. 129 billion in mid-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-back. Irrespective of whether earnings are distributed or retained, they belong to the shareholders.

The buffer is to reinforce the institutions' resilience

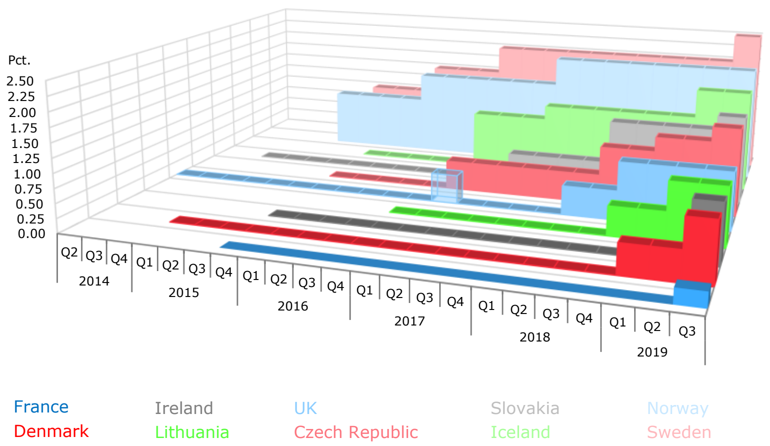
The countercyclical capital buffer should contribute to limiting the negative effects on the real economy of a future financial crisis. The buffer is to be built up during periods when risks are increasing in the financial system. Once the buffer has been built up, it can be reduced when risks materialise, e.g. when the financial system is hit by a negative shock. 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.

2 See also the Council's buffer assessment method at the Council's website www.risikoraad.dk.
3 The institutions must meet the countercyclical capital buffer requirement with Common Equity Tier 1 capital. The vast majority of them would also be able to comply with a 0.5 percentage point increase of the buffer rate, which the Council expects to recommend in the 1st quarter of 2019.
4 Danish experience shows that the increased capital requirements, introduced in the international regulation after the financial crisis, 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.

The buffer is primarily an instrument for strengthening the resilience of the institutions. It should not be regarded as an instrument for managing business cycles.

The countercyclical capital buffer was introduced in international regulation after the financial crisis as part of a larger set of reforms aiming to make the financial sector more robust. Several countries have activated the buffer, cf. Chart 1. Each country has its own method for assessing the buffer rate, and the level set depends on the country-specific financial development. On a broad information basis several countries have decided to activate and raise the buffer rate even in times of limited lending growth. Some of these countries are Ireland, Iceland and the UK. Other countries with modest credit growth have not yet activated the buffer. In May 2018, the IMF advised that the buffer rate in Denmark should be increased if risks would continue to build up.[5]

Countercyclical buffer rates in other countries	Chart 1



Note: The UK decision to raise the buffer rate to 0.5 per cent with effect from March 2017 did not take effect, as the buffer rate was reduced to 0 per cent after the outcome of the Brexit referendum in June 2016.
Source: European Systemic Risk Board's website and websites of national macroprudential authorities.

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. In mid-2018, the vast majority of the Danish institutions had sufficient capital to meet both the buffer requirements[6] that are being phased in until 2019 and a countercyclical capital buffer of 1 per cent in Denmark. Moreover, the institutions can increase their capitalisation towards 2019 by retaining earnings.

The countercyclical capital buffer differs from the other buffer requirements as it can be reduced 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 MREL.[7] The purpose of the MREL, inter alia, differs from the purpose of the countercyclical capital buffer, cf. Appendix A.

The requirement that the banks must maintain a countercyclical capital buffer is not a "hard" requirement. So banks in breach of the requirement will not lose their banking licences. Instead, they will be required to submit a capital conser-

5 See IMF, Denmark: Concluding Statement for the 2018 Article IV Consultation, May 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 requirement for own funds and eligible liabilities. Own funds and eligible liabilities can absorb losses and recapitalise an institution in a resolution situation. As a main rule, the MREL will be phased in towards 2022, cf. the Danish Financial Supervisory Authority's press release of 30 October 2017.

vation plan to the Danish Financial Supervisory Authority, and bonus and dividend payments etc. may also be limited if the banks fail to comply with the combined capital buffer requirement.[8]

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

Lars Rohde, Chairman of the Systemic Risk Council

Statements from the representatives of the ministries on the Council

"Legislation regarding the Systemic Risk Council stipulates that recommendations addressed to the government must include a statement from the representatives of the ministries on the Council. Neither the representatives of the ministries nor the Danish Financial Supervisory Authority have the right to vote on recommendations addressed to the government.

