M E M O R A N D U M

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Capital requirements for Swedish banks

Summary

Experience from the latest financial crisis resulted in intense efforts to strengthen the capitalisation of the international banking sector. In 2009, the G20 countries reached a global agreement regarding measures to improve the capitalisation of banking systems. Finansinspektionen (FI) is now taking a further step in the lengthy decision-making process that has been required to implement the agreement. The Swedish authorities concerned were already in agreement to further tighten capital requirements for Swedish banks, beyond the internationally agreed levels. The positions presented by FI aim to ensure that the Swedish banking system stands more robustly equipped to withstand future financial crises.

On 3 April, the Government presented a bill regarding strengthened capital adequacy rules. According to the bill, the new rules will primarily come into effect on 1 August 2014. The bill authorises FI to decide on several matters which, on the whole, have a major influence on the capital requirements of banks. FI is now describing how the capital requirements will be devised.

The information provided by FI can be summarised as follows:

- FI is now implementing the agreement between the Riksbank, the Swedish Ministry of Finance and FI regarding higher capital requirements for systemically important banks (the so-called November Accord from 2011), such that the four major Swedish banks are assigned a systemic risk buffer of 3 per cent in common equity Tier 1 capital as of 1 January 2015, and a further 2 per cent in a common equity Tier 1 capital requirement within the framework of Pillar 2.

- In FI's opinion, the countercyclical capital buffer should be activated in Sweden given the current economic conditions. FI will consult with other relevant authorities and seek input from the parties concerned prior to setting the level.

- FI is raising the risk weight floor for Swedish mortgages to 25 per cent (from 15 per cent currently).

- Finanstilsynet in Norway is planning to tighten risk weight requirements for Norwegian mortgages. For this reason, FI intends, within the framework of Pillar 2, to increase risk weights for Norwegian mortgages in a similar manner for the Swedish firms active on the Norwegian mortgage market. Once Finanstilsynet has set out how the tightened requirements will ultimately be devised, FI will set out how FI's implementation of the increase to risk weights will be devised, and the size of the increase.

- FI implements the supervisory capital assessment in Pillar 2, i.e. the assessment of the individual capital requirement of firms, such that a capital requirement under Pillar 2 is always additional to the capital requirement according to the general capital requirements under Pillar 1. However, FI does not normally intend to make a formal decision on the capital requirement under Pillar 2. Insofar that a formal decision has not been made, the capital requirement under Pillar 2 does not affect the level at which the automatic restrictions on distributions linked to the combined buffer requirement come into effect.

On the whole, the implementation of the strengthened capital adequacy rules involves a clear tightening of capital requirements for Swedish banks, particularly the systemically important major banks. The total own funds requirement of the four major banks is estimated to vary between 18.7 and 24.5 per cent, and the total common equity Tier 1 capital requirement is estimated to vary between 14.5 and 19.3 per cent.[1] In FI's opinion, the Swedish banks will be able to meet the requirements. At the same time, because of the need for continuing adaptation, certain banks still need to be conservative in their capital planning and show restraint in measures that weaken their resilience, such as profit distribution and share buybacks.

At the same time, it can be ascertained that international efforts to further strengthen the capitalisation of the banking system are progressing. For example, a leverage ratio measure will be introduced, potentially as a compulsory requirement as of 2018. The Basel Committee is also working on preparing proposals to standardise risk weight calculations with the aim of limiting the disparities between the internal models of different banks. Another important aspect is how the EU's crisis management directive will be implemented and applied, since it might involve requirements being placed on the loss-bearing capacity a systemically important bank must have in the event of it succumbing to resolution.

Any viewpoints or positions must be submitted to FI no later than 30 June 2014.

[1] The estimate is based on a number of assumptions, which are described in the consequence analysis in section 7.

1 Introduction and background

1.1 Purpose

An important conclusion from the latest financial crisis is that much more capital is needed in the banking sector. This memorandum describes Finansinspektionen's (FI) position for several of the capital requirement provisions on which it is proposed that FI be authorised to decide. A common factor of the matters included herein is that they are of great importance to the total own funds requirement of the firms, and that implementation does not primarily occur through regulations, but through decisions or practice. The matters include the implementation of the November Accord, as it is known. That is, the agreement between FI, the Swedish Ministry of Finance and the Riksbank regarding new capital requirements for Swedish banks, published in November 2011.[2]

The questions addressed are the size of the systemic risk buffer, the method and size of the countercyclical capital buffer and the implementation of the supervisory capital assessment in Pillar 2. In the supervisory capital assessment, FI also needs to take account of systemic risk. This affects the supervisory capital assessment for the most systemically important firms, and the assessment of the capital requirement for exposures to mortgages.

In this memorandum, the term "firm" or "credit firm" is used for all institutions (banks, credit institutions and investment firms) covered by the capital adequacy rules.

1.2 Viewpoints and implementation

The positions described by FI in this memorandum will ultimately be implemented through different procedures. The matters pertaining to Pillar 2 are implemented in FI's supervision process, and matters regarding buffer requirements are implemented through formal decisions or regulations. These processes are described in more detail with respect to each position taken. FI is now providing concerned parties with the opportunity to submit any viewpoints on the positions described herein. Any viewpoints must be submitted no later than 30 June 2014. FI will subsequently prepare a final version of this memorandum.

[2] See New capital requirements for Swedish banks, press release on fi.se, 25 November 2011.

1.3 Background

1.3.1 The benefit of higher capital requirements

Compared with other firms, banks and other credit firms have a high level of indebtedness. In other words, their share of equity is low in relation to other funding. It is normally profitable for the owners of such firms to fund their operations using a large share of loans. This is largely due to the Government's implicit and explicit guarantees for the banking system.

The high debt ratio involves a clear risk of default. At the same time, a smoothly functioning financial market is key to the economy. It is hence of great public interest that credit firms have sufficient capital to cover (absorb) losses.

1.3.2 The Basel 3 agreement and implementation in the EU

The financial crisis that broke out in 2007 led to powerful initiatives to safeguard financial stability. In a declaration from the G20 meeting in Pittsburgh in 2009, a global agreement was presented regarding measures to improve the capitalisation of the banking system. In December 2010, the Basel Committee on Banking Supervision (the Basel Committee) then issued a new framework for banks, known as the Basel 3 agreement.[3]

The Basel 3 agreement contained a large number of measures to address the difficulties in global financial regulations. The measures were directed at both funding and liquidity risks, and the banks' overly weak capitalisation. The matters addressed in this memorandum are limited to capitalisation. In this area, Basel 3 can be summarised most simply as the new rules requiring banks to hold more capital, and for the capital to be of better quality.

The EU has chosen to implement the Basel 3 agreement as binding regulations. In July 2011, the EU Commission presented a proposal for a new directive and a new regulation to replace the previously applicable directives in the area. The Capital Requirements Directive[4] and the Capital Requirements Regulation[5] were adopted by the European Parliament and the European Council on 26 June 2013 and came into effect on 1 January 2014.

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[3] Basel 3: A global regulatory framework for more resilient banks and banking systems, December 2010, and updated in June 2011, www.bis.org

[4] 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 2009/49/EC.

[5] Regulation (EU) No 575/213 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012.

1.3.3 EU harmonisation and national measures

The Capital Requirements Regulation fundamentally comprises what is known as fully harmonised rules. According to full harmonisation, individual Member States may not apply rules that are either less strict or more strict than those specified in the EU regulations. The ban on applying stricter rules differs from the Basel agreements, which are agreements on minimum rules. The purpose of fully harmonising the rules within the EU is to promote the EU's single market for financial services. In order for the competent authorities of each EU country to nevertheless be able to adapt the capital requirements to the level of systemic risks (sometimes known as macroprudential risks) in the country, and to the risk in individual firms, there are however certain specific provisions containing both possibilities and obligations to apply stricter rules.

In the EU negotiations preceding the adoption of the Capital Requirements Directive and the Capital Requirements Regulation, Sweden represented a line that entailed the individual Member States having the possibility of applying stricter capital requirements if they deemed it necessary to safeguard the country's financial stability. These viewpoints also gained the support of the Council and the European Parliament. According to the line of negotiation, a need was recognised to balance the desire to harmonise regulations to promote the single market, and the need to promote financial stability by having the possibility, at national level, to address country- and firm-specific risks.

Part of the background to Sweden's line of negotiation was the previously mentioned November Accord, which entailed the major Swedish banks having higher capital requirements. In connection with the presentation of the Accord, it was pointed out that the Swedish banks were very large in relation to the Swedish economy and that they largely obtain funding on international capital markets. This state of affairs was considered to pose particular challenges to upholding financial stability in Sweden.

The specific possibilities and obligations of the EU regulations to apply stricter rules, in order to adapt the capital requirement to the level of systemic risks in the country and to the risk in individual firms, presuppose that an authority is appointed to assess the level of such risks. In Sweden, FI is proposed to make such assessments and the ensuing decisions.

1.4 The components of the capital requirement

The own funds requirement in the new regulations consists of several different components. A brief and general overview of the components is provided in this section. More details are provided in the other sections of the memorandum.

First, like before, there is a *minimum capital requirement* calculated according to the detailed rules specified in the Capital Requirements Regulation. This

capital requirement always amounts to 8 per cent of the firm's risk-weighted exposure amount.

On top of this, the new Capital Requirements Directive introduces a new type of capital requirement that was not in the former regulations; that is, a number of buffer requirements. The buffer requirements consist of five different buffers:

- *The capital conservation buffer* amounts to 2.5 per cent of risk-weighted assets and applies to all firms.

- The level of the *countercyclical capital buffer* is determined at national level by a designated authority as regards credit exposures for each country, and hence varies between firms and over time.

- In addition, there are three systemic risk buffers; the *systemic risk buffer*, the *capital buffer for global systemically important institutions* and the *capital buffer for other systemically important institutions*. Which firms are to be covered by the systemic risk buffers, and the level of these buffer requirements, are primarily determined at national level and hence vary between the firms.

Finally, the competent authority, in the same way as before, shall perform an individual supervisory review and evaluation of the capital requirement of each individual firm. The extra own funds requirement ensuing from this assessment is called the *specific own funds requirement* in the regulation, but is often called the capital requirement according to *Pillar 2*, compared to the previously described capital requirements, which are often called capital requirements according to *Pillar 1*.

1.5 Overarching legal basis

The EU has implemented the Basel 3 agreement as binding regulations through the Capital Requirements Regulation and the Capital Requirements Directive.

The Capital Requirements Regulation contains prudential requirements which the firms covered, i.e. credit institutions and investment firms, must fulfil. It is hence a case of requirements that the firms must fulfil in terms of capital, liquidity, major exposures, leverage ratio and reporting. In the Capital Requirements Regulation, possibilities have also been introduced for Member States or competent national authorities to use a number of specific macroprudential measures to counteract systemic risks at national level. The Capital Requirements Regulation is directly applicable in Sweden; that is, as Swedish law as soon as it has come into effect without needing to take any measures to implement it.

The new Capital Requirements Directive contains provisions about the methods of competent authorities to conduct supervision of firms, corporate governance matters, demands on firms' risk management systems, sanctions in the event of breaches of the regulations and provisions regarding capital buffers.

The Capital Requirements Directive is, unlike the Capital Requirements Regulation, not directly applicable in Sweden, but must be implemented in Swedish law. On 3 April 2014, the Government submitted the proposal referred to the Council on Legislation regarding strengthened capital adequacy rules that contain the bills through which the directive is proposed to be implemented in Sweden. The proposal referred to the Council on Legislation contains a special supervision of credit institutions and investment firms bill, and a capital buffers bill. In turn, these bills contain an authorisation for the Government or the authority designated by the government to issue regulations. In the bills, it is stated that FI shall be appointed as the competent and designated authority. It is in light of this that FI's positions in this memorandum should be seen.

The European Banking Authority (EBA) is given, through the Capital Requirements Directive and the Capital Requirements Regulation, the assignment of preparing proposals for binding technical standards in certain areas that are to be adopted by the EU Commission before coming into effect. Once these technical standards have been adopted by the Commission and come into force, they will have the same binding effect as law in Sweden. In addition, the EBA and, in certain rare cases the European Systemic Risk Board (ESRB), will be given the possibility of issuing guidelines and recommendations. EBA's guidelines and recommendations are not legally binding, but national supervisory authorities and the institutions covered shall "make every effort to comply with them".[6] FI finds that guidelines from the European supervisory authorities addressed to competent authorities or financial market participants are equivalent to Swedish general guidelines.[7]

[6] Article 16.3 of Regulation (EU) No. 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority.

[7] The implementation of the European supervisory authorities' guidelines and recommendations, memorandum published on fi.se on 18 February 2013, FI Ref. 12-12289.

2 The supervisory capital assessment in Pillar 2

2.1 Introduction and background

2.1.1 Introduction

This section aims to describe FI's positions in a number of fundamental matters pertaining to the implementation of the rules governing FI's supervisory review and evaluation of the risks and capital requirements of individual firms – the supervisory capital assessment. This takes place within the framework of Pillar 2.

Later in 2014, FI intends to publish further documents on matters regarding Pillar 2. These will be guidance documents pertaining to firms' internal capital adequacy assessment process, and documents that refer to FI's more detailed methods to assess individual types of risk in the framework of the supervisory capital assessment. (For an explanation of the various terms, see section 2.1.2.)

2.1.2 General information about Pillar 2

Pillar 2 supplements the capital requirement calculations regulated in detail in the Capital Requirements Regulation, which are often called Pillar 1. Pillar 2 is the umbrella term for the rules governing firms' *internal capital adequacy assessment process*, and FI's *supervisory review and evaluation process*, of which FI's *supervisory capital assessment* forms an important part.

The positions taken by FI in this section pertain to the part of Pillar 2 that constitutes FI's supervisory capital assessment. The positions will also reasonably affect how the firms choose to devise their internal capital adequacy assessment process.

Each firm subject to the capital adequacy rules must complete an internal capital adequacy assessment process. This must be performed at both the individual and consolidated level; that is for the firm itself and for the group to which the firm belongs. It must also be revised regularly to be kept up to date. The purpose of the evaluation is to highlight the risks to which the firm is or could become exposed, how such risks are managed and hence the capital required by the firm. FI's supervisory review and evaluation process includes an assessment of the firm's internal capital adequacy assessment process.

FI's supervisory capital assessment is based on a comprehensive analysis of the firm. Besides assessing the extent to which the firm needs to hold extra capital to cover risks or risk elements not covered by Pillar 1 (henceforth, this extra capital is referred to as the *Pillar 2 basic requirement*), FI also performs an assessment of the firm's need to hold a so-called *capital planning buffer*. In special cases, the Pillar 2 basic requirement can also include an extra own funds requirement for deficiencies in arrangements, processes and procedures.

2.1.3 Scope of the regulations

The rules apply to all firms covered by the capital adequacy regulations, irrespective of size. This applies both at the individual and consolidated level. The positions taken in this section regarding individual firms therefore also apply at consolidated level for the groups in question.

FI's supervisory review and evaluation process, which includes the supervisory capital assessment, is for the very largest groups much more thorough and comprehensive than it is for the smaller firms. For the largest groups and firms, a supervisory capital assessment is conducted at least once a year. For most smaller firms and groups, however, the supervisory capital assessment is conducted less frequently, insofar there is no indication of material risks to ongoing financial robustness or deficient compliance with regulations. The same applies at the individual level for most of the firms that form part of large groups.

2.2 Fundamental legal basis

2.2.1 EU legal regulation

The rules regarding Pillar 2 can be found in Articles 73–110 of the Capital Requirements Directive.[8] The Capital Requirements Directive, unlike the Capital Requirements Regulation, is not in direct effect in Sweden, but must be implemented in Swedish law. In the sections of the memorandum that address the legal basis for the implementation in Pillar 2 in Sweden, reference is thus made to the Government's proposal referred to the Council on Legislation regarding strengthened capital adequacy rules, which was submitted to the Council of Legislation on 3 April 2014, and in particular its special supervision of credit institutions and investment firms bill and capital buffers bill.

2.2.2 Swedish law

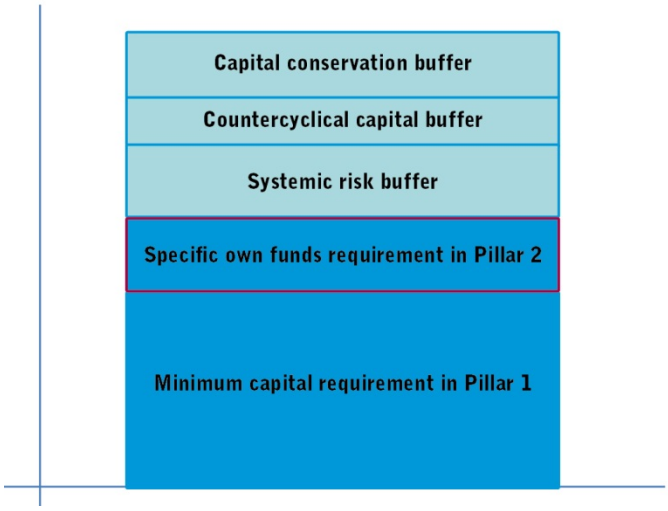
According to the Government's proposal to the Council on Legislation, the provisions of the directive regarding Pillar 2 will be implemented in Swedish law through Chapter 2 of the special supervision of credit institutions and investment firms bill, Chapter 6, sections 1–3, 4a–b and 5 of the Banking and Financing Business Act (2004:297) – the BFBA, Chapter 8, sections 3–8 of the Swedish Securities Market Act (2007:528) – the SMA, and a forthcoming ordinance regarding special supervision of credit institutions and investment firms.

[8] Pillar 2 is not used as a formal concept in the EU regulations. It is a term introduced and used by the Basel Committee on Banking Supervision.

The provision regarding a specific own funds requirement, Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, gives FI the right to decide that a firm shall have an own funds requirement in excess of the minimum level that otherwise applies (that is, on top of what is required by the Capital Requirements Regulation and the capital buffers bill). FI has the right to decide on a specific own funds requirement if FI, in conjunction with a supervisory review and evaluation, sees a need to cover risks to which the firm is or could become exposed, and risks that the firm poses to the financial system.[9] Decisions regarding a specific own funds requirement can also be taken if the firm does not meet the requirements of Chapter 6, section 1–3, 4 a, 4 b and 5 of the BFBA regarding e.g. equity/assets ratio and liquidity, risk management and transparency, or equivalent provisions of the SMA (Chapter 8, sections 3–8 of the SMA).

The aforementioned provision in Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill expresses that a formally decided specific own funds requirement is additional to both the minimum capital requirement and the capital buffers. Furthermore, in Chapter 2 section 2 of the same bill, it is expressed that a firm that does not meet the capital requirements according to the Capital Buffers Act, but that meets other capital requirements (Pillar 1 and specific own funds requirements under Pillar 2) can be subjected to certain interventions. Hence, in other words, the specific own funds requirement involves an increase to the minimum capital requirement and hence pushes the combined buffer requirement upwards, as in diagram 2.1 below.[10]

2.1 How the specific own funds requirement stands in relation to minimum capital requirements and buffer requirements in Pillar 1 in the special supervision of credit institutions and investment firms bill



[9] FI's supervisory review and evaluation process will, according to the Council on Legislation, be regulated more closely by a prudential requirements for credit institutions and investment firms ordinance.

[10] See section 7.2.11 of the proposal referred to the Council on Legislation.

In diagram 2.1 above, and also henceforth in this section, the three different systemic risk buffers – the buffer for global systemically important institutions, the buffer for other systemically important institutions and the systemic risk buffer – are illustrated as one combined buffer which, in this section, is called the systemic risk buffer. The size of the buffer, as depicted in the diagram, should not be seen as an indication of actual implementation. How the three systemic risk buffers work, and how they will be implemented in Sweden, is instead described in Chapter 3. That scope of the specific own funds requirement under Pillar 2 in the diagram is merely an example and should not either be considered indicative of the actual scope, which varies between firms and over time. The same applies to the size of the countercyclical capital buffer.

2.2.3 EBA's guidelines

In Article 107.3 of the Capital Requirements Directive, EBA is given the task of issuing guidelines to the national supervisory authorities with a view to specifying the common procedures and methods for the supervisory review and evaluation process. These guidelines shall be completed no later than 31 December 2014, and EBA plans to circulate a draft for review in the summer of 2014.

Furthermore, EBA has, through Article 8.1 of the regulation governing the operations of the authority[11], been given the task of preparing a European supervision manual regarding the supervision of financial institutions in the EU. This manual too will have a certain effect on how FI's supervisory review and evaluation process is devised, and EBA intends to complete an initial version of selected parts of the manual in 2014.

2.3 General information regarding FI's positions

2.3.1 Positions in relation to EU law

The EU regulations and the Swedish bill governing Pillar 2, and which was generally described in section 2.2, set out the fundamental principles for Pillar 2, including FI's powers. At the same time, the bills and the Capital Requirements Directive provide a certain amount of scope for FI, and the other national supervisory authorities, to devise the supervisory review and evaluation process, including the supervisory capital assessment, in practice. However, this scope will be further limited by the guidelines being prepared by

[11] Regulation (EU) No. 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending decision no. 716/2009/EC and repealing the Commission's decision 2009/78/EC. See also Regulation (EU) No. 1022/2013 of the European Parliament and of the Council of 22 October 2013 amending Regulation (EU) No. 1093/2010 establishing a European Supervisory Authority (European Banking Authority), in terms of bestowing special tasks on the European Central Bank in accordance with the Regulation (EU) No. 1024/2013 of the Council.

the EBA on the area. FI participates actively in work with the EBA's guidelines, and hence has the ability to be involved and influence their content. Exactly how the EBA's guidelines will ultimately be devised is as yet unknown. However, FI's current opinion is that they too will provide a certain amount of scope for the national supervisory authorities in terms of devising their processes.

If, contrary to expectations, it emerges later on in the year, when EBA's guidelines have been completed, that the positions reported by FI do not coincide with the guidelines, FI will be prepared to review how its processes are devised.

2.3.2 Areas affected

FI has identified five areas that pertain to the implementation of the Pillar 2 regulations, in which FI finds that there is a need to clarify how FI intends to conduct the supervisory capital assessment. FI's positions in these five areas will, on the whole, have a substantial effect on the level of capital firms will need to hold on top of the Pillar 1 requirements.

The five areas are:

- Fundamental method selection for FI's assessment of the Pillar 2 basic requirement
- Assessment of the capital planning buffer
- The Basel 1 floor, Pillar 2 requirement and the capital planning buffer
- Type of capital
- FI's decision-making

In the following sections, FI's position in each area is described, along with the legal basis and the reasons for FI's position. Some sections also include certain clarifications about practical implementation. Finally, it is described how FI intends to contribute to improved transparency of the supervisory capital assessment in Pillar 2.

2.4 Fundamental method selection for the assessment of the Pillar 2 basic requirement

2.4.1 Introduction to the matter

The legislation provides scope for FI to devise the methods that are to form the basis of FI's supervisory capital assessment in Pillar 2. The following section describes FI's view of how the capital requirements for individual risks are to be weighed together into the total Pillar 2 basic requirement. It affects in particular the management of risks also covered by Pillar 1. The more detailed assessment of the risk level for the individual risk areas, which is implemented in the supervisory capital assessment, is not covered by this position.

2.4.2 FI's position

The risks covered by the Pillar 2 basic requirement are always *additional* to Pillar 1. Hence, an individual risk will never be considered lower than specified by Pillar 1. In addition, the risks or risk elements not covered by Pillar 1 are added.

