

2018-09-19

DECISION MEMORANDUM



FI Ref.18-11833

Finansinspektionen
Box 7821
SE-103 97 Stockholm
[Brunnsgatan 3]
Tel +46 8 408 980 00
Fax +46 8 24 13 35
finansinspektionen@fi.se
www.fi.se

Amendment to regulations regarding the countercyclical buffer rate

Summary

Finansinspektionen has decided to raise the countercyclical capital buffer to 2.5 per cent, and the new buffer rate shall be applied as of 19 September 2019. The buffer rate is being increased to raise the resilience in the Swedish banking system. A higher buffer improves the financial system's possibilities for managing potential problems in the future.

Finansinspektionen makes the assessment that the risks in the Swedish financial system continue to be at an elevated level. The risks have also increased since March 2016 when Finansinspektionen decided to raise the countercyclical buffer to 2 per cent. One indication that the risks in the financial system have increased is that the combination of low interest rates and low risk premiums. Risk premiums are currently lower than they were in March 2016. The more expansive financial conditions are judged to have increased risk-taking. In general, risk premiums are now at lower levels than in March 2016. A stronger indication that the risks have increased is that total lending to households and non-financial firms grew on average by 7.7 per cent on an annual basis the last five quarters. This is significantly faster than the growth of 6.4 per cent when Finansinspektionen most recently decided to raise the buffer. Finansinspektionen pointed out already one year ago that the countercyclical buffer might need to be raised if the rate at which debt was increasing did not decelerate.

The banking system's resilience is considered to have improved since March 2016 since the banks now hold more capital than they did prior to the previous decision to raise the buffer. However, Finansinspektionen makes the assessment that this increase in capital is not sufficient for fully counteracting the continued risk build-up in the financial system. This suggests that additional capital buffers are needed for the banks to have the capacity in a potential crisis to maintain their lending activities.

Table of Contents

1	Background	3
1.1	Objective of the regulation	3
1.2	Current regulation	4
1.3	Alternative regulatory approaches	5
1.4	Legal basis	5
1.5	Preparation	5
2	Reasoning and considerations	6
2.1	Background	6
2.2	The countercyclical buffer rate is raised to 2.5 per cent	7
2.3	Entry into force	23
3	Impact assessment	24
3.1	Impact on society and borrowers	24
3.2	Impact for lenders	25
3.3	Implications for Finansinspektionen	28
	Appendix 1. Change in data source for firms' market financing	29
	Appendix 2. Diagrams.....	30
	Appendix 3. FI's forecasts	33

1 Background

The Capital Requirements Directive¹ contains provisions on setting the countercyclical buffer rate (see, inter alia, Article 136). These provisions have been implemented in Swedish law mainly through Chapter 7, sections 1–3 of the Capital Buffers Act (2014:966) (the Buffer Act). According to Chapter 7, section 1 of the Buffer Act, Finansinspektionen shall set a countercyclical buffer guide and a countercyclical buffer rate each quarter. The countercyclical buffer guide shall be viewed as a benchmark when Finansinspektionen sets the countercyclical buffer rate. This rate shall then in turn serve as a basis for calculating the size of the firm-specific countercyclical capital buffer pursuant to Chapter 6 of the same act.

The countercyclical buffer rate set by Finansinspektionen pursuant to Chapter 7, section 1 of the Buffer Act shall be applied by all institutions concerned.² Finansinspektionen's decision to set the countercyclical buffer rate is part of its standard-setting activities and therefore occurs in the form of regulations. Since the Buffer Act was changed on 1 January 2018, the institutions concerned include credit institutions, Svenska Skeppshypotekskassan and the investment firms referred to in Regulation No 575/2013 of the European Parliament and of the Council on prudential requirements for credit institutions and investment firms (CRR).³ This change means that fund management companies and AIF managers with authorisation to conduct discretionary portfolio management are no longer subject to the provision. The same applies to the securities companies that are not covered by the CRR's definition of "investment firm".

1.1 Objective of the regulation

The objective of the countercyclical capital buffer is to ensure sufficient resilience in the banks and thereby in the financial system. The buffer shall ensure that the banking system as a whole has sufficient capital to sustain lending to households and corporations following serious shocks to the economy at large or the financial system that could cause a credit crunch. The countercyclical capital buffer is a capital requirement that is intended to vary over time. This means that the buffer should be activated and raised in periods during which the risks in the financial system are judged to be building up (Diagram 1).⁴ In the event of an ensuing crisis or major losses for the banks,

¹ Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

² The countercyclical buffer rate should normally fall between 0 and 2.5 per cent of the firm's total risk-weighted exposures amount.

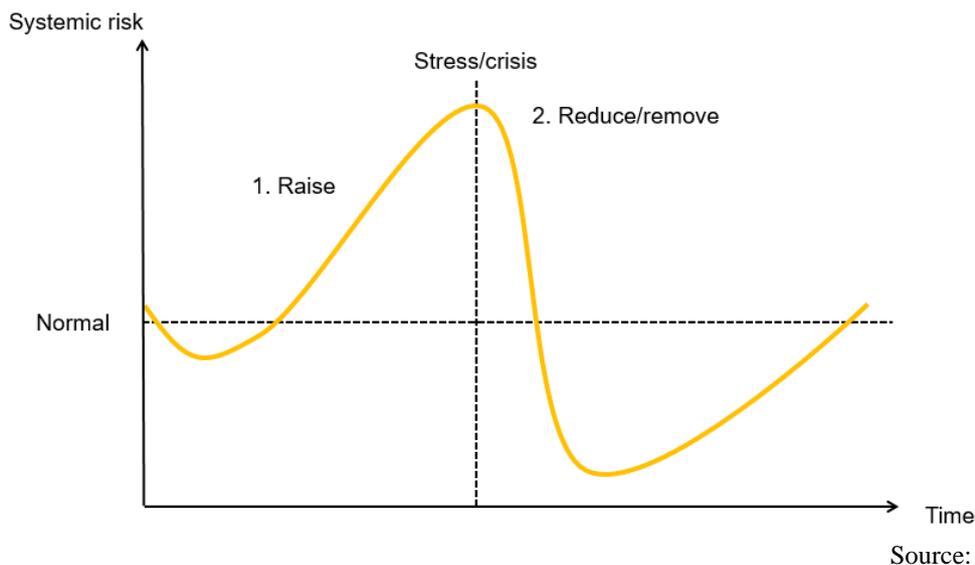
³ The term "banks" is hereafter used as an umbrella term to refer to the firms that are affected by the countercyclical capital buffer.

⁴ These risks are sometimes called cyclical systemic risks, which refers to the tendency of these risks to be built up during relatively long cycles that tend to be significantly longer than normal economic cycles.

the buffer requirement may be lowered or removed entirely to counteract more restrictive lending and thereby alleviate the economic downturn.

The objective of the countercyclical capital buffer, in other words, is not to manage normal economic fluctuations but rather to build up sufficient resilience in the banks to enable them to maintain their lending activities even during a serious crisis, thus mitigating the credit crunch and in turn the economic downturn. It is also not the objective of the buffer to slow the rate at which debt is growing during the build-up phase, even if this can be a side-effect.

Diagram 1. The buffer over time



1.2 Current regulation

Finansinspektionen activated the countercyclical capital buffer for Sweden on 8 September 2014 by issuing regulations regarding a countercyclical buffer rate; see Finansinspektionen's regulations (FFFS 2014:33) regarding the countercyclical buffer rate.⁵ The regulations set the buffer rate at 1 per cent and was applied as of 13 September 2015.

On 22 June 2015, Finansinspektionen decided to amend the regulations regarding the countercyclical buffer rate.⁶ The regulations raised the buffer rate to 1.5 per cent as of 27 June 2016.

⁵ *Föreskrifter om kontracykliskt buffertvärde*. Published at www.fi.se on 10 September 2014, FI Ref. 14-7010. An English translation is available on the website.

⁶ *Ändring av föreskrifter om kontracykliskt buffertvärde*. Published at www.fi.se on 23 June 2015, FI Ref. 15-7062. An English translation is available on the website.

On 14 March 2016, Finansinspektionen decided once again to amend the regulations regarding the countercyclical buffer rate.⁷ These regulations raised the buffer rate to 2 per cent. The amendment went into effect on 19 March 2017.

1.3 Alternative regulatory approaches

When preparing the regulations regarding the countercyclical buffer rate, Finansinspektionen has observed EU law and the rules of the Capital Requirements Directive. Sweden is obliged to implement the rules of the Capital Requirements Directive regarding e.g. countercyclical capital buffers. These rules are implemented in Swedish law primarily through Chapter 7, sections 1–3 of the Buffer Act. According to Chapter 7, section 1 of the Buffer Act, Finansinspektionen shall set a countercyclical buffer guide and a countercyclical buffer rate each quarter. With due consideration for the Swedish judicial system, this entails an obligation for Finansinspektionen to issue regulations regarding the countercyclical buffer rate. No alternative is available other than regulation via regulations.

1.4 Legal basis

According to Chapter 7, section 1 of the Buffer Act, Finansinspektionen shall set a countercyclical buffer rate each quarter. It therefore has a mandate to issue implementing regulations pursuant to this provision through section 19, point 4 of the Special Supervision and Capital Buffers Ordinance (2014:993).

1.5 Preparation

According to the quarterly process for setting the countercyclical buffer rate, it is Finansinspektionen's Director General who is responsible for deciding on directional decisions and decisions not to change the buffer rate. Decisions to change the buffer rate, which thus require an amendment to the regulation, are to be made by Finansinspektionen's Board of Directors. Before the regulation is amended, a directional decision is first made by the Director General. The proposed regulations are then submitted for consultation. After Finansinspektionen has considered the feedback received during the consultation, Finansinspektionen's Board of Directors will decide on whether or not to change the buffer. This decision is then published by Finansinspektionen on its website.

On 13 July 2018, Finansinspektionen announced that the Director General had decided on a directional decision to investigate whether the countercyclical buffer should be raised. The investigation showed that there are grounds for raising the countercyclical buffer rate to 2.5 per cent. On 30 July 2018, a proposal to amend the regulations regarding the countercyclical buffer rate and

⁷ *Ändring av föreskrifter om kontracykliskt buffertvärde*. Published on www.fi.se on 15 March 2016, FI Ref. 16-742. An English translation is available on the website.

the grounds for the amendment were submitted for consultation in a consultation memorandum.

Written feedback on the proposal was received from Sveriges Riksbank, the Swedish National Debt Office, the Swedish Better Regulation Council, the Swedish Bankers' Association, the Swedish National Savings Banks Organisation, the Association of Swedish Finance Houses, the Financial Sector Union of Sweden and the Swedish National Board of Housing, Building and Planning. The Swedish Accounting Standards Board, industry organisation FAR, Kommuninvest, and the Swedish Investment Fund Association responded that they do not have any feedback regarding the proposal. Finansinspektionen will discuss the feedback from the consultation bodies in section 2.

2 Reasoning and considerations

In this section, Finansinspektionen accounts for its considerations regarding the size of the buffer rate given the systemic risks and current economic and financial circumstances. In addition, this section presents the feedback from the consultation bodies and Finansinspektionen's response.

2.1 Background

In the build-up phase, the size of the countercyclical capital buffer should be assessed given the development of the risks in the financial system and the banking system's resilience to shocks over time. Therefore, Finansinspektionen follows the systemic risks and the resilience in the banking system. As described in section 1.1, the purpose of the countercyclical capital buffer is to maintain and strengthen the banks' resilience.⁸ This also strengthens the resilience of the financial system as a whole. The banks need to build up a larger countercyclical capital buffer when the systemic risks are higher than what is considered normal. In these situations, the countercyclical capital buffer should be raised.

