



FI Ref. 15-16477

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Decision regarding the countercyclical buffer rate

Finansinspektionen (the Swedish Financial Supervisory Authority) has decided not to amend Finansinspektionen's Regulations (FFFS 2015:5) regarding the countercyclical buffer rate. The buffer rate of 1.5 per cent, which is specified in the regulations, shall thus continue to apply.

Background

According to Chapter 7, section 1 of the Capital Buffers Act (2014:966), Finansinspektionen shall set a countercyclical buffer guide¹ and a countercyclical buffer rate for each quarter. The countercyclical buffer for Sweden was activated on 8 September 2014, when Finansinspektionen decided to issue new regulations concerning a countercyclical buffer rate, see Finansinspektionen's Regulations (FFFS 2014:33) regarding the countercyclical buffer rate.² These regulations established that the countercyclical buffer rate shall be 1 per cent and be applied as of 13 September 2015.

On 22 June 2015, Finansinspektionen made a new quarterly decision that entailed notifying new regulations concerning the countercyclical buffer rate, see Regulations (FFFS 2015:5) regarding amendments to Finansinspektionen's regulations (FFFS 2014:33) concerning the countercyclical buffer rate.³ These regulations meant that the countercyclical capital buffer for Sweden was raised. According to the new regulations, the countercyclical buffer rate shall be 1.5 per cent and be applied as of 27 June 2016. On 7 September 2015, Finansinspektionen made a new quarterly decision setting out that the buffer rate of 1.5 per cent shall continue to apply. In the motivation for the decision, it

¹ The buffer guide constitutes the point of departure for Finansinspektionen's assessment of the size of the countercyclical buffer rate.

² FI (2014), *Regulations regarding the countercyclical buffer rate*. Published on fi.se on 10 September 2014, FI ref. 14-7010.

³ FI (2015), *Amendment to regulations regarding the countercyclical buffer rate*. Published on fi.se on 23 June 2015, FI ref. 15-7062.

is also set out that the countercyclical buffer guide was then set at 1.65 per cent.⁴

Finansinspektionen's assessment

The purpose of the countercyclical capital buffer is to strengthen the resilience of banks and ensure that the banking system as a whole has sufficient capital to sustain the flow of credit to households and corporations in situations when shocks to the financial system could cause a credit crunch. The countercyclical capital buffer is a time-varying capital requirement. This means that the buffer shall be built up when there is a risk of financial imbalances, and hence systemic risks, growing. In an ensuing recession or in the event of major losses for the banks, the buffer requirement may be reduced to counteract tighter lending and thereby alleviate the economic downturn.

Finansinspektionen sets the countercyclical buffer rate for Sweden by means of a qualitative assessment that takes quantitative factors into consideration. *The buffer guide* is an important, but not decisive, factor in the assessment of the buffer rate level. The most important factor is the development of the debts. Finansinspektionen therefore monitors debt and in particular how it develops in relation to gross domestic product (GDP) and incomes. Finansinspektionen also considers other quantitative variables that are relevant for assessing the cyclical systemic risks. This analysis is supplemented with judgements.

Development in total lending

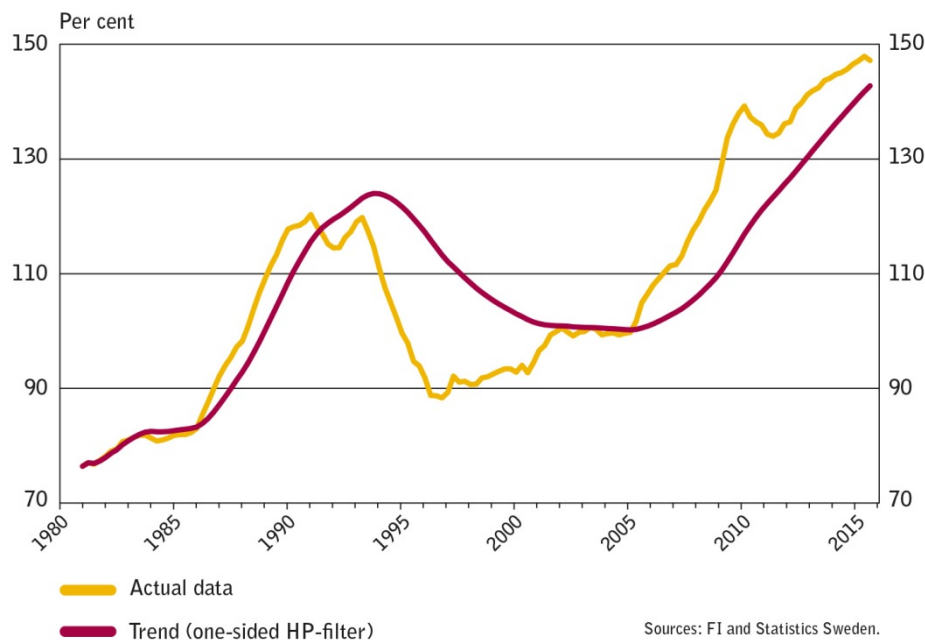
Finansinspektionen's assessment of the cyclical systemic risks is based on the development in lending to the non-financial sector over time, both as a whole⁵ and in its parts (for example lending to households and corporations, respectively). Lending is then related to other quantities, such as GDP or developments in household incomes. These relationships are studied to assess whether imbalances are building up in the financial system.

Lending to households and companies is increasing in Sweden, and has increased at a faster pace than nominal GDP since 2011 (see Diagram 1). Lending to the private sector is at present 147 per cent of GDP.

⁴ FI (2015), *Decision regarding the countercyclical buffer rate*. Published on fi.se on 8 September 2015, FI ref. 15-11646.

⁵ For Sweden, the measure of total credit to the private sector covers all corporate and household lending issued through monetary financial institutions (MFI) and the total market financing of corporations. The market financing of corporations has been defined as the value of all outstanding corporate bonds and certificates traded on the fixed-income market.

1 Credit in relation to GDP, actual data and trend



During the second quarter of 2015, total lending grew by 6.0 per cent on an annual rate (see Table 1). In the same period, nominal GDP grew by 4.9 per cent. Lending is thus continuing to increase faster than GDP. However, the difference has declined somewhat. Between the first and the second quarters, debts grew at a slower pace than GDP, which means that debt in relation to GDP fell somewhat (see Diagram 1).

1 Growth rates in lending to households and corporations (excluding and including the market financing of corporations)

Annual percentage change

	Households (MFI)	Corporations (MFI)	Corporations (market)	Corporations (MFI+market)	Total credit
2014 Q2	5.1	2.4	11.2	4.7	4.9
2014 Q3	5.4	3.2	13.3	5.8	5.6
2014 Q4	5.7	3.7	10.8	5.6	5.6
2015 Q1	6.1	4.6	12.9	6.9	6.5
2015 Q2	6.5	2.9	12.2	5.4	6.0

Note: MFI refer to Swedish financial institutions.

Source: Statistics Sweden.

Developments in lending to households

Lending from monetary financial institutions (MFI) to households shows a sustained upward trend and the growth rate was 6.5 per cent in the second quarter of 2015. Monthly figures from Statistics Sweden show, moreover, that the rate of increase is continuing to rise – in October 2015 it was 7.2 per cent (see Table 2).