2.4.3 Legal basis

FI shall, according to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, decide that a firm shall, under certain circumstances, meet a specific own funds requirement *in addition to* what is required under the Capital Requirements Regulation and the capital buffers bill.[12]

Furthermore, the Government, or the authority appointed by the Government in Chapter 10, section 2, point 4 of the special supervision of credit institutions and investment firms bill, is authorised to issue regulations regarding the circumstances to be duly considered in establishing a suitable own funds level in connection with a supervisory review and evaluation of a firm. A proposal for an ordinance supported by the authorisation has not yet been presented. However, the proposal referred to the Council on Legislation expresses that the detailed rules about how often supervision in this respect is to occur, and what it is to cover, should not be expressed in law but be regulated by lower-level regulations, as is done today in sections 29–30 of the Capital Adequacy and Large Exposures Ordinance (2006:1533). That ordinance regulates which areas FI is to assess within the framework of the supervisory review and evaluation process. However, nothing is mentioned about which method is to be used in the assessment. It is hence up to FI to decide on that matter.[13]

2.4.4 Reasons for FI's position

It is clear from the legal basis that FI has the power to impose a specific own funds requirement on a firm, and that the assessment of the size of the specific own funds requirement is to be based on FI's supervisory review and evaluation process. This process involves a review of all substantial risks to which a firm is or could become exposed, and the risks that an institution poses to the financial system. Because the assessment covers all substantial risks, it covers both the risks not covered and that are covered by Pillar 1. The risks that are only covered in part or not at all by Pillar 1 shall be covered in their entirety by what FI calls the Pillar 2 basic requirement. In FI's opinion, the

[12]Furthermore, it is noteworthy that, according to Article 104.1.d of the Capital Requirements Directive, competent authorities can also require firms, in connection with own funds requirements, to apply a specific provisioning policy or specific treatment of assets. This falls, according to the proposal referred to the Council on Legislation, within FI's powers to order firms to take various types of measures in e.g. Chapter 15 of the BFBA.

[13] As already pointed out, however, EBA has been authorised to issue guidelines.

purpose of the Pillar 2 basic requirement is the same as the purpose of the minimum capital requirement in Pillar 1. The only difference is that, while Pillar 1 is limited to the risks and calculation methods specified in Pillar 1, the assessment of the Pillar 2 basic requirement shall cover all risks and risk elements.

The supervisory capital assessment in Pillar 2 thus covers both the risks that are covered and those that are not covered by Pillar 1. FI finds that it is appropriate that FI, as supervisory authority and issuer of regulations on the area, does not diverge in Pillar 2 either from the risk measurement method prescribed by the regulations (that is, the calculation under Pillar 1) for the risks and risk elements covered by Pillar 1, insofar that Pillar 1 cannot be said to underestimate the actual risk.

2.4.5 Clarification regarding the internal capital adequacy assessment process

In contrast to FI, a number of firms choose to manage their own capital need calculation, which is conducted in the internal capital adequacy assessment process, as a separate and parallel calculation in relation to Pillar 1. The final result of such a calculation might hence very well involve both a lower capital need and greater capital than the levels ensuing from Pillar 1. It is particularly prominent for the firms that allow significantly positive effects from diversification.

Part of the supervisory review and evaluation process involves FI assessing the quality of the firms' internal capital adequacy assessment process. FI can consider a firm's internal capital adequacy assessment, that is the firm's *processes* for assessing its risks, to be satisfying despite FI finding that the risks and hence the *capital need* in the Pillar 2 basic requirement are higher than the level concluded by the firm's own calculations to that effect. Hence, FI may, in the framework of the same supervisory review and evaluation process, find that the firm's internal capital adequacy assessment process meets the requirements imposed by the regulations, while at the same time FI, in its supervisory capital assessment, does not accept the firm's conclusion regarding the aggregate risk level, and hence the capital need level.

2.5 Assessment of the capital planning buffer

2.5.1 Introduction to the matter

Besides an assessment of the size of the Pillar 2 basic requirement, the supervisory capital assessment also contains an assessment of the firm's need to hold what FI calls a capital planning buffer. Because the regulations do not prescribe how the size of the capital planning buffer is to be assessed, it is appropriate for FI to clarify its view on this. The implementation of the Capital Requirements Directive brings new requirements for firms to hold capital buffers under Pillar 1. It therefore needs to be clarified how the capital

planning buffer under Pillar 2 stands in relation to the new capital buffers; that is, whether they fully or partially cover the same risk and have the same purpose, and hence fully or partially overlap.

2.5.2 FI's position

The capital held by a firm to cover the capital conservation buffer may also be used to cover the capital planning buffer, with the exception of the part that is intended to cover a *normal recession*.

The capital held by a firm to cover minimum capital requirements and other buffer requirements may, with the exception stated above, not be used to cover the capital planning buffer.

The capital planning buffer shall be of such scope that it covers at a minimum the losses that may arise in *severe but plausible* financial stress. The size of the buffer is suitably calculated by means of scenario analyses/stress tests that reflect such a scenario.

2.5.3 Legal basis

2.5.3.1 The capital planning buffer

According to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, a specific own funds requirement shall be imposed when a firm does not fulfil the requirements of e.g. Chapter 6, section 2 of the BFBA, or Chapter 8 section 4 of the SMA. The provision in Chapter 6, section 2 of the BFBA and equivalent provision in Chapter 8, section 4 of the SMA regulate the requirements for firms' internal capital adequacy assessment process, and state that firms shall have introduced sound, effective and comprehensive processes for continuously evaluating and maintaining internal capital which, in its amount, type and distribution, is sufficient to cover the type and level of the risks to which they are or could become exposed.

In the preparatory work for the aforementioned laws, it is stated that the provision entails that firms ought to have introduced strategies and methods to continuously maintain the capital at a sufficient level (prop. 2006/07:5, page 137.).

2.5.3.2 The capital buffers in Pillar 1

The capital buffers are regulated in the capital buffers bill. There are five different buffers – three that are intended to cover systemic risk (the buffer for global systemically important institutions, the buffer for other systemically important institutions and the systemic risk buffer, which together are called systemic risk buffer in the diagrams here), as well as a capital conservation buffer and a countercyclical capital buffer.

The firms are to calculate the extra capital requirement they are to meet by reason of the buffers, known as the combined buffer requirement. If the combined buffer requirement is not maintained, certain specific intervention measures arise in the form of e.g. restrictions on distributions, see section 2.8.2.2 and Chapter 8 of the capital buffers bill.[14]

The purpose of the capital buffers, as the buffers are described in section 5.3.1. of the proposal referred to the Council on Legislation, is that they can be used as temporary shock absorbers for covering losses in downturns, and hence prevent firms from breaching the own funds requirement of the Capital Requirements Regulation. This wording is matched to a certain extent by the Capital Requirements Directive, recital 80 in the introduction, which states that the purpose of the capital conservation buffer and the countercyclical capital buffer is to be drawn down *during stressed periods*. In terms of the countercyclical capital buffer, it is also expressed in particular that it should meet a cyclical systemic risk primarily associated with excessive credit growth in the financial system, and that it will hence vary over time.

In section 7.2.9 of the proposal referred to the Council on Legislation, it is stated that the purpose of the systemic risk buffer is to prevent or reduce long-term, non-cyclical systemic risks or macroprudential risks.

2.5.4 Reasons for FI's position

2.5.4.1 How the capital planning buffer relates to the buffer requirements in Pillar 1

The requirement for the firm to *continually* maintain sufficient internal capital involves the firm needing to hold capital in excess of the level entailing all risks and risk elements being covered; that is, on top of the minimum requirement under Pillar 1 and the Pillar 2 basic requirement. FI calls this the capital planning buffer.

Should the firm not hold a sufficient capital planning buffer, it is in breach of Chapter 6, section 2 of the BFBA or Chapter 8, section 4 of the SMA. This constitutes grounds for FI to decide on a specific own funds requirement in accordance with Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill.

The capital planning buffer is hence part of the specific own funds requirement if the firm breaches the requirement to hold a sufficient capital planning buffer, but only in that case. This differs from the part of the specific own funds

[14] Besides the automatic legal consequences, supervisory authorities can consider other supplementary intervention measures, which are set out in law. Such intervention possibilities will be further broadened through the forthcoming implementation of the Crisis Management Directive.

requirement that is based on FI's possibility to decide that a firm is to hold capital to cover risks or risk elements not covered by Pillar 1; that is, the Pillar 2 basic requirement. FI is entitled to make decisions on the Pillar 2 basic requirement, even if the firm has own funds that suffice to cover such risks, see Chapter 2 section 1 of the special supervision of credit institutions and investment firms bill.

As expressed in the rationale above, the legal basis for the requirement to hold a capital planning buffer differs from the basis of the requirement to hold other Pillar 2 capital – the capital which FI calls the Pillar 2 basic requirement. FI therefore finds that the capital planning buffer should not be considered as a part of the minimum capital requirement, in the way that the Pillar 2 basic requirement is considered, but as the very buffer it is. There is therefore a need to clarify how the capital planning buffer interacts with the buffer requirements specified in the capital buffers bill, namely the capital conservation buffer, the three buffers for systemic risks and the countercyclical capital buffer.

The capital requirement under Pillar 1 and the Pillar 2 basic requirement aim to cover losses that may arise in highly *severe financial stress* and constitute ultimate protection for depositors and other creditors, the government and taxpayers in a situation of the bank risking succumbing to resolution. Because the capital requirement is to be continuously maintained, the firm must hold a buffer so that less improbable losses do not lead to dropping below the capital requirement.

The purpose of the capital conservation buffer clearly overlaps with that of the capital planning buffer, i.e. constituting a margin down to the minimum capital requirement. It is thus reasonable that the capital set aside to cover a capital conservation buffer may also be used, at least to a certain extent, to cover the capital planning buffer. In section 5.3.1 of the proposal referred to the Council on Legislation, it is stated that it should be possible to use the capital conservation buffer, similar to the other buffers, as a temporary shock absorber to cover losses in downturns and hence prevent institutions from breaching the own funds requirements of the Capital Requirements Regulation. FI interprets the term "downturns" in light of recital 80 in the introduction of the Capital Requirements Directive, which states that the capital conservation buffer may be drawn down *during stressed periods*. FI finds that the term *stressed period* in this context should be understood as financial stress that goes beyond a *normal recession*. When performing its assessment of capital, FI assumes that the worst year of a normal recession occurs around once every seventh year. If the firm's earnings do not suffice to cover negative financial stress in such a year, the firm needs to hold capital beyond the capital conservation buffer to cover that.

Although the three buffers that aim to cover systemic risk are not addressed separately from the capital conservation buffer (and countercyclical capital buffer) in terms of the legal consequences that would ensue from a firm falling below the total buffer requirement, the purpose of these buffers is clearly

separate from that of the capital conservation buffer, and also from the purpose of holding a capital planning buffer. FI therefore finds that the capital held to cover the three buffers for systemic risk may not be used to cover the capital planning buffer.

In recital 80 in the introduction to the Capital Requirements Directive, it is stated that it should be possible to draw down the capital conservation buffer, like the countercyclical capital buffer, during stressed periods. FI finds, however, that the purpose of the countercyclical capital buffer cannot be established supported solely by this. In FI's opinion, even though the reason in the introduction states that it should be possible to draw down the countercyclical capital buffer during stressed periods, because of the fact that the buffer will be determined by FI and vary over time, its purpose cannot be seen as being at parity with that of the capital conservation buffer. Furthermore, the proposal referred to the Council on Legislation states that the countercyclical capital buffer is intended to meet a cyclical systemic risk primarily associated with excessive credit growth in the financial system (equivalent wording can be found in reason 80 in the introduction to the Capital Requirements Directive). In order for any decision to determine the countercyclical buffer at higher than zero to have the effect intended by the regulations (i.e. an accumulation of capital), the same capital cannot be used to cover the countercyclical capital buffer as for covering the capital planning buffer. This is because the capital planning buffer, to the extent that it exceeds the capital conservation buffer, would otherwise absorb and hence offset the intended accumulation of capital.

2.5.4.2 Assessment of the size of the capital planning buffer

Because FI finds that the purpose of the capital conservation buffer clearly overlaps with that of the capital planning buffer, as described above, the calculation of the size of the capital planning buffer may in practical terms be considered as a verification as to whether the capital conservation buffer is sufficiently large for the individual firm; that is, an assessment of whether the firm needs to hold a buffer on top of the capital conservation buffer.

FI is of the opinion that the size of the capital planning buffer should be determined based on the purpose of the buffer, which is to continuously hold a sufficient level of capital. In light of that, the protection that the capital planning buffer provides need not be as strong as the protection that the other capital requirement is to provide. The minimum capital requirement can be described as having the purpose of covering the losses that could arise in highly *severe* financial stress. The scenario that the capital planning buffer is to cover can be described in words as *severe but plausible* financial stress. Such more regular, recurring financial stress could for example equate to a deep, protracted recession combined with major drops in asset prices.

The capital planning buffer is to serve as protection against declining capital adequacy; that is, against losses and rising risk-weighted exposure amounts, and falling below the capital requirement which could result from that. It hence covers all the risks, and the same risks, as those covered by Pillar 1 and the Pillar 2 basic requirement. In light of that, it might be appropriate to make clear that, by this, the capital requirements directive requires a firm to hold capital to cover the same risks twice.

2.5.5 Clarification of the practical implementation

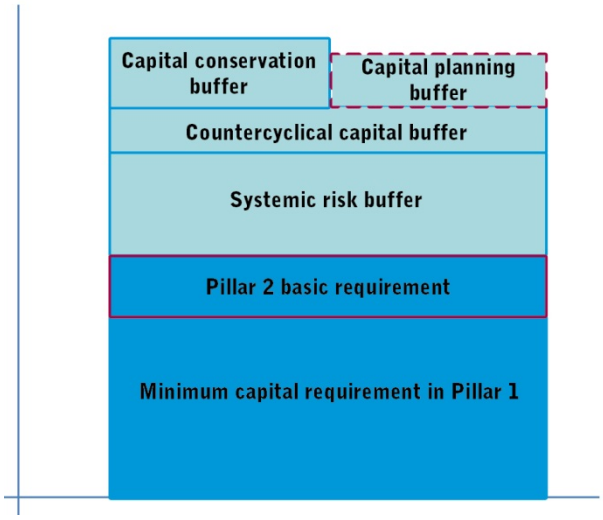
A calculation of the size of a capital planning buffer is often performed by means of a stress test of the firm's income statement, balance sheet and, ultimately, capital adequacy. (Liquidity can also be tested in the same exercise, but that part is not addressed here). The stress test is based on simulating how all material items are affected in *severe but plausible* financial stress. Such a test is suitably tailored to specifically test the weak points of a certain firm, rather than being based on a more general severe scenario. From FI's perspective, however, there are however merits in applying the same scenario to all firms of a certain type, because it facilitates a fair comparison. The scenario should ideally run over the capital planning horizon applied by the firm, which is usually at least three years. In this type of calculation, due consideration should also be given to the firm's earnings capacity. A firm with a high capacity to generate earnings – and perhaps even for a year or so to also generate a profit in a severe but plausible scenario – will thus need less of a capital planning buffer, all else equal. The minimum size of the capital planning buffer is ultimately determined by how much the capital adequacy of the firm deteriorates at the most in the scenario.

In order to ensure that the firm can cope with a *normal recession* without drawing down the capital conservation buffer, the firm also need to assess how capital adequacy might be affected in such a scenario. A firm with sound earnings capacity could generate a positive result during a normal recession too, and in such cases the firm does not need to make a provision for any own funds; earnings serve as sufficient protection provided that risk-weighted assets do not increase to an equal extent or more. Firms with slightly weaker earnings capacity may however need to hold a certain level of own funds to cope with the deterioration in capital adequacy that also occurs during a normal recession.

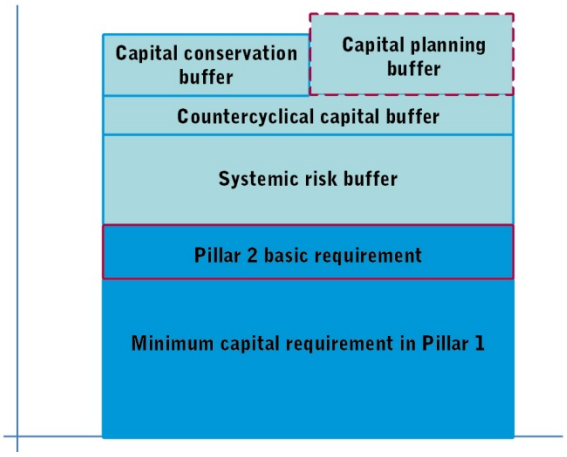
This capital need does not come on top of the capital planning buffer, which is to reflect the capital need during severe but plausible financial stress, but is part of it. However, it must be calculated separately in order to ensure that the firm does not need to draw down the capital conservation buffer during a normal recession.

The diagram below shows two examples of how the capital planning buffer can affect the total capital level of firms.

2.2 Total capital need with a capital planning buffer that falls below the capital conservation buffer



2.3 Total capital need with a capital planning buffer that is above the capital conservation buffer



2.6 The Basel 1 floor, Pillar 2 basic requirement and the capital planning buffer

2.6.1 Introduction to the matter

As FI has already announced, the Basel 1 floor, which comprises the firms authorised to use an internal model to calculate capital requirements, will continue to be applied through 2017.[15] The floor constitutes a back-stop for the lowest level of own funds, and is a capital requirement calculated separately and in parallel. In FI's memorandum on the Basel 1 floor, it was stated that the same capital that covers the new buffer requirements (systemic risk buffers, capital conservation buffer and countercyclical capital buffer) may also be used to cover the Basel 1 floor. However, the memorandum did not describe how the Pillar 2 basic requirement and capital planning buffer stand in relation to the Basel 1 floor. This is not expressly regulated either. There is thus a need for FI to clarify its position in this matter.

2.6.2 FI's position

The same capital used to cover the Pillar 2 basic requirement may also be used to cover the Basel 1 floor. The capital that covers the capital planning buffer may not be used to cover the Basel 1 floor, however.

2.6.3 Legal basis

The Basel 1 floor is regulated in Article 500 of the Capital Requirements Regulation. The provision describes that firms using internal models shall have own funds which, at all times, are at least equal to 80 per cent of the total minimum amount of own funds that the firm would have been obliged to

[15] See the memorandum Finansinspektionen's approach to the Basel 1 floor. Published on fi.se on 18 March 2014, FI ref. 13-13990.

maintain under the Capital Adequacy Act of 1994, through which the Basel 1 Accord was implemented in Swedish law.

There is no explicit regulation of how the Basel 1 floor stands in relation to the Pillar 2 basic requirement and the capital planning buffer.

2.6.4 Reasons for FI's position

2.6.4.1 Pillar 2 basic requirement

As already described, the regulations state that the Pillar 2 basic requirement constitutes part of the minimum capital requirement, when a formal decision has been taken on this specific own funds requirement, and the capital covering the Pillar 2 basic requirement cannot be used to cover the combined buffer requirement. The calculation of the floor, on the other hand, is an entirely parallel and separate capital requirement compared with the capital requirement calculation under the main rule.

Because the capital requirement that the Basel 1 floor constitutes is a parallel and separate requirement in relation to the capital requirement calculated using the main rule, and because the Pillar 2 basic requirement is to constitute part of the minimum capital requirement, as it is determined under the main rule, FI finds it reasonable that the Pillar 2 basic requirement should also be calculated separately from and in parallel with the Basel 1 floor. In so doing, it is also clarified that the purpose of the floor is to constitute a back-stop for the total capital level, but that the floor in itself is not a part of the main calculation. See also the examples in diagram 2.4 below.

2.6.4.2 The capital planning buffer

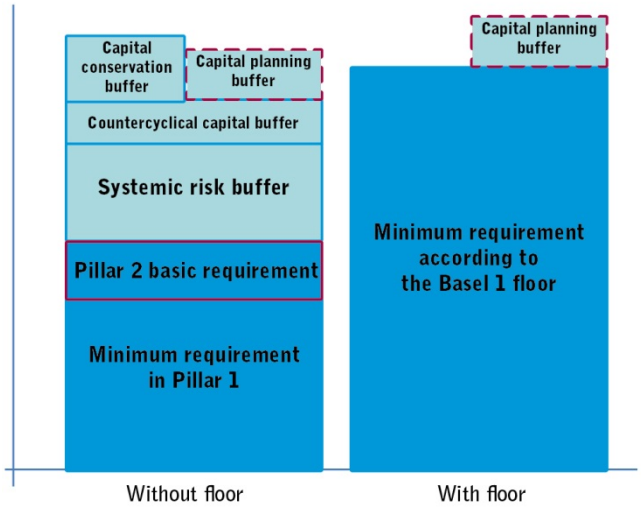
In the position in section 2.5.2, it is stated that the capital planning buffer will largely be allowed to overlap with the capital conservation buffer. According to the Basel 1 floor, however, certain firms can fall below the floor (which constitutes an absolute minimum capital requirement) before the capital conservation buffer has been drawn down, and certain firms can fall below it before falling below the buffer requirements at all.[16] This is because the floor is not part of the main calculation itself and is rather calculated in parallel, and the buffer requirements under Pillar 1 are hence not additional to the Basel 1 floor.

It has also already been established in this chapter that the purpose of a capital planning buffer is that a firm must have a margin on top of the legally binding capital requirement, so that already slight variations in the firm's financial position do not lead to falling below the threshold. FI finds that, because the

[16] See the memorandum Finansinspektionen's approach to the Basel 1 floor. Published on fi.se on 18 March 2014, FI ref. 13-13990.

minimum capital requirement is determined by the floor rule, the natural consequence of the purpose of the capital planning buffer is that it is additional to the minimum capital requirement – irrespective of whether this requirement is determined in accordance with the main rule or in accordance with the floor. Otherwise, a firm cannot meet either the requirement in Chapter 6, section 2 of BFBA or Chapter 8, section 4 of SMA in terms of continuously maintaining sufficient capital. See also the example in diagram 2.4 below.

2.4 Example of the total capital need of a firm covered by the Basel 1 floor, calculation with and without the floor



2.6.4.3 Clarification of the practical implementation

Section 2.5.5 explains how a capital planning buffer is calculated. It describes, for instance, that such a buffer is to cover both changes to own funds and to the capital requirement. When the capital planning buffer comes on top of the minimum capital requirement, as it is determined according to the Basel 1 floor, the assessment of the size of the capital planning buffer might need to be adapted to this end. This is because financial stress can affect the capital requirement according to the Basel 1 floor differently to how it affects the capital requirement calculated using the main rule.

2.7 Type of capital

2.7.1 Introduction to the matter

FI may, according to section 11.3.1 of the proposal referred to the Council on Legislation, impose demands on both amounts and type of capital in decisions on specific own funds requirements. Therefore, within the framework of decisions regarding specific own funds requirements, FI must take a position on whether the capital requirements under Pillar 2 are to be covered by the forms of capital included in the definition of own funds, and whether all or a certain share should be covered by capital of particularly high quality, such as

common equity Tier 1 capital only. Because such matters are of great importance to the firms' capital planning, FI needs to provide an account of its position in this respect.

2.7.2 FI's position

The capital planning buffer is to be covered in its entirety by common equity Tier 1 capital.