It is then possible to lower the buffer requirement or completely remove it when a serious financial crisis is looming or circumstances otherwise justify counteractive measures. This releases capital, which gives the banks space to maintain large parts of their lending activities. This counteracts the potential of a credit crunch arising in a crisis situation, particularly if the banks are suffering major losses. This could in turn mitigate the real economic downturn.

In line with the European Systemic Risk Board's (ESRB) guidelines, Finansinspektionen chose to establish the level of the countercyclical buffer

⁸ The objective, in other words, is not to slow the growth rate of lending, but this could be a side-effect.

rate through a qualitative assessment of the systemic risks.⁹ This assessment is based on a number of quantitative indicators that reflect different risks in the Swedish financial system.¹⁰ There are primarily three main groups of indicators.

The first group consists of indicators related to credit terms and conditions on international and Swedish capital markets. These indicators reflect the market participants' view of risk – their willingness to purchase riskier assets and lend to borrowers with lower creditworthiness. Low interest rates can contribute to this type of higher risk-taking and thus to increasing systemic risks.

The second group includes indicators on lending in the Swedish economy. This group includes the single, most important factor in Finansinspektionen's assessment of the systemic risks – lending to Swedish households and non-financial firms. This lending includes both bank-generated loans and non-financial firms' market financing, i.e. borrowing with bonds and certificates. It is important to assess the financial system's vulnerability as a whole. Therefore, Finansinspektionen carefully follows total lending compared to the trend-related development of the Gross Domestic Product (GDP). The second group also includes the countercyclical buffer guide, calculated using the Basel Committee's standard method, as one of the factors considered when setting the buffer rate.¹¹

The third group of indicators includes the prices of relevant asset classes, such as residential properties and commercial real estate. They provide an indication of how much stress the financial system and the economy can be exposed to in a crisis situation before asset prices fall.

Finansinspektionen uses the indicators listed above to assess the changes to the systemic risks. Finansinspektionen then weights this assessment against the resilience in the Swedish banking system.

2.2 The countercyclical buffer rate is raised to 2.5 per cent

Finansinspektionen's position: The countercyclical capital buffer for Sweden shall be raised and set at 2.5 per cent. The countercyclical buffer guide is set at 0.11 per cent using the standard method.

Consultation memorandum: The proposal had the same content.

⁹ The ESRB's guidelines for setting the countercyclical buffer rate recommends that the authority responsible for assessing the systemic risks associated with strong credit growth shall take into account quantitative indicators, of which the credit gap is one, as well as a qualitative assessment. See ESRB (2014), ESRB Recommendation on guidance for setting countercyclical buffer rates, ESRB/2014/1

¹⁰ See also ESRB (2014), *Operationalising the countercyclical capital buffer: indicator selection, threshold identification and calibration options*, Occasional Paper No. 5.

¹¹ Chapter 7, section 2 of the Buffer Act and Article 136(3) of the Capital Requirements Directive.

Consultation bodies: The consultation bodies *Sveriges Riksbank (the Riksbank)*, *the Swedish National Debt Office (SNDO)* and *the Swedish National Board of Housing, Building and Planning* support the proposed increase. *The Swedish Bankers' Association (the Bankers' Association)*, *the Swedish National Savings Banks Organisation*, *the Association of Swedish Finance Houses* and *the Financial Sector Union of Sweden* oppose the proposal. The industry organisation *FAR*, *the Swedish Accounting Standards Board*, *Kommuninvest* and *the Swedish Investment Fund Association* have no opinion on the proposal. *The Swedish Better Regulation Council* considers the impact analysis to meet the requirements.

The Riksbank welcomes Finansinspektionen's proposal to raise the countercyclical buffer rate. According to the Riksbank, high household debt and its continued upward trend are the greatest risk for the Swedish economy. The Riksbank also takes the position that Sweden has a large, concentrated and interconnected banking system with limited capital levels. The banking system is therefore vulnerable and sensitive to shocks. According to the Riksbank, this makes it important to strengthen the banks' resilience since the risks have been building for a long time. The Riksbank also believes that the higher buffer rate should be applied as early as in six months instead of the proposed twelve months. The aim is to increase the banks' resilience before risks materialise.

The SNDO supports Finansinspektionen's proposed increase in the countercyclical capital buffer. The SNDO shares Finansinspektionen's analysis that the systemic risks have increased and that it is during the boom cycles that measures need to be taken to increase resilience in the Swedish financial system. However, the SNDO comments that low interest rates on the Swedish treasury bonds in and of themselves are not necessarily an indication that the systemic risks have increased.

The Swedish National Board of Housing, Building and Planning supports Finansinspektionen's proposed change in the countercyclical buffer rate. The Swedish National Board of Housing, Building and Planning believes that total lending is growing rapidly and an increase is reasonable given the risk of underestimated systemic risks.

The Swedish Better Regulation Council finds that the impact assessment as a whole meets the requirements of sections 6 and 7 of the Regulatory Impact Assessment Ordinance (2007:1244). According to the Council, the impact analysis falls short in the proposal's impact on competition since the analysis has not considered international competition. The Council also finds the account of the special considerations for small businesses when formulating the regulations to be incomplete.

The Swedish Bankers' Association opposes Finansinspektionen's proposal to raise the countercyclical capital buffer. The Bankers' Association questions whether credit growth in Sweden is at such a level that Sweden must be the

first EU country to set a buffer rate at the highest possible level according to the main rule. The buffer guide, which is used as a benchmark when setting the capital buffer, is lower now than when the buffer rate was last raised. The buffer guide shows instead that the capital buffer should be lowered, not raised.

The Bankers' Association believes that the growth in lending to households has slowed since Finansinspektionen last raised the buffer rate. Lending to non-financial firms has been below normal-state growth in nominal GDP for a long time. It is primarily only recently that lending to firms has increased and marginally exceeded GDP growth. The Bankers' Association therefore does not consider lending to firms to be excessive in relation to the long-term trend and that growth is not increasing rapidly enough for the systemic risks associated with lending to have increased. Furthermore, the Bankers' Association takes the position that the firms' market financing does not constitute a direct risk for the banks and thus does not contribute to the firms' total credit growth. Market finance only makes the non-financial firms more sensitive, according to the Bankers' Association. Today's level of credit growth in the banking sector thus does not justify an increase, says the Bankers' Association.

The Bankers' Association furthermore states that indicators such as lower volatility on the equity markets and lower risk premiums reflect lower risk and that both financial and non-financial firms are more resilient. The fall in house prices and forecasts of unchanged price levels should be considered in Finansinspektionen's assessment. Earlier price increases, and thus debt growth, was primarily due to insufficient construction in expanding areas. Raising the buffer rate, and thus increasing the financing cost to produce new residential property, can be viewed as counter-productive.

The Bankers' Association also takes the position that it is inevitable that an increase in the buffer rate will affect the real economy. It can primarily obstruct growth in the commercial sector, investments and demand since the increase reduces the banks' incentives to issue loans to mainly corporate customers, the loans of which have higher risk weights. The National Institute of Economic Research's forecast shows that GDP will slow, and the Bankers' Association believes that the proposed increase will risk further slowing GDP growth.

Finally, the Bankers' Association states that Swedish banks are very well capitalised, both in relation to the risks that are taken and in comparison to banks in other countries. The risk that the banks would not have enough capital to withstand a systemic crisis is low in the opinion of the Bankers' Association. At the same time, the banks' risk-weighted assets will be affected by the change in the risk weight floor for mortgages, the European Banking Authority's (EBA) overview of internal models and, by extension, the EU's implementation of the Basel IV regulations. The Bankers' Association points out that higher risk-weighted assets means that the countercyclical buffer will increase in SEK.

The Swedish National Savings Banks Organisation opposes the proposal to raise the countercyclical buffer rate with the motivation that Finansinspektionen has not presented sufficient grounds for the implementation. According to the Organisation, Finansinspektionen works entirely from the systemic risk development in a broad perspective instead of basing the proposal on analyses of the credit risk itself and the risks associated with excessive credit growth. The Organisation takes the position that the analysis largely needs to be based on the development of credit growth, and it would also have appreciated a comparison of the conditions in comparable European countries.

The Swedish National Savings Banks Organisation shares Finansinspektionen's perception that a higher volume of market financing can result in elevated systemic risk. At the same, though, the Organisation believes that capital requirements cannot be forced on banks for risks to which the banks for various reasons have refrained from exposing themselves. As a whole, the Organisation finds that it is difficult to understand the need for an increase since it has been stated that the banks' resilience has increased since the last increase.

The Association of Swedish Finance Houses opposes an increase in the capital buffer. The Association makes the point that the tool to counteract systemic risks is a blunt instrument and that it does not take into account that credit growth differs greatly between different areas. Like with the last increase, the Association says that the buffer can send the wrong signals and have negative effects on lending to corporates and also, by extension, the real economy at large. The Association also questions whether credit growth in Sweden is at such a serious level that Sweden must be the only EU country to set the highest buffer according to the main rule. The Association also notes that the buffer guide supports a decrease rather than an increase. There is also no explanation for why the risk guide is not given the weight specified by the Directive.

The Association of Swedish Finance Houses makes the assessment that the risks have not increased materially and that the banks are better capitalised now than when the rate was raised before. Corporate debt has increased slightly in recent years, but from levels below the growth in GDP. Therefore, the credit growth to corporates is not excessive. There are also signs that house prices have plateaued or are falling, which probably will decrease rather than increase credit growth in mortgages in the future. Supported by these arguments, the Association of Swedish Finance Houses opposes an increase in the capital buffer.

The Financial Sector Union of Sweden opposes the proposal since it believes that Finansinspektionen has not sufficiently justified the proposal. The Financial Sector Union of Sweden states that it is primarily lending to corporates that concerns Finansinspektionen, but that there is no information on how much of the increase is associated with bank loans and how much with market financing. The Financial Sector Union of Sweden also believes that it is

not clear if an increase in market financing is a real problem and a driver behind elevated systemic risks. The Union would like a clarification from Finansinspektionen on this matter.

The Financial Sector Union of Sweden also raises a concern that Swedish banks will experience a competitive disadvantage in relation to other European banks since Swedish financial regulation is not fully harmonised with the rules in the rest of Europe. An increase in the buffer can enhance this problem. The Financial Sector Union of Sweden also questions whether lending activities have reached such critical levels that Sweden must be the first EU country to set the buffer rate at the highest possible level.