The Danish economy is strong, employment is record-high and house prices are rising. Credit growth at national level remains moderate, but somewhat higher in Copenhagen and Aarhus where house prices are high. According to experience, credit growth responds with a certain lag to rising house prices. The principal aim of the buffer is that it should be possible to reduce it when the business cycle reverses, in order to support lending and promote a more stable development in e.g. employment and families' disposable incomes. That is why the government relies on building up the countercyclical buffer in times like the current period with strong economic development and before large financial imbalances appear. In addition, it takes 12 months from the announcement of the buffer until it enters into force. The government follows the recommendation to increase the buffer from 0.5 per cent to 1 per cent."

8 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.

Appendix A: 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 to provide a more detailed picture than that painted by the key indicators.

The early stage of a financial upswing is often characterised by an increasing risk appetite among investors. 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 earlier than other indicators, e.g. lending to households and firms.

It is the assessment of the Council that risks are still building up in the financial system. This is supported by several factors. The indicators included by the Council in the information basis are described below, divided into relevant categories.[9]

Risk perception

The financial markets have been characterised by a very low level of stress for a number of years. At the same time, risk perception is currently low and risk appetite high. This is reflected in e.g. very low implied volatility in the bond and equity markets and narrow credit spreads.

Real estate market

In the housing market, prices have continued to rise all over Denmark, and trading activity remains high. The markedly high rate of price increase for owner-occupied flats in the Copenhagen area has subsided in 2018, although prices remain high. There are signs that the housing market growth has spread particularly from the Capital Region of Denmark to the rest of Zealand.

Prices and activity in the commercial property market have risen strongly in recent years. The required rates of return on rental properties have generally fallen, driven by the low level of interest rates and high demand from investors seeking alternative investment opportunities.

Credit standards and lending

There are signs of increasing risk in lending by credit institutions. According to Danmarks Nationalbank's lending survey, the banks have gradually eased credit standards for corporate customers since 2013, mainly motivated by intensified competition. While the lending survey indicates tighter credit standards regarding households, a thematic survey from the Danish Financial Supervisory Authority indicates a higher risk appetite among several institutions, granting loans to customers with low disposable amounts, a high debt factor or negative wealth.[10]

Total lending by credit institutions to households and firms has risen since 2015, but nevertheless remains modest. Lending growth is stronger for corporate customers than for households.

Although lending growth is modest, total lending is at a high level. Build-up of debt from an already high level amplifies risks associated with future credit

9 The categories are described in the Council's method paper on the countercyclical capital buffer available at the Council's website www.risikoraad.dk.
10 See Danish Financial Supervisory Authority, Press release of 4 September 2018, "Flere banker tager høj risiko ved boliglån i vækstområder" (More banks assume high risks on housing loans in growth areas).

growth in connection with an upswing in the real estate market and in the economy.

Every quarter, all EU member states must calculate and publish a credit-to-GDP gap and a reference rate 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.[11] 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 buoyed up by the very high level of lending in the pre-crisis years. The credit-to-GDP gap is thus negative in many countries, including in countries with positive countercyclical buffer rates.[12] The credit-to-GDP gap is very negative in Denmark and does not provide a true and fair view of credit developments.[13] Consequently, the Council finds it important to include different 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 higher risk appetite, this could lead to lower credit quality and easing of credit standards.

High earnings for the institutions are, inter alia, attributable to low loan impairment charges. The return on equity has increased in recent years and is now at more or less the same level as in the pre-crisis years. A large share of the listed institutions' earnings is distributed to shareholders in the form of dividend and 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 it is driven primarily by fluctuations in house prices and lending and that house prices have a tendency to move ahead of lending.[14] One of the estimates of the financial cycle shows that it has turned and is now on the upswing. The other estimate indicates that the cycle is reversing. 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).