The Pillar 2 basic requirement shall as a main rule be covered according to the same allocation of capital as the Pillar 1 capital requirement, including the static buffer requirements (capital conservation buffer, systemic risk buffer and buffers for other and global systemically important institutions) .[17]

Divergences from the main rule for the Pillar 2 basic requirement can be made for specific risk types. If this occurs, FI will state this in connection with publishing the method for assessing this type of risk.[18]

Furthermore, in exceptional cases, there may be grounds for FI, in decisions pertaining to individual firms, to opt to diverge from the main capital allocation practice presented herein.

2.7.3 Legal basis

Pursuant to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, FI may impose demands on both amounts and type of capital when deciding on specific own funds requirements, see section 11.3.1 of the proposal referred to the Council on Legislation.

2.7.4 Reasons for FI's position

2.7.4.1 Pillar 2 basic requirement

The reason for the proposal that the Pillar 2 basic requirement should normally be covered by the same capital allocation as in Pillar 1 is that this capital, as a starting point, fulfils the same purpose as the capital requirement under Pillar 1 (see also section 2.4). If divergences are made from the main rule in terms of specific risk types, the reasons for the divergence will be stated in connection with publishing the method for assessing this type of risk.

[17] The systemic risk buffer and buffers for other and global systemically important institutions can be changed through decisions by FI, but the purpose is for them not vary over time, like the countercyclical capital buffer.

[18] This is the case as regards the Pillar 2 basic requirement for Swedish mortgages and for systemic risk, see Chapters 3 and 4 of this memorandum.

It is inappropriate, as a main rule, to make an assessment of the required type of capital in each individual case, because this would lead to excessive uncertainty for firms in their capital planning. However, it must be possible to make exceptions to the main rule in certain specific cases. This pertains at least to such cases that concern covering losses already incurred – but which for various reasons have not affected reporting and capital requirements under Pillar 1 – rather than the *risk of* losses. An example of such a case is that, in a review of asset quality, it has emerged that the firm has hidden losses in the balance sheet, i.e. it has made insufficient provisions. In such a case, an additional capital requirement matching the hidden losses could be added in the Pillar 2 basic requirement. Since this capital requirement would reflect actual (although not yet reported) losses, and not just a *risk of* losses, in cases such as and similar to this, it is reasonable for this part only to be covered by common equity Tier 1 capital.

2.7.4.2 The capital planning buffer

There are two main reasons as to why the capital planning buffer must be covered by common equity Tier 1 capital. First, it may be covered by the same capital used to cover the capital conservation buffer which, according to the Pillar 1 regulations, is to consist solely of common equity Tier 1 capital (as specified i section 2.5.2). Second, it is natural for a buffer that is intended, in a situation of financial stress, to be drawn down first of all as losses arise, to be covered by common equity Tier 1 capital because this is the capital that decreases first in the event of losses.

2.8 FI's decision-making

2.8.1 Introduction to the matter

In section 2.5.4 it is expressed that FI can make a formal decision on a firm being obliged to hold a sufficient capital planning buffer if the firm breaches that very requirement, but only in that case. This is not the case in terms of the Pillar 2 basic requirement. FI is entitled to make a decision on the Pillar 2 basic requirement even if the firm has own funds that exceed the capital need for such risks. Furthermore, in a economic sense too, the purpose of the Pillar 2 basic requirement and the capital planning buffer differs. There are hence grounds to address the Pillar 2 basic requirement and the capital planning buffer in different ways in terms of decision-making.

An alternative to making a formal decision is to inform the firm of FI's overall supervisory capital assessment, without that evaluation constituting a formal decision. Such has been FI's practice to date.

As expressed in section 2.2.2, the specific own funds requirement constitutes an increase to the minimum capital requirement and hence brings up the combined buffer requirement. The capital adequacy level at which automatic restrictions on distributions, linked to falling below the combined buffer

requirement, start to apply is not however affected by the specific own funds requirement provided that a formal decision has not been made on this requirement. (Read more in section 2.8.2.2.). There is therefore reason for FI to state in advance how FI intends to manage its decision-making right in terms of the specific own funds requirement.

2.8.2 Legal basis

2.8.2.1 About FI's decision-making

According to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, FI will be authorised to make decisions on a specific own funds requirement in certain circumstances. Furthermore, the same provisions state that FI may refrain from deciding on a specific own funds requirement, for instance if a breach is negligible or excusable, or if the firm rectifies the matter. In section 11.3.1 of the proposal referred to the Council on Legislation, this authorisation is described as FI having the *possibility* of making decisions about specific own funds requirements.

2.8.2.2 Specific information about restrictions on distributions

A firm shall, according to Chapter 2, sections 1–2 of the capital buffers bill have common equity Tier 1 capital in addition to the minimum capital requirement and a decision regarding a specific own funds requirement by reason of the various capital buffers, known as the combined buffer requirement. If a firm does not fulfil the combined buffer requirement, certain bans come into effect, see Chapter 8 of the capital buffers bill.

A firm that does not fulfil the combined buffer requirement may not, according to Chapter 8, section 3 of the capital buffers bill, i) make distributions linked to the firm's common equity Tier 1 capital, ii) undertake to pay out variable remuneration or discretionary pension benefits, iii) distribute dividends or interest payments on Tier 1 capital contributions. In certain conditions, a firm may nevertheless take such measures that are otherwise prohibited. This presupposes that the firm has calculated a so-called maximum distributable amount, and reported it to FI. The level of the restrictions is determined by the maximum distributable amount.

It is proposed that FI be authorised to prescribe how the maximum distributable amount is to be calculated. A regulatory proposal has not yet been presented. Article 141 of the Capital Requirements Directive states, however, that the calculation of the maximum distributable amount takes account of how large a share of the combined buffer requirement the firm has failed to meet. If a firm can only fulfil the lowest quartile of the combined buffer requirement, the factor is zero, so the restriction is 100 per cent. In the second quartile, the firm may use 20 per cent of its maximum distributable amount, in the third 40 per cent and finally 60 per cent in the fourth quartile.

In particular, the following should be noted. If a formal decision regarding a specific own funds requirement for the firm has not been taken, the calculation of the maximum distributable amount shall be performed without incorporating the Pillar 2 basic requirement and the capital planning buffer. This is because only a formal decision on a specific own funds requirement affects the maximum distributable amount.

Otherwise, according to Chapter 8, section 1 of the capital buffers bill, a firm that does not meet the combined buffer requirement must submit a capital conservation plan to FI showing how it will meet the combined buffer requirement within a reasonable amount of time.

2.8.3 FI's position

FI will not normally make a formal decision on specific own funds requirements. Instead, FI will inform each firm of its supervisory capital assessment of the firm. A formal decision will only be taken in cases where it is deemed necessary.

If a firm falls below the total capital requirement, calculated with account taken of the Pillar 2 basic requirement and the capital planning buffer, without any formal decision on a specific own funds requirement having been taken, FI will, within the framework of intensified supervision activities with respect to the firm, demand that the latter describes in writing how it intends to restore the capital.

2.8.4 Reasons for FI's position

2.8.4.1 FI's decision-making

In terms of the Pillar 2 basic requirement, there need not be a shortage of capital for FI to be able make a decision regarding a specific own funds requirement. FI finds it most appropriate, however, not to make formal decisions in cases where, in FI's opinion, all risks and risk elements actually have capital coverage by the firm. Instead, FI will notify the firm of the outcome of FI's supervisory capital assessment, as information addressed to the firm's CEO and board of directors. FI finds that this proceeding is in line with the intention of the legislator's bill, because according to the bill, FI is given the possibility of deciding on a specific own funds requirement, but may refrain from making such decisions if the breach is negligible or excusable or if the firm rectifies the matter. There are many more reasons as to why FI finds this method suitable.

First, the supervisory review and evaluation process, which includes the supervisory capital assessment, is a continuous process in which the risk profile is constantly updated. A formal decision is static and cannot be changed without taking a considerable amount of time.

Second, it is particularly important that FI has the possibility of giving due consideration to the specific situation and the current circumstances in which a firm in financial stress finds itself, at the time of a situation arising that would give FI reason to find it necessary to make a formal decision. If a firm is in severe financial stress, its risk profile can change in a short space of time. For example, certain risks included in the assessment of the Pillar 2 basic requirement might have materialized, which might mean there are no longer grounds for requiring the firm to hold capital for them.

Third, it ought to be positive for financial stability that a firm has the possibility, using rapid and resolute measures, as agreed with FI, to restore its capital without the firm necessarily becoming subject to priorly specified and automatic legal restrictions. In other words, firms are hence given the possibility of re-establishing their capital in a strained situation without automatic restrictions on distributions or, depending on the size of the capital shortage, a formal resolution phase being activated.

In summary, FI's position is considered to give both FI and the firms greater freedom of action to identify, in relation to the actual situation, appropriate ways of restoring the capital in ample time.

2.8.4.2 Account of how the firm intends to restore the capital

Also in a situation in which a firm has a capital shortage, FI can refrain from making a formal decision about a specific own funds requirement if the breach is, for example, negligible or if the firm rectifies the matter. In order for FI to be able to efficiently monitor to ensure that the firm rectifies the matter, i.e. that the firm intends to restore and consequently does restore its capital sufficiently quickly and resolutely, FI intends, in the framework of its supervision, to request a written account of how it intends to restore the capital. This provides FI with effective possibilities to review and assess the firm's plans.

2.8.5 Examples of FI's assessment of the need for a decision on specific own funds requirements

2.8.5.1 When a decision is not necessary

As described above, FI's point of departure is that a formal decision on specific own funds requirements will only be taken if it is deemed necessary. In normal circumstances, FI's supervisory capital assessment will be provided as information, and not as a formal decision.

"Normal circumstances" refers in this respect to a firm having, in periods of normal or booming economic activity, own funds that cover the total minimum and buffer capital requirement (this refers to the minimum requirement under Pillar 1, the Pillar 2 basic requirement, all buffers described in the capital buffers bill and the capital planning buffer to the extent that it exceeds the

capital conservation buffer). Furthermore, in order for it to be considered "normal circumstances", the firm's capital policy must state that the firm has the objective of holding own funds that at least equal that level, insofar that it is not exposed to financial stress that exceeds the equivalent of a normal recession. See also section 2.5

2.8.5.2 When a decision might become necessary

Should a firm end up in a situation in which its own funds fall below the total minimum and buffer capital requirement (with account taken of the Pillar 2 basic requirement and the capital planning buffer) due to financial stress, FI will intensify its supervision activities with respect to the firm. This will involve FI, among other measures, requesting that the firm provides an account of how it intends to restore the capital. If the firm has a credible plan for restoring the capital, it is not necessary for FI to make a formal decision regarding a specific own funds requirement. Should, on the other hand, FI be of the opinion that the measures are insufficient, FI can judge it necessary to make a formal decision regarding a specific own funds requirement including the Pillar 2 basic requirement. A decision on a capital planning buffer will however not normally be required if the firm is already in a situation of financial stress.

In this context, it should be pointed out that, in a situation of severe financial stress, the buffers may be drawn down – that being their purpose. Because of this, it should be noted however that the firms are not permitted to *plan for* drawing down anything other than the capital conservation buffer (see section 2.5). There is hence a difference between what it is reasonable to require firms to plan for, and the choices FI has to make if an event even more severe than what the firm planned for transpires.

As stated in the legal basis, neither the Pillar 2 basic requirement nor the capital planning buffer affect the automatic restrictions on distributions, as long as a formal decision on a specific own funds requirement has not been made. Hence, in such a situation, a firm may freely choose, in the framework of other applicable regulations and under FI's review, the most suitable way of restoring the capital in that specific situation. For example, the firm is not obliged to halt or limit dividends or interest payments on Tier 1 capital contributions, if the firm can identify other and more appropriate ways of restoring the capital sufficiently quickly. (This applies as long as there is no shortfall from the combined buffer requirement under the Pillar 1 rules, i.e. excluding the specific own funds requirement).

Should the firm, due to financial stress, find itself in a situation of an imminent risk of the buffers being fully drawn down, and of own funds potentially falling below the total minimum capital requirement (i.e. the minimum capital requirement under Pillar 1 and not a formally decided Pillar 2 basic requirement), it will be necessary for FI to formally decide on a specific own funds requirement. In this situation, FI will, in the decision on the level of the

Pillar 2 basic requirement, give due consideration to the specific circumstances prevailing in the situation in which the firm finds itself. A decision taken when the firm is exposed to financial stress will not normally include the capital planning buffer, but only the Pillar 2 basic requirement.

2.8.5.3 When a decision is necessary

Should the firm in its capital policy (or equivalent) state a capital objective that falls short of the total minimum and buffer capital requirement (that is, including the supervisory capital assessment in Pillar 2), FI will call the firm's attention thereto. Should the firm nevertheless not rectify the matter, i.e. choose to not adjust its capital objective to cover the total minimum and buffer capital requirement, or choose to not act to reach or maintain this capital objective, FI will make a decision on both the Pillar 2 basic requirement and the capital planning buffer. (In this case, FI is entitled to make a decision not only on the Pillar 2 basic requirement, but also on the capital planning buffer, because it would be a case of deficient compliance with Chapter 6, section 2 of BFBA and Chapter 8, section 4 of SMA. See section 2.5.) In terms of the capital planning buffer, however, only the part that exceeds the size of the capital conservation buffer, i.e. which is in excess of 2.5 per cent of the risk-weighted exposure amount, will be covered by the decision on a specific own funds requirement.

It should be noted here that, should the firm, after a decision on a specific own funds requirement has been made, choose to hold a capital level that involves it failing to cover the capital conservation buffer, it shall, according to the bill, submit a capital conservation plan to FI. The plan must show how the firm, in a reasonable amount of time, is to reach the combined buffer requirement. Hence, a firm is not permitted to breach the requirement to maintain a capital conservation buffer other than for a shorter (reasonable) time.

2.8.6 Clarification on the agreement with other authorities

Chapter 4, sections 4 and 5 of the special supervision of credit institutions and investment firms bill expresses that FI shall agree with authorities from other countries included in the international supervisory college on a suitable level for the group's own funds with due consideration for the group's financial situation and risk profile, and the level of own funds required to apply Chapter 2, section 1 of the mentioned Act to both individual units and the group as a whole. The agreement referred to is binding for FI, as it is for the other authorities concerned. FI intends to apply it to firms in the way described above in the section on FI's decision-making.

In FI's opinion, the decision on the group's combined own funds made in the framework of the supervisory college is not binding for the firms in the group because it is not a formal decision made according to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill. In other

words, it is not a formal decision in the sense referred to in FI's position in section 2.8.3.

2.9 Transparency

2.9.1 Introduction

To date, the practice of FI and the firms concerned has been not to make FI's supervisory capital assessment of the individual firms public.[19] Because the capital requirements under Pillar 1 are clearly increased through the Capital Requirements Regulation and the Swedish implementation of the Capital Requirements Directive[20] coming into effect, the specific own funds requirements in Pillar 2 will constitute an even more important factor in devising the capital policy of firms than it has been so far. FI also finds that the intended effect of macroprudential measures within Pillar 2 are clarified and potentially also strengthened through full transparency of their effects on the capital requirements of firms. In light of this, FI wishes to contribute to the transparency of Pillar 2 with a view to improving the market's understanding of the total capital strength of the banks.

2.9.2 FI's planned measures

The capital effect of the parts that can be fully or partially said to have macroprudential purposes, such as the risk weight floor, will be published in detail by FI for all the large groups concerned.[21] The consequence analysis in section 7 of this memorandum describes the parts of the supervisory capital assessment referred to here, for each individual large group concerned. FI also intends to publish, on a quarterly basis, updated figures for the large groups, regarding these very components of the supervisory capital assessment.

The specific own funds requirement imposed by FI on the firms in the framework of Pillar 2 are made up of many different components that vary in character. Some components, such as those presently pertaining to systemic risk and the risk weight floor, are standardised using the exact same calculation method for all firms covered, while others encompass more individualised assessment methods.[22] FI has an ambition to standardise the assessment of

[19] In the case of FI's risk weight floor for Swedish mortgages (See Risk weight floor for Swedish mortgages, on fi.se, from 21 May 2013, FI Ref. 12-11920), FI chose, for that specific risk element, to publish the effect for the largest groups concerned.

[20] This relates primarily to the new buffer capital requirements and tightened definition of own funds.

[21] FI already did this in when the current risk weight floor was introduced. See the consequence analysis in the memorandum Risk weight floor for Swedish mortgages. Published on 21 May 2013 on fi.se.

[22] FI's decision on a specific own funds requirement is firm-specific, which could be interpreted as FI not being able to provide a general conclusion on its risk assessment.

further risk types included in the Pillar 2 basic requirement, and in connection therewith publish the methods of this assessment. Once a standardised approach for capital assessment has been made public, FI will also publish and, in relevant parts, quarterly update the outcome of the assessment at firm level.

The firms primarily affected by FI's analysis are the very largest groups, currently the firms covered by the detailed consequence analysis in section 7. For these, FI performs the supervisory capital assessment at least once a year.

3 Capital requirements for systemically important banks

3.1 Background

3.1.1 International standards

The Basel 3 agreement and the amended EU regulations aim both to strengthen the resilience of individual firms to firm-specific risks, and strengthen the resilience of the entire financial system to systemic risks. The new EU regulations introduce new instruments for better counteracting risks in the entire financial system, known as systemic risks.

The latest financial crisis brought to light the negative effects that global systemically important firms can have on the financial system and economy at large. During the crisis, many countries provided comprehensive government support to save systemically important firms with a view to upholding financial stability. They were, quite simply, considered too important to fail due to their size and, in certain cases, complex and cross-border operations.

The new EU regulations on buffer requirements for global systemically important firms is based on the G20 agreement from 2011 to impose demands on systemically important firms in terms of holding extra capital on top of the minimum requirement set out in the Basel 3 agreement.[23] The Basel Committee has developed a method for identifying and globally managing Global Systemically Important Banks, G-SIB.[24] Based on this method, the Basel Committee and Financial Stability Board regularly publish a list of global systemically important firms.

On the instruction of G20, the Basel Committee also prepared a framework, presented in the autumn of 2012, to identify Domestic Systemically Important Banks, D-SIB. [25]

However, it is the case that certain risks are common to all firms with a certain type of exposures.

[23] FSB (2011), Policy Measures to Address Systemically Important Financial Institutions, www.financialstabilityboard.org/publications/r_111104bb.pdf

[24] www.bis.org/publ/bcbs255.htm

[25] www.bis.org/publ/bcbs233.htm

Based on these international efforts, the EU has introduced requirements for Member States are to introduce a buffer for global systemically important firms and has made it possible for Member States to introduce buffer requirements for other systemically important firms. Besides these two buffer requirements, the EU has also made it possible for Member States to introduce a systemic risk buffer.

3.1.2 The November Accord

In Sweden, as mentioned previously, FI, together with the Riksbank and the Ministry of Finance, in November 2011 described its expectations on the forthcoming capital need of Swedish systemically important firms (the November Accord). According to the agreement, the ambition was to impose on systemically important banks a capital surcharge for systemic risk of 3 per cent from 2013 and 5 per cent from 2015 on top of the own funds requirement specified in the proposals for the new the Capital Requirements Regulation and Capital Requirements Directive of that time.

In summary, it involved a combined requirement for a common equity Tier 1 capital ratio of 10 per cent from 1 January 2013 and 12 per cent from 1 January 2015.[26] According to the press release, the levels include a capital conservation buffer requirement and a capital surcharge for systemically important banks, but not requirements for a countercyclical capital buffer.

The agreement also expressed that the extra capital requirement for systemically important banks should primarily apply to the four major banks at consolidated level, i.e. Handelsbanken, Nordea, SEB and Swedbank.

The November Accord was entered before the Capital Requirements Directive and Capital Requirements Regulation were ready in their final form. Hence, the November Accord did not specify how the higher capital requirements were to be implemented based on the new EU regulations.

3.2 Overarching description of the capital requirements for systemic risk

The Capital Requirements Directive introduces a number of different tools to prevent and counteract both structural and cyclical systemic risks. Member states are enabled to introduce both a systemic risk buffer and capital buffers for systemically important institutions. In addition, the competent authority shall evaluate the need for capital in order to manage systemic risks also in Pillar 2. See also section 5 on the countercyclical capital buffer.

[26] The total capital ratio requirement is 3.5 percentage points higher and can be filled using other Tier 1 capital and, to a certain extent, Tier 2 capital.

Requirements for a *systemic risk buffer* may be introduced to prevent and reduce long-term structural systemic risks that can have serious negative effects on the financial system or real economy of a certain Member State. The requirement can be imposed on all firms concerned or on firms in certain parts of the financial sector. The systemic risk buffer may amount to 3 per cent in common equity Tier 1 capital on all risk-weighted exposures. As of 1 January 2015, requirements can be placed for a further 2 per cent in a systemic risk buffer on exposures within the country and in a third country.

As of 1 January 2016, two capital buffers for systemically important institutions will be introduced; *the capital buffer for global systemically important institutions* (G-SII) and *the capital buffer for other systemically important institutions* (O-SII). Their purpose is to limit the risk posed by systemically important institutions to the financial system. The buffer requirement for global systemically important institutions is compulsory, unlike the buffer requirement for other systemically important firms.

The buffer requirement for global systemically important firms is only imposed at consolidated level and may amount to a maximum of 3.5 per cent in common equity Tier 1 capital on all risk-weighted assets. The buffer requirement for other systemically important firms can be imposed both at firm and consolidated level, and can be set at no more than 2 per cent.

Firms which, at consolidated level, are subject to requirements for both a global systemically important institution buffer and a buffer for other systemically important institutions need not fulfil both, but only the higher of the buffer requirements. That buffer is called the applicable buffer for systemically important institutions. Requirements for an applicable buffer for systemically important institutions is not additional to any requirements placed on a systemic risk buffer. The higher of the systemic risk buffer and the applicable buffer for systemically important institutions is the one that applies. If requirements for a buffer for systemically important institutions are only placed on the risk-weighted exposure amount in the country or in a third country, the systemic risk buffer is added together, however, with the applicable buffer for systemically important institutions.

In section 2, the supervisory capital assessment is described. FI can also, in the framework thereof, when deciding on a specific own funds requirement, also take account of systemic risks to which FI finds the firm exposes the financial system.

3.3 The systemic risk buffer

3.3.1 Position

FI intends to decide that the four major banks, as of 1 January 2015, shall hold a systemic risk buffer of 3 per cent in common equity Tier 1 capital. The requirement applies to total risk-weighted assets at consolidated level.

3.3.2 Legal basis

The provisions of the Capital Requirements Directive on the systemic risk buffer are proposed, in the Government's proposal referred to the Council on Legislation, to be implemented in Swedish law through Chapter 4 of the capital buffers bill. According to Chapter 4, section 1 of the aforementioned bill, FI may, with the purpose of counteracting a structural systemic risk that could entail serious consequences for the stability of the financial system and real economy in Sweden, decide that firms, for all or some of their exposures at individual level, subgroup level and consolidated level, shall have a systemic risk buffer.