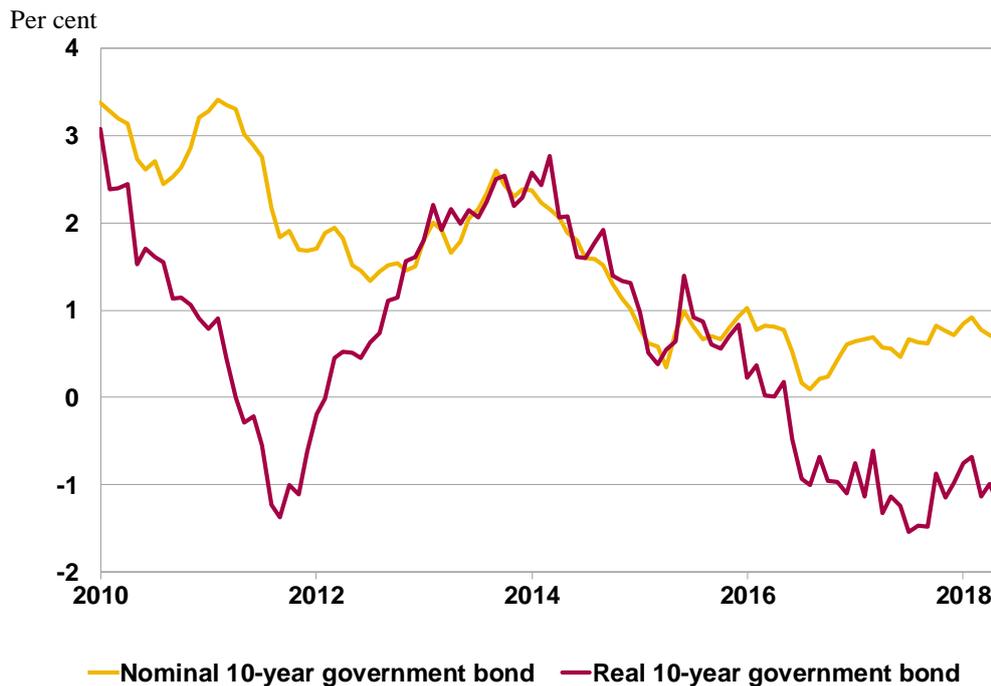
Finally, the Financial Sector Union of Sweden believes the buffer should be primarily used to counteract excessive lending. Given that Finansinspektionen appears to be more concerned about the increased systemic risks in general than expansive lending, the Financial Sector Union of Sweden says that there are other tools available in the financial regulations.

Finansinspektionen's reasoning: The countercyclical capital buffer should be built up during periods when systemic risks are increasing. Finansinspektionen last raised the countercyclical capital buffer to 2 per cent in March 2016. Since then, the financial systemic risks have increased.¹² The low interest rates have increased risk-taking because financing costs for investments are lower and investors must invest in riskier assets to achieve their target yield. Total lending to households and non-financial firms is growing significantly faster than what Finansinspektionen considers to be sustainable in the long term. Total lending is also growing faster than when Finansinspektionen last raised the buffer. In the autumn of 2017, Finansinspektionen made the assessment that an increase in the buffer rate could become relevant if the lending growth did not decelerate. No deceleration has occurred. As a whole, Finansinspektionen makes the assessment that the systemic risks continue to be elevated and that they have increased since Finansinspektionen raised the buffer to 2 per cent in March 2016.

Low interest rates contribute to greater risk-taking

Over the past few years, the return on government bonds with long maturities has been low (see Diagram 2). As a result, investors have been investing in assets with a higher expected return. These assets normally have higher risk than government bonds.

¹² In this section, FI accounts for the development in certain relevant indicators. The analysis is based on information was available on 25 July 2018.

Diagram 2. Interest rate on 10-year government bonds

Note: Real interest rate is deflated with CPI.

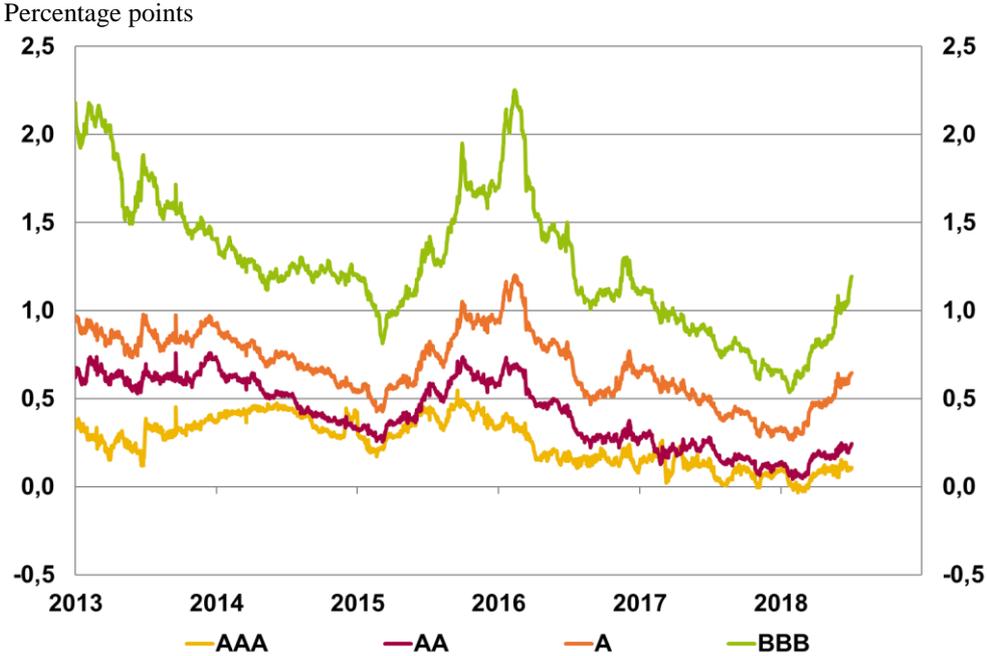
Source: Thomson Reuters Datastream, the Riksbank and own calculations.

The difference in the expected return between risky and secure assets (the risk premium) has been small the past five years. Low risk premiums can encourage greater risk-taking and imply that risks are priced too low. The risk premiums are now lower than at the beginning of 2016 even if they increased in 2018 (Diagram 3). The strong demand for riskier assets has resulted in an increase in the supply of corporate bonds with lower credit ratings in terms of both volume and the share of the market. Higher debt in the corporate sector means that systemic risks can be building.

The volatility on the Swedish and foreign equity market has been relatively low since 2016, with a temporary increase in the spring of 2018 (Diagram 4). The volatility today is at approximately the same level as before the financial crisis in 2008. The implicit volatility reflects the market participants' pricing of derivative instruments and can be viewed as a forward-looking measure of the general risk perception. Low volatility can be a sign that investors are underestimating the risks, which may lead to excessively high risk-taking.

The Swedish Bankers' Association takes the position that a more reasonable interpretation of the indicators is that the risks are low and non-financial firms have high financial resilience. Finansinspektionen notes that previous periods of low volatility in combination with low risk premiums have preceded financial crises. The indicators can therefore be a sign that risk is being priced too low, and this contributes to the build-up of systemic risks.

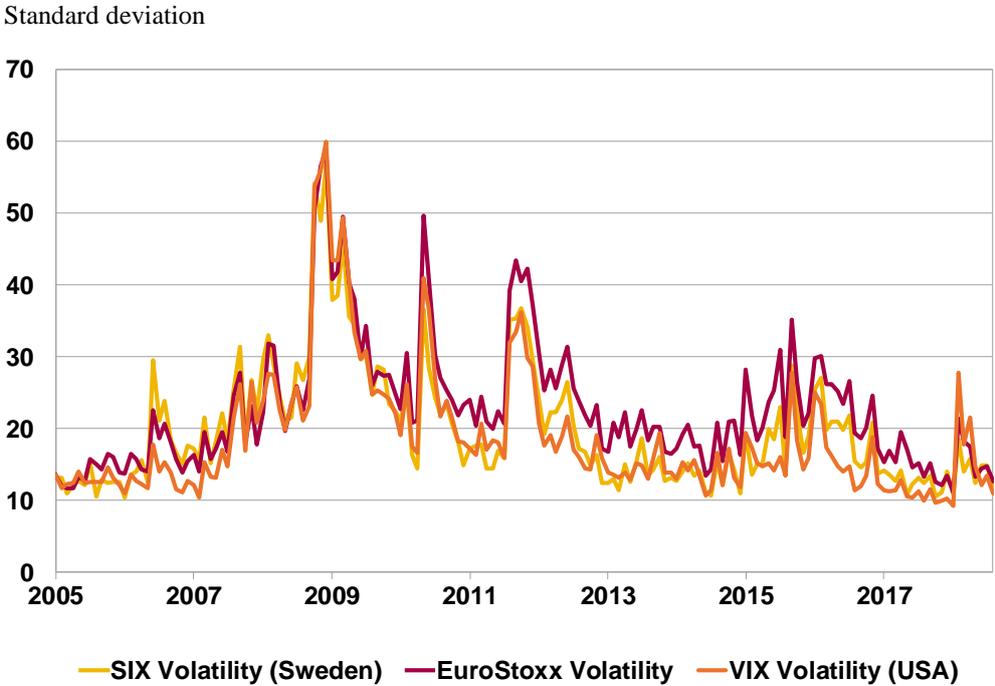
Diagram 3. Risk premiums



Note: Interest rate differences for corporate bonds with different credit ratings in the euro area. The difference is calculated between the return for an index of European corporate bonds (iBoxx euro corporates) with a maturity of five to seven years and a European swap rate.

Source: Thomson Reuters Datastream.

Diagram 4. Volatility index



Note: Implicit volatility calculated from index option prices.

Source: Thomson Reuters Datastream.

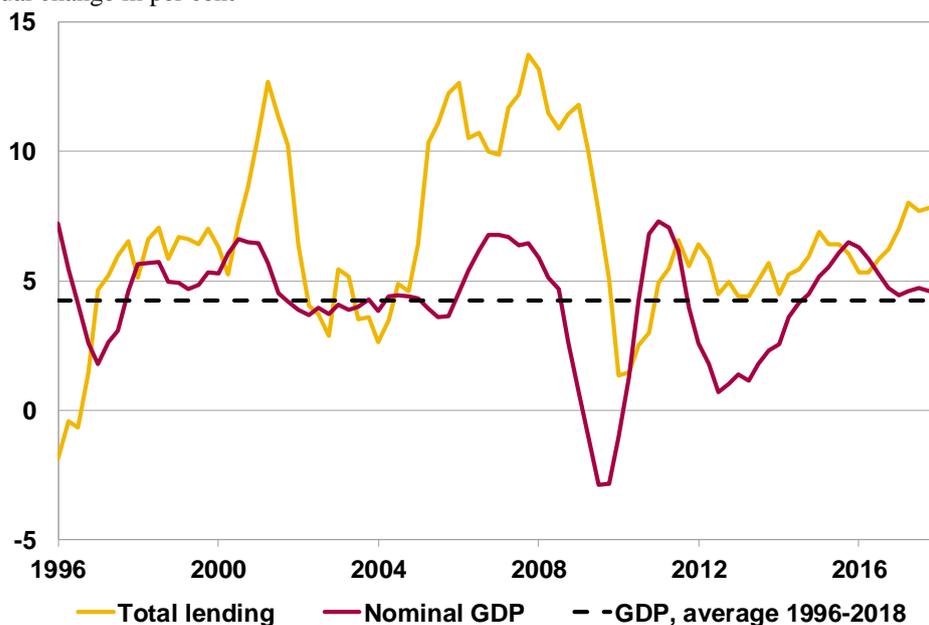
Total lending has been rising rapidly for a long time

With the exception of the financial crisis in 2008, total lending to households and non-financial firms has increased faster than the trend in nominal GDP since 2004 (Diagram 5). Since Finansinspektionen last decided to raise the countercyclical capital buffer in March 2016, lending growth has also accelerated. Total lending to Swedish households and non-financial firms grew on average by 7.7 per cent on an annual basis the past five quarters. This is significantly faster than the rate of 6.4 per cent in March 2016.¹³

Lending to households still contributes most to total lending (Diagram 6). The household contribution has decreased slightly since the capital buffer was raised the last time. However, lending to corporates and firms' market financing have contributed more since March 2016. The rapid increase in lending growth has also meant that the total debt in relation to GDP has increased by approximately 8 percentage points since 2016 and now amounts to almost 160 per cent (see Diagram B1 in Appendix 2). As a whole, the fast rate of lending growth implies elevated systemic risks and that these risks have increased since March 2016.