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.

One requirement is the MREL, i.e. the minimum requirement for own funds and eligible liabilities of the institutions. Own funds and eligible liabilities can absorb losses and recapitalise an institution in a resolution situation. 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

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11 In principle, the reference rate 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 reference rate 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 reference rate, 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 www.risikoraad.dk.

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

13 The reference rate 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 Chart A.4 (right).

14 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.

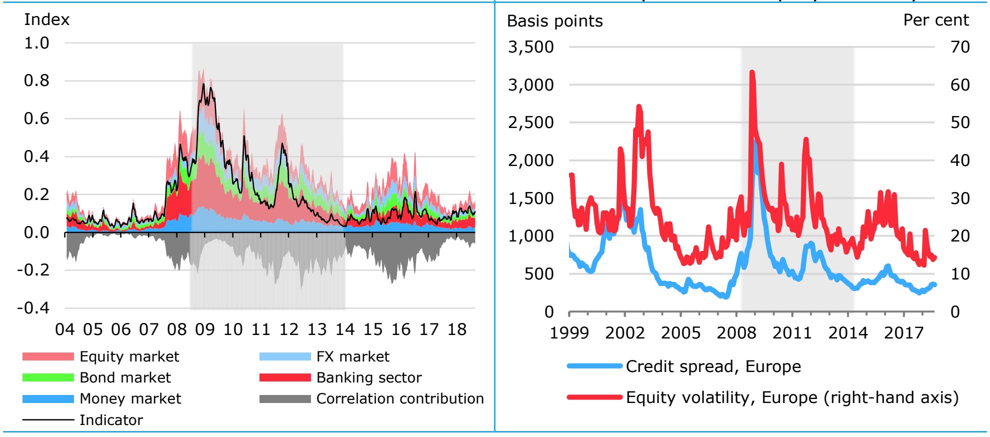
financial stability. This differs from the purpose of the countercyclical capital buffer, which is to make it easier for the credit institutions to maintain a suitable level of lending in periods of stress in the financial system. The buffer should preferably be built up before such a period begins. 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.

Future requirements for institutions also include the Basel Committee's recommendations for adjustment of the capital requirements, published in December 2017. According to the Basel Committe, the purpose is to ensure 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: Key indicators

Risk perception	Chart A.1

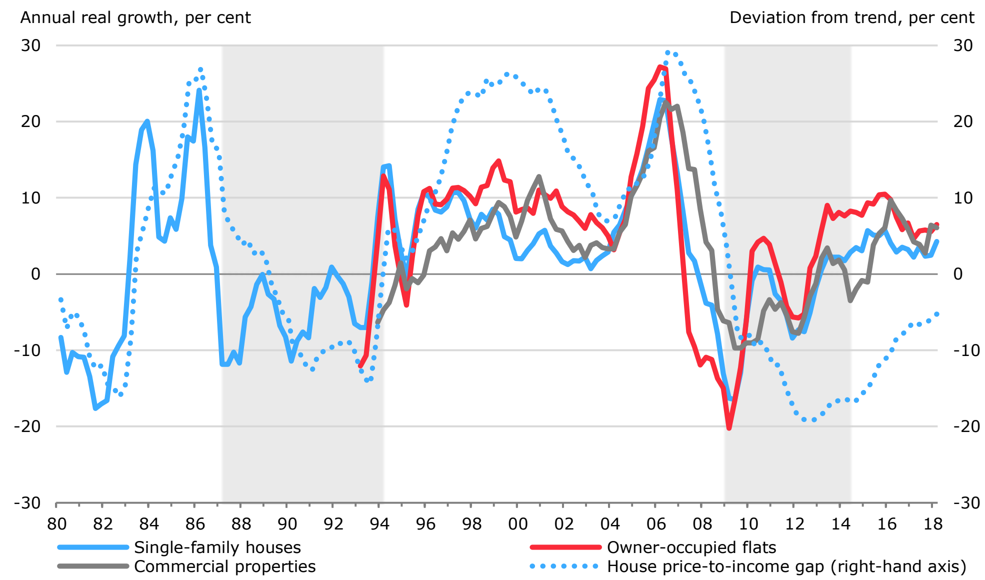
Financial stress indicator | Credit spread and equity volatility



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 www.risikoraad.dk. The most recent observations are from 2 September for the financial stress indicator and August 2018 for credit spreads and equity volatility.