2 Growth rates in MFI-lending to households and corporations

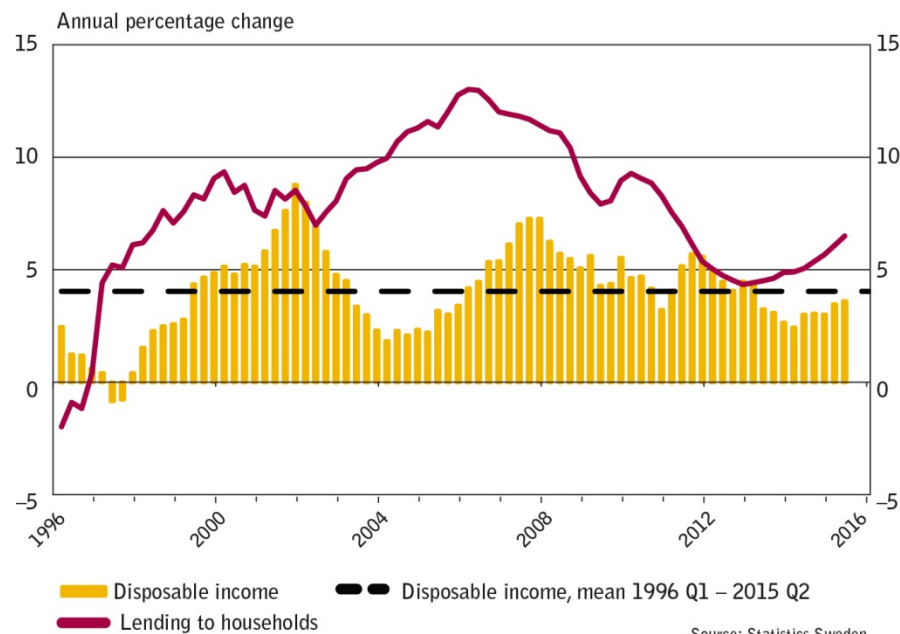
Annual percentage change

2015	Households, total	Households, housing	Corporations
August	7.0	7.8	2.5
September	7.2	8.0	2.9
October	7.2	8.1	3.3

Source: Statistics Sweden.

Household indebtedness is increasing even faster than disposable incomes. Incomes increased by 3.6 per cent during the second quarter of 2015 (see Diagram 2).

2 Growth rate in lending to households and nominal disposable income



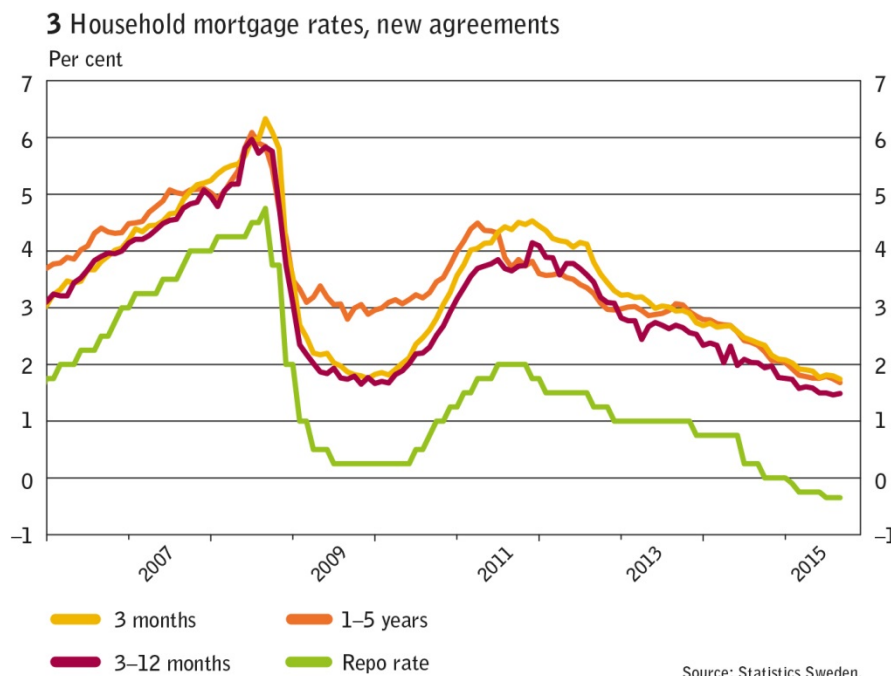
Growth in household debt over the past two decades has been largely driven by structural factors. These include an increased share of home-owning households, rapid urbanisation, lower taxes on housing and lower real interest rates.⁶ Some of these factors are closely linked to developments in the housing market, while others affect how many households are indebted.

Higher housing prices are thus an important contributing factor to the increase in lending to households. Swedish housing prices have accelerated recently and the rate of increase is currently much higher than growth in household incomes (see Diagram B 1.1). Figures from Statistics Sweden show that the prices of

⁶ Sveriges Riksbank, Finansinspektionen and the Swedish National Debt Office (2015), *The driving forces behind household indebtedness*, report to the Financial Stability Council. Published on 3 July 2015, see: http://www.fi.se/upload/90_English/95_Supervision/2015/Drivkrafter_150702_eng.pdf. Hansen (2013), *Explanations for the development in household debt since the mid-1990s*, Analysis materials for the Council for Cooperation on Macroprudential Policy, Memorandum 1, Finansinspektionen.

single-family dwellings rose by 10 per cent on an annual basis in the three month period September–November 2015 compared with the same period a year before.⁷ It is thus not only the price of tenant-owned apartments in metropolitan areas that has increased.⁸ Mortgages account for just over 80 per cent of total lending to households. The annual rate of growth for mortgages was 8.1 per cent in October 2015, which is an increase in relation to September, when the growth rate was 8.0 per cent (see Table 2).

Households' interest-to-income ratio, that is, interest costs in relation to household disposable incomes, has fallen considerably since the beginning of the 1990s and is now lower than it has been for the past 35 years (see Diagram B 1.4). Currently, interest expense, after tax deduction, amounts to around 2.9 per cent of disposable income. The low ratio is due to lending rates being historically low. This applies to both long and short fixed interest rate periods (see Diagram 3).