Diagram 5. Total lending and nominal GDP

Annual change in per cent



Source: Statistics Sweden.

¹³ The growth rates refer to the total debt with data for market financing from Svensk Värdepappersdatabas.

Finansinspektionen noted already in 2017 that total debt was growing at a rate that was not considered to be sustainable in the long run.¹⁴ Finansinspektionen made the assessment then that an increase in the buffer rate could become relevant if lending growth did not decelerate and if systemic risks continued to build. No such deceleration has occurred, and total lending is now increasing slightly faster than it was last fall. The growth rate has also increased slightly compared to last quarter, and current forecasts show that growth will continue to be high. Finansinspektionen's estimate is that total lending can be expected to grow by approximately 7 per cent on an annual basis at the end of 2019 (Diagram 7). Lending is therefore expected to grow approximately 2 percentage points faster than what nominal GDP grows under normal conditions.¹⁵

Several consultation bodies question if the debt growth is at such a level that Sweden must be the first EU country to apply the highest level according to the main rule. Finansinspektionen shares the assessment that international comparisons are relevant but also notes that the countercyclical capital buffer must reflect the overarching systemic risks in the country in question and that the development in different countries can be difficult to capture only using individual indicators. Finansinspektionen also notes that Sweden's growth in total lending, in relation to GDP, has been the second highest in the past year compared to other EU countries.¹⁶ Even the level of total lending in relation to GDP is one of the highest in the EU.

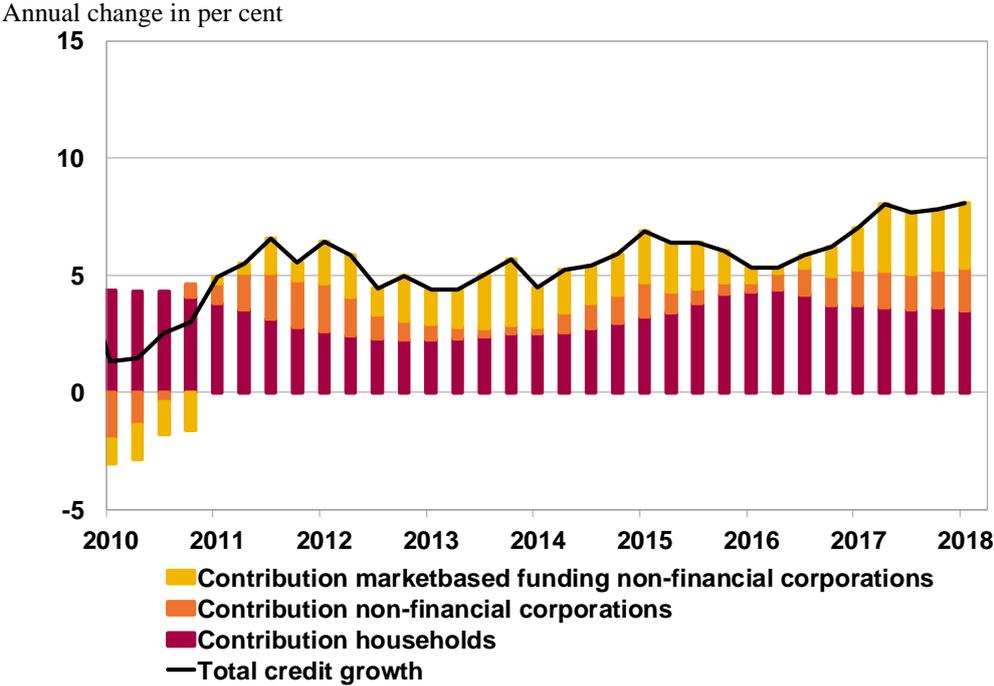
Another viewpoint that several consultation bodies raise is that Finansinspektionen is concerned about higher systemic risks in general instead of overly expansive lending activities. Finansinspektionen notes that the growth in total debt has increased since Finansinspektionen most recently decided to raise the buffer, and that this high rate of growth is one of several indicators that the risks have increased. Finansinspektionen would also like to clarify that the capital buffer's objective is to ensure that the banking system has sufficient buffers for managing a serious crisis in the future. Therefore, it is specifically when the overall systemic risks are increasing in relation to the banks' resilience that the buffer should be raised. The objective is not to limit lending activities, which was illustrated by the impact analysis Finansinspektionen presented in the consultation memorandum as well as in this decision.

¹⁴ See *Finansinspektionens beslut om kontracykliskt buffertvärde (2017)*, published on fi.se on 14 July 2017, FI Ref. 17-9849 and *FI:s beslut om kontracykliskt buffertvärde (2017)*, published on fi.se on 26 October 2017, FI Ref. 17-16986. Both decisions are available in English at www.fi.se.

¹⁵ Growth is somewhat higher in the current forecast. This can be explained by a higher outcome in corporate loans from MFIs than in the last forecast. Finansinspektionen also now uses data from Svensk Värdepappersdatabas for the non-financial firms' market financing (see Appendix 1).

¹⁶ ERSB, *Risk Dashboard*, June 2018.

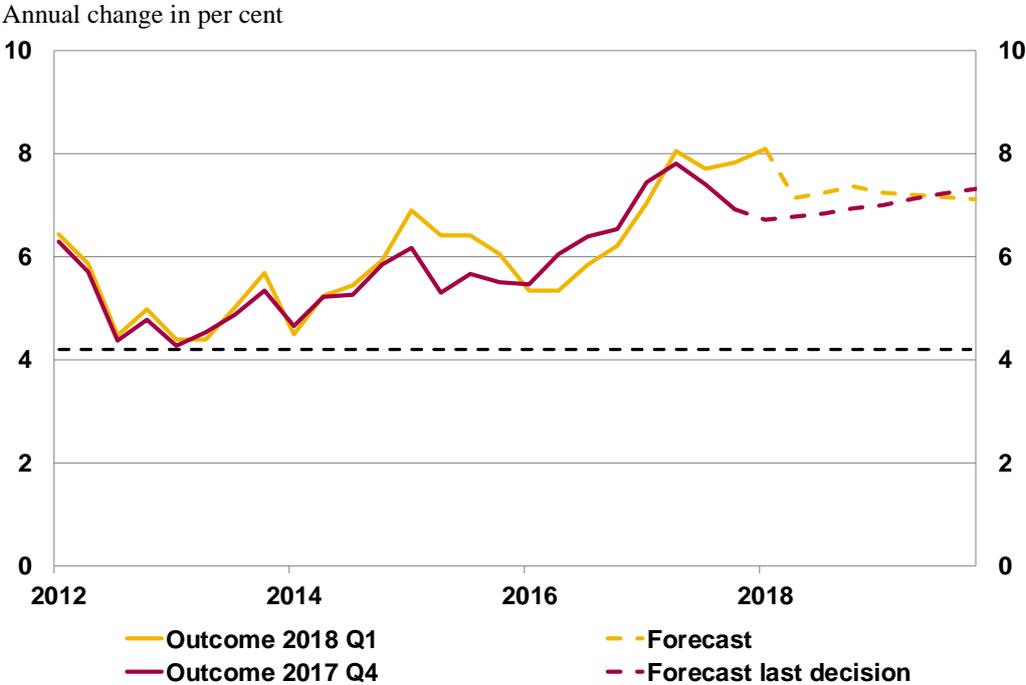
Diagram 6. Contribution to change in total lending growth



Note: Refers to total lending to households and corporates and their contribution to the annual rate of growth in per cent.

Source: FI and Statistics Sweden.

Diagram 7. Forecast for total lending

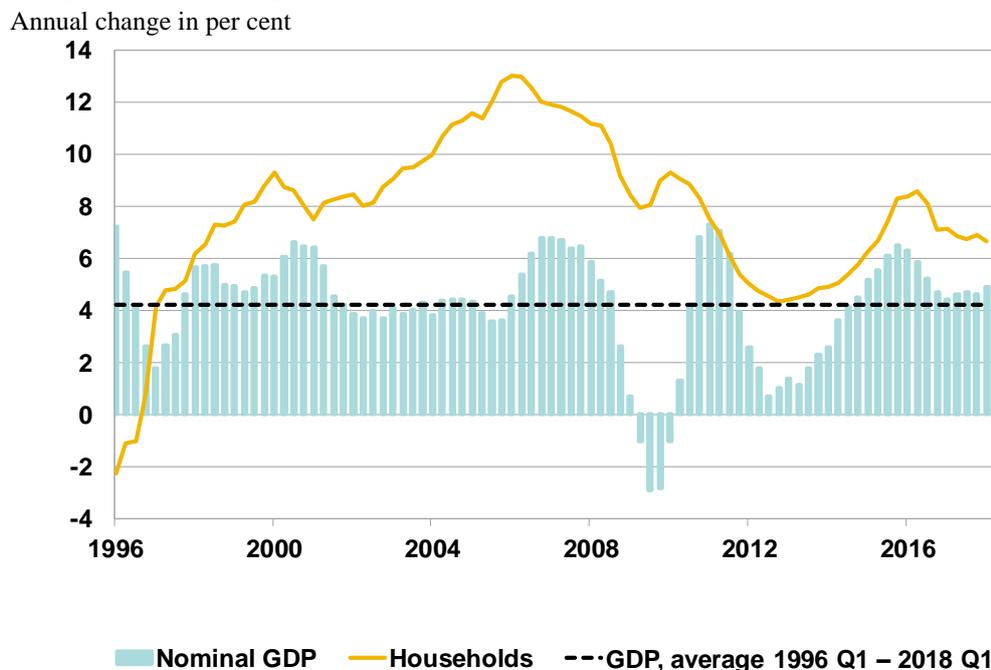


Note: The black dotted line marks the growth in nominal GDP under normal conditions (average between 2006 and 2018). Historical outcomes have been revised due to the new data for non-financial firms' market financing (see Appendix 1).

Source: FI and Statistics Sweden.

Lending to households has slowed slightly but continues to grow at rapid pace
 Since the end of the 1990s, lending to households has grown significantly faster than nominal GDP (Diagram 8). House prices are also rising faster than household disposable income. The growth in lending to households has slowed slightly the past year and is today lower than in March 2016 when Finansinspektionen most recently decided to raise the countercyclical buffer. However, household debt is continuing to grow faster than what Finansinspektionen deems to be sustainable in the long run. This was one reason why Finansinspektionen introduced a stricter amortisation requirement in March 2016. Lending to households is expected to continue to grow faster than under normal conditions (see Appendix 3). This growth implies that systemic risks associated with household debt continue to be high even if they are judged to have decreased slightly since 2016.

Diagram 8. Lending to households and nominal GDP



Source: Statistics Sweden.