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

Property prices	Chart A.2

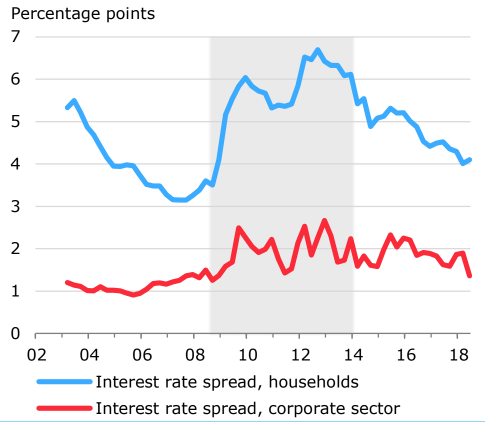


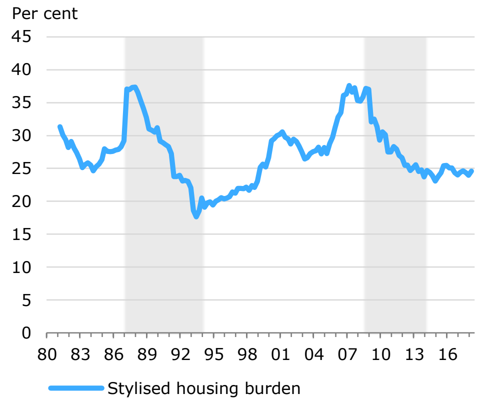
Note: Grey markings indicate financial crises. The house price-to-income gap is defined as deviations of the house price-to-disposable-income ratio from its long-term trend (estimated by means of a recursive HP filter, lambda = 400,000), the house price being the cash price for a single-family house. For further details, see the Council's method paper on the countercyclical capital buffer at www.risikoraad.dk. The most recent observations are from the 1st quarter of 2018.

Source: Statistics Denmark, the MONA data bank and own calculations.

Credit standards

Chart A.3



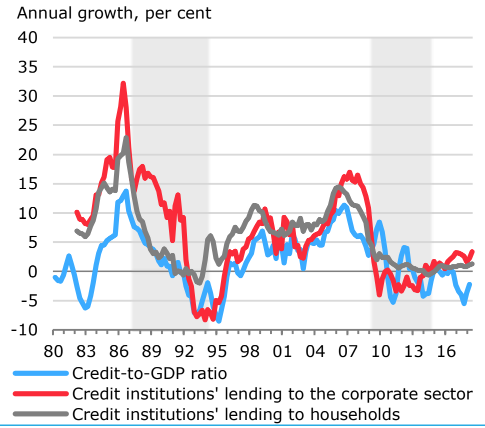


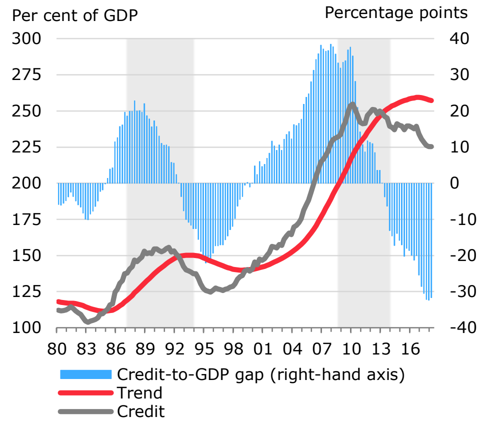
Note: Grey markings indicate financial crises. *Left-hand chart:* 3-month moving averages. The interest premium is defined as the banks' lending rate on new lending, excluding overdrafts, relative to Danmarks Nationalbank's rate of interest on certificates of deposit (Danmarks Nationalbank's lending 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 www.risikoraad.dk. The most recent observations are from the 2nd quarter of 2018 for the banks' interest premium and the 1st 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