Finansinspektionen regularly analyses how individual households are affected by economic disruptions. The purpose of this is to obtain a supplementary portrayal of households' resilience and this is aided by stress tests of

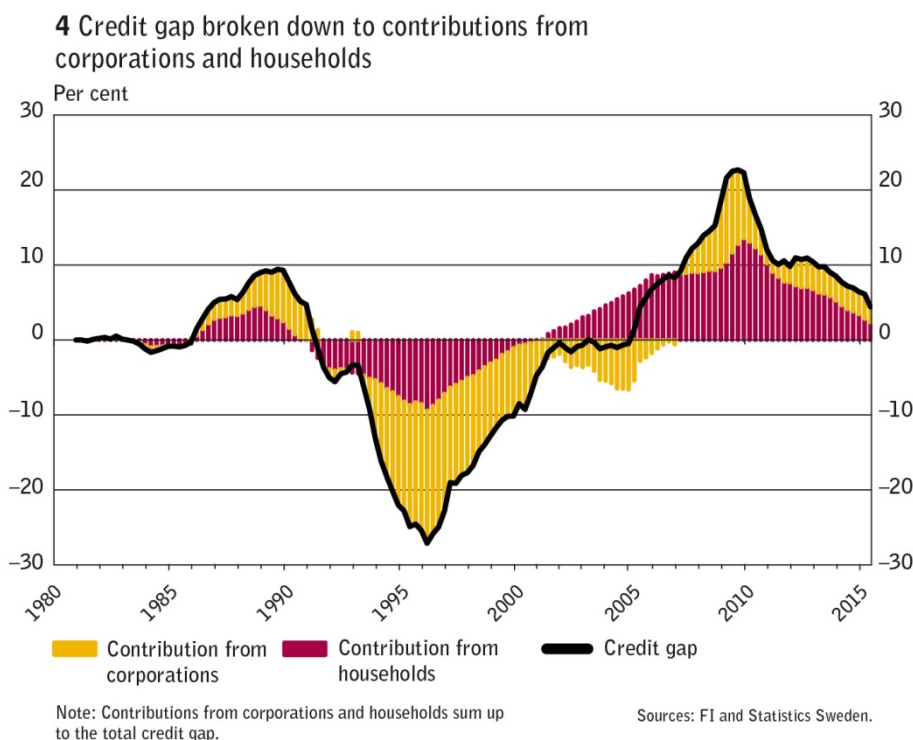
⁷ According to Statistics Sweden's House price survey, prices for single-family dwellings in Sweden rose by 1 per cent during the most recent three-month period September–November 2015, compared with the previous period.

⁸ Information from Mäklarstatistik show that housing prices were unchanged in November. Over the past three-month period (September–November 2015), prices of tenant-owned apartment rose by 5 per cent and detached house prices by 2 per cent, compared with June–August 2015. Year-on-year, the price change is 16 per cent for tenant-owned apartments and 12 per cent for detached houses. See <http://www.maklarstatistik.se/pressmeddelande/pm-2015-12-14.aspx>.

households with new mortgages.⁹ The stress tests analyse households' sensitivity to rising interest rates or higher unemployment. At present, the stress tests show that households have good resilience to higher interest rates, loss of income and falling house prices. For instance, a rise in interest rates of 5 percentage points means that only 4 per cent of households would have a deficit in their monthly budget; despite much higher interest rates, most households with new loans would thus manage to pay their loans. Household resilience has increased substantially in relation to 2013, when almost 8 per cent of households showed a deficit with an increase in interest rates of 5 percentage points. On the whole, Finansinspektionen finds that Swedish households have good resilience, and the risks of major credit losses linked to household indebtedness remain low.

Measures to manage the risks linked to household indebtedness

Credit growth with respect to the household sector has long been the driving force behind lending growth in Sweden. However, in recent quarters growth in corporate lending has provided an increasing contribution to the total credit gap (see Diagram 4).



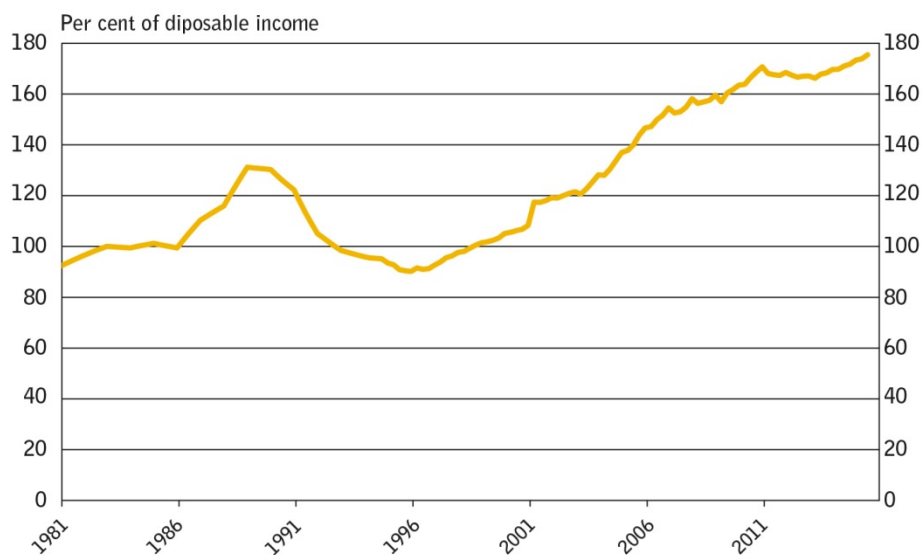
As mentioned earlier, growth in household indebtedness is largely linked to increases in housing prices. Finansinspektionen has already implemented several measures to reduce the risks linked to household indebtedness and the housing market. These measures include the introduction of a mortgage cap

⁹ FI (2015), *The Swedish mortgage market 2015*. Published on fi.se on 14 April 2015, FI ref. 14-8731.

and raising the risk weight floor for the banks' mortgages. The latter took place in two stages in 2013 and 2014, which entails an increase from around 5 to 25 per cent. In addition, new capital requirements have been introduced to increase the banks' resilience in crisis in accordance with new EU regulations. Finansinspektionen has also tried to dampen the risks linked to household indebtedness in other ways than through regulation. For instance, Finansinspektionen has, in consultation with the Swedish Bankers' Association, also worked to promote offering individually tailored amortisation plans to mortgage holders (from 2014 onwards). These measures are in addition to Finansinspektionen's regular supervision of the banks' credit assessment process.

Households' rising indebtedness constitutes an increasing risk. The aggregate debt-to-income ratio, that is the household sector's total debts in relation to their disposable incomes, increased from 100 to 170 per cent from the end of the 1990s up to 2010 (Diagram 5).¹⁰ After remaining stable at this level for some years, the debt-to-income rate has begun to rise again, albeit at a more moderate pace than during 1995-2010. If the increase in the debt-to-income ratio is due to more households owning their own home, it need not mean that the risks increase. However, the trend towards more people owning their own home appears to have slowed down and is not the main explanation for the increase in debt we are seeing now. Finansinspektionen has therefore begun to look into the possibility of introducing further measures to slow down growth in household indebtedness and thereby increase households' resilience to economic shocks.

5 Household debt



Source: Statistics Sweden.

¹⁰ Experience and research indicate, however, that the change of pace in debt is a better indicator that imbalances are building up than the absolute level of the debt-to-income ratio.

Finansinspektionen considers that there is a need for an amortisation requirement, in line with the proposal presented by Finansinspektionen in spring 2015, and that this requirement should be introduced as soon as possible.¹¹ An amortisation requirement increases the resilience of households to shocks and thus reduces the risk of the Swedish economy being negatively affected as a result of unforeseen events. The Government has referred a proposal to the Council on Legislation regarding a new provision on amortisation of mortgages in the Banking and Financing Business Act (2004:297).¹² It is also proposed that the Government or authority designated by the Government may issue regulations regarding the amortisation requirement. The amendment to the act is proposed to enter into force on 1 May 2016. If the proposal is adopted, Finansinspektionen may have regulations regarding an amortisation requirement in place in summer at the earliest.