According to Chapter 4, sections 3 and 4 of the same bill, FI may decide on a systemic risk buffer amounting to a maximum of 3 per cent of the institution's total risk-weighted exposure amount. Exemptions from the 3 per cent limitation may be granted. This requires the approval of the EU Commission, however. In Chapter 4, section 6 of the aforementioned Act, it is stated that FI may decide that firms shall have a systemic risk buffer amounting to more than 3 per cent of the total exposure amount if FI has fulfilled the notification requirement of Article 133.12 of the Capital Requirements Directive, and that such a measure has been approved by the EU Commission, in accordance with Article 133.15 of the same Directive. Article 133.12 of the Capital Requirements Directive expresses that the Commission shall approve the higher amount with due consideration for ESRB's and EBA's assessment and if it is convinced that the higher buffer does not entail disproportionate adverse effects on the whole or parts of the financial system of other Member States or of the Union as a whole, forming or creating an obstacle to the functioning of the internal market. The systemic risk buffer may, without the approval of the EU Commission, amount to a further 2 percentage points, i.e. a maximum of 5 per cent, of the institution's risk-weighted exposure amount based solely on the institution's exposures in Sweden or outside of the EEA.

Furthermore, Chapter 10, section 1, point 2 of the bill states that the Government or the authority designated by the Government may issue regulations on the policies that are to be observed when establishing and grading the systemic risk buffer according to Chapter 4, section 1 of the same bill. A proposal for an ordinance has, however, not yet been published.

3.3.3 Reasons for FI's position

Today, Sweden has four predominant banking groups – Handelsbanken, Nordea, SEB and Swedbank (known as the major banks). If any of the four major Swedish banks were to default, this would currently be hard to manage without major risks to the economy. There is a lack of sufficiently effective authority tools for warding off a situation of one of the major banks risking default, without Swedish taxpayers being exposed to risks and without risking disruptions in the functions performed by the major banks that are value-creating and crucial to society. The default of one major bank could also directly have tremendous effects on the other major banks. The capital adequacy of banks is intended to bear (absorb) unexpected losses. FI therefore finds that the four major banks need to have greater loss-bearing capacity in the form of common equity Tier 1 capital of a further 5 percentage points at consolidated level to cover systemic risk.

This requirement for common equity Tier 1 capital of 5 percentage points entails, as a comparison, the major banks, in addition to the other requirements of the capital rules, securing further resilience equalling a drop in value of their total assets of approximately 1 per cent.

At the time of the November Accord and the publishing of the capital adequacy levels then recommended for the major banks, the tools made available through the EU regulations were not yet known. The systemic risk buffer could provide scope to fully reach the extra common equity Tier 1 capital of 5 percentage points that FI current considers necessary and sufficient for systemic risk related reasons. However, a decision regarding a systemic risk buffer in excess of 3 per cent requires the approval of the EU Commission, as described in the legal basis in section 3.3.2. Because FI takes account of systemic risk in Pillar 2 (see section 3.4), FI finds it appropriate not to decide on a systemic risk buffer in excess of the level within FI's own decision-making power. Addressing systemic risks in Pillar 2 instead is therefore more appropriate and brings an efficient decision-making process.

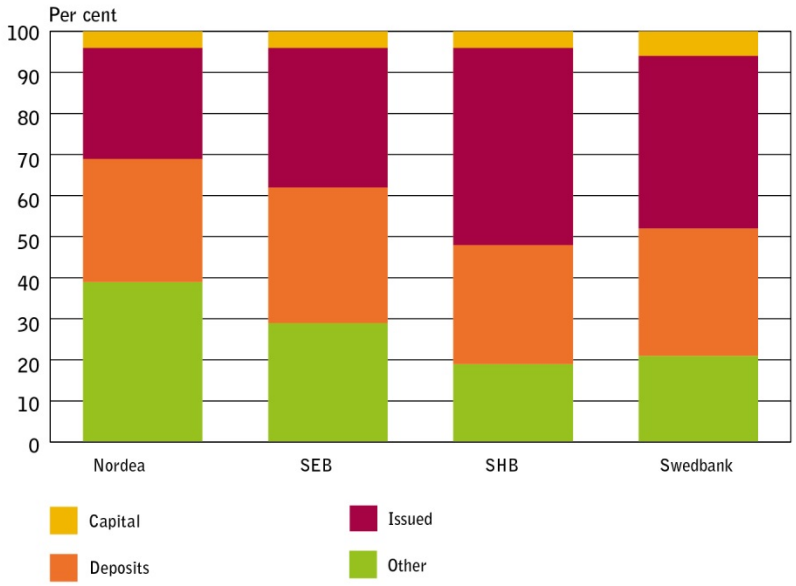
The financial system, and ultimately the economy too, is exposed to structural risks due to the most systemically important Swedish banks operating on a concentrated market, with similar exposures, and being closely interlinked. In the event of uncertainty surrounding the resilience of the banking system, demands from the funding market tend to increase and access to liquidity and funding is made more difficult and expensive for the banks. This occurred, for example, in the autumn of 2008, showing how financial problems for any of the most systemically important banks risk spreading to the rest of the financial system, and ultimately risk sharply weakening the economy.

The four major Swedish banks largely have *similar business models*, which can lead to problems for the financial system being amplified in a crisis. The banks partially have the same type of structure in terms of both assets and funding. The types of assets, and exposure at geographic level, exposure classes and

counterparties are largely of the same nature and sometimes overlap. The funding structure is also largely similar, in terms of e.g. a structural deposit deficit, a large share of covered bonds and extensive borrowings in foreign currency.

3.1 Distribution of lending (Data at Q4 2013 at consolidated level)

3.2 Distribution of funding (Data at Q4 2013 at consolidated level)



The domestic markets of the major Swedish banks are highly *concentrated*. This is particularly the case in Sweden, where the four major Swedish banks

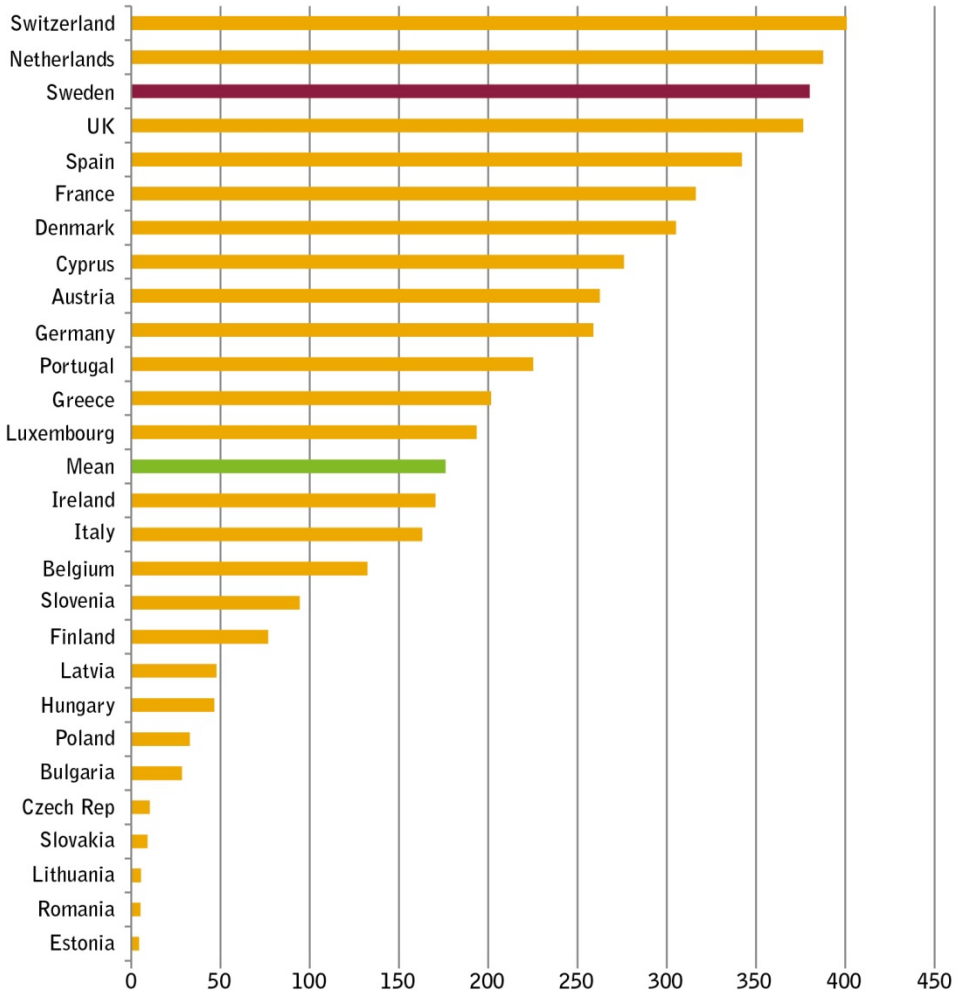
overall have a completely dominant market share in most business segments. A high degree of concentration is an indicator that the losses of an individual bank risk increasing at the same time as problems arise for the financial system as a whole.

The similarities in terms of business model and structure, combined with the high degree of market concentration, have also led to a clear *interlinkage* between the four major Swedish banks. The banks are interlinked through direct exposures to each other, and indirectly, in that a bank's actions can affect both the value of assets of and funding terms for the other banks. The interlinkage can thus have negative consequences in times of crisis that risk being amplified by market uncertainty or deficient information giving rise to reputational risks.

The interlinkage between the four major Swedish banks constitutes a source of systemic risk, particularly in combination with the *size* of the banking system in relation to the Swedish economy. Major shocks in the financial system thus risk leading to serious and negative consequences for the real economy. The importance of the major banks also makes it difficult in Sweden to deflect or soften a crisis for a major, cross-border systemically important bank without major costs for society.

3.3 The banks' assets in relation to GDP

December 2013



Note: The data for Switzerland is from December 2012

Source: The Riksbank

Structural factors in the Swedish financial system thus indicate that disruptions in one of the four major banks risk being amplified and having a major negative impact on the economy. The risk of a financial crisis is thus not necessarily greater in Sweden, but there is a risk that the consequences of a banking crisis – if it were to occur – would be major.

In the event of a financial systemic crisis, weakened market confidence in the Swedish banks also risks damaging confidence in the creditworthiness of the Swedish Government. There is a risk of more expensive borrowing costs for the Government. This hence risks coinciding with a situation of funding on decent terms probably being of great importance to enable flexibility for managing the effects of a crisis on the real economy. The structure of the Swedish banking market thus leads to high costs for society if the stability of the banks is called into question, and mutually positive effects for both the Government and the financial system if the banks have a high level of resilience to shocks and financial crises.

The general capital requirements of the Capital Requirements Regulation do not cover the risk posed by the structural vulnerability of the Swedish banking system. This risk could lead to major costs for society in the event of a financial crisis. The basis in the Capital Requirements Directive for establishing the scope of the need for buffer capital for systemic risk, is that each Member State is obliged to protect the banking system and the real economy from systemic risks that can arise due to structural factors or specific exposures. However, determining a necessary or sufficient size for the systemic risk buffer will, by necessity, largely be a qualitative assessment.

As described above, the Swedish banking system has certain structural features that distinguish it from the European banking system as a whole. FI finds that the Swedish financial system, and ultimately the real economy, is exposed to greater risks than the basic level required by the Capital Requirements Regulation. Such higher structural risks arise due to the high systemic importance of Nordea, SEB, Handelsbanken and Swedbank. In order to increase resilience to shocks, these banks thus need a high level of loss-bearing capacity. FI therefore finds that the four major banks should hold a systemic risk buffer of 3 per cent.

3.3.4 Decision-making procedure for the systemic risk buffer

According to Chapter 4, section 1 of the capital buffers bill, FI may decide that a firm shall have a systemic risk buffer. FI intends, at its Board meeting on 8 December 2014, to make a decision directed at the four major banks stating that, as of 1 January 2015, they shall establish a systemic risk buffer of 3 per cent at consolidated level.

3.4 Specific own funds requirement for systemic risk under Pillar 2

3.4.1 Position

The four major banks shall, in addition to the systemic risk buffer of 3 per cent, be subject to a capital surcharge of 2 per cent for systemic risk in the framework of the Pillar 2 basic requirement. The requirement will be imposed on total risk-weighted assets at consolidated level and be covered by common equity Tier 1 capital.

3.4.2 Legal basis

FI may, according to Chapter 2, section 1 of the special supervision of credit institutions and investment firms bill, decide that a firm shall have a specific own funds requirement in excess of the minimum level that otherwise applies (that is, on top of what is required by the Capital Requirements Regulation and the capital buffers bill). Decisions on such a specific own funds requirement can be made if FI, in connection with a review and evaluation, finds that it is needed to cover the risks to which the firm exposes the financial system (systemic risks). Read more on the specific own funds requirement in section 2.

Furthermore, Chapter 10, section 2 point 4 of the special supervision of credit institutions and investment firms bill states that the government or the authority designated by the government may issue regulations regarding the circumstances that are to be observed when establishing an appropriate own funds level in connection with a review and evaluation of a firm. A proposal for an ordinance supported by the authorisation has not yet been presented, but the proposal referred to the Council on Legislation expresses that FI, within the framework of decisions on specific own funds requirements following a review and evaluation, also ought to be able to give due consideration to the risk to which the institution exposes the financial system (systemic risks), see section 11.3.1 of the proposal referred to the Council on Legislation.

3.4.3 Reasons for FI's position

In the opinion of FI, as stated in section 3.3.3, the need for a higher loss-bearing capacity in the Swedish financial system is currently matched by a total capital surcharge of 5 percentage points for the four most systemically important bank groups. Three percentage points of the capital need are made up of the systemic risk buffer. The remaining 2 percentage points shall therefore be covered by a surcharge for systemic risks within the Pillar 2 basic requirement. The reasons for why FI is choosing to cover part of the capital need for systemic risk in Pillar 2 were provided in section 3.3.3.

The purpose of the systemic risk surcharge in Pillar 2 is, as for the systemic risk buffer, to secure greater loss-bearing capacity for the firms that pose the greatest systemic risk, in order, in so doing, to bolster the resilience of the

financial system and reduce the risk of shocks being amplified and affecting the real economy.

FI hence bases the application of the systemic risk surcharge in Pillar 2 on the same drivers of risk and indicators as for the systemic risk buffer. Because it is an overall determination of the scope of the capital need for systemic risk, the result of the risk assessment will be the same also if it is based on the risk in individual firms and groups, which shall be the basis for an assessment within Pillar 2.

3.4.4 Entry into force

The introduction of a capital requirement for systemic risk under Pillar 2 is a change in practice and not a new regulation. There will thus be no formal date of entry into force. The change in practice is implemented in the authority's affected processes with immediate effect following FI's decision to implement it. A final version of this memorandum will be published when the opinions received have been processed.

3.5 Buffer for global systemically important firms

According to the government's proposal referred to the Council on Legislation, the provisions of the directive regarding a buffer for global systemically important firms will be implemented in Swedish law through Chapter 5 of the capital buffers bill. According to Chapter 5, section 1 of the bill, FI may decide which firms are to have a capital buffer for global systemically important institutions. The buffer shall, according Chapter 5, section 2 of the same Act, consist of common equity Tier 1 capital and amount to no less than 1 per cent and no more than 3.5 per cent of the firm's total risk-weighted exposure amount.

The provisions regarding the buffer for global systemically important firms shall, according to section 2 of the bill implementing the Capital Buffers Act, be applied as of 1 January 2016. According to section 4 of the same Act, the buffer requirements for global systemically important firms shall be phased in during 2016–2019.

EBA will, in accordance with Article 131.18 of the Capital Requirements Directive, prepare a technical standard for supervision specifying the method for identifying global systemically important firms, and the buffer requirements that are to apply. There will, however, be a certain degree of scope for national considerations.

FI has not yet taken a position on how the buffer for global systemically important institutions is to be implemented. FI will decide on which firms are to have a capital buffer for global systemically important institutions, and the scope of this buffer before the regulations come into effect.

3.6 Buffer for other systemically important institutions

The provisions regarding the buffer for other systemically important institutions are introduced, according to the Government's proposal referred to the Council on Legislation, through Chapter 5 of the capital buffers bill. According to Chapter 5, section 3 of the bill, FI may decide that a firm is to have a capital buffer for other systemically important institutions. The buffer shall, according Chapter 5, section 4 consist of common equity Tier 1 capital and amount to no more than 2 per cent of the firm's total risk-weighted assets.

The provisions regarding the buffer for other systemically important institutions will, according to section 2 of the bill implementing the Capital Buffers Act, come into effect on 1 January 2016. In Chapter 10, section 1, point 2 of the capital buffers bill, the Government or the authority designated by the Government is authorised to issue regulations on how other credit institutions are to be identified and how the assessment of the relevant capital buffer requirement is to be made.

The Capital Requirements Directive sets out a number of criteria that the competent authority shall take into account when assessing other systemically important firms. EBA will also prepare guidelines further specifying how the competent authority is to identify such firms.

FI has not yet taken a position on how the buffer for other systemically important institutions is to be implemented. FI will decide on which firms are to have a capital buffer for other systemically important institutions, and the scope of this buffer before the regulations come into effect.

3.7 Summary of the capital requirements for systemically important banks

On the whole, the positions described in this section involve the four major banks holding, from 1 January 2015, a total of 5 percentage points in common equity Tier 1 capital at consolidated level for counteracting systemic risk that could entail serious consequences for the stability of the financial system and the real economy in Sweden.

This is implemented such that FI intends to decide that the four major banks shall hold a systemic risk buffer of 3 percentage points as of 1 January 2015. The four major banks shall also hold 2 percentage points in common equity Tier 1 capital for covering systemic risk in the Pillar 2 basic requirement from 1 January 2015. Both of these requirements will be imposed on all risk-weighted assets at consolidated level.

FI will revert with which firms shall have a buffer for global systemically important institutions and other systemically important institutions, and how large these buffers are to be, before the legal provisions regarding these buffers start to apply on 1 January 2016. In these decisions, FI will take account of

forthcoming technical standards and guidelines from EBA. The capital buffers for global systemically important institutions and other systemically important institutions are not additional to the systemic risk buffer, as stated in section 3.2. Hence, the total capital requirement for the major banks will not be affected by the buffers for global systemically important institutions and other systemically important institutions, because they are covered by the systemic risk buffer. The total capital requirement for other firms may be affected by the buffer for other systemically important institutions.

4 Increase to the risk weight floor for Swedish mortgages

4.1 Introduction

This section provides FI's opinion and position as regards the level of the risk weight floor for Swedish mortgages. Swedish mortgages amount to much more than half of Sweden's GDP. FI is therefore of the opinion that it is crucial to financial stability that firms hold own funds that cover the risks in such lending. Responsibility for financial stability supervision not only includes analysing imbalances among financial institutions and non-financial corporations and households, but also taking measures.[27]

The present risk weight floor was introduced on 21 May 2013 and the level was then set at 15 per cent. In November last year, FI presented new measures that might be required to reduce risks in household indebtedness.[28] The assessment made by FI at the time was that raising the risk weight floor to 25 per cent would be a sound decision. That memorandum also specified that a key element in that measure is that FI is empowered by legislation to take into consideration the systemic risks to which individual firms give rise in mortgage lending, when the authority assesses an appropriate level for the risk weight floor. The Government has now published the proposal referred to the Council on Legislation containing the bills implementing the new capital adequacy regulations (see more in section 1). It is therefore possible to take a position in the matter based on the conditions set out in the proposals contained in the proposal referred to the Council on Legislation.

4.2 Background

4.2.1 Current risk weights for Swedish mortgages

In order to determine the capital requirement for credit risk, the exposure amount for each credit exposure is multiplied by a risk weight. This results in a risk-weighted amount, and it is this amount that is subject to capital requirements.

When the Basel 2 agreement entered into force in Sweden in 2007 through amendments to the Capital Requirements Directive (often called CRD 2), several Swedish firms received permission from FI to use the internal ratings-based approach (IRB approach) to calculate the risk weights for their credit exposures. As a result, the risk weights for Swedish mortgages fell drastically. All predominant mortgage lenders in Sweden currently use the IRB approach, and several of the largest players have average risk weights in the internal models of around 5 per cent for such exposures. In May 2013, FI introduced a

[27] See section 1 of Finansinspektionen's Instructions Ordinance (2009:93).

[28] How FI can decrease the risks inherent in household debt. Published on fi.se on 14 November 2013, FI ref. 13-12811.

risk weight floor for Swedish mortgages of 15 per cent in the framework of Pillar 2.

The risk weights of 5 per cent and 15 per cent, respectively, can be compared to 50 per cent in Basel 1, i.e. the regulations that applied until 2007 and which still form the basis of the Basel 1 floor[29], and 35 per cent in the currently applicable standardised approach.[30]

4.2.2 About the IRB approach

The IRB approach consists of two parts:

- The risk weight formula – which is set out in the Capital Requirements Regulation and serves as the basis for the calculation of the capital requirement.

- Expected loss – which is determined by the banks in accordance with the minimum requirements of the Capital Requirements Regulation, and constitutes input data for the risk weight formula.

The expected loss is set per exposure. An individual risk weight is subsequently calculated for each individual exposure in the portfolio. The estimation of the expected loss is based on historical credit loss data. The calculation method is regulated by the Capital Requirements Regulation.

The low risk weights ensuing from the IRB approach reflect the very low credit losses for Swedish mortgages in the past 20–25 years. Swedish firms meet the minimum requirements for using the IRB approach for Swedish mortgages and carry out the calculations in accordance with the requirements set out in the regulatory framework and established industry practice.

[29] See Finansinspektionen's approach to the Basel 1 floor. Memorandum published on 18 March 2014 on fi.se, FI Ref. 13-13990.

[30] In order to properly compare the approaches, the expected loss amount, less reserves and other value adjustments, must be added to the capital requirement in the IRB approach. However, for most firms, this amount is currently a small part of the total capital requirement for the Swedish mortgages. In this context, it should also be noted that, unlike in Basel 2, lending collateralised by tenant-owned apartments does not count as lending collateralised by residential property in Basel 1, and therefore were risk-weighted at 100 per cent.

EXPECTED LOSS

Expected loss is a simplified umbrella term for the estimates made by banks within the IRB approach. Banks in fact estimate three risk parameters for exposures to mortgages.

- **PD**, Probability of Default
- **LGD**, Loss Given Default
- **Exposure amount,** also called EAD, Exposure At Default

Default in this context means roughly that the credit counterparty is really late with payment or that the lender makes an assessment that it is probable that the counterparty will not be able to pay on time.

The Expected Loss (EL) is calculated using the three risk parameters multiplied by each other.

4.2.3 About FI's present risk weight floor

On 21 May 2013, FI published the introduction of a risk weight floor for Swedish mortgages in the context of the supervisory capital assessment under Pillar 2. The floor was set at 15 per cent for the portfolio's average risk weight. The reason for the present risk weight floor is that FI finds that the IRB approaches of firms do not sufficiently capture the credit loss risk in Swedish mortgages. The conclusion that risk weights for Swedish mortgages are to be at least 15 per cent is the result of an overall assessment of future loss levels in Swedish mortgages in a situation of intense financial stress.

When the present risk weight floor was introduced, "the old" capital adequacy regulations were still in effect in Sweden; that is, the Capital Adequacy and Large Exposures Act (2006:1371). When implemented, FI was aware of the forthcoming regulations. The risk weight floor was thus devised both with its legal basis in the old regulations in place at the time, and on the assumptions that could be made at the time about how the future regulations would be devised and implemented. In the former Swedish legislation, the legal basis for an extra own funds requirement for systemic risk was not expressed as it is in the bills implementing the new capital adequacy regulations in the proposal referred to the Council on Legislation.

4.3 FI's position

The risk weight floor is increased by 10 percentage points, from 15 per cent currently to 25 per cent.