Total debt at non-financial firms is increasing more quickly

Total lending to non-financial firms has grown more quickly since 2016 and is growing significantly faster than nominal GDP (Diagram 9). The banks' lending to non-financial firms is now growing almost 4 percentage points faster than in March 2016 when the countercyclical capital buffer was most recently raised. The financing of non-financial firms from financial markets has accelerated even more since March 2016. Monthly statistics from Statistics Sweden indicate that lending from banks to the non-financial firms continued to accelerate in Q2 2018. Finansinspektionen also makes the assessment from the forecast that lending from banks is expected to grow faster in the future

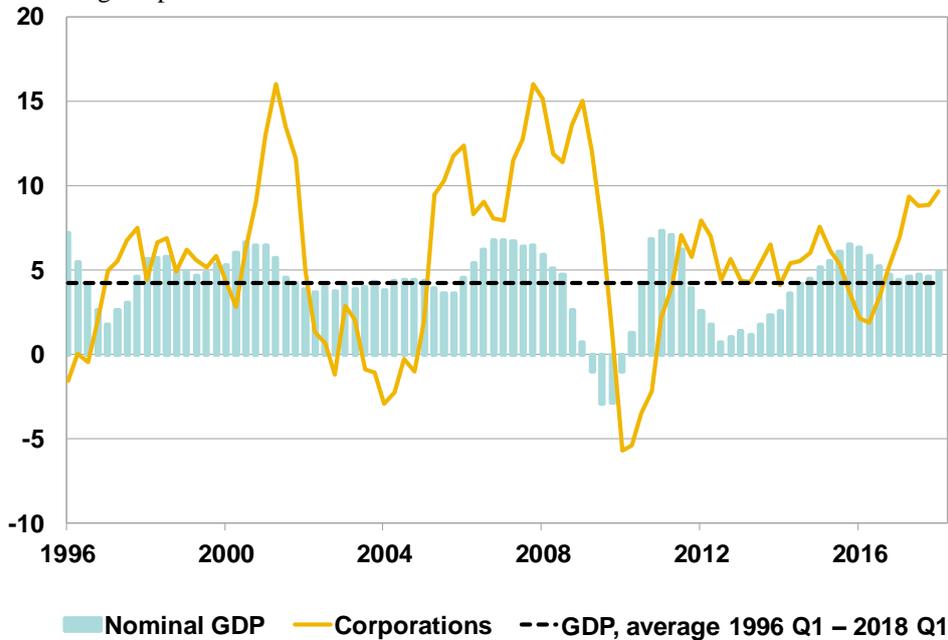
(Appendix 3). This rapid growth in lending implies that systemic risks associated with lending to corporates are increasing.

Total lending to non-financial firms from banks and via market financing grew by 9.7 per cent annually in Q1 2018. Since Finansinspektionen last decided to raise the countercyclical capital buffer in March 2016, it grew by 5.3 per cent.¹⁷ In the autumn of 2017, when Finansinspektionen indicated that the systemic risks had increased, total lending to non-financial firms increased by approximately 7 per cent.

Market financing has gradually become an increasingly important form of financing for non-financial firms. In 2016, growth in market financing slowed, but since then it has once again accelerated and established itself at a high level. Market financing grew by 16.4 per cent annually in Q1 2018.

Diagram 9. Total lending to non-financial firms and nominal GDP

Annual change in per cent



Source: Statistics Sweden.

The Swedish Bankers' Association, the Financial Sector Union of Sweden and the Swedish National Savings Banks Organisation have questioned whether increased market financing causes higher systemic risks. Finansinspektionen shares the assessment that the market financing of non-financial firms does not constitute a *direct* risk for the banks. However, it does constitute an indirect risk. The banks are part of a closely interconnected system, where the risks different participants meet affect the behaviour of other participants. When non-financial firms increase their financing via financial markets, their debt

¹⁷ When FI made the decision in March 2016, statistics up to an including Q3 2015 were available.

increases, making them more interest-rate sensitive and dependent on future refinancing. Higher levels of market financing, therefore, just like loans from banks, make the non-financial firms more sensitive to shocks. If non-financial firms experience problems with their repayment capacity, this affects everyone who has lent them money. This affects the banks as well through their corporate lending. In the event of serious shocks, there can also be a flowback risk if refinancing from the capital market is limited or not available. The non-financial firms may then need to use the contractual credit facilities they have with the banks, and the banks may want to take over more of the firms' financing due to customer relationships. If the banks do not have sufficient capital buffers then, they may not be able to fulfil this role.

Higher volumes of market financing can also lead to increase prices of real estate and other assets, which borrowers have often pledged as collateral for loans with the banks. A fall in prices later can thus lead to a deterioration in the quality of the banks' collateral, which can increase the risk of losses.

The countercyclical buffer guide

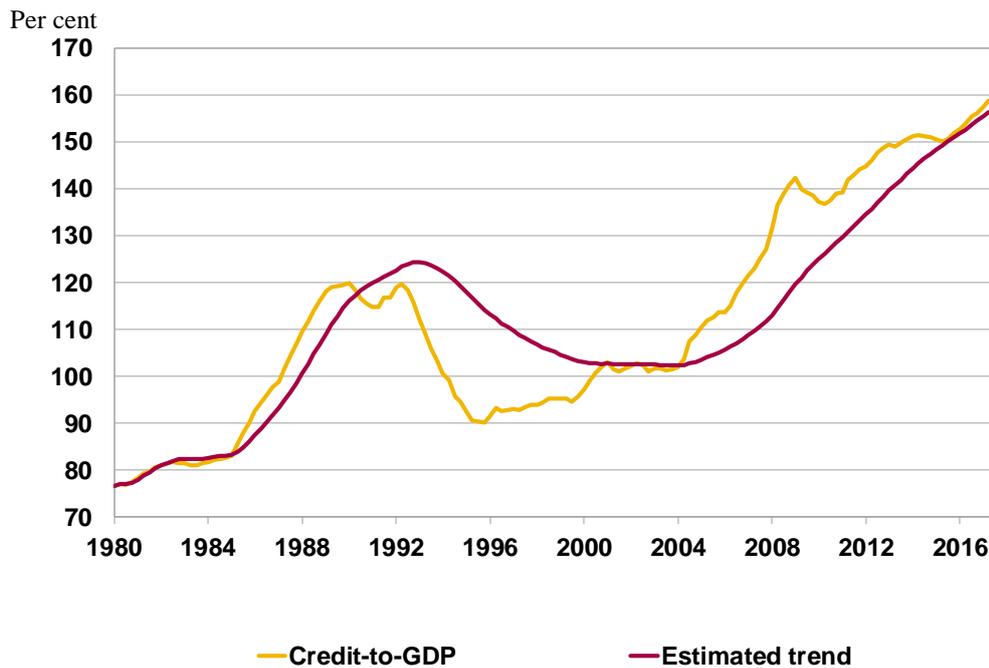
The countercyclical buffer guide is part of Finansinspektionen's assessment of the countercyclical buffer in Sweden. The guide is calculated using the credit gap, which specifies how much the ratio between total lending and the GDP deviates from this ratio's estimated trend (Diagram 10). The credit gap's value as an indicator in the size of the systemic risks varies between countries and over time. Its usability as an indicator decreases if the underlying trend in lending in relation to GDP deviates significantly from the level that is sustainable in the long run. The long-term trend was very strongly affected by high lending growth during the decade prior to the financial crisis in 2008. Finansinspektionen makes the assessment that a development in line with this trend is not sustainable in the long run. In recent years, Finansinspektionen has allocated this indicator relatively little weight.

Finansinspektionen calculates the credit gap and buffer guide in accordance with the Basel Committee's standard method.¹⁸ According to the standardised approach, the credit gap is estimated to be 2.34 per cent (see Diagram 11). This means that the countercyclical buffer guide for Q1 2018 is 0.11 per cent (Diagram 12).¹⁹

¹⁸ *Guidance for national authorities operating the countercyclical capital buffer*, December 2010, Basel Committee on Banking Supervision, Bank for International Settlements).

¹⁹ According to the Basel Committee's standard method, a credit-to-GDP gap that is lower than 2 per cent should result in a buffer guide of 0 per cent. When the credit gap is between 2 and 10 per cent, the buffer guide increases linearly up to 2.5 per cent. It should be noted that the buffer guide is most suitable as an indicator of any increases in the buffer rate - not decreases.

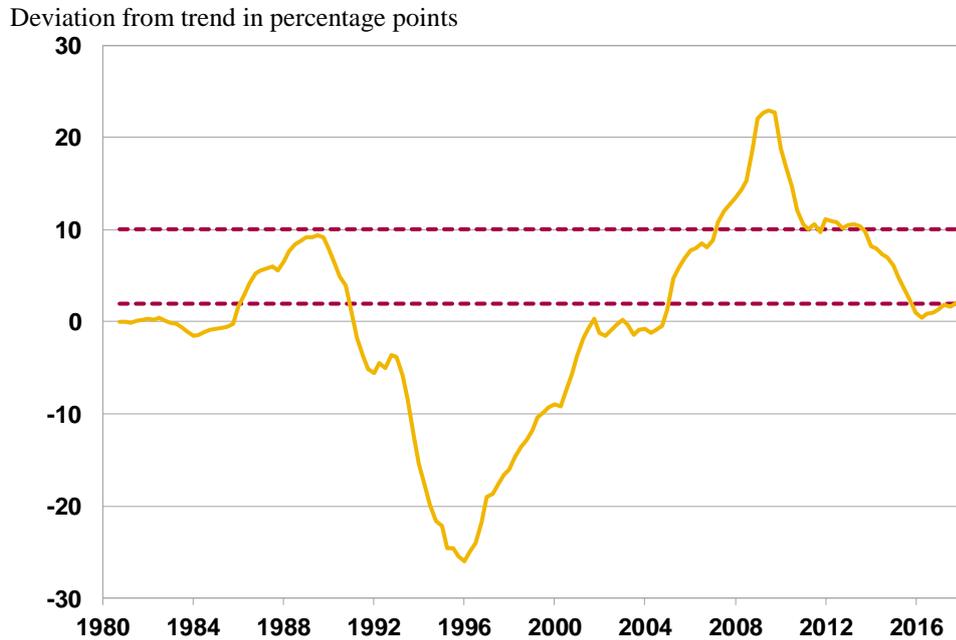
Diagram 10: Total debt in relation to GDP



Note: Credit refers to total debt from households and corporates including market financing. The trend is estimated with an HP filter.

Source: FI and Statistics Sweden.

Diagram 11. Credit gap according to the standardised method



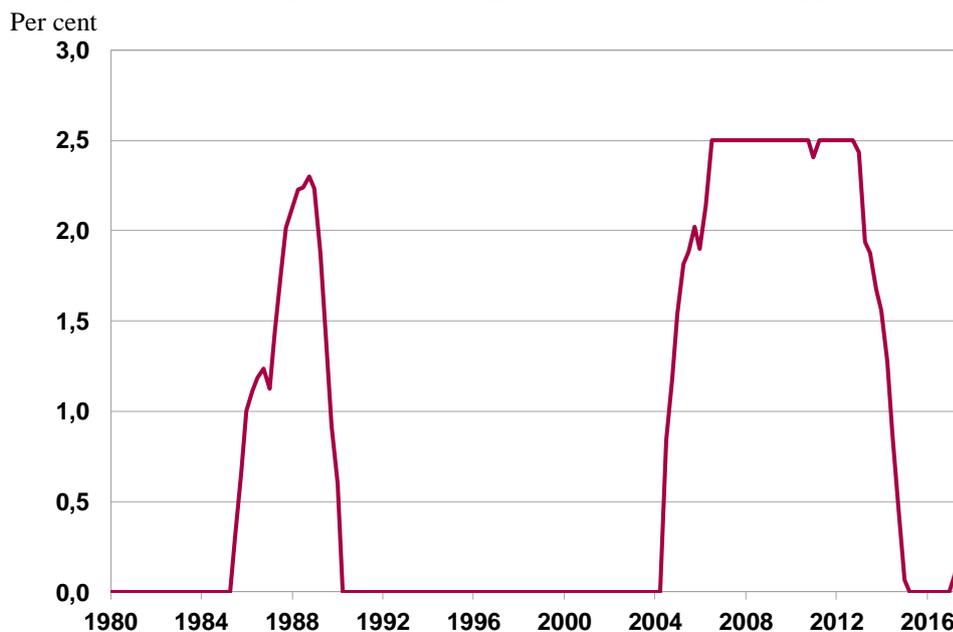
Note: The dotted lines show the interval (2 and 10 per cent) where the credit gap is used to determine a buffer guide pursuant to the standard method.