Developments in lending to companies

Lending from MFIs to non-financial companies is continuing to increase, but at a declining pace. Growth was 2.9 per cent (on an annual rate) during the second quarter of 2015, which can be compared with 4.6 per cent in the previous quarter. However, the latest monthly figures from Statistics Sweden show that the corporate lending of MFIs has increased somewhat. The annual growth rate was 3.3 per cent in October 2015 (see Table 2), which is an increase of 0.4 percentage points compared with the previous month.

In recent years, the market for borrowing using bonds and certificates has become an increasingly important source of funding for non-financial companies. This market funding makes companies less dependent on banks and thereby less sensitive to disruptions in the banking sector. At the same time, companies may become more sensitive to disruptions in the securities markets. As there are substantial costs for becoming established on the bond market and it requires a substantial borrowing need, it is mainly large companies that finance themselves through bonds and certificates. The growth rate in companies' market borrowing remained strong in the second quarter of 2015, at 12.2 per cent, but declined somewhat in relation to the previous quarter.

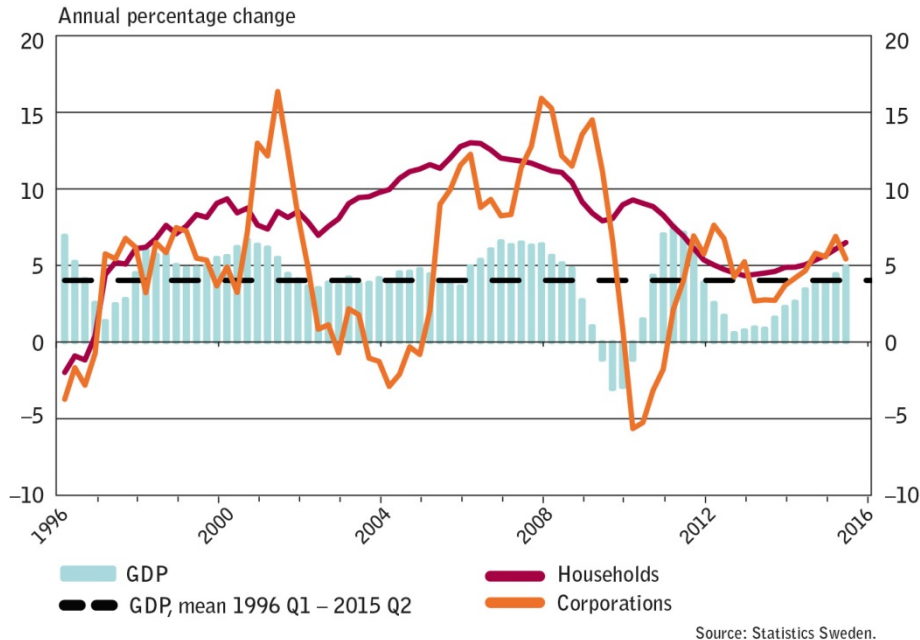
All in all, total lending to companies – lending from MFIs and via market funding – increased by 5.4 per cent. This is a lower rate of growth than the previous quarter, but somewhat faster than nominal GDP growth (see

¹¹ FI (2015), *Proposal for new rules regarding mortgage amortisation requirements*. Published on fi.se on 11 March 2015. See also Ingves, Stefan and Lindblad, Hans and Noréus, Martin (2015), Tydligt amorteringskrav bör införas snarast möjligt (Clear amortisation requirements should be introduced as soon as possible), *Dagens Nyheter*. Debate article published on 17 August 2015.

¹² Council on Legislation, *Amortisation requirement*. Published on 10 December 2015, <http://www.regeringen.se/contentassets/e3d2b5e9700e4b7a857e9ec3fa33dad3/amorteringskrav>

Diagram 6). At present, Finansinspektionen sees no clear signs that extensive imbalances are building up in the corporate sector.

6 Growth rate in MFI-lending to households and corporations and nominal GDP growth



Models for households' and companies' debts

As a complement to the analysis of outcomes, Finansinspektionen also uses models for households' and companies' debts.¹³ The development of debt contributes valuable information to Finansinspektionen's total assessment of financial and economic stability in Sweden. Moreover, the development of debt in relation to GDP is an important indicator for establishing the buffer guide. Finansinspektionen already follows the development of debt, but by analysing various scenarios for indebtedness Finansinspektionen can better plan its future work on the countercyclical capital buffer.

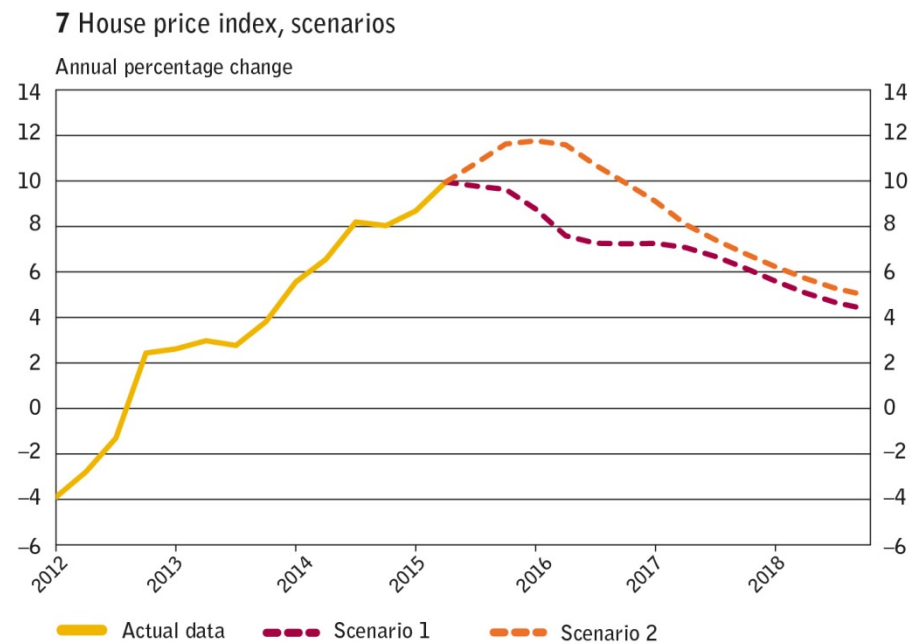
Finansinspektionen has created models for analysis of household and corporate debt. The household model contains, in addition to debt, property prices, consumer confidence (economic activity) and a mortgage rate. The company model contains debt, a business tendency indicator (economic activity) and a corporate borrowing rate. The models' forecasts for individual variables depend partly on how the other variables develop and partly on a long-term normal level.¹⁴ The normal level is a combination of assessments and information in data. The normal situation for the debts in this case is related to nominal GDP. The models are assessed on the basis of their forecasting

¹³ For a description of the approach and the household model, see FI (2015), *A model for household debt*, FI Analysis no. 4. Published on fi.se on 1 December 2015.

¹⁴ In the long run, all variables in the model will grow in accordance with the normal situation.

performance and how well the estimated correlations between the variables coincide with economic theory.

In the first model scenario we have made the models conditional on the National Institute of Economic Research's assessment in its report *Wage Formation in Sweden 2015*, published in October (Scenario 1).¹⁵ Swedish house prices have recently shown a rapid increase and during the autumn the rate of price increase has risen. There is a risk that house prices will continue to rise rapidly, and therefore a much stronger rate of increase in house prices is assumed in the second scenario (Scenario 2), compared with the first. Diagram 7 shows the development of property prices in these scenarios.