When calculating the capital requirement in which the risk weight floor results, all capital requirements under Pillar 1 must be included, including the countercyclical capital buffer rate for Sweden. In addition, for the major banks, the full capital need for systemic risk shall be taken into account.[31]

4.4 Legal basis

4.4.1 Systemic risk in Pillar 2

Detailed rules governing how firms are to calculate their risk-weighted exposure amounts for household exposures are provided in Part three, Title 2, Chapter 3, sections 2–5 of the Capital Requirements Regulation (articles 151–191).

Because the Capital Requirements Regulation is a regulation, individual countries cannot introduce requirements that conflict with what it prescribes. FI can therefore not set higher requirements for the calculation of the risk-weighted exposure amount than what is expressed in the Capital Requirements Regulation. However, FI may, with the support of Chapter 2, section 1 of the of special supervision of credit institutions and investment firms bill, decide that a firm shall have higher own funds than the minimum level that would otherwise apply if, within the framework of a review and evaluation, it is deemed necessary to cover risks to which an institution is or could become exposed, and risks to which the institution exposes the financial system. Read more about the specific own funds requirement and FI's supervisory capital assessment in section 2.

According to section 11.3.1 of the proposal referred to the Council on Legislation, the provision requires neither a breach having occurred (i.e. that the firm has insufficient own funds) nor an assessment having been made of there being a risk of such a breach arising. The provision could thus be applied in the case of a firm using an approved IRB approach to calculate risk-weighted exposure amounts, but the method nevertheless entails an underestimation of the risks and hence of the capital need.

Furthermore, Chapter 10, section 2 point 4 of the special supervision of credit institutions and investment firms bill states that the Government or the

[31] Hence, besides the systemic risk buffer of 3 per cent, the capital requirement for systemic risk of 2 per cent imposed on the major banks within the framework of Pillar 2 (see section 3) must also be taken into consideration in the calculation of the capital requirement for Swedish mortgages.

authority designated by the Government may issue regulations regarding the circumstances that are to be observed when establishing an appropriate own funds level in connection with a review and evaluation of a firm. A proposal for an ordinance supported by the authorisation has not yet been presented, but section 11.3.1 of the proposal referred to the Council on Legislation expresses that FI, within the framework of a decision on specific own funds requirements following a supervisory review and evaluation, also ought to be able to give due consideration to the risk to which the institution exposes the financial system (systemic risks).

FI's decision on a specific own funds requirement is firm-specific, which could mean FI not being able to provide a general conclusion on its risk assessment. However, the risk currently not taken sufficiently into account by the internal models of firms is common to all firms with the type of exposure in question here. Because the risk weight floor for Swedish mortgages is also an important matter in the capital planning of firms, FI deems it appropriate to specify the general assessment practice that the authority intends to apply in this regard.

4.4.2 Alternative tools

4.4.2.1 Introduction

As expressed above, it is not possible for FI to set higher requirements for the calculation of risk-weighted exposure amounts than those expressed by the Capital Requirements Regulation to ensure that firms hold more capital in relation to their Swedish mortgages. The new capital adequacy regulations also contain, however, other provisions that enable adjusting risk weights for mortgages.

4.4.2.2 Possibilities of national flexibility

Article 458 of the Capital Requirements Regulation enables national authorities to e.g. increase risk weights for mortgages and commercial properties in certain circumstances. The possibility has been devised to cope with changes in the intensity of macroprudential risks or systemic risks, and introduces a number of tools, or measures, which Member States would have the possibility of using to this very end.

The provision specifies that the measures described in the article may be taken in *temporary* periods of heightened risk for a *limited time period* of no more than two years, with the possibility of extension. Also, the competent authority must explain, to the European Parliament, the European Commission, the European Council, the ESRB and the EBA why the identified macroprudential risk or systemic risk cannot equally be addressed in the framework of Pillar 2. Furthermore, the Council, on the proposal of the Commission, is entitled to refute such measures.

The overarching purpose of FI's new practice is to strengthen the firms' resilience *in the long term* against such shocks that Article 458 is intended to address for a limited time. The inability of the competent authority to achieve the same result through measures in Pillar 2 is, as mentioned, also a condition for a measure in the framework of the article.

4.4.2.3 LGD floor

Article 164 of the Capital Requirements Regulation specifies how Loss Given Default (LGD) is to be calculated. The fourth point of the article describes that the average LGD value for all retail exposures secured by residential properties without government guarantees may not be below 10 per cent. This floor rule has been applied since the introduction of internal models for credit risk.

A new feature in the Capital Requirements Regulation is that the competent authority shall, according to the aforementioned article, annually perform an assessment of whether the minimum values for LGD in point 4 are appropriate for exposures secured by residential properties or commercial properties in their territory, and if it is suitable, in the interests of financial stability, to set higher minimum values than those pursuant to point 4.

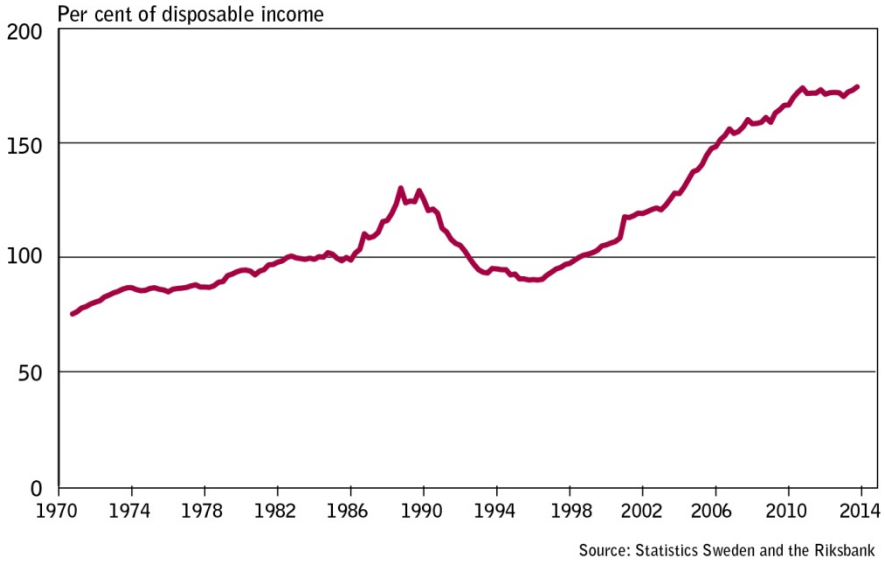
The LGD value has a direct linear relationship with the capital requirement for individual credits and hence also for the credit portfolio as a whole. Should, for reasons of stability, FI choose to increase the minimum level for LGD from 10 per cent to e.g. 30 per cent, this would mean firms which currently have average risk weights for mortgages of 5 per cent having risk weights of 15 per cent; that is, an increase of 10 percentage points. A firm with an average risk weight of 10 per cent would have a new average risk weight of 30 per cent, i.e. an increase of 20 percentage points. FI believes it would be unfortunate to further amplify the differences in risk weights which derive from the firms' variations in internal approaches for calculating risk-weighted exposure amounts, but which are often fundamentally not motivated by a difference in the actual risk of the exposures. In light of this, the possibility in article 164 is less suitable for use compared with the possibility of addressing the matter in the supervisory capital assessment.

4.5 Reasons for FI's position

4.5.1 Description of the systemic risk caused by Swedish mortgages

Swedish household debt is at a historically high level, and is on the rise. The debt ratio (total household debt in relation to disposable income) has increased from 100 per cent to over 170 per cent in the last 15 years.

4.1 Debt ratio of Swedish households



Source: Statistics Sweden and the Riksbank

Mortgages make up the majority of household debt. This high level of household indebtedness through mortgages poses a risk to financial stability. High indebtedness, combined with a large share of variable-rate loans, makes household sensitive to changes in interest rates. Also, the biggest asset of many households is their home. If house prices fall, household are expected to be more restrained in their consumption, which could aggravate a recession. Furthermore, the mortgages of households make up a large proportion of the banks' total assets and involve a major funding need for the Swedish banking system.

The high indebtedness of households makes them vulnerable, both in terms of changes in interest rates and the trend on the housing market. Higher interest rates give rise to a higher housing cost for households, and lower consumption. Mortgage rates are at historically low levels and, if interest rates approach the historical average, a large part of the budget of households will need to go on interest expenses.

Higher interest rates can also change the calculation that forms the basis for purchasing homes, and affect the house price trend. House prices, mortgaging and interest rates affect each other.

A recession involves high financial and social costs for society. The high indebtedness of households can affect the real economy by aggravating a recession if mortgaged households cut down their consumption sharply. The most serious scenario in this context is a recession that coincides with a sharp drop in house prices.

The reason why house prices might affect household consumption is that almost half of the collective assets of Swedish households consist of single-

family dwellings, tenant-owned apartments and holiday homes[32]. This is a lot, but the aggregate measures are affected by a small number of households having major financial assets. If the very wealthy households are taken out of the statistics, single-family dwellings, tenant-owned apartments and holiday homes have an even higher share of the other households' assets. For a large part of the population, financial assets are limited, and the home is their absolute largest asset.

Household consumption does not just depend on current disposable income. When households decide how much they are to save and consume, they also consider how much their assets are worth. "Assets" should have a wide interpretation and do not just include the value of financial assets, but also properties and future income from employment.

When house prices decline sharply, households see that the value of their own home is lower than before. People who feel poorer find they cannot spend as much. Demand in the economy declines when households tighten their purses. There are studies that suggest that mortgaged households reduce their consumption more than other households.[33] In such studies, the most highly mortgaged households cut back on spending the most when house prices decline.

There are more possible reasons for greater tightening among mortgaged households. One reason might be that some of the mortgaged households finance consumption with loans collateralised by their home. When the home is worth less, they might borrow and consume less. Another reason could be that households want to have a buffer between the value of the home and the mortgage. When the value of the home declines, the buffer shrinks. In order to restore the buffer, households have to save.

In Sweden, just over 60 per cent of households live in a single-family dwelling or a tenant-owned apartment, and the vast majority of them have mortgages. A sharp drop in house prices thus affects the majority of the population. A drop in house prices in a recession can lead households to further reduce consumption from already suppressed levels. Heavily mortgaged households might be expected to exercise even more restraint than more lightly mortgaged households. The high indebtedness of Swedish households through mortgages thus poses a risk to the real economy in Sweden.

[32] The Riksbank. Financial Stability 2013:2.
[33] Andersen, A.L., Duus, C. and Jensen, T.L. (2014), "Household debt and consumption during the financial crisis: Evidence from Danish micro data", Danmarks Nationalbank Working Papers 89 and Dynan, K. (2012), "Is a Household Debt Overhang Holding Back Consumption?", Brookings Papers on Economic Activity.

4.5.2 Systemic risk, the IRB approach and the present risk weight floor

4.5.2.1 About the IRB approach and systemic risks

Despite its name, only certain parts of the internal ratings-based (IRB) approach are an internal approach. The calculation of the capital requirement and the use of the approach are governed by detailed regulations. Swedish firms currently using the IRB approach for Swedish mortgages comply with the minimum requirements for the approach. The firms estimate the expected loss themselves (see fact box on page 49) based on historical credit loss data, and this is converted into a capital requirement using the risk weight formula specified in the regulations. According to this approach, the capital requirement should correspond to the credit loss in the mortgage portfolio arising during highly severe financial stress.

As expressed in the section above, Swedish mortgages can cause other costs than credit losses alone. As described, the purpose of the IRB approach is hence to capture and reflect such costs that do not affect the firm directly in the form of credit losses in the mortgage portfolio. These so-called systemic risks are therefore not covered by the capital need calculated using the IRB approach.

4.5.2.2 Present risk weight floor and systemic risks

The present risk weight floor of 15 per cent was introduced because FI was of the opinion that the IRB approaches of firms do not sufficiently capture the credit risk in Swedish mortgages. In the memorandum published on 21 May 2013, it is expressed that FI finds that the IRB approach does allow for fully capturing changes in fundamental economic and contractual factors[34] that have an effect on the risk of credit losses.

The position in the memorandum from 21 May, that the risk weight for Swedish mortgages is to be at least 15 per cent, is the result of an overall assessment of future loss levels in Swedish mortgages in a situation of intense financial stress. The floor level of 15 per cent thus does not cover systemic risks, but only the credit risk in mortgages.

4.5.2.3 Overall assessment

Swedish mortgages cause systemic risks. This risk is not covered either by the capital requirement calculated using the IRB approach or the present risk weight floor of 15 per cent, because both of these calculations only cover credit risk. The systemic risk caused by Swedish mortgages is thus currently not addressed in the existing capital requirements.

[34] "Contractual factors" refers to the terms and conditions agreed regarding the mortgage with respect to e.g. how the interest rate is to be calculated and the amortisation rate.

4.5.3 Assessment of the systemic risk level in Swedish mortgages

FI must assess the scope of the systemic risk caused by Swedish mortgages, in order to be able to include the risk in the capital requirement. While this is a difficult task, according to FI that does not constitute an adequate reason for addressing the risk in the capital requirement.

In FI's opinion, it is not appropriate to assess the scope of the systemic risk using a quantitative model. There is currently no generally accepted model. Instead, FI chooses to perform an overall assessment of what a reasonable level is.

Because it is clear that Swedish mortgages cause systemic risk, FI finds that the capital set aside to cover the systemic risk should constitute a clear increase to the present capital requirement for the portfolio, which is determined by the risk weight floor of 15 per cent. According to FI, this indicates that the floor should be increased by over 5 percentage points, i.e. to over 20 per cent.

When it introduced the present risk weight floor, FI was of the opinion that credit risks in Swedish mortgages equal an average risk weight of at least 15 per cent. There is no objective criterion which, in itself, means the systemic risk in Swedish mortgages could not exceed the credit risk they contain. However, FI finds it reasonable that the capital that firms are obliged to hold for mortgages should to the most part reflect the risk of credit losses in the portfolio in question. This suggests that the present risk weight floor should be increased by less than its present level of 15 per cent, hence to a level that is lower than 30 per cent, with the purpose of covering the systemic risk.

A risk weight floor of 25 per cent, i.e. an increase of 10 percentage points, meets both the above criteria. FI thus finds this to be an appropriate level. This increase equals, in capital requirements, around 1 per cent of the exposure amount of the portfolio.

4.5.4 Cyclical and structural systemic risk in Swedish mortgages

Section 3.3.3 states that FI finds that the four major banks need to have greater loss-bearing capacity in the form of common equity Tier 1 capital of a further 5 percentage points at consolidated level to cover systemic risk. This should also be reflected in the calculation of the Pillar 2 basic requirement in which the risk weight floor results. In the calculation of this capital requirement, FI will therefore take into consideration both the systemic risk buffer of 3 per cent and the further capital requirement of a further 2 per cent for systemic risk (described in section 3), which is imposed on the four major banks under Pillar 2.

The assessment that the risk weight floor will be increased to 25 per cent is based on the presence of long-term (albeit not necessarily permanent) so-called structural systemic risks. Because Swedish mortgages are such a large part of

overall lending, mortgages also make a substantial contribution to aggregate credit growth, which is an important factor in assessing cyclical systemic risk. FI therefore finds it appropriate, in the calculation of the Pillar 2 basic requirement in which the risk weight floor results, to take into consideration the countercyclical capital buffer rate for Sweden.

4.6 Description of the calculation method

4.6.1.1 Introduction

This section contains a detailed description of the calculation method which FI will use in the supervisory capital assessment for the specific assessment of whether a firm is holding sufficient capital to cover the risks in its Swedish mortgage exposures.

4.6.1.2 Scope

The firms covered by the measure are the Swedish firms authorised to use an internal model to calculate the capital requirement for credit risk (the IRB approach), and which have an exposure to Swedish mortgages. This currently applies to seven groups, and the firms included therein: Handelsbanken, Landshypotek, Länsförsäkringar Bank, Nordea, SBAB, SEB and Swedbank. Six savings banks are also subject to the floor: Bergslagens, Färs & Frosta, Rekarne, Sjuhärad, Vimmerby and Ölands.[35]

If a further firm were given authorisation to use the IRB approach to calculate the capital requirement for Swedish mortgages, this firm too would be covered by the measure. Firms using the standardised approach to calculate the capital requirement for credit risk are not affected.

Branches of foreign firms that are exposed to Swedish mortgages and which use the IRB approach for them might also be affected. The conditions for this are described in section 4.8.

4.6.1.3 Definition of affected portfolio

The portfolio covered by the risk weight floor, and which in this memorandum is, in simplified terms, referred to as "Swedish mortgages", consists of Swedish exposures collateralised by properties in the exposure class household exposures. The exposure class by far largely consists of mortgages for private individuals, but can also include certain exposures to small corporations with loans collateralised by real estate and exposures that are loans collateralised by real estate other than residential properties. For an exact definition, see Articles 147.5 and 154.3 of the Capital Requirements Regulation.

[35] All of them are included in the Swedbank group, except Bergslagens Sparbank since Swedbank sold its holding of shares to the Savings Bank Foundation in 2010. However, they nevertheless have permission to use an internal model as individual firms.

It is largely the same definition that applied when the present risk weight floor was introduced. The difference is that the exposure class now, since the entry into force of the Capital Requirements Regulation, is no longer defined in FI's regulations, but in the Capital Requirements Regulation. This also involves some slight differences in relation to the previous definition in FI's regulations. However, the differences are not of such magnitude as to lead FI to review the level of the present risk weight floor. Hence, no part of the increase to the floor is due to amendments to the definition.

4.6.1.4 Definition of average risk weight

The risk weight floor relates to the exposure-weighted average risk weight. The exposure-weighted average risk weight is calculated by dividing the portfolio's risk-weighted exposure amount by the exposure amount.

4.6.1.5 Capital requirement and capital type

In order to calculate the capital need in SEK for Swedish mortgages, taking the risk weight floor into account, the exposure amount of the portfolio is first multiplied by 25 per cent (the risk weight floor). This amount is then multiplied by the applicable capital requirement.

The capital requirement is 10.5 per cent, including the capital conservation buffer. For the major banks, 5 percentage points are also added, in accordance with the positions in section 3. (See also section 4.5.4). When the capital buffers for global and other systemically important institutions have been decided, these will also be included in the calculation.

As expressed in section 4.5.4, not only structural but also cyclical systemic risks should be covered by the supervisory capital assessment with respect to Swedish mortgages. This means that the level of the countercyclical capital buffer rate in Sweden will also affect the Pillar 2 basic requirement for mortgages. Note that this marks a difference compared to what was previously specified with respect to the present risk weight floor.[36]

Hence, on the whole, the risk weight floor for the major banks is calculated using a total capital requirement of 15.5 per cent, plus the countercyclical capital buffer rate. For other firms, the risk weight floor is calculated using a capital requirement of 10.5 per cent plus the countercyclical capital buffer rate.

The type of capital that is to cover the specific own funds requirement for Swedish mortgages is the same allocation of capital as the Pillar 1 capital requirement, including all buffer requirements. In addition, consideration must

[36] See the memorandum Risk weight floor for Swedish mortgages, published on fi.se on 21 May 2013. FI Ref. 12-11920.

be given to the 2 percentage points for systemic risk imposed on the four major banks (described in section 3).

The specific own funds requirement constitutes part of the Pillar 2 basic requirement and not the capital planning buffer, read more in section 2.

Calculation examples

Calculation example A, specific own funds requirement for Swedish mortgages:

Group A, which is *not* one of the four major banks, has an exposure amount of SEK 100 billion for Swedish mortgages. The current average risk weight according to the IRB approach is 5 per cent. For this group, the risk weight floor of 25 per cent involves a specific own funds requirement for Swedish mortgages of SEK 2.4 billion, of which SEK 1.7 billion consists of common equity Tier 1 capital, according to the calculation below.

Increase in the average risk weight (floor reduced by the current average risk weight):
25% - 5% = 20%

Increase in the risk-weighted assets (increase in the average risk weight multiplied by the exposure amount):
*20% * SEK 100 billion = SEK 20 billion*

Specific own funds requirement (increase in risk-weighted assets multiplied by the own funds requirement which, including the capital conservation buffer and an assumed countercyclical capital buffer for Sweden of 1.5 per cent[37], is 12 per cent):
*SEK 20 billion * 12% = SEK 2.4 billion*

Specific own funds requirement covered by common equity Tier 1 capital (increase in risk-weighted assets multiplied by the common equity Tier 1 capital requirement, which, including the capital conservation buffer and an assumed countercyclical capital buffer for Sweden of 1.5 per cent, is 8.5 per cent):
*SEK 20 billion * 8.5% = SEK 1.7 billion*

[37] The level only serves to exemplify and is not an indication the countercyclical buffer rate that may be decided.

Calculation example B, specific own funds requirement for Swedish mortgages:

Group B, which *is* one of the four major banks, has an exposure amount of SEK 500 billion for Swedish mortgages. The current average risk weight according to the IRB approach is 10 per cent. For this group, the risk weight floor of 25 per cent involves a specific own funds requirement for Swedish mortgages of SEK 12.8 billion, of which SEK 10.1 billion consists of common equity Tier 1 capital, according to the calculation below.

Increase in the average risk weight (floor reduced by the current average risk weight):
25% - 10% = 15%

Increase in the risk-weighted assets (increase in the average risk weight multiplied by the exposure amount):
*15% * SEK 500 billion = SEK 75 billion*

Specific own funds requirement (increase in risk-weighted assets multiplied by the own funds requirement which, including the capital conservation buffer, a total surcharge of 5 per cent for systemic risk, and an assumed countercyclical capital buffer for Sweden of 1.5 per cent, is 17 per cent):
*SEK 75 billion * 17% = SEK 12.8 billion*

Specific own funds requirement covered by common equity Tier 1 capital (increase in risk-weighted assets multiplied by the own funds requirement which, including the capital conservation buffer, a total surcharge of 5 per cent for systemic risk, and an assumed countercyclical capital buffer for Sweden of 1.5 per cent, is 13.5 per cent):
*SEK 75 billion * 13.5% = SEK 10.1 billion*

4.6.1.6 Expected loss

The capital requirement, expressed in relation to the risk-weighted assets, aims to cover unexpected losses, expressed simply as the losses which exceed the expected loss (see also the fact box on page 46) and which arise in a certain level of financial stress. The expected loss, which should more or less equal the long-term average loss, is normally covered in an average year by the firm's accounting provisions. The IRB rules specify that there is an additional deduction from own funds in cases where the total expected loss amount, calculated using the IRB approach, exceeds the firm's provisions and other value adjustments according to its accounting. Because provisions in an average year in general can be expected to correspond to the expected loss, the

deduction is currently small in relation to the capital requirement for mortgages for most of the firms affected.

The effect of the expected loss amount on capital adequacy is not covered by the risk weight floor. Its impact on own funds will thus continue to be calculated going forward in the same way as it is today.

4.7 Entry into force

The increase to the risk weight floor is a change in practice and not a new regulation. There will thus be no formal date of entry into force. The change in practice is implemented in the authority's affected processes with immediate effect following FI's decision to implement it. A final version of this memorandum will be published when the opinions received have been processed.

4.8 The application of the risk weight floor for foreign branches

Section 2 describes the legal basis for a specific own funds requirement in Pillar 2. FI has decision-making powers relating to the specific own funds requirement for the firms and groups at consolidated level that are domiciled in Sweden, but not relating to foreign branches in Sweden. Nevertheless, despite the lack of formal decision-making powers, FI has the ability to influence the supervisory capital assessment relating to the substantial operations of foreign branches in Sweden through its participation in what are known as supervisory colleges. This occurs through FI taking part in the joint risk assessment of the group, which takes place in the framework of the supervisory college and which forms the basis of the supervisory capital assessment.