Source: FI and Statistics Sweden.

The Swedish Bankers' Association and the Association of Swedish Finance Houses wonder why Finansinspektionen does not give the buffer guide the weight that they consider to be stipulated in the Directive. They also note that the buffer guide supports a decrease rather than an increase.

Finansinspektionen would like to emphasise that the buffer guide is one of several indicators used to set the buffer rate and is not a determining factor in the assessment of the size of the buffer. The Buffer Act and the Capital Requirements Directive stipulate that Finansinspektionen shall also take into consideration all ESRB guidelines, the recommendations issued by ESRB and other indicators that Finansinspektionen considers to be relevant for managing systemic risks.²⁰ Finansinspektionen places little weight on the buffer guide as an indicator to raise the buffer since the underlying trend in lending in relation to GDP deviates significantly from a level that is sustainable in the long run. Other authorities with responsibility for macroprudential tools also place little weight on the buffer guide and look at other indicators.²¹ ESRB also recommends other indicators for potential future decreases in the buffer rate, such as financial stress indicators.

Diagram 12. Buffer guide according to the standardised approach



Source: FI and Statistics Sweden.

Risks associated with high asset prices

House prices have been rising for a long period of time. In the summer of 2017, house prices reached historically high levels in relation to household disposable income (Diagram B3). Since then, prices have fallen. This means

²⁰ Chapter 7, section 2 of the Buffer Act and Article 136(3) of the Capital Requirements Directive.

²¹ See, for example, *Range of practices in implementing the countercyclical capital buffer policy, Implementation reports*, 22 June 2017, BIS.

that the ratio between house prices and household disposable income has fallen to approximately the same levels as in March 2016.

The Swedish Bankers' Association and the Association of Swedish Finance Houses make the assessment that the slow-down in house prices will slow growth in lending. Finansinspektionen does not agree with this assessment. Despite the slow-down, prices are still high. House prices have increased by more than 40 per cent the past five years. Therefore, many new mortgagors will need to take out larger loans in the future. The prices on other important assets are also high from a historical perspective. The prices of commercial real estate, for example, have also increased sharply since 2013.²²

Resilience in the banking system in general is satisfactory
The Swedish Bankers' Association and the Swedish National Savings Banks Organisation take the position that resilience in the banking system has increased since the countercyclical buffer was raised last time. They therefore see no reason for raising the buffer again. *The Riksbank* asserts in contrast that the capital levels are limited and that the banking system is thus vulnerable to shocks.

Finansinspektionen makes the assessment that the banks' resilience to shocks is largely satisfactory.²³ The banks' capital in relation to their assets has improved since March 2016 when the countercyclical capital buffer was raised most recently (Diagram 13).²⁴ The banks' CET 1 capital ratio has increased by approximately 2 percentage points since March 2016.

The four major banks hold approximately 3 percentage points more in capital than what is required under the total capital requirements.²⁵ At the same time, the countercyclical capital buffer has a broader aim than just protecting the banks themselves. It is primarily to be used to counteract a credit crunch during a stressed financial situation. When assessing the countercyclical capital buffer, it is also necessary to decide the level of resilience that the banks will need in order to counteract such a crunch.

²² See Finansinspektionen (2018), *Stabiliteteten i det finansiella systemet 2018:1*. An English translation is available at fi.se.

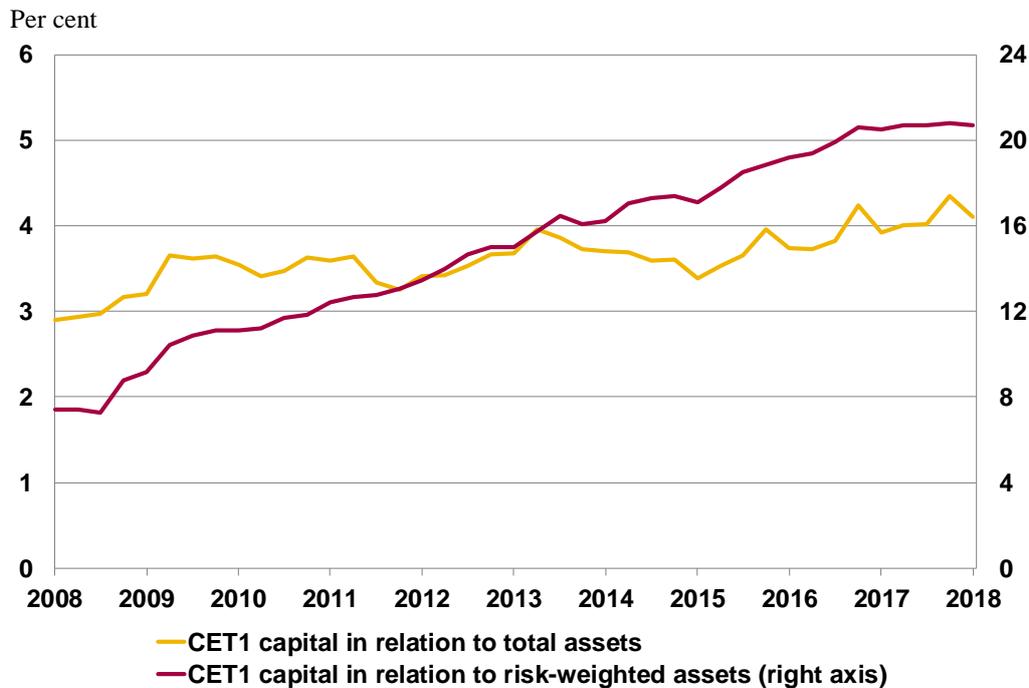
²³ See Finansinspektionen (2018), *Stabiliteteten i det finansiella systemet 2018:1*. An English translation is available at fi.se.

²⁴ See also Finansinspektionen (2018), *De svenska bankernas kapitalkrav, första kvartalet 2018*. Published on fi.se on 25 May 2018, FI Ref. 18-9114, and Finansinspektionen (2018), *Stabiliteteten i det finansiella systemet (2018:1)*. Published on www.fi.se on 29 May 2018. Both are available in English at www.fi.se.

²⁵ There are also indicators that show relatively good resilience in the household sector, for example a high level of savings. The high level of savings is reflected in Sweden's large surpluses in its current account since the middle of the 1990s, although the surpluses have gradually decreased since 2007. This high level combined with relatively stable public finances indicates a relatively good resilience in the Swedish economy as a whole (see Diagram B6).

Overall, Finansinspektionen makes the assessment that the increase in the resilience is not sufficient for counteracting the higher systemic risks. There is therefore a greater risk that the banks will not be able maintain their lending activities during a future crisis. Finansinspektionen is therefore raising the countercyclical capital buffer to 2.5 per cent.

Diagram 13. CET 1 capital



Source: FI.

2.3 Entry into force

Finansinspektionen's position: The countercyclical buffer rate shall be applied as of 19 September 2019.

Consultation Memorandum: The proposal had the same content.

Consultation bodies:

According to *the Riksbank*, it is important to strengthen the banks' resilience since the risks have been building for a long time. The Riksbank therefore believes that the higher buffer rate should be applied as early as in six months instead of the proposed twelve months. The aim is to increase the banks' resilience before risks materialise.

Finansinspektionen's reasoning: According to Chapter 7, section 6 of the Buffer Act, a decision to activate or increase a countercyclical buffer rate shall contain information about when the buffer rate starts to apply. Decisions involving an increase to the buffer rate, as a general rule, must start to apply twelve months after the decision was announced. If special grounds exist, the decision may go into effect earlier.

Finansinspektionen's analysis shows that the systemic risks are continuing to build, and it therefore sees a need to raise the countercyclical buffer. Even if the systemic risks are high, the risk build-up is not so exceptionally high that there are grounds for the new buffer rate to begin to apply at an earlier date. Therefore, the stated countercyclical buffer rate, according to the main rule, shall be applied as of 19 September 2019.

Finansinspektionen does not consider there to be a need for specific information initiatives in connection with the application. The firms that are affected are assumed to be well aware of and well informed about the measures and the measures' background.

3 Impact assessment

Below, Finansinspektionen describes the impact of the raised buffer rate. The section starts with an account of the effects for borrowers, investors and the economy at large. The consultation bodies' viewpoints of the effects of the increase are also discussed. A description of the firms subject to the change and the impact on these firms are presented, and, in conclusion, the impact on Finansinspektionen.

3.1 Impact on society and borrowers

An increase to the buffer is judged to further increase resilience in the banking system and contribute to a more stable financial system in Sweden. The opportunity to lower the buffer improves the banks' ability to continue their lending activities if the economy suffers a serious shock and their actual or expected credit losses increase. Ultimately, this means that future crises might be less costly for society. A positive side-effect is that a larger buffer might diminish lending in periods of excessive credit growth.

Higher capital requirements normally increase the banks' funding costs. One argument that is raised in this context is that the banks must then compensate themselves for the cost increase by charging borrowers higher prices. This need not necessarily be the case. A bank may need to carry part of the cost increase instead of passing on the entire increase to its customers. This applies in particular when the bank is active on a market characterised by efficient competition. Even if the banks were able to pass on the costs to the borrowers – and chose to do so – the effect on lending rates and credit growth is judged to be small.

Finansinspektionen's calculations show that the increase in the countercyclical buffer rate from 2 to 2.5 per cent could raise the mortgage rate by 0.01–0.015 basis points if the entire cost is passed on to borrowers.²⁶ This kind of increase

²⁶ The calculations are based on assumptions that overestimate rather than underestimate the effects.

in the interest rate would only marginally affect households' borrowing costs. Household demand for credit is therefore not significantly diminished, either. Even the effect on the interest rate paid by non-financial firms is judged to be small – approximately 0.02 basis points. The increase is thus judged to have only a small impact on the firms' lending costs or credit demand. The change itself is therefore judged to have a very small impact on society and borrowers.

The Swedish National Board of Housing, Building and Planning judges there to be a pressing need for new residential properties and that a stable financial sector is a prerequisite for this. However, the Swedish National Board of Housing, Building and Planning believes the increase in the buffer requirement could have a negative impact on housing construction.

The Association of Swedish Finance Houses takes the position that an increase in the buffer can send improper signals about and have negative effects on lending to non-financial firms. The Association also asserts that an increase in the buffer rate not only has a negative effect on lending to corporates but also by extension on the real economy in general. Finansinspektionen considers the increase in the cost for firms during normal conditions to be small, and it will therefore not have a tangible impact on the borrowers' operations. Given that the banks are building up and holding more capital during upturns, Finansinspektionen makes the assessment that they will have better possibilities for maintaining their lending activities after a shock by reducing or removing the countercyclical capital buffer. The cost for and access to financing will therefore be better in a future crisis.

3.2 Impact for lenders

3.2.1 Firms affected

The countercyclical buffer rate shall be used to calculate the firm-specific countercyclical capital buffer. The decision affects banks, credit market companies, Svenska Skeppshypotekskassan and the securities companies subject to the CRR's definition of "investment firm".

3.2.2 Costs for lenders

Raising the countercyclical buffer rate to 2.5 per cent means that the banks must hold more capital (or reduce the margin between actual capital and the capital requirement). Finansinspektionen has estimated what this means for the ten largest banks based on data from Q1 2018. For these banks, the countercyclical buffer amounted to approximately SEK 30.7 billion at the end of Q1 2018, but the total capital requirement for the countercyclical capital buffer was larger than this since the buffer also affects the additional capital

requirement in Pillar 2.²⁷ The buffer rate for banks based in other countries but that are active in Sweden has not been considered.