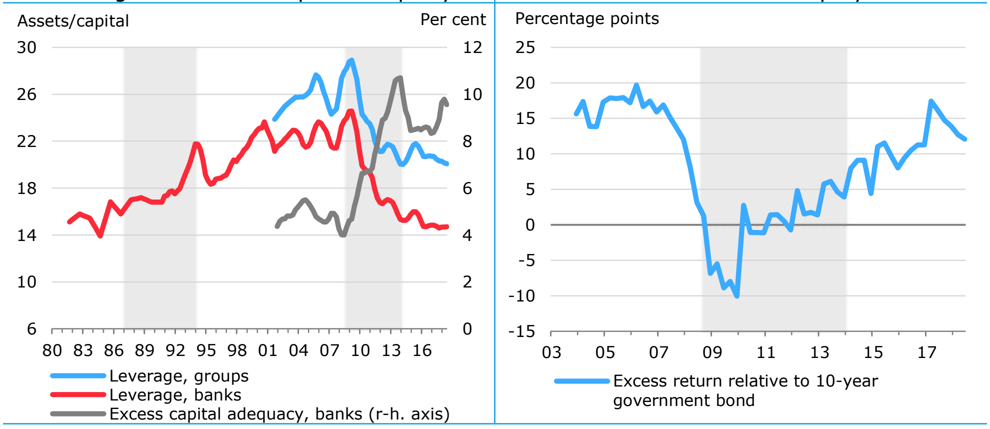


Note: Grey markings indicate financial crises. *Left-hand chart:* In credit/GDP, lending is based on a broad definition of credit, while the other two lending series are based on a narrow definition. *Right-hand chart:* Lending is based on a broad definition of credit and the credit-to-GDP gap is defined 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 www.risikoraad.dk. The most recent observations are from the 2nd quarter of 2018 for lending by credit institutions to households and the corporate sector and the 1st 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 data bank and own calculations.

Risk build-up in credit institutions — Chart A.5

Leverage and excess capital adequacy | Banks' return on equity

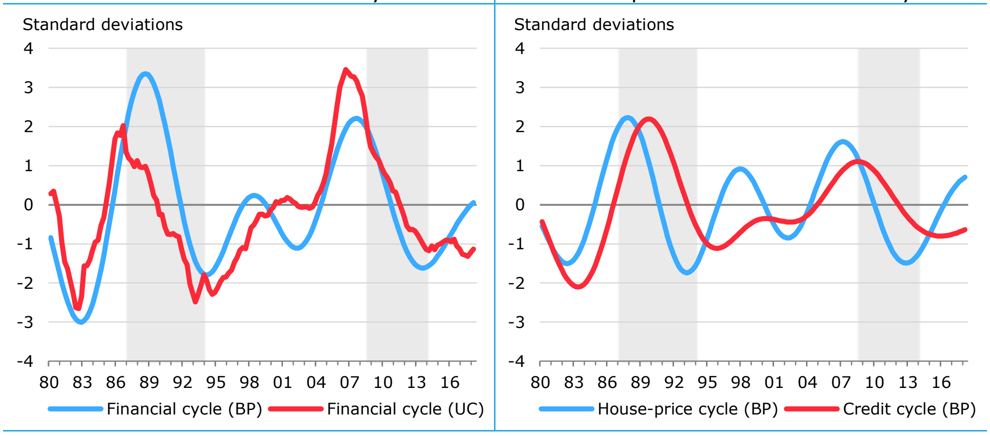


Note: Grey markings indicate financial crises. *Left-hand chart:* 4-quarter moving averages. Part of the increase in the excess capital adequacy from 2016 to 2017 is due to the fact that Nordea Bank is not included in the data since the 1st quarter of 2017. *Right-hand chart:* Annualised quarterly data for the banks' return on equity. For further details, see the Council's method paper on the countercyclical capital buffer at www.risikoraad.dk. The most recent observations are from the 2nd quarter of 2018 for leverage, capital adequacy and the banks' return on equity.

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

Model-based indicators — Chart A.6

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 www.risikoraad.dk. The most recent observations are from the 1st quarter of 2018.

Source: Danmarks Nationalbank, Statistics Denmark and own calculations.