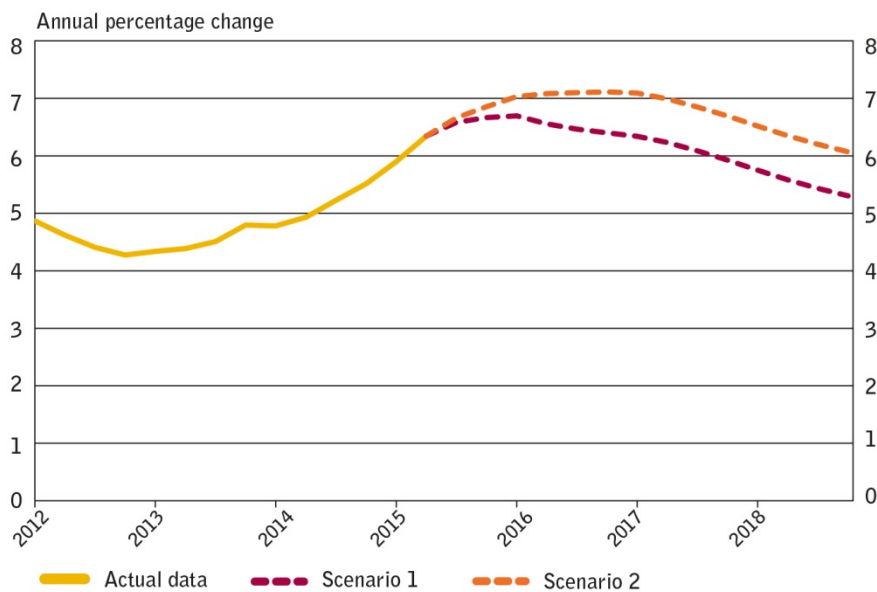


Sources: Statistics Sweden and FI.

In Scenario 1, the annual percentage change in household debt declines during the entire forecast period (see Diagram 8). The debts increase faster than in a normal situation and the growth rate therefore slows down. However, the adjustment occurs slowly, because the debts have historically shown a gradual adjustment to the normal situation. Moreover, low interest rates during the forecast period contribute to the slow dampening.

¹⁵ NIER (2015), *Wage Formation in Sweden 2015*, National Institute of Economic Research.

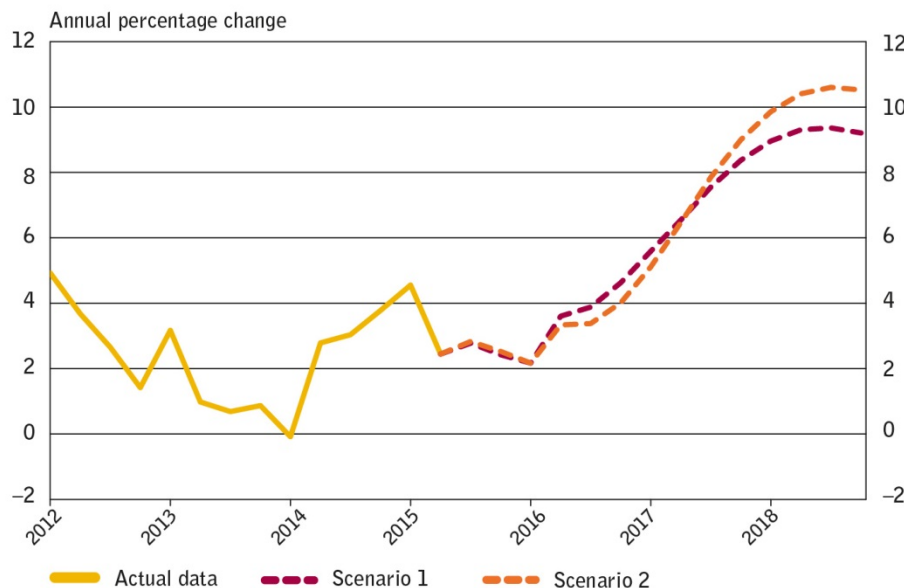
8 Household debt, scenarios



Sources: Statistics Sweden and FI.

The growth rate in corporate debt increases during the forecast period (see Diagram 9). This is due to the low interest rates and to the growth rate being below normal to start with. The corporate model is more sensitive than the household model with regard to both economic activity and interest rates.

9 Corporate debt, scenarios



Sources: Statistics Sweden and FI.

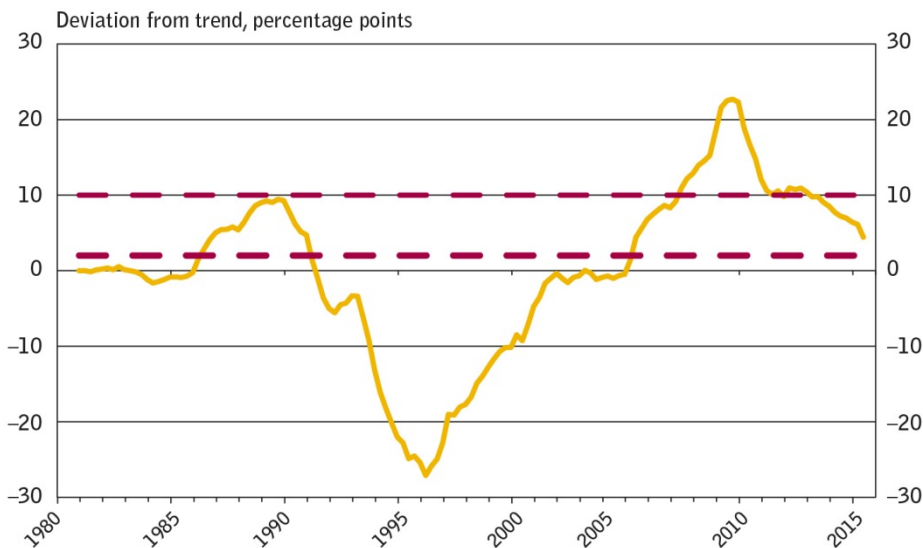
The countercyclical buffer guide

The buffer guide, which is given by the credit gap, is an important part of Finansinspektionen's analysis and assessment of the size of the countercyclical buffer in Sweden. There is, however, no mechanical link between the guide

and the level of the countercyclical buffer. The reason is that the credit gap can sometimes give misleading signals and must therefore be interpreted with caution. The credit gap is a less suitable indicator for determining when the buffer should be released. This means that the buffer guide is important as a starting point when activating and raising the countercyclical buffer. However, with regard to reducing the buffer rate, other indicators are recommended, such as financial stress indicators.¹⁶

Finansinspektionen calculates the buffer guide in accordance with the Basel Committee's standardised approach.¹⁷ This method is based on the credit gap, that is, how much total household and corporate lending in relation to GDP deviates from its long-term trend. According to the standardised approach, the credit gap was 4.4 per cent in the second quarter of 2015, which is the latest available outcome (see Diagram 10).

10 Credit gap according to the standardised approach



Note: The dotted lines show the thresholds (2 per cent and 10 per cent, respectively) which, under the standardised approach, are used to convert the credit gap into a buffer guide.