Danske Bank's branch is currently the only foreign branch that uses the IRB approach and which conducts substantial operations on the Swedish mortgage market. FI is a member of the supervisory college for Danske Bank, which is headed by the Danish supervisory authority. FI intends to express a wish for the Danish supervisory authority to take into consideration the systemic risks caused by Swedish mortgages in its supervisory capital assessment of Danske Bank.

5 The countercyclical capital buffer

5.1 Introduction

According to the Government's proposal referred to the Council on Legislation, FI is the authority that is to set the countercyclical capital buffer rate in Sweden and for third-country exposures.

This section describes FI's position relating to the choice of method for setting the countercyclical capital buffer rate in Sweden. The chapter also includes

considerations pertaining to the need to activate the countercyclical capital buffer in Sweden given the economic and financial conditions currently prevailing, FI's decision-making procedure and the size of the countercyclical buffer rate, and FI's present view of reciprocity for the countercyclical capital buffer and for establishing the buffer rate for third-country exposures.

5.2 Background

The countercyclical capital buffer is part of the Basel 3 agreement (read more on the Basel 3 agreement in section 1). The background to the introduction of the buffer is that financial markets tend to act in a procyclical manner. In other words, they amplify cyclical fluctuations in the real economy. In periods of high economic growth, banks and investors tend to take growing risks, for instance by increasing lending to the private sector. This can lead to excessive credit growth. When such a period is followed by a recession, when the stress level in the financial system is often high and access to liquidity scarce, the banks tend to tighten credit supply by cutting back on lending to the real economy. This behaviour serves to amplify cyclical fluctuations.

In order to ensure that the banking sector has sufficient capital to supply the economy with credit, even in periods of financial stress, it might be effective to have capital requirements that vary over time. The countercyclical capital buffer is such a capital requirement, which aims to manage cyclical systemic risks. The buffer is activated in economic boom periods, when credit growth is high. In downturns, when unexpected losses can quickly arise and access to capital is limited, the buffer is reduced or released. The buffer built up during the period of high credit growth and high profitability can therefore be drawn down when economic and financial circumstances are less favourable. This is to underpin credit supply because in downturns, credit firms are not forced to tighten lending due to a shortage of capital.

The main purpose of the countercyclical capital buffer is consequently to strengthen the resilience of firms and ensure that the banking system as a whole has sufficient capital to sustain the flow of credit to households and corporations, even at times when shocks to the financial system could cause a credit crunch. A positive side-effect is that the buffer might potentially help curb lending in periods of excessive credit growth, although that is not the main purpose of the buffer.

5.3 Legal basis

5.3.1 Introduction

The provisions of the Capital Requirements Directive on the countercyclical capital buffer are proposed, in the Government's proposal referred to the Council on Legislation, to be implemented in Swedish law through Chapters 6–7 of the capital buffers bill.

The countercyclical capital buffer is to reflect the cyclical systemic risk associated with excessive credit growth in the financial system, and is to be met by firms at individual and consolidated level, see section 7.2.3 of the proposal referred to the Council on Legislation.

5.3.2 The size of the firm-specific countercyclical capital buffer

Pursuant to Chapter 6, section 1 of the capital buffers bill, the countercyclical capital buffer shall be calculated by multiplying the total risk-weighted exposure amount of a firm by a weighted average of the so-called countercyclical buffer rates that apply for countries in which the firm has its relevant credit exposures. The countercyclical capital buffer shall, according to the same provision, be covered by common equity Tier 1 capital. It is proposed that FI be authorised to prescribe what is meant by "relevant credit exposures" . A regulatory proposal has, however, not yet been presented.

FI shall, according to Chapter 7, sections 1 and 2 of the aforementioned bill establish on a quarterly basis a countercyclical *buffer guide* and a countercyclical *buffer rate* in the manner and based on the factors set out in Articles 136.2 and 136.3 of the Capital Requirements Directive. When establishing the buffer rate and the buffer guide, FI shall also take into consideration guidelines from the European Systemic Risk Board (ESRB). In section 7.2.3 of the proposal referred to the Council on Legislation, it is stated that it must be considered natural that in the future FI discusses with the relevant authorities in order to make well-founded decisions on the countercyclical buffer rate. However, the Government does not see a need to set out in law a requirement for consultation to precede decisions in this matter.

The buffer guide shall, according to the aforementioned articles of the Capital Requirements Directive, serve as a reference when FI sets an appropriate countercyclical buffer rate for Sweden. The buffer guide shall be calculated on the basis of the so-called credit gap. This gives the deviation of the ratio of credit-to-GDP from its long-term trend.

The buffer guide shall also serve as a reference for FI's assessment of the size of the countercyclical buffer rate in Sweden. However, section 7.2.3 of the proposal referred to Council on Legislation expresses that decisions on the countercyclical buffer rate should be based on both quantitative and qualitative assessments of the sustainability of the credit trend and the level of systemic risks. FI shall also take into account other relevant variables that could signal the build-up or slowdown of cyclical systemic risk, and perform its own qualitative assessments. The intention is not a mechanical setting of the countercyclical buffer rate.

According to Chapter 7, section 3 of the capital buffers bill, the countercyclical buffer rate shall be between 0 and 2.5 per cent and apply to all credit firms with operations in Sweden. The size of the countercyclical buffer rate shall be expressed as a percentage of the total risk-weighted exposure amount, and in

intervals of 0.25 per cent. FI may, according to the same provision, set a countercyclical buffer rate that is higher than 2.5 per cent, if it is justified based on the factors specified in Articles 136.2 and 136.3 of the Capital Requirements Directive, which, among other factors, refer to forthcoming ESRB guidelines, see Chapter 7, section 3 of the capital buffers bill. This buffer rate will, however, not automatically apply for the branches of foreign firms in Sweden, but must first have been approved by the domestic authorities, as set out in Article 137 of the Capital Requirements Directive.

Decisions to activate or increase a countercyclical buffer rate must contain information about when the buffer rate starts to apply. Decisions involving an increase to the buffer rate must, as a general rule, start to apply twelve months after the decision was announced. However, the decision may start to apply earlier if there are special grounds. Decisions to reduce the buffer rate shall start to apply immediately, see Chapter 7, section 6 of the capital buffers bill. Decisions about the countercyclical capital buffer rate must also be published and motivated, see Chapter 7, section 8 of the same bill.

According to Chapter 10, sections 6–9 of the aforementioned bill, it is proposed that the Government or the authority designated by the Government be authorised to issue regulations on which credit exposures are to be taken into consideration when calculating the countercyclical capital buffer, the calculation of the weighted average of the countercyclical buffer rates, and the obligation of firms to state the geographic location of their credit exposures. The authorisation also includes issuing regulations about exempting small and medium-sized investment firms, management companies and alternative investment fund managers from the requirement to meet a countercyclical capital buffer.

EBA has, supported by the authorisation in Article 140 of the Capital Requirements Directive, prepared proposals for technical supervision standards that specify the method for identifying the geographical location of the relevant credit exposures.[38]

[38] EBA (2013), *Final draft regulatory technical standards on the method for the identification of the geographical location of the relevant credit exposures under Article 140(7) of the capital requirements directive (CRD)*.

5.3.3 ESRB's guidelines

Exactly how ESRB's guidelines and recommendations will ultimately be devised is not yet known, but on 3 March 2014 ESRB published a handbook on macroprudential tools containing some guidance about setting countercyclical buffer rates.[39] FI participates actively in the work with ESRB's guidelines and recommendations. If, contrary to expectations, it emerges at a later date, when ESRB's guidelines and recommendations have been completed, that the positions reported by FI in this memorandum do not coincide with the guidelines and recommendations, FI will be prepared to review its positions.

5.4 Method for setting the countercyclical capital buffer

5.4.1 Position

FI will set the countercyclical *buffer rate* for Sweden on the basis of a qualitative assessment that takes quantitative factors into consideration. *The buffer guide* will be an important but not determining factor in the overall assessment. The qualitative assessment will also take account of other quantitative variables that may change over time.

The Basel Committee's standardised approach will be used to calculate the countercyclical buffer guide.

5.4.2 Reasons for FI's position

As described in section 5.3, according to the legal basis, FI must calculate and publish a buffer guide and a buffer rate quarterly. The buffer guide is to provide the basis for determining the size of the countercyclical buffer rate, but the decision should not only be based on the buffer guide. Other relevant variables too that could signal a build-up of or slowdown in cyclical systemic risks, and ESRB guidelines and recommendations, are to be taken into account.

The handbook published by ESRB in March 2014 contains preliminary results and conclusions from a comprehensive analysis performed by ESRB's expert group for guidance in setting countercyclical capital buffer rates. The analysis shows that the credit gap, calculated using the standardised approach of the Basel Committee, is a good indicator with good signalling qualities for the build-up of systemic risk that could cause the buffer to be activated or increased. At the same time, it is ascertained that the indicator does not always work well. Hence, other relevant indicators, such as various measures of the credit growth, should also be taken into consideration to supplement assessing the build-up of systemic risks. In addition, the credit gap and the supplementary variables used in the analysis should be continually evaluated.

[39] ESRB (2014), *The ESRB Handbook on Operationalising Macro-prudential policy in the Banking Sector*.

In summary, ESRB finds that the qualitative assessment, combined with the credit cap and other relevant indicators, should guide the national authority in setting the countercyclical buffer rate.

FI will follow the directive and ESRB's guidance when deciding on the countercyclical buffer rate. Hence, the buffer rate will be set on the basis of a qualitative assessment that takes account of various quantitative indicators that will change over time.

FI will use the standardised approach for calculating the buffer guide for Sweden. The method is described in the next section.

The buffer guide will be a part of the overall assessment of the level of the buffer rate, but will not be a determining factor in the decision. The reason is that the credit gap, calculated using the standardised approach, can sometimes give misleading signals and must therefore be interpreted with caution.

The shortcomings of the standardised approach are, for instance, linked to the statistical method used to estimate the long-term trend for credit in relation to GDP, known as the HP filter[40], which aims to reflect the long-term sustainable credit level. Because the trend is calculated mechanically, its ability to explain the equilibrium level of credit is deficient. This can be particularly problematic after a long period of excessive credit growth. The mechanical trend then continues to increase as a result of earlier credit growth, and indicates that credit growth in relation to GDP is sustainable. If this growth is not sustainable, the credit gap and hence the buffer guide too will underestimate the risks in the system and thereby also the need for a countercyclical buffer. One way of reducing the uncertainty in estimating the trend, but which still does not resolve the fundamental problem, could be to extend the data series by a simple forecast over a certain time horizon before the HP filter is applied. This method has been used by Norges Bank in connection with the central bank advising the Norwegian Ministry of Finance on setting the countercyclical buffer rate in Norway.

Another shortcoming is the sensitivity of the method to short-term fluctuations in the GDP trend. The method might indicate a high buffer level in a temporary downturn in GDP in connection with a dip in the economy. The reduction in GDP (the denominator) makes the credit gap larger, given unchanged lending (the numerator). However, such a situation need not be associated with the build-up of cyclical systemic risks.

The analyses of ESRB and the Basel Committee also show that the credit gap is a less suitable indicator for determining when the buffer should be released. In decisions about releasing or reducing the buffer, it is instead more

[40] The trend is calculated using a one-sided Hodrick–Prescott (HP) filter with smoothing parameter lambada of 400,000. This is based on an assumption that a financial cycle is four times as long as a normal business cycle.

informative to use high-frequency variables such as indicators that measure the stress level of the financial system. Because of the lack of clear indicators with sound signalling qualities in releasing or reducing the buffer, the judgement and qualitative assessments of the authority will be all the more important in such decisions. According to ESRB and the Basel Committee, a release or reduction of the countercyclical capital buffer may occur quickly or gradually. In a course of events in which major losses are incurred in the banking system in a short space of time, the buffer should be turned off immediately in order to release capital that can be used to cover such losses and hence reduce the risk of a credit crunch. If, however, the losses arise in a more protracted course of events instead, the level of the buffer might need reducing gradually as the risks are curbed.

5.5 Description of the Basel Committee's standardised approach

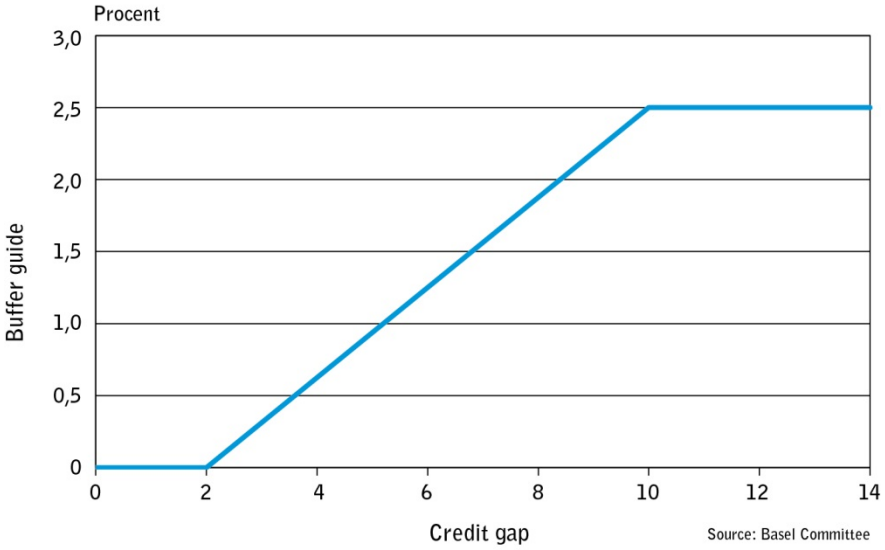
The Basel Committee's standardised approach[41], which FI uses to calculate the buffer guide, is based on the credit gap which is a measure of the deviation of the ratio of credit-to-GDP from its long-term trend. An initial step in establishing the credit gap is to calculate the ratio between aggregate credit to the private sector and GDP. The Basel Committee recommends that aggregate credit be as broadly defined as possible.

The long-term trend for the ratio of credit-to-GDP is then calculated. The credit gap is the difference between the ratio and the calculated trend, and measures the deviation from trend in percentage points. A large, positive credit gap is an indication that lending has increased to an excessive level in relation to GDP. It can imply that risks in the financial system have increased and that there is thus reason to activate or increase the countercyclical capital buffer.

In the final step, the credit gap is converted to a buffer guide. A quantitative rule specifies how the credit gap and buffer guide are to stand in relation to each other. According to the rule, the buffer guide shall be greater than zero when the credit gap is higher than 2 per cent, and then increase linearly with the credit gap until the buffer reaches its maximum level (e.g. 2.5 per cent of the risk-weighted exposure amount) when the credit gap reaches 10 per cent. As mentioned, 2.5 per cent does not constitute the maximum level for the countercyclical buffer rate. FI may set a buffer rate that is higher than 2.5 per cent when motivated. However, 2.5 per cent is the upper limit for the buffer rate to apply automatically for firms in other Member States. The linear function that determines the relationship between the credit gap and buffer guide is shown in diagram 5.1.

[41] BCBS (2010), *Guidance for national authorities operating the countercyclical capital buffer*.

5.1 Relationship between the credit gap and buffer guide according to the standardised approach



5.6 The countercyclical buffer rate and the buffer guide for Sweden

5.6.1 Position

The countercyclical buffer guide for Sweden is to be set at 1.5 per cent given the present economic conditions.

FI finds that the countercyclical capital buffer should be activated, i.e. that the level of the countercyclical buffer rate should be set at higher than zero (0) in Sweden given the present economic conditions. FI will consult with other relevant authorities and seek input from the parties concerned prior to setting the buffer rate.

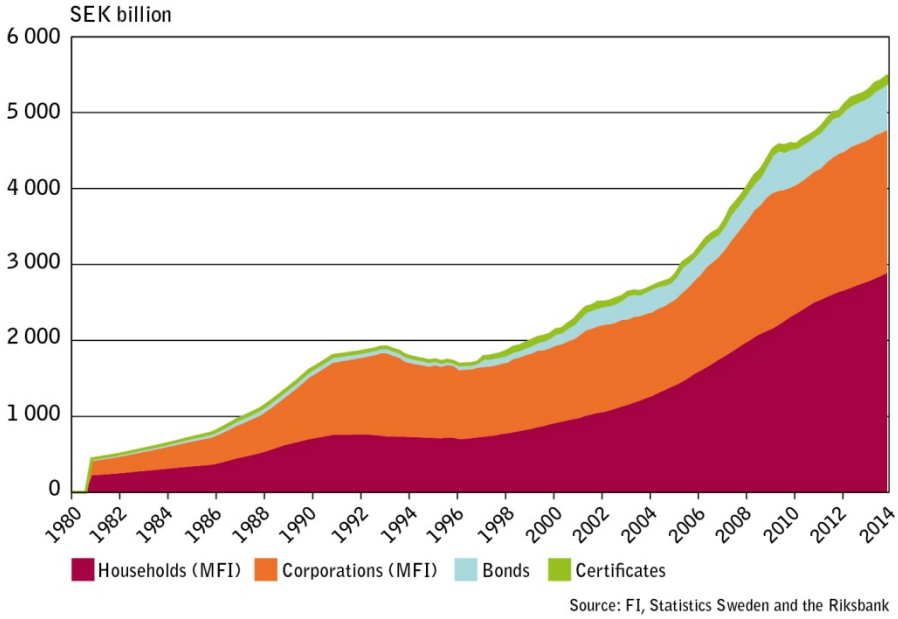
5.6.2 Reasons for the position

According to the standardised approach, the countercyclical buffer guide in Sweden is 1.5 per cent for the fourth quarter of 2013, which is the most recently available outcome. The following describes the stages for deriving this buffer guide. All amounts are in nominal terms. Appendices 1 and 2 include further details about how the calculation was performed.

The Basel Committee recommends that the credit measure used for calculating the credit gap should be as broad as possible so that it also captures credits not granted through traditional bank loans. For Sweden, the measure of total credit to the private sector covers all corporate and household lending issued through

monetary financial institutions (MFI)[42] and the total market financing of the corporations. [43] The market financing of corporations has been defined as the value of all outstanding corporate bonds and certificates traded on the fixed-income market.[44] Diagram 5.2 shows the lending development in Sweden over time in nominal terms.

5.2 Lending to the private sector in Sweden



Source: FI, Statistics Sweden and the Riksbank

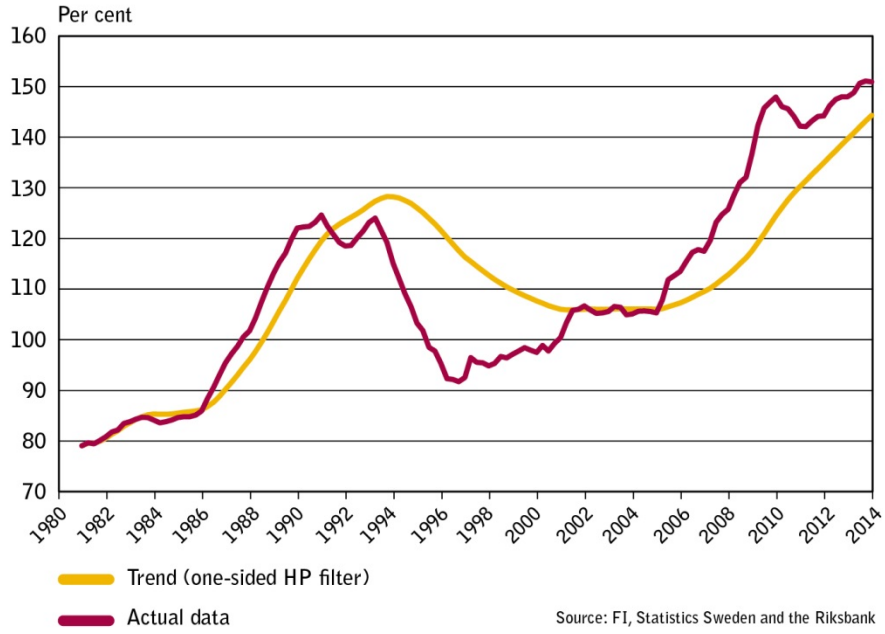
The credit measure in diagram 5.2 has been used to calculate the credit-to-GDP ratio, as shown in diagram 5.3. It can be ascertained that total corporate and household lending in Sweden has risen faster than GDP in the 2000s. Total lending to the private sector currently amounts to around 150 per cent of GDP over the past year in Sweden.

[42] Monetary financial institutions (MFI) include banks, mortgage institutions, financial companies, municipal and corporate-financed institutions, monetary securities companies and monetary investment funds (money market funds).

[43] Intragroup loans for non-financial corporations have been excluded from the credit measure because they are often based on other motives than financial ones (e.g. tax reasons).

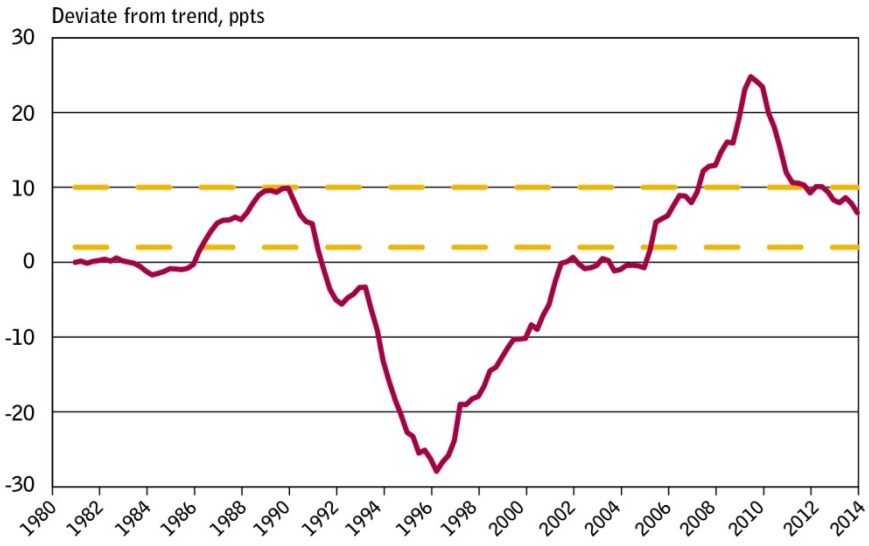
[44] For more credit data information, see Appendix 1.

5.3 Credit in relation to GDP, actual data and trend



The total credit-to-GDP ratio is thus still at a historically high level. The calculation of the credit gap indicator, i.e. the deviation of the ratio from the calculated long-term trend, shows that the ratio is also higher than the trend since the gap is positive (see diagram 5.4).

5.4 Credit gap according to the standardised approach



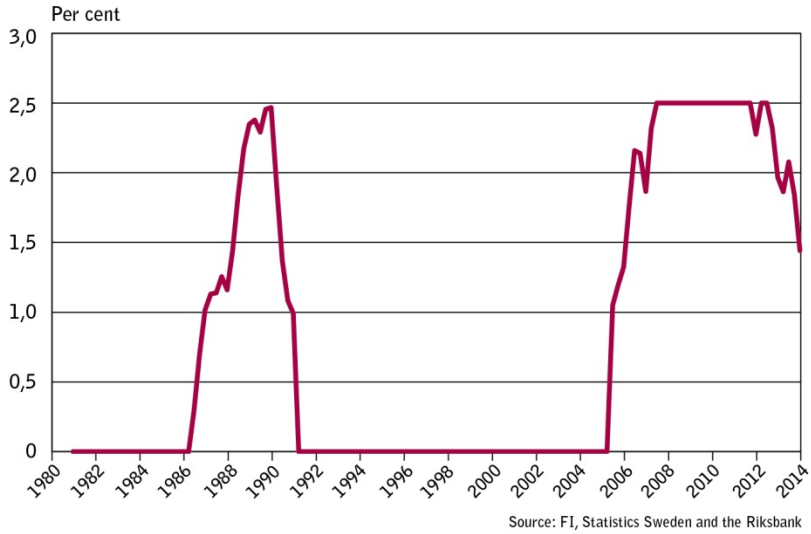
Note. The dotted lines show the thresholds (2 per cent and 10 per cent, respectively) which, under the standardised approach, are used to convert the credit gap into a buffer guide.