In total, the capital need is estimated to increase by approximately SEK 9.3 billion for the ten largest banks after raising the countercyclical capital buffer from 2 to 2.5 per cent (Table 1).

Table 1. Higher capital need for the ten largest banks

SEK million

	Countercyclical capital buffer	Risk weight floor Swedish mortgages (25%)	Other capital requirements in Pillar 2	Total increase in capital
Nordea	1,193	520	28	1,741
SEB	1,206	451	42	1,699
SHB	1,225	807	0	2,031
Swedbank	1,215	1,012	45	2,272
Landshypotek	80	43	0	123
Länsförsäkringar	329	209	0	538
Kommuninvest	13	-13	0	0
SEK	304	0	0	304
SBAB	216	329	0	544
Skandiabanken	34	56	0	90
Total	5,815	3,427	102	9,343

Note: The table shows how much more capital the banks need to hold if the countercyclical capital buffer is raised from 2 per cent to 2.5 per cent. The calculations are based on the banks' risk exposure amounts from Q1 2018.

Source: FI.

The Swedish Bankers' Association believes that the future design of the capital requirements – moving the risk weight floor for mortgages, supervision of internal models and EU's implementation of Basel IV regulations – will increase the banks' risk-weighted assets. This means that the buffer requirement will be larger in SEK. Finansinspektionen agrees that the changed rules will increase the banks' risk-weighted assets. However, these changes will occur in the future and it will take a long time before they are introduced at all banks. Because systemic risks have increased more than the banks' resilience, Finansinspektionen needs to take action now. It is important to build resilience before the risks materialise.

The Financial Sector Union of Sweden believes that a high buffer requirement can give Swedish banks a competitive disadvantage in relation to other

²⁷ The share of the concerned credit exposures in Sweden held by each firm is stated below: Nordea 18.9%, SEB 39.2%, SHB 44.9%, Swedbank 59.2%, Landshypotek 100%, Länsförsäkringar 99.4%, Kommuninvest 64.9%, SEK 70.6%, SBAB 98.1% and Skandiabanken 98.4%.

European banks. *The Swedish Better Regulation Council* has expressed that it is not specified clearly if the proposal will have an impact on competition between Swedish and foreign banks. However, the buffer requirement applies to institutions, both Swedish and foreign, that are active and have exposures in Sweden. This is why Finansinspektionen does not consider the increase to affect the playing field for Swedish and foreign banks.

Finansinspektionen makes the assessment that the increase in the countercyclical buffer rate will not have a noticeable effect on the banks' operations or competitiveness. Neither does the increase entail considerable administrative expenses for either small or large banks. They already have processes for gathering, processing and reporting information.

The increase to the countercyclical capital buffer does not entail any need for further investment or staff changes for the firms concerned. Neither does the change in the regulation affect the focus of the operations.

3.2.3 *Change in the risk weight floor affects the countercyclical buffer*

Finansinspektionen decided on 22 August 2018 to change its method for applying the risk weight floor for Swedish mortgages.²⁸ The change means that the total risk-weighted exposure amount for each institution will increase. The total risk-weighted exposure amount is used to calculate the countercyclical capital buffer. As a result of the change in the method used to apply the risk weight floor to mortgages, there will be an increase in the countercyclical buffer. However, the banks' total capital need for mortgages are judged not to be significantly changed as a result of the new method since the Pillar 2 requirement will decrease. The change in the method (decided pursuant to Article 458 of the CRR) will go into effect as of 31 December 2018.

Finansinspektionen has estimated how much the change in the method to apply the risk weight floor affects the size of the countercyclical capital buffer for the ten largest banks by calculating how large the buffer would have been if the changed method for the risk weight floor had applied during Q1 2018. According to Finansinspektionen's calculations, the countercyclical capital buffer would have been SEK 45.6 billion. When the buffer is raised to 2.5 per cent, the countercyclical buffer increases to approximately SEK 55.4 billion, which is an increase of SEK 9.8 billion compared to the SEK 9.3 billion shown in Table 1 (which does not take into account the change in the method for calculating the risk weight floor).

3.2.4 *Impact on market financing*

²⁸ See also Finansinspektionen's Decision Memorandum (2018), *Förändrad metod för tillämpning av riskviktgolvet för svenska bolån*, published on fi.se on 23 August 2018, FI Ref. 18-6251 (an English version is available at fi.se) and Commission Decision C(2018) 4716, published on fi.se on 18 August 2018.

The raised countercyclical buffer probably means that it will be more expensive for households and non-financial firms to borrow from firms subject to the requirement. This means that market funding will become relatively more attractive for non-financial firms. However, the effect on market financing will most likely be marginal since the countercyclical buffer's impact on the banks' lending rates is small (see section 3.1). Finansinspektionen therefore makes the assessment that the positive effect on the resilience in the banking system outweighs any effects on the distribution between bank-based lending and market-based financing.

3.3 Implications for Finansinspektionen

Finansinspektionen assesses and sets the countercyclical buffer rate on a quarterly basis. Prior to making a decision about the buffer rate, Finansinspektionen carries out an overall assessment of both qualitative and quantitative information. This includes analysing a number of relevant indicators. Finansinspektionen already conducts such assessments as part of its ongoing work on capital requirements for Swedish financial institutions and financial stability. An increase to the buffer thus does not involve any additional costs for the authority.

Appendix 1. Change in data source for firms' market financing

Prior to this decision (Q3 2018), Finansinspektionen decided to change its data source for the non-financial firms' market financing from Finansräkenskaper to Svensk Värdepappersdatabas (SVDB). SVDB is considered to have better coverage of outstanding securities from non-financial firms.

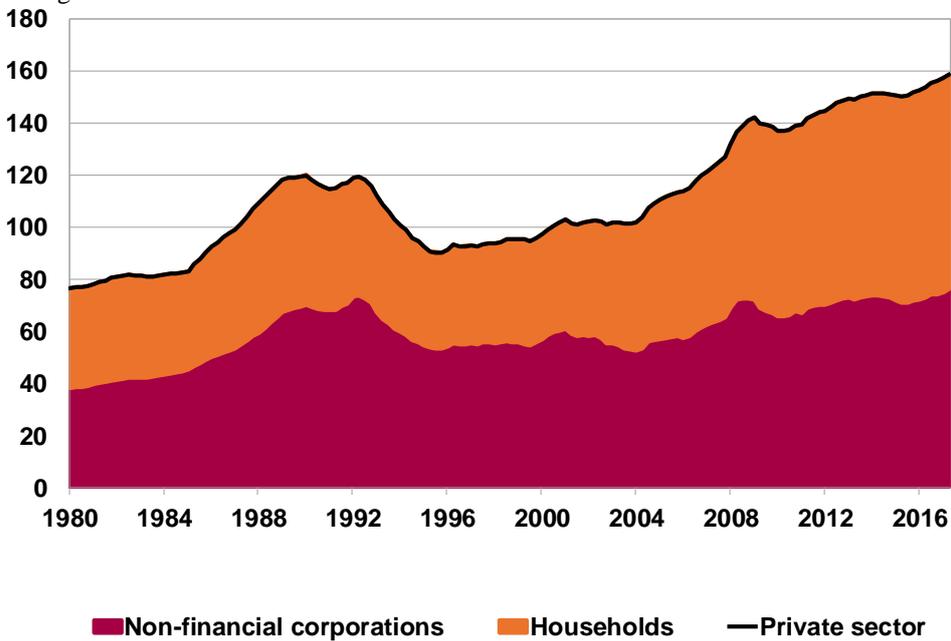
Market financing measured with SVDB data has on average the past two years grown 1.6 percentage points slower than market financing in the Finansräkenskaper data. However, the outstanding volume of issued securities is approximately SEK 190 billion larger according to SVDB data. This means that market financing is given a slightly larger weight when calculating total debt growth. Total debt over the past two years grew on average 0.2 percentage points slower based on the data from SVDB than the data from Finansräkenskaper. In Q1 2018, though, the growth rate was 0.4 percentage points higher than what it had been in the data from Finansräkenskaper.

Finansinspektionen's assessment of the systemic risks and the need to raise the countercyclical buffer is not affected by the change in data source.

Appendix 2. Diagrams

Diagram B1. Total debt in relation to GDP

Percentage of GDP

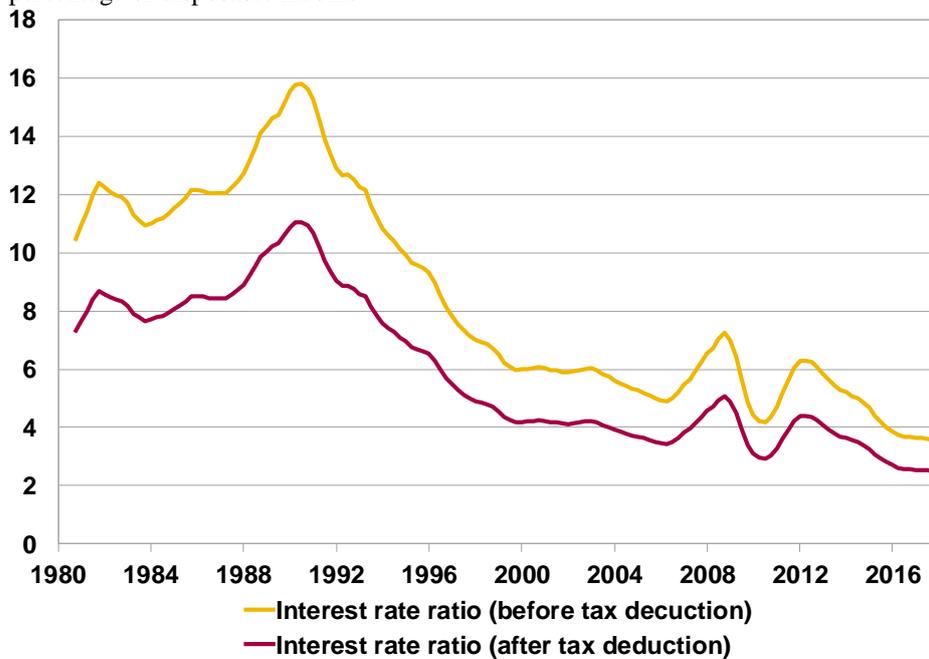


Note: A narrower term is used here than in the private sector’s consolidated debt. The diagram only refers to the lending from Swedish MFIs to households and non-financial firms and the non-financial firms’ market financing.

Source: Statistics Sweden.

Diagram B2. Interest-to-income ratio of households

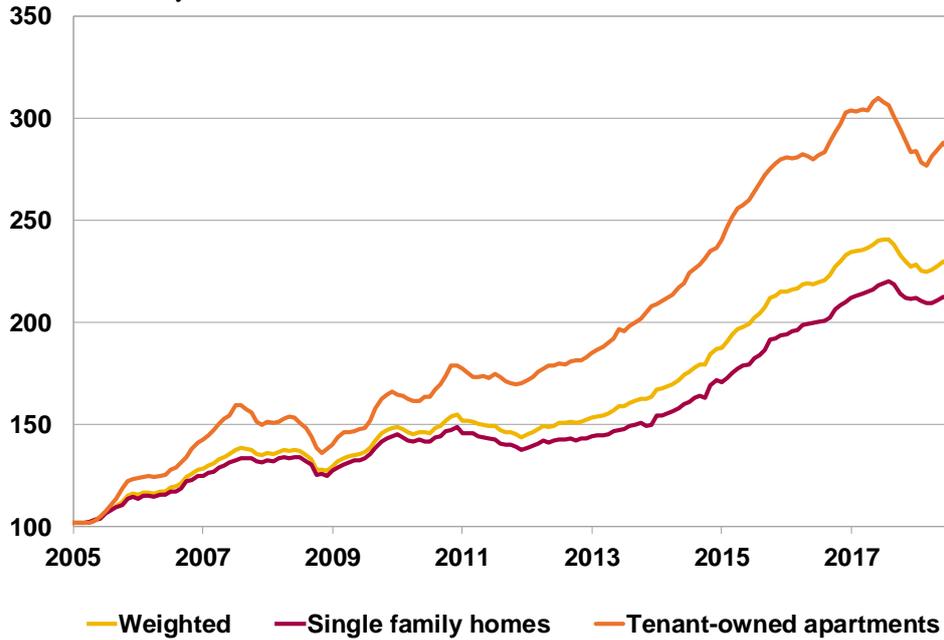
As a percentage of disposable income



Source: Statistics Sweden.