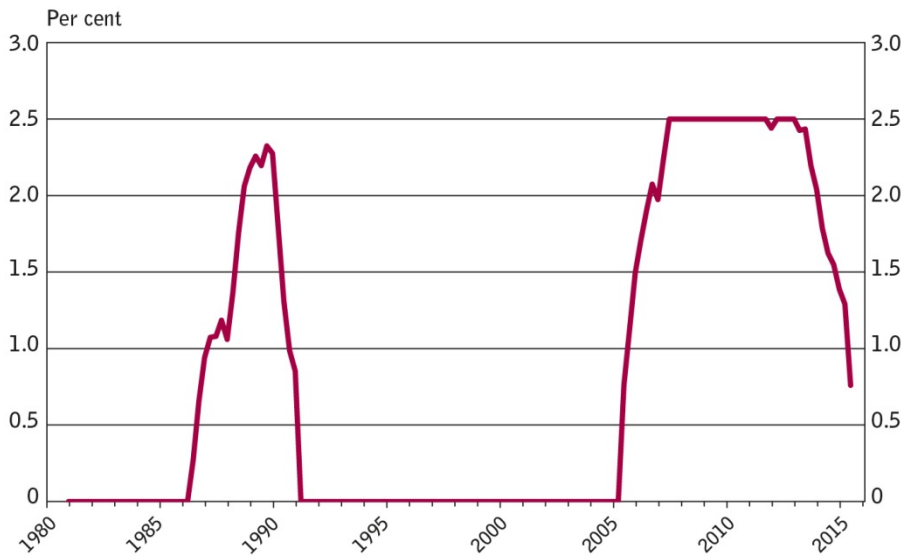
Sources: FI and Statistics Sweden.

The size of the credit gap is converted into a buffer guide in accordance with a formula for the relationship between the credit gap and the buffer guide. A credit gap of 4.4 per cent gives a buffer guide of 0.75 per cent (see Diagram 11).

¹⁶ ESRB (2014), *Operationalising the countercyclical capital buffer: indicator selection, threshold identification and calibration options*, Occasional Paper No. 5.

¹⁷ For more information about the standardised approach, see FI (2014), *Regulations regarding the countercyclical buffer rate*. Published on fi.se on 10 September 2014, FI ref. 14-7010.

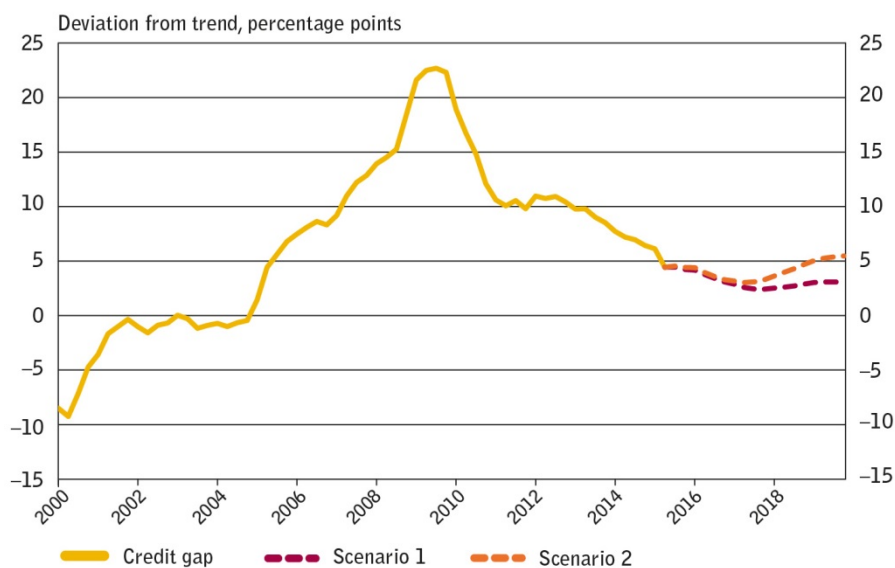
11 Buffer level according to standardised approach



Sources: FI and Statistics Sweden.

Given the National Institute of Economic Research’s assessment of GDP and Finansinspektionen’s debt models, we can create scenarios for the credit gap (see Diagram 12). The credit-gap scenarios are constructed in the same way as the normal credit gap, except that outcomes have been extended with forecasts. In the scenarios (see the section “Models for households’ and companies’ debts”) the gap continues to close in 2015 and 2016. After that, the gap increases, which is because debts are growing faster than GDP in 2017 and 2018. The gap increases most for Scenario 2, which is expected, as stronger growth in property prices gives stronger growth in both households’ and companies’ debts. Both scenarios indicate that the credit gap will continue to be weakly positive in the coming years.

12 Credit gap, scenarios



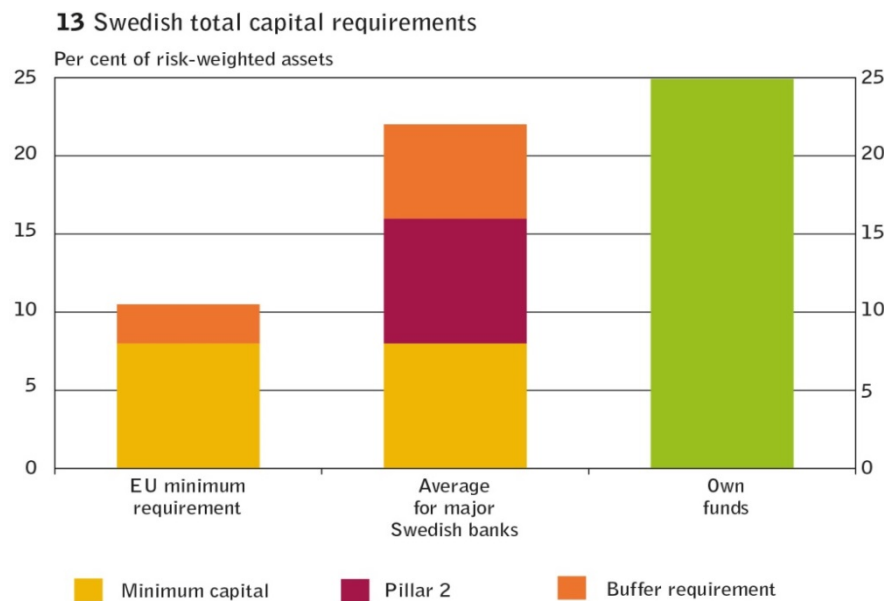
Sources: Statistics Sweden and FI.

Other quantitative indicators

Finansinspektionen has chosen to monitor a number of indicators, in addition to the credit gap, which are considered to be relevant for the countercyclical buffer rate. These indicators include various measures of the progression of household and corporate lending, house prices in relation to disposable income, current account and financial savings in the public sector as a share of GDP, bank capital levels, the interest-to-income ratio of households, and developments in real equity prices.¹⁸

Some of these indicators have already been described in earlier sections. A review of the other indicators shows that the risk outlook has not changed tangibly since the previous quarter. A substantial current account surplus and stable public finances, compared with other countries, imply relatively small risks (see Diagram B 1.2). Real equity prices have declined somewhat in recent months. This is a natural result of the relatively strong development in real equity prices since the financial crisis and particularly since mid-2012 (see Diagram B 1.5).