Source: FI, Statistics Sweden and the Riksbank

Historical buffer levels in Sweden can be calculated by applying the quantitative rule that determines the relationship between the credit gap and buffer level. The result of the calculation is shown in diagram 5.5. The calculations show that the countercyclical capital buffer would have been activated on two occasions during the period 1980–2013. In 1986 – ahead of

the crisis of the 1990s, and in 2005 – ahead of the latest financial crisis. The result for the fourth quarter of 2013 indicates that the current buffer guide amounts to just shy of 1.5 per cent.

5.5 Buffer level according to the standardised approach



Source: FI, Statistics Sweden and the Riksbank

5.6.2.1 Other considerations

Introduction

The buffer guide for Sweden is to be set at 1.5 per cent. FI sets the value on the basis of a calculation made using the standardised approach of the Basel Committee, as described above.

Due to the deficiencies in the standardised approach, as described in section 5.4.2, the buffer guide should however not be the only indicator taken into account when setting the countercyclical capital buffer. The assessment of an appropriate buffer rate level thus needs to be supplemented by, on the one hand, information about other relevant indicators that could signal the build-up of systemic risks and, on the other hand, qualitative assessments.

Development of corporate and household debt

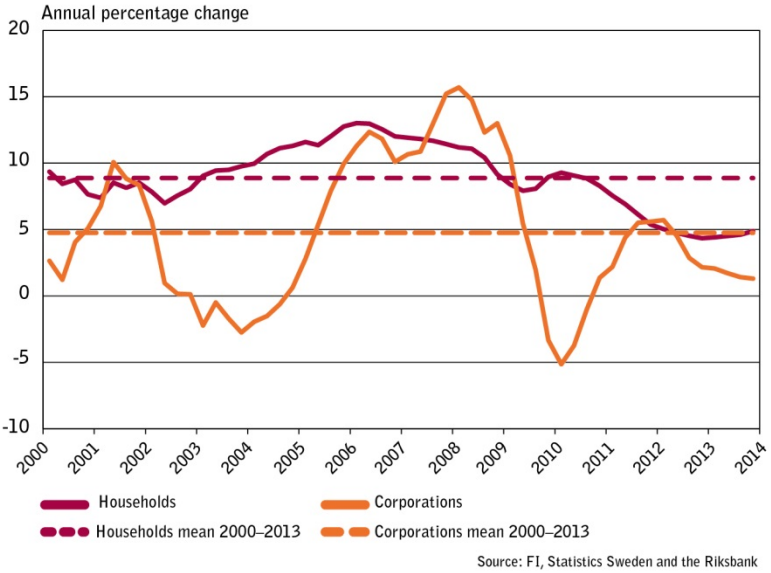
In order to gain a better insight into the development oflending over time, it is interesting to break down the aggregate credit gap measure and analyse how lending to the household and corporate sectors, respectively, has progressed.

The most important conclusion that can be drawn from this analysis is that the rate of lending to, households and corporates, respectively, varies to a relatively high degree. In recent years, corporate lending has mainly increased at a rate that is close to or even lower than nominal GDP growth, while

household lending, despite a certain slowdown in recent years, continues to rise at a faster rate than GDP growth.

The growth rate in lending to households and corporates respectively, in Sweden is shown in diagram 5.6. According to Financial Market Statistics, household loans from MFI have on average increased by almost 9 per cent annually over the period 2000–2013. The growth rate in corporate lending from MFI has been lower on average, at just under 5 per cent. Compared with household lending, corporate lending shows greater volatility and a clearer link to the developments in the business cycle. The sharp volatility in corporate lending could also be a sign of the procyclicality in the lending of credit firms, with major credit expansion in boom times and heavy tightening in downturns.

5.6 Growth rate in lending to households and corporations from MFIs



Source: FI, Statistics Sweden and the Riksbank

It is clear that the development of the total indebtedness for the private sector in Sweden has mainly been driven by household borrowing. Since the financial crisis, however, the growth rate for both household and corporate credits has decreased. Diagram 5.6 shows that both household and corporate lending through MFIs are currently below the historical averages. In recent years, total lending has slowed down and the growth rate today is clearly much lower than before the financial crisis, when the rate of increase in lending reached all-time highs (see table 1).

Table 5.1 shows the annual rates of increase for household and corporate lending, respectively, and for total lending in 2013.

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

Annual percentage change

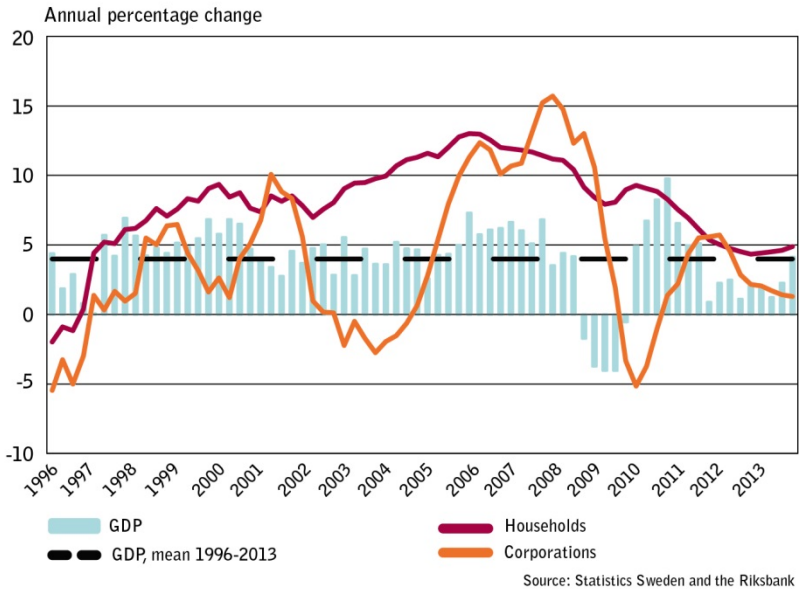
	Households	Corporations (ex. market)	Corporations (inc. market)	Total credit granting/lending
Q1 2013	4.4	2.1	2.9	3.7
Q2 2013	4.5	1.7	3.0	3.8
Q3 2013	4.6	1.4	3.0	3.8
Q4 2013	4.9	1.3	3.9	4.4
FY 2007	11.7	12.5	12.1	11.9
FY 2013	4.6	1.6	3.2	3.9

Source: FI, Statistics Sweden and the Riksbank

In 2013, aggregate lending rose by almost 4 per cent compared to almost 12 per cent in 2007, when the credit expansion of the 2000s was close to its peak. Despite this stabilisation, however, the loan stock of households is still increasing faster than that of corporations, in terms of corporate lending both excluding and including market financing.

Since the end of the 1990s, lending to households has continually increased and growth rates have clearly outstripped nominal GDP growth (see diagram 5.7). Corporate lending tends instead to develop the same way as the business cycle and hence GDP growth. As was the case for nominal GDP growth, corporate lending waned in the wake of both the IT bubble and the latest global financial crisis, while household lending was affected to a very minor extent by these economic downturns.

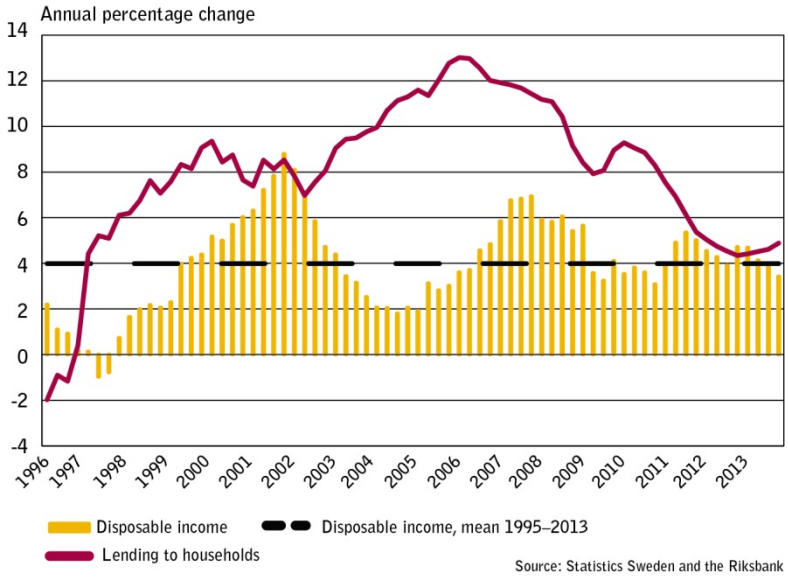
5.7 Growth rate in lending to households and corporations and nominal GDP growth



Source: Statistics Sweden and the Riksbank

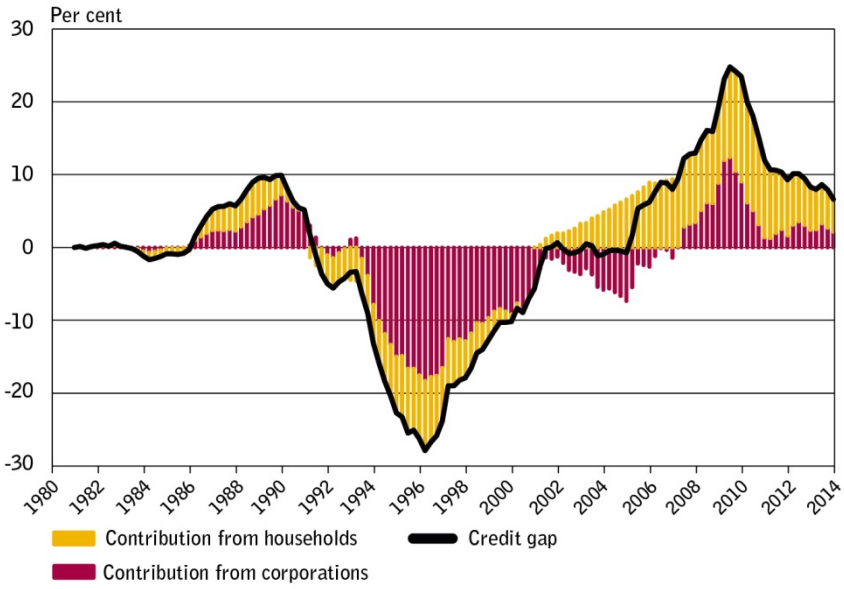
A comparison of credit growth in the household sector with the development of household nominal disposable income shows that household credits have increased at a faster rate than income (see diagram 5.8). However, this has stabilised to a certain extent in the last few years. Disposable income has increased at a healthy rate, close to the historical average, while growth in household credits has instead slowed down to be more in line with disposable income.

5.8 Growth rate in lending to households and nominal disposable income



As a supplement to studying actual growth rates, the respective contributions of households and corporations to the total credit gap can also be calculated (see diagram 5.9). Household credit growth accounts for over two thirds of the total credit gap. In other words, lending to households contributes the most to the credit gap, both now and a few years historically.

5.9 Credit gap broken down by contributions from households and corporations



Note. Contributions from households and corporations sum up to the total credit gap

Source: FI, Statistics Sweden and the Riksbank

As expressed above, households have contributed the most to the debt build-up in the private sector in Sweden in recent years. However, it is also clear that a certain degree of stabilisation has occurred after the financial crisis. The indicators described above suggest that credit growth does not appear to be excessively high in Sweden today. At the same time, household indebtedness, i.e. the total debt of households as a share of disposable income, is high, which could mean that lending has built up risks in the Swedish economy that could indirectly affect the corporate sector. Total household debt currently amounts to around 175 per cent of disposable income, which is a high level in both a historical and international perspective (see also diagram 4.1 in section 4). This high level of indebtedness can pose a risk to the stability of the financial system.

The analysis in this section shows that total lending remains high in Sweden, but that the growth rate has slowed down and is currently relatively moderate, particularly in the corporate sector, but also in the household sector. Corporate lending has slowed down more than household lending and is currently growing at around the same rate as nominal GDP. Corporate lending has also proven to fluctuate more with the business cycle. According to the standardised approach, the current relatively moderate credit growth in the corporate sector is making a positive contribution to the credit gap (see diagram 5.9), but this should be seen in light of the fact that the calculation in the standardised approach is affected by the very low lending to the corporate sector almost entirely throughout the 1990s. Taking this into consideration, there does not seem to be a credit-driven build-up of risk in the corporate sector. As a counterweight, there is cumulative high indebtedness among households that

could trigger or amplify an economic downturn and pose a risk to financial stability.

FI's latest mortgage report[45] showed that Swedish households have high resilience and repayment ability, even in stressed situations such as in interest rate hikes or increased unemployment. This implies that the risk for major credit losses on mortgages is still limited. However, it is important to bear in mind that, although households could continue to pay off their loans in a stressed financial situation, indirect negative effects could arise in other parts of the economy. In a crisis, it is probable that households would cut back on other expenditure in order to pay their loans or to restore their balance sheets, and household consumption could consequently decrease considerably. This could in turn affect corporations with a negative impact on their profitability and ability to pay their loans, resulting in a heightened risk of credit losses in the corporate loan portfolios of banks. In light of this, it may therefore be desirable for the banks to build up a buffer to cover potential credit losses also in exposure classes other than household exposures. FI is therefore of the opinion that the banks need to have a countercyclical capital buffer to make them more resilient to potential future credit losses.

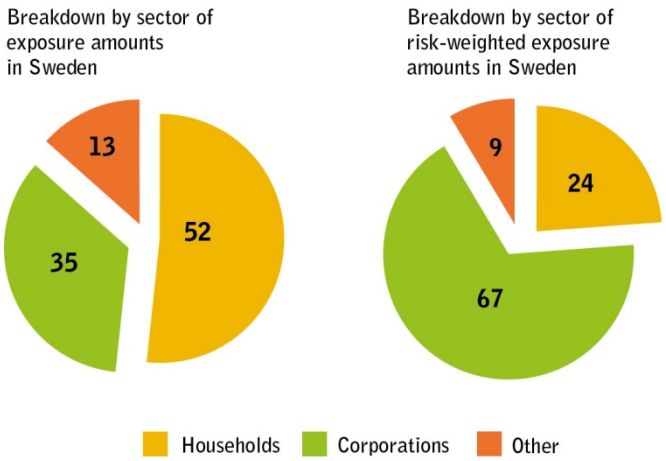
The effect of the countercyclical capital buffer on the capital requirement for household and corporate exposures, respectively

As mentioned previously, the credit gap is based on a broad measure of credit and includes not only lending from financial institutions, but also market financing. The reason for this is that banks and other credit firms might be affected in one way or another by the consequences of a period of excessive credit growth, despite them not having contributed themselves to inflating such excessive credit growth. Credit firms might hence be forced to hold more capital also in a scenario where they themselves have exercised restraint in lending.

In addition to the measure of credit being broader than the exposures to which the buffer is to be applied, there is a further aspect to take into consideration in this context. The countercyclical capital buffer is applied to the total risk-weighted exposure amount in Sweden. Hence, the buffer's impact in absolute terms will be greater on corporate exposures than on household exposures. This is shown by the breakdown between the various sectors of non-risk-weighted and risk-weighted credit exposures at aggregate level for the four major banks, see diagram 5.10.

[45] FI (2014), *The Swedish mortgage market 2014.* Published on fi.se on 10 April 2014, FI ref. 13-7755.

5.10 The major banks' aggregate non-risk-weighted and risk-weighted exposure amounts for credit risk, broken down by different sectors (per cent)

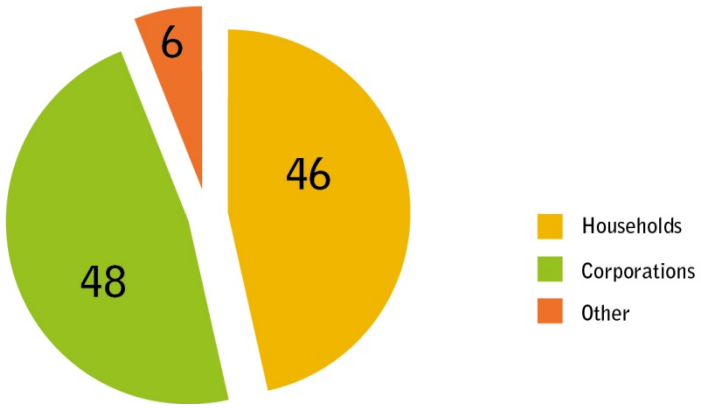


Household exposures account for just over half of the major banks' total exposure amount for credit risk, while corporate exposures account for around one third. The breakdown appears differently in terms of the total risk-weighted exposure amount for credit risk. Two thirds of the major banks' risk-weighted exposure amounts are attributable to corporations, while barely one quarter is attributable to households. This is in turn due to the fact that corporate exposures have a higher risk weight on average than household exposures. Since the countercyclical buffer rate is applied to the banks' risk-weighted exposure amount in Pillar 1, the effect will therefore be greater for corporate exposures, measured in terms of non-risk-weighted exposure amounts.

Section 4 states that FI finds that the calculation of the Pillar 2 basic requirement, which results when applying the risk weight floor should include the countercyclical capital buffer rate for Sweden. The risk weight floor for mortgages thus entails that household sector's share of the concerned firms' risk-weighted exposure amount in practice becomes larger.[46] This is shown in diagram 5.11, which can be compared to diagram 5.10.

[46] In legal terms, the share of the countercyclical capital buffer affected by the risk weight floor does not form part of the countercyclical capital buffer, but is included in the specific own funds requirement in Pillar 2. It is also depicted in this way in the consequence analysis in section 7.

5.11 The major banks' aggregate risk-weighted exposure amounts for credit risks, taking account of a risk weight floor for mortgages of 25 per cent, broken down by different sectors (per cent)



However, it is still the case that the buffer requirement hits the corporate exposures of banks slightly harder than their household exposures, measured in terms of non-risk-weighted exposure amounts. In this context, it should also be noted that small and medium-sized corporations are those that rely on bank loans the most. Large corporations often have access to market financing as an alternative.

The countercyclical capital buffer is, in this respect, a blunt instrument that does not take account of whether credit growth in a certain sector is excessive, but only takes aggregate credit growth into consideration. In general, when the causes of systemic risk can be identified, it is more effective to focus on these causes to better prevent and manage the systemic risks. The analysis presented in the memorandum shows that lending to households has been the driving factor, contributing the most to credit expansion in Sweden. The fact that the countercyclical capital buffer has somewhat greater effects on the corporate sector must be taken into consideration when deciding on the buffer rate.

The effect of raising the risk weight floor for mortgages to 25 per cent

The position described in section 4, that the risk weight floor is to be increased by 10 percentage points, means an additional amount of over SEK 40 billion[47] in own funds requirements being needed to cover the risks in Swedish mortgages. This can be related to the own funds requirements of SEK 18 billion[48] that would be the result if a countercyclical capital buffer of 1.5 per cent were introduced in Sweden, as is indicated by the buffer guide calculated using the standardised approach for the credit gap.

By increasing the risk weight floor for mortgages to 25 per cent, the need for a high countercyclical capital buffer decreases. Since the largest part of the credit gap is explained by growth in credit to households, an increase of the risk

[47] Based on the information in table 7.1.

[48] Based on the information in table 7.1.

weight floor appears to be a much more appropriate tool. This tool can take account not only of the change in lending, but also cumulative risks.

Overall assessment

As described previously, activating the countercyclical capital buffer entails the banks holding a buffer to cover potential losses when a crisis strikes, while at the same time maintaining the ability to continue providing credit to the real economy. The countercyclical buffer is to be built up when the economy is strong and credit growth is high, and the possibilities for banks to build up a capital buffer are favourable.

Previously in this section, it has been ascertained that credit growth does not appear to be excessively high in Sweden today. The growth rate for corporate lending is lower than nominal GDP growth. For household credits, the growth rate is slightly higher than nominal GDP growth, but has slowed down from previous levels and is in line with growth in disposable income. At the same time, household indebtedness remains high in both a historical and international perspective. The credit expansion that has taken place for a number of years can pose risks to the financial system and, ultimately, the real economy. FI finds that there are grounds for activating the countercyclical capital buffer in Sweden, given the risks overall and present economic circumstances. The analysis shows that there are grounds to suggest that the countercyclical buffer rate could be set both higher and lower than the value indicated by the buffer guide.

In addition, it is important, when setting the buffer rate, to also take account of other measures that FI will take to manage systemic risks. For example, FI will take account of the increase in the risk weight floor for mortgages. FI finds that increased risk weights for mortgages, combined with an activation of the countercyclical capital buffer, is an appropriate and effective approach for raising the resilience of the banks' without simultaneously increasing too much the capital requirements for corporate lending.

FI has not yet taken a position on the level of the countercyclical buffer rate. According to the proposal referred to the Council on Legislation, FI shall discuss with relevant authorities in order to make well-founded decision. In light of this, FI will await the forthcoming discussion in the Financial Stability Council and seek input from the parties concerned before FI takes a position on the level of the countercyclical capital buffer rate, read more about the decision-making process in section 5.9.

5.7 Reciprocity and setting a countercyclical buffer rate for a third country

5.7.1 Introduction

The competent authority of each country sets the buffer rate that is to apply for that country. Thus it must be specified how the Swedish firms with exposures outside of Sweden are to apply these buffer rates.

5.7.2 Position

FI will, as of the time of the Swedish law coming into force, recognise the countercyclical buffer rate decided by a competent authority of another EEA country up to 2.5 per cent.

For countercyclical buffer rates above 2.5 per cent decided by the competent authority of another EEA country, FI will decide on the application in each individual case as the need arises.

FI will not set a countercyclical buffer rate for non-EEA countries besides the buffer rate established by the country, given the current economic conditions. This position will be regularly reviewed.

5.7.3 Legal basis

The provisions on reciprocity of the Capital Requirements Directive regarding countercyclical capital buffer rates are, according to the Government's proposal referred to the Council on Legislation, implemented in Swedish law through Chapters 6-7 of the capital buffers bill and section 5 of the bill implementing the Capital Buffer Act.

FI may, according to section 5 of the bill implementing the Capital Buffers Act, recognise until 31 December 2018 the shorter transitional periods of other Member States for the countercyclical capital buffer in accordance with Article 160.6 of the Capital Requirements Directive. When taking decisions to recognise the countercyclical capital buffer rates of other Member States, FI shall meet the notification obligation specified in the aforementioned Article of the Capital Requirements Directive. According to the notification obligation, FI shall inform the parties concerned of its recognition, including the EU Commission, ESRB, EBA and relevant supervisory colleges.