Diagram B3. House prices in Sweden

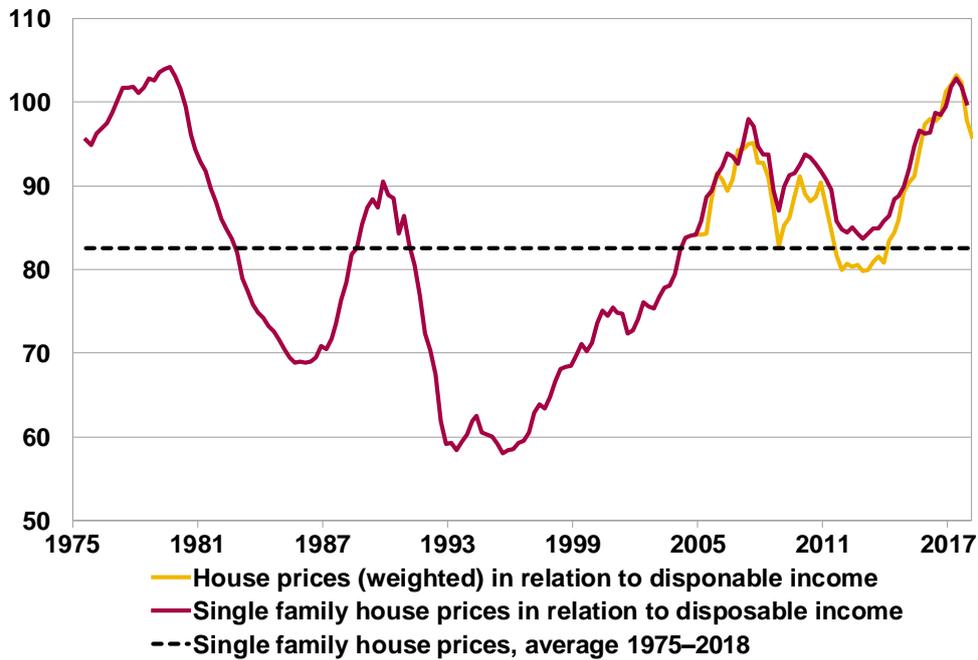
Index 100 = January 2005



Source: Valueguard.

Diagram B4. House prices in relation to disposable income

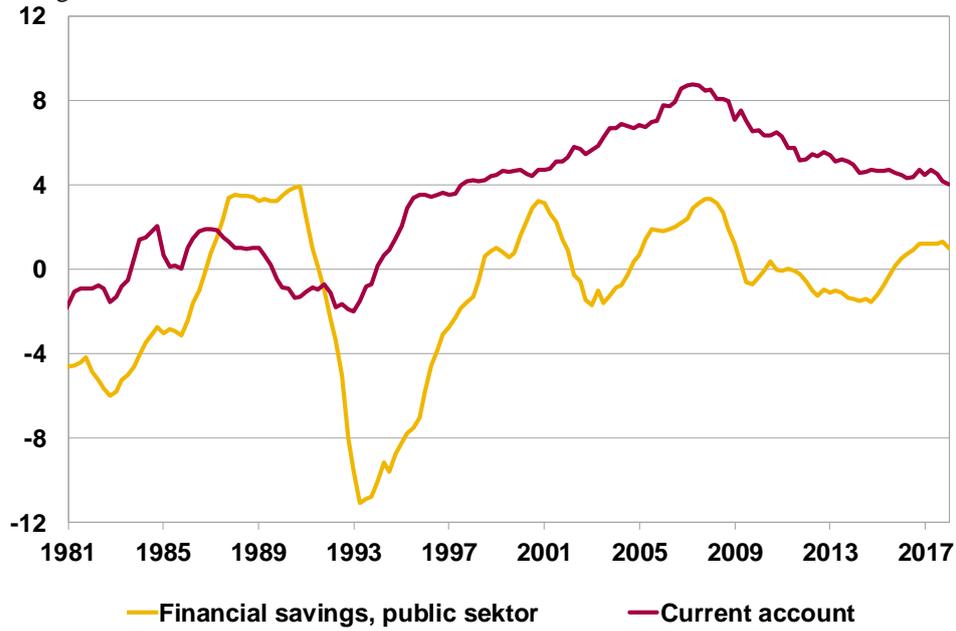
Ratio



Source: Statistics Sweden and Valueguard.

Diagram B5. Current account and financial savings in the public sector

Percentage of GDP



Source: Statistics Sweden.

Appendix 3. FI's forecasts

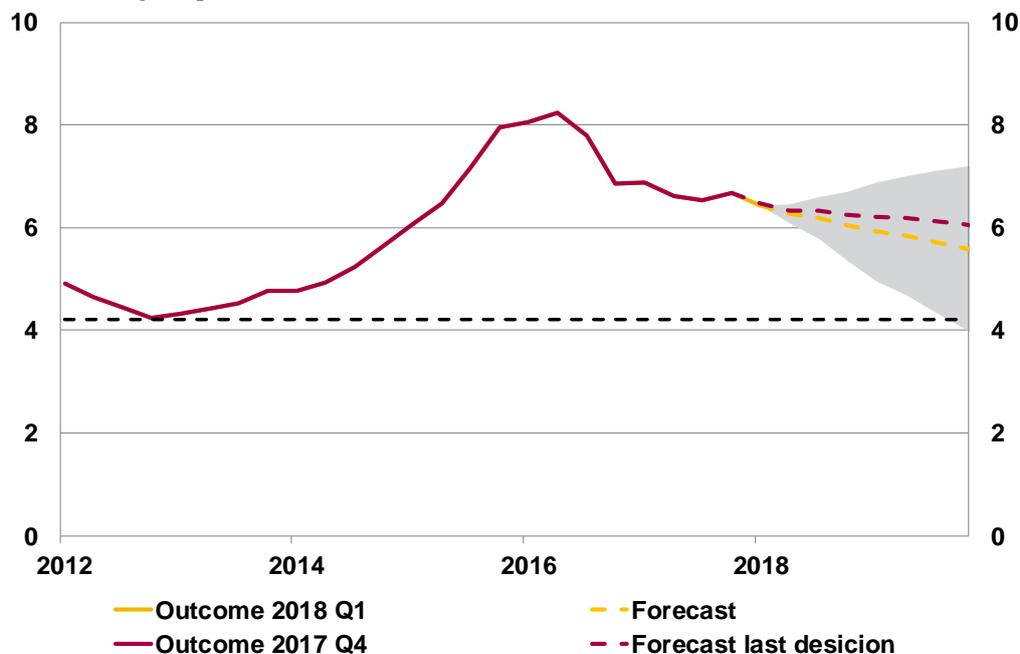
The forecast for total lending is generated by statistical models for lending to households and non-financial firms and an extrapolation of market funding.

FI's forecasts for lending to households

As a complement to its analysis of the outcomes, Finansinspektionen also forecasts household debt.²⁹ According to the forecast, household debt is expected to grow by 5.7 per cent on an annual basis through the end of 2019 (Diagram B6). This is slightly lower than the previous forecast, but higher than under normal conditions. Lending to households may grow slower than in Finansinspektionen's forecast. The reason for this is that house prices have fallen and the number of newly built apartments is expected to decrease. However, it is still very cheap to borrow money.

Diagram B6. Forecast for lending to households

Annual change in per cent



Note: The black dotted line marks the growth in nominal GDP under normal conditions.

Source: FI and Statistics Sweden.

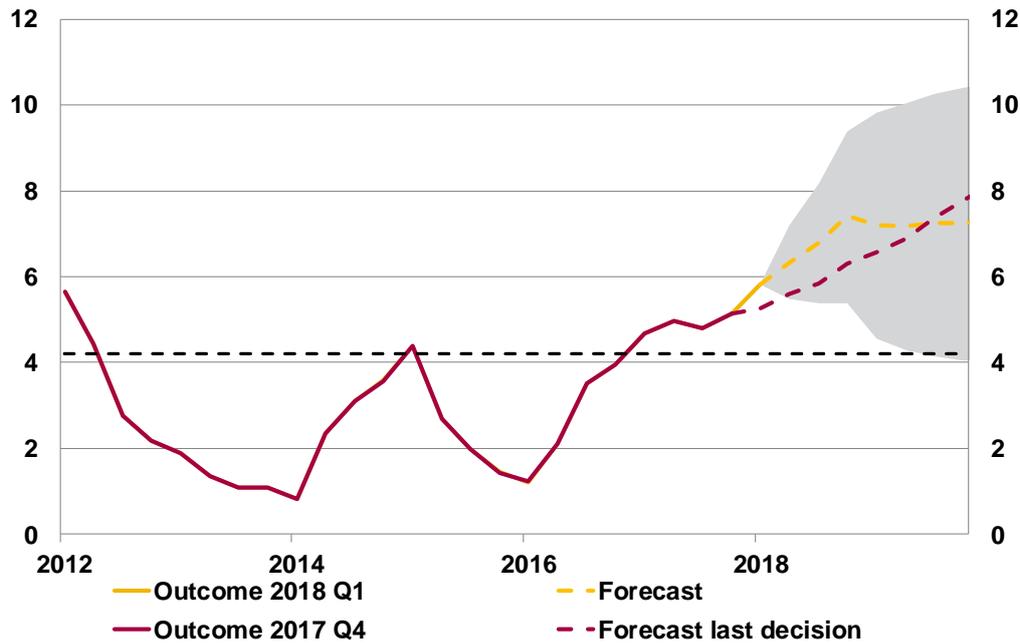
FI's forecast for banks' lending to non-financial firms

The forecast for the banks' lending to non-financial firms shows that growth in lending will continue (Diagram B7). At the end of 2018, this lending is expected to increase by more than 7 per cent. This constitutes an upward revision since the last forecast.

²⁹ Finansinspektionen (2015), *A Model for Household Debt*, FI Analysis No. 4.

Diagram B7. Forecast for lending to non-financial firms from MFIs

Annual change in per cent



Note: In the diagram, debt refers only to Swedish MFI’s lending to non-financial firms. The black dotted lines mark the growth in nominal GDP under normal conditions.

Source: FI and Statistics Sweden.

Extrapolation of market financing

Finansinspektionen extrapolates the growth in market financing by using the average annual change in per cent the past eight quarters. Starting with this memorandum, Finansinspektionen now uses data from Svensk Värdepappersdatabas (SVDB) (see Appendix 1). The rate of growth based on SVDB data is slightly higher for Q4 2017 than the rate of growth in the Finansräkenskaper data, which Finansinspektionen previously used. The extrapolation rate is therefore slightly higher in this forecast than in the last forecast.