The banks' capital situation is still good and has improved during the third quarter of 2015 (see diagram B 1.3).¹⁹ The requirements made of Swedish banks are currently twice as high as the EU minimum requirements (see Diagram 13).



Note. The Pillar 2 requirement includes a risk-weight floor of 25 per cent for Swedish mortgages, capital requirements for Norwegian mortgages, systemic risk in Pillar 2 and other capital requirements in Pillar 2. Other capital requirements within Pillar 2 vary in practice between the different institutions, the chart shows an unweighted average. They chiefly consist of capital requirements for interest rate risk in the pass book, pension risk and concentration risk. Buffer requirements include the systemic risk buffer, the countercyclical capital buffer for Sweden and the capital conservation buffer for Sweden (which is also included in the EU's minimum requirements).

Source: FI.

¹⁸ Appendix 1 provides diagrams of the trend for these indicators.

¹⁹ See also FI (2015), *The Swedish banks' capital requirements, third quarter 2015*. Published on fi.se on 25 November 2015, FI ref. 15-7395.

The Swedish banks are well capitalised, both in relation to the risks they take and compared with European banks. The increase in the banks' capital in relation to risk-weighted assets is largely due to higher capital requirements in recent years.²⁰ Despite the improved capital strength in the banks, Finansinspektionen considers that the capital requirements may need to be raised further, but that they shall remain risk-based. For example, Finansinspektionen has identified a need to tighten both the regulations on and supervision of the internal models the banks use to actively manage and reduce risks. The use of internal models is a means of attaining risk-sensitive capital requirements and thus sound credit granting. For this purpose, Finansinspektionen will take measures to improve the management of model risks and deal with specific weaknesses in the construction of the internal models.²¹

Overall assessment

Total lending to the private non-financial sector continued to rise in the second quarter of 2015. However, the growth rate was lower than in the previous quarter. The reason for the decline is that the growth rate in lending to companies has declined somewhat. This applies in particular to lending from MFIs. At present, Finansinspektionen sees no clear signs that extensive imbalances are building up in the corporate sector.

Lending to households, on the other hand, is continuing to grow steadily, which is to a large degree due to the acceleration in prices on the housing market. Household debts are also growing faster than both nominal GDP and disposable income. Although household debt is currently not assessed to be any direct threat to financial stability, this development is worrying. Debt is growing rapidly and many households are highly indebted, which makes the economy vulnerable to shocks.²² Finansinspektionen therefore considers it good that the amortisation requirement can be introduced in summer 2016, which can contribute to dampening the risks linked to household debt.

The first results of Finansinspektionen's analysis of scenarios for the development of debt indicates that debts will continue to grow strongly, but also that the growth rate will slow down somewhat in the coming years. However, debts are expected to grow faster than GDP up to the end of 2019.

Finansinspektionen decided in June 2015 to raise the countercyclical buffer to 1.5 per cent to boost the resilience of the banks. This assessment was based on the acceleration in credit growth, rapidly-rising house prices and the risk that

²⁰ Measured in terms of current balance sheets, the major Swedish banks have SEK 100 billion more in capital than they had in 2008.

²¹ FI (2015), *Stability in the financial system*. Published on fi.se on 1 December 2015. See also Thedéen, Erik and Noréus, Martin (2015), *Banker måste öka sitt kapital* (Banks must increase their capital), *Dagens Industri*. Debate article published on 1 December 2015.

²² FI (2015), *Stability in the financial system*. Published on fi.se on 1 December 2015.

the absence of an amortisation requirement could contribute to somewhat higher growth in credit. The above analysis shows that developments are still worrying, but that the risk outlook has not altered significantly in relation to the previous quarter. Total credit growth has declined somewhat over the past quarter, at the same time as the amortisation requirement may be in place in summer 2016. Other indicators, which form the basis for the assessment of the risk outlook, do not point to systemic risks having increased significantly. Finansinspektionen will, in addition, continue to monitor developments and is prepared to take action if systemic risks linked to the growth in credit increase. Given this, the countercyclical buffer rate is still set at 1.5 per cent.

Finansinspektionen

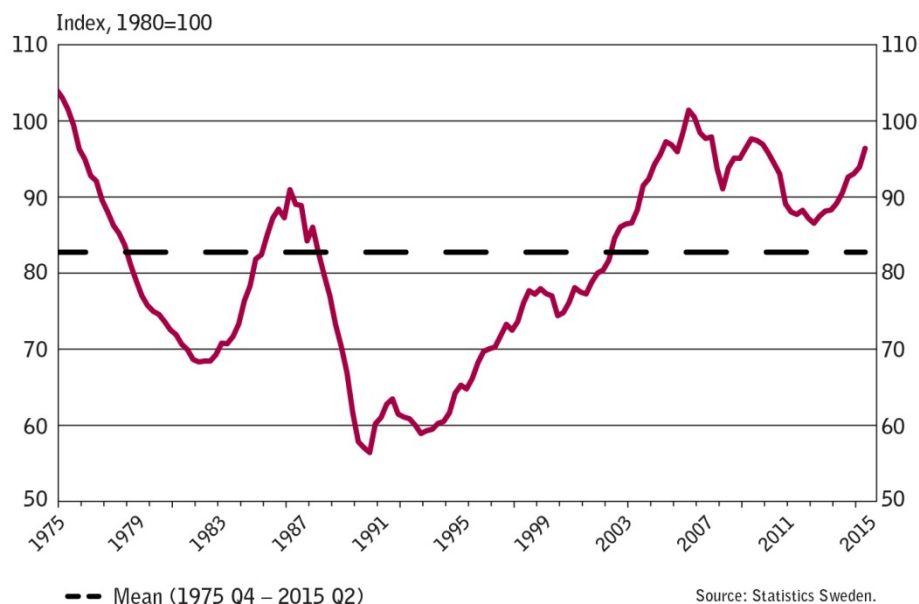
Sven-Erik Österberg
Chairman of the Board

Matilda Gjirja
Senior Analyst

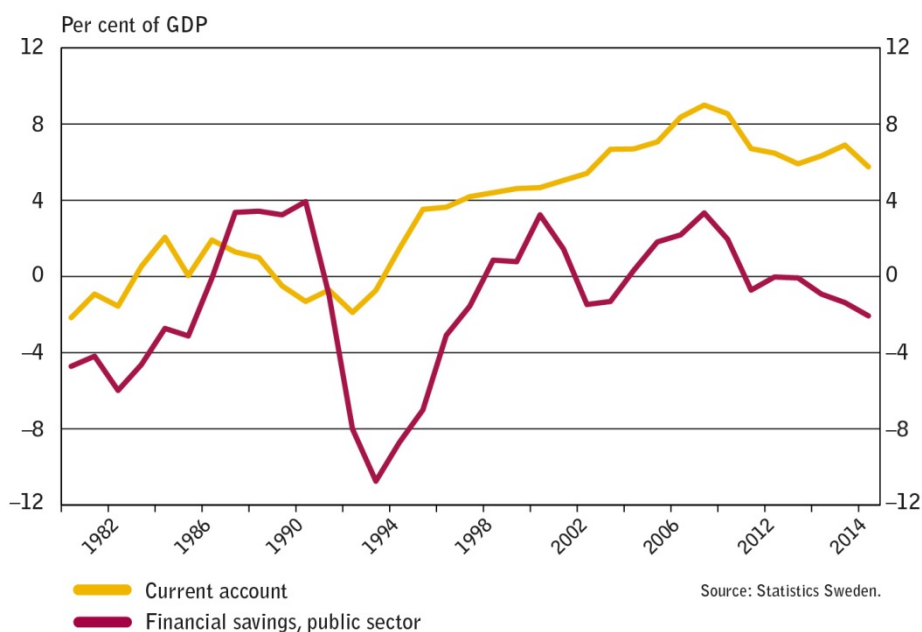
A decision in this matter was made by the Board of Directors of Finansinspektionen (Sven-Erik Österberg, Chair, Sonja Daltung, Astri Muren, Hans Nyman, Anna Pettersson Westerberg, Gustaf Sjöberg and Erik Thedéen, Director General) following a presentation by Senior Analyst Matilda Gjirja. Per Håkansson (Chief Legal Counsel) and Henrik Braconier (Chief Economist) also participated in the final procedure.

Appendix 1: Diagram

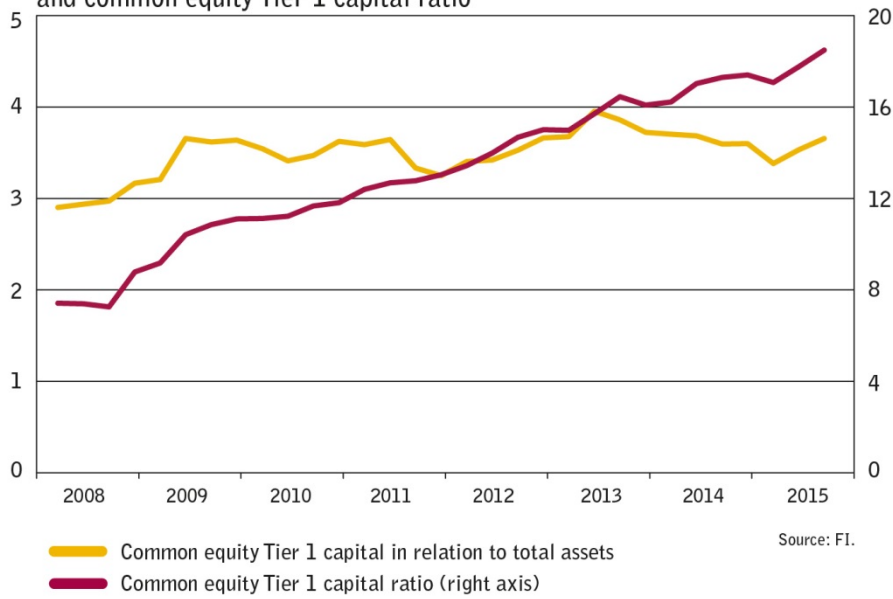
B 1.1 House prices in relation to disposable income



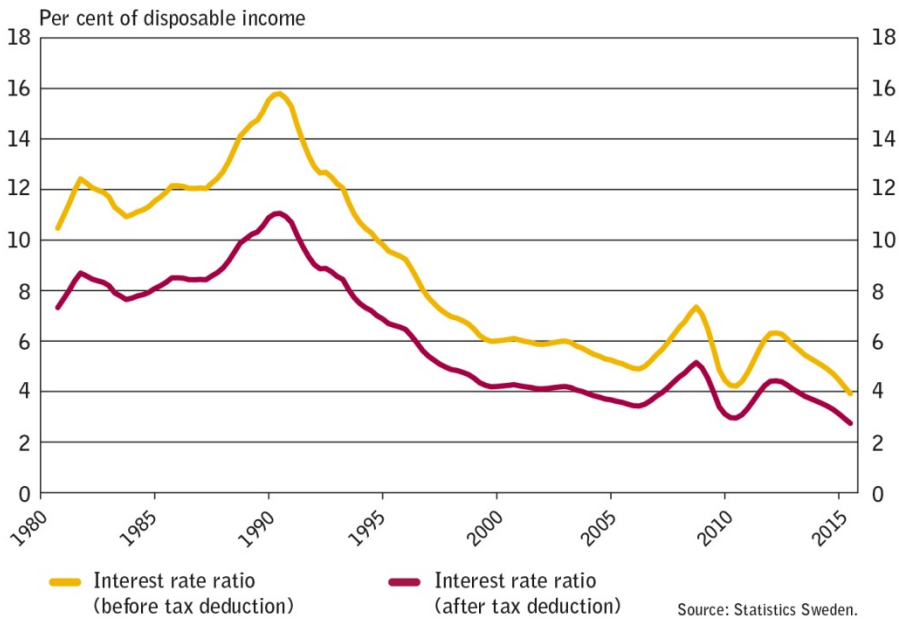
B 1.2 Current account and financial saving in the public sector



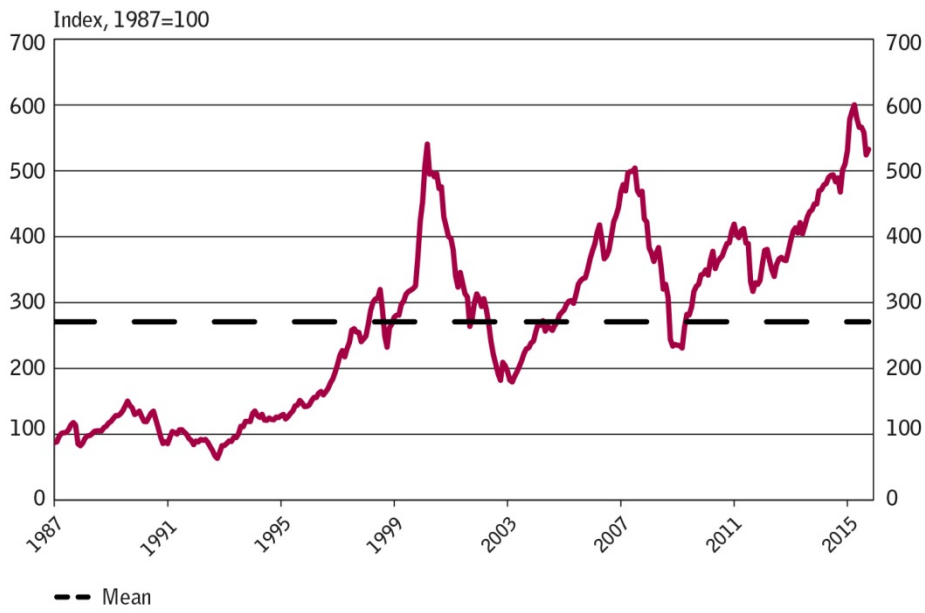
B 1.3 Common equity Tier 1 capital in relation to total assets and common equity Tier 1 capital ratio



B 1.4 Interest rate ratio of households



B 1.5 Real equity prices



Note: Real equity prices have been calculated by deflating the OMX by CPIF.

Source: Statistics Sweden and Reuters Ecowin.