As of 31 December 2018, when calculating the firm-specific countercyclical capital buffer for exposures in other EEA countries, the countercyclical buffer rate decided by the competent authority of that country will always be applied, although no more than 2.5 per cent (see Chapter 6, section 5 of the capital buffers bill). If the firm-specific countercyclical capital buffer is to be calculated based on a countercyclical buffer rate determined by a foreign

competent authority within the EEA, the buffer rates shall be applied as of the date set by the foreign authority (Chapter 6, section 6 of the same bill). If a foreign authority within the EEA has set a countercyclical buffer rate exceeding 2.5 per cent of the total risk-weighted exposure amount, FI may, according to Chapter 7, section 4 of the capital buffers bill decide that Swedish firms shall, for relevant credit exposures in that country, apply a buffer rate exceeding 2.5 per cent of the total risk-weighted exposure amount. However, it cannot be a question of the latter until after 31 December 2018.

FI may, according to Chapter 7, section 5 of the aforementioned bill, also set the countercyclical buffer rate that the domestic firms are to apply for exposures to a third country, i.e. non-EEA countries, in calculating the firm-specific countercyclical capital buffer. This possibility presupposes either that there is no buffer rate for the third country to which one or several firms in Sweden have exposures, or if a set countercyclical buffer rate in a third country is insufficient to protect the firms in Sweden from risks associated with excessive credit growth in the third country. FI may then apply a higher but not a lower buffer level than that set by the third-country authority for the domestic firms' calculation of the institution-specific buffer rates. If the set buffer rate of the foreign authority exceeds 2.5 per cent, there is no obstacle to setting a rate below that level. However, the level may not be below 2.5 per cent. Hence, if FI has not approved the higher countercyclical buffer rate of a third country, firms shall, to their exposures in the third country, apply a countercyclical buffer rate of 2.5 per cent. If, on the other hand, FI has chosen to set a higher buffer rate for the third country than the buffer rate that already applies, FI shall also set a date from which the domestically authorised firms are to apply the higher buffer rate in calculating the institution-specific countercyclical capital buffer. The date may not be later than 12 months following the decision. If the date is less than 12 months following the decision, this shall be motivated on specific grounds (see Chapter 7, section 6 of the aforementioned bill).

According to an authorisation in Article 138 of the Capital Requirements Directive, ESRB may issue recommendations regarding the suitable countercyclical buffer rate for exposures in a third country.

5.7.4 Reasons for the position

FI generally takes a positive view to Swedish firms operating in other countries applying the same countercyclical buffer rates as the foreign firms. This is of importance so that firms in different countries can compete on equal terms. It is also important in preventing firms from circumventing the measures of authorities by transferring operations to other countries, which could lead to the measures not having the intended effect. FI is also understanding of the fact that other countries, like Sweden, see a need to set a shorter transitional period for the countercyclical capital buffer than that which applies as the lowest rate of introduction according to the Capital Requirements Directive.

FI's generally positive attitude to Swedish firms having to apply the same countercyclical buffer rates as the foreign firms applies irrespective of the buffer requirement level. When setting a buffer rate above 2.5 per cent, FI finds, however, that there may be specific circumstances that need to be analysed. FI therefore reserves the right to determine, in each individual case, whether buffer rates above 2.5 per cent shall be applied.

5.8 Calculation of the firm-specific countercyclical buffer rate

Each firm shall calculate a firm-specific buffer rate that is to form the basis of calculating how large a countercyclical capital buffer the individual firm is to maintain. The consequence analysis in section 7 provides an estimation of the firm-specific countercyclical buffer rate and the capital requirements in which it results for the 10 largest credit firms in Sweden.

5.9 FI's decision-making process for setting the countercyclical buffer rate and the buffer guide

According to Chapter 7, section 1 of the capital buffers bill, FI shall, on a quarterly basis, set a countercyclical buffer guide and a countercyclical buffer rate.

Neither the law nor the proposal referred to the Council on Legislation express the form in which FI is to issue these decisions. Such decisions, however, have a general impact and affect a wide range of firms, because all firms concerned must apply the buffer rates in their calculations of the firm-specific countercyclical buffer rate. FI thus finds that it is a matter of setting standards and adoption should be in the form of regulations. FI therefore assumes that the Government, in the forthcoming ordinance, will authorise FI's implementation competence in this regard so that FI can adopt these rates in the form of regulations. This should also apply in relation to decisions on the recognition of the buffer rates of other countries according to Chapter 7, section 4 of the capital buffers bill. In connection with a decision on such a regulation or amendments thereto, FI will also publish a decision memorandum in which FI's grounds for the decision will be motivated in accordance with the requirements of Chapter 7, section 8 of the capital buffers bill.

FI intends, after consultation with other relevant authorities in the Financial Stability Council (see section 5.6.2.1), to submit a proposal for a regulation regarding the countercyclical buffer rate and, in connection therewith prepare a consultation memorandum. FI will at that time take account of the latest available data and hence an up-to-date overview of economic conditions.

6 Risk weights for Norwegian mortgages

6.1 Introduction

By reason of a request from the Norwegian supervisory authority, Finanstilsynet, FI describes in this section its view of risk weights for Norwegian mortgages. Finanstilsynet wishes, for Swedish firms operating on the Norwegian mortgage market, that FI applies the tightened requirements for risk weights for Norwegian mortgages that Finanstilsynet intends to introduce for Norwegian firms.

6.2 Background

In a letter to FI dated 16 January 2014[49] Finanstilsynet described the authority's plans to tighten requirements for firms' calculations of risk weights for Norwegian mortgages in the framework of the IRB approach. In the letter, Finanstilsynet stated that the tightened requirements should also be applied to Swedish banks operating on the Norwegian mortgage market, and requested FI's comments on this.

On 21 February 2014, Finanstilsynet sought input on the plans to tighten the requirements from Finance Norway (FNO) – the federation for banks, insurance companies and other financial institutions in Norway (Finansnaeringens Fellesorganisasjon).[50] In the letter to FNO, Finanstilsynet wrote that the authority intends to make a final assessment on devising the tightened requirements based on the input received, and communicate this to the banks. The final day for submitting feedback was 31 March 2014.

FI responded to Finanstilsynet's request for comments in a letter on 11 March 2014.[51] The content of the letter was described on FI's website on 3 April.

6.3 FI's approach to Finanstilsynet's request

In the letter to Finanstilsynet, FI stated the following.

FI is understanding of Finanstilsynet's intention to increase the risk weights for Norwegian mortgages, and takes a positive view to Swedish firms operating on the Norwegian mortgage market applying risk weight levels similar to those of the Norwegian firms.

Finanstilsynet intends to introduce a number of limitations on how the risk weights are calculated directly in the IRB models under Pillar 1. The part of the tightened requirements for risk weights that ensues from Norway having raised

[49] The letter was published on finanstilsynet.no on 9 April 2014.

[50] The letter was published on finanstilsynet.no on 21 February 2014.

[51] The letter was published on finanstilsynet.no on 9 April 2014.

the so-called LGD floor already applies to Swedish firms, because this ensues from the Capital Requirements Regulation.[52] FI intends to introduce the further tightening described by Finanstilsynet in the framework of the supervisory capital assessment in Pillar 2.

Before Finanstilsynet has set out the tightened requirements in their final form, FI does not however have the possibility of describing exactly how FI's implementation of the increase to risk weights in the framework of Pillar 2 will be devised, and how large this increase will be. FI's approach is, however, as already stated, that the Swedish firms shall apply risk weights similar to those of the Norwegian firms.

FI's response entails that FI intends to implement further increases to the risk weights for Norwegian mortgages supported by the same legal grounds as for the introduction of the risk weight floor for Swedish mortgages, see section 4 and the memorandum *Risk weight floor for Swedish mortgage*s, published on fi.se on 21 May 2013.

6.4 Agreement in the framework of supervisory colleges

Section 2.8.6 provides a brief description of the provisions that govern how FI will agree on the supervisory capital assessment in Pillar 2 with other relevant authorities for firms with cross-border operations. "Relevant authorities" refers, for the purposes of this agreement, to authorities responsible for the supervision of subsidiaries.[53] Hence, supervisory authorities in countries where the group conducts operations through a branch are not formally party to the agreement.

The Swedish firms that conduct operations of any significance on the Norwegian mortgage market and use the IRB approach for Norwegian mortgages are Handelsbanken through a branch and Nordea through subsidiaries.[54] FI is, as the supervisory authority in the country in which the group is domiciled, chair of the supervisory colleges for Handelsbanken and Nordea. Finanstilsynet is a member of both colleges.

For Nordea, Finanstilsynet is covered by the formal, common agreement regarding a suitable level for the group's own funds. For Handelsbanken, Finanstilsynet does not have any formal decision-making powers because the operations are run through a branch. However, Finanstilsynet has the ability to influence the supervisory capital assessment of Handelsbanken too through its participation in the supervisory college. This occurs through the authority

[52] The increase is in accordance with Article 164.5 of the Capital Requirements Regulation. According to Article 164.7, the firms of one Member State shall apply the higher minimum LGD values that have been determined in another Member State to exposures secured by property located in that Member State.

[53] See Article 113.1 of the Capital Requirements Directive.

[54] The tightened requirements will not be applicable to firms that do not use the IRB approach.

taking part in the joint risk assessment of the group, which takes place in the framework of the supervisory college and which forms the basis of the supervisory capital assessment. (See also section 4.8.)

To sum up, the supervisory colleges for Nordea and Handelsbanken provide a suitable forum for reaching, in more detail, an agreement on establishing capital requirements for Norwegian mortgages

7 Consequence analysis

7.1 Introduction

The purpose of FI's positions set out in this memorandum is to reduce the probability of financial crises, increase freedom to act for individual firms and for the entire financial system in the event of shocks, and to reduce costs for tax payers when a financial crisis strikes. Because, from a computational point of view, capital is a more expensive funding source than other funding, heightened capital requirements can lead to higher costs for the banks. Ultimately, many factors influence the extent to which higher capital levels lead to an increase in the banks' total funding cost in the long term, and by how much costs increase for the banks' customers in that process. In the assessment of the economic effects, consideration must also be given to the benefits to society from e.g. a reduced probability of financial crises, and the major costs for society they entail.

The following section describes the effects to which FI's proposed application of the new capital adequacy rules are expected to lead for individual firms, on competition and the market, households and non-financial corporations and on the economy.

On the whole, FI finds that the forthcoming regulations bring about increased economic benefit because the costs are considered limited and the advantages of having stable banks are great. At the same time, there is a need to continually follow up on the effects of the regulation on the banks' behaviour and risk-taking, and on lending to non-financial corporations and households.

7.2 Effects for financial institutions

7.2.1 Firms affected

The positions in this memorandum concern, at least to some extent, all firms covered by the capital adequacy regulations, which comprises all credit market companies, including banks, and investment firms, at both the individual and consolidated level.

7.2.2 The total capital requirement and its components

7.2.2.1 Introduction

In section 1.4, an overarching description is provided of the capital requirement's various components. The total capital requirement is regulated by the Capital Requirements Regulation, Swedish law and FI's regulations. It is also affected by the positions described in this memorandum.

As mentioned above, the forthcoming total capital requirement consists of a number of different parts. Some of these parts involve an equal increase in capital requirement levels for all firms. For example, the capital conservation buffer is the same level (2.5 per cent) for all firms. Other parts, such as the increased risk weight floor for mortgages, vary from firm to firm depending on their risk exposure. The factors influencing the capital requirement for an individual firm can, in general terms, be broken down into systemic importance, geographic distribution of lending, breakdown of lending by sector and exposure to other risks not covered by Pillar 1.

7.2.2.2 Description of the calculations

The next chapter illustrates the estimated effects of the proposed applications for the ten largest Swedish credit firms. The effects have been assessed based on data primarily pertaining to the first quarter of 2014 for the major banks, and the full-year 2013 for the other six firms.[55] For the major banks, forecasts are also provided from forecasting service SME Direkt regarding profit and distribution for the remainder of the current financial year. However, the risk-weighted assets trend is not forecast.

The calculations pertain to the consolidated level. The capital planning buffer and the minimum capital requirement according to the Basel 1 floor are not reflected in the diagrams. The effects described in this chapter comprise ten firms, eight of these shall comply with the Basel 1 floor; the four major banks, Landshypotek, Länsförsäkringar, SBAB and SEK. The effects of the Basel 1 floor are accounted for in *Finansinspektionen's approach to the Basel 1 floor*.[56]

The size of the various components of the capital requirement has been estimated as follows.

Capital requirement under Pillar 2, excluding risk weight floor and systemic risk. A standardised value has been used, which is 2 per cent of the risk-weighted exposure amount in total own funds. The share to be covered by common equity Tier 1 capital is determined by the breakdown of type of capital according to Pillar 1 (including buffer requirements besides the countercyclical capital buffer) that applies to the major banks and other firms, respectively.

Current risk weight floor for mortgages. The increased risk-weighted exposure amount brought about by a risk weight floor of 15 per cent has been multiplied by the relevant capital requirement that applies to the major banks and other firms, respectively, and which was stated in section 4.6.1.5. In the absence of an established countercyclical buffer rate, a buffer guide of 1.5 per cent has

[55] This means that, for the major banks, the effects of the capital requirements regulation (which came into effect on 1 January 2014) on own funds and risk-weighted exposure amounts are included, while this is not the case for the other six firms.

[56] Memorandum published on fi.se on 18 March 2014, FI ref. 13-13990.

been used in the calculation. This means that the own funds requirement used in the calculation is 17 per cent for the major banks and 12 per cent for other firms. The common equity Tier 1 capital requirement used is 13.5 per cent for the major banks and 8.5 per cent for other firms. The effects have been estimated on the basis of exposure data for the 2013 full year.

Increase in the risk weight floor to 25 per cent. The increased risk-weighted exposure amount brought about by the increase has been multiplied by the capital requirement as above. The effects have been estimated on the basis of exposure data for the 2013 full year.

Systemic risk in Pillar 2. 2 per cent of the total risk-weighted amount for the major banks. Covered in its entirety by common equity Tier 1 capital.

Systemic risk buffer. 3 per cent of the total risk-weighted amount for the major banks. Covered in its entirety by common equity Tier 1 capital.

Countercyclical capital buffer. In the absence of an established countercyclical buffer rate, a buffer guide of 1.5 per cent has been used in the calculation. The company-specific buffer guide has been estimated on the basis of risk-weighted exposure data for the 2013 full year. The share of concerned credit exposure in Sweden of each firm has been estimated as follows[57]:

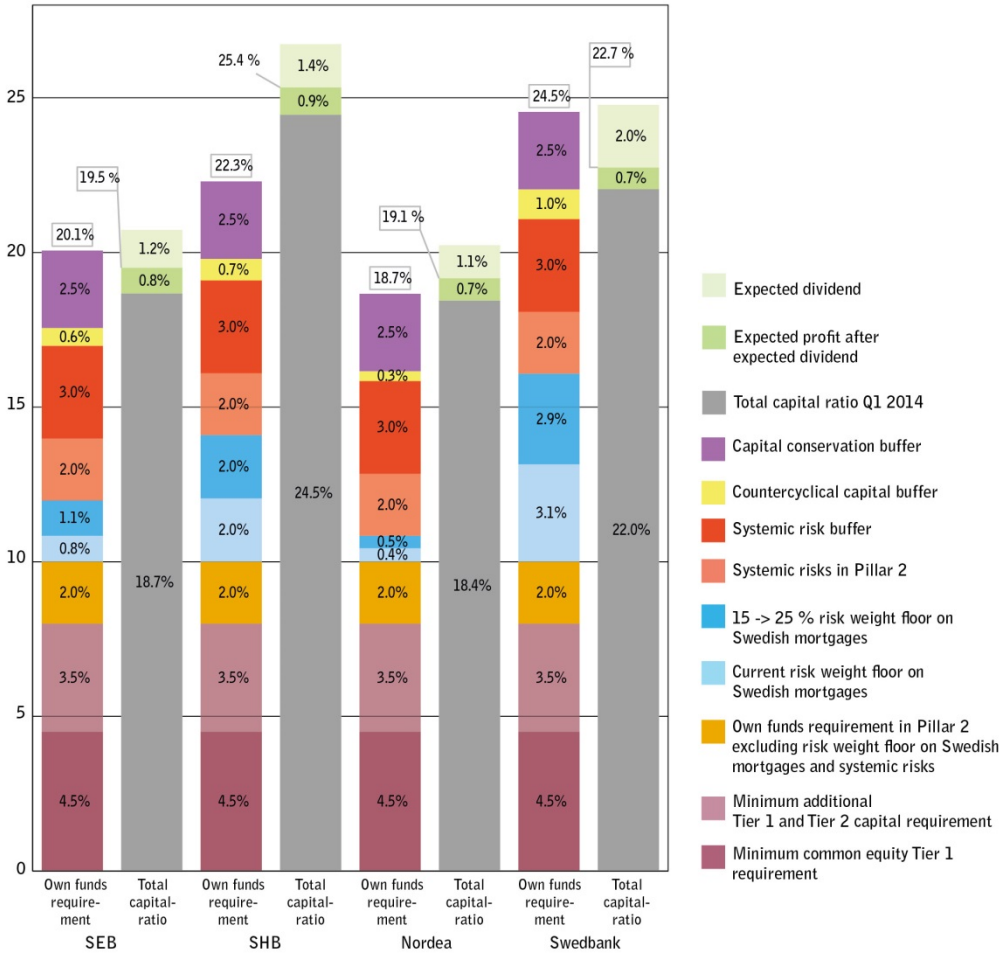
- Handelsbanken: 47 per cent
- Nordea: 21 per cent
- SEB: 39 per cent
- Swedbank: 64 per cent
- Landshypotek: 98 per cent
- Länsförsäkringar: 100 per cent
- Kommuninvest: 100 per cent
- SBAB: 89 per cent
- SEK: 55 per cent
- Skandia: 40 per cent

In order to calculate the firm-specific buffer rate, the share of the concerned credit exposure in Sweden, as above, is multiplied by the buffer guide of 1.5 per cent. Buffer rates for other countries have not been taken into account.

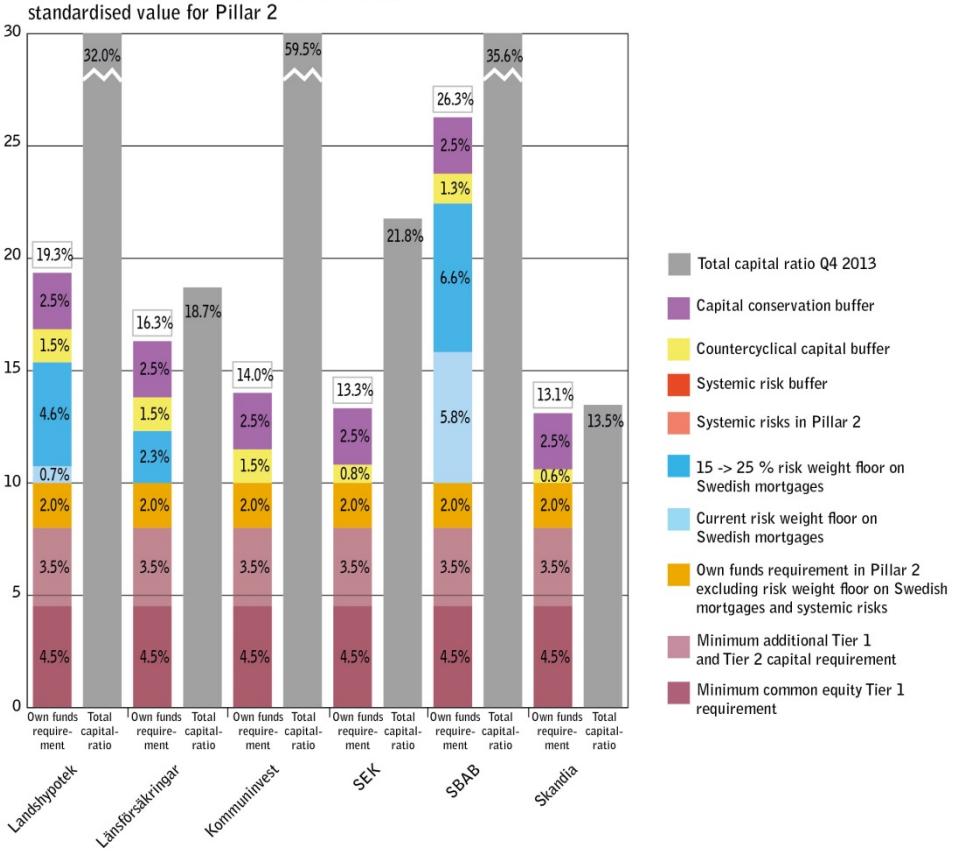
Capital conservation buffer. 2.5 per cent of the total risk-weighted exposure amount. Covered in its entirety by common equity Tier 1 capital.

[57] The geographic breakdown that forms the basis of the calculation was not performed according to EBA's technical standard proposal because data according to that exact definition is not currently available.

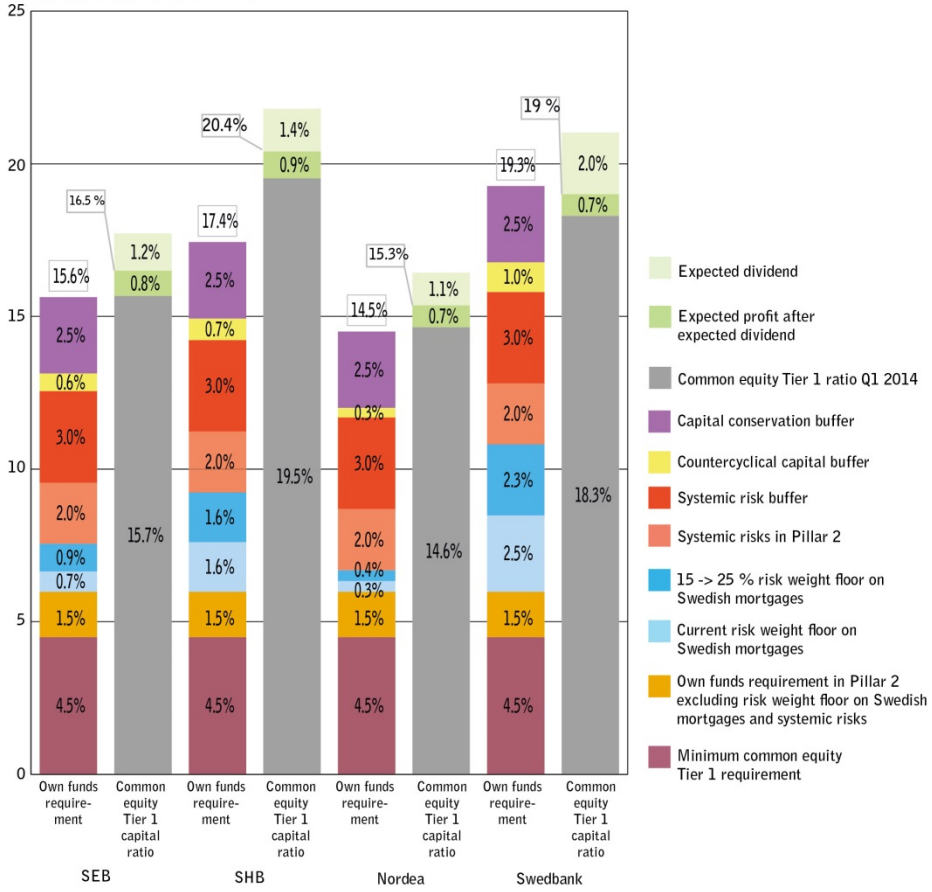
7.1 Total capital requirement, four major banks, standardised value for Pillar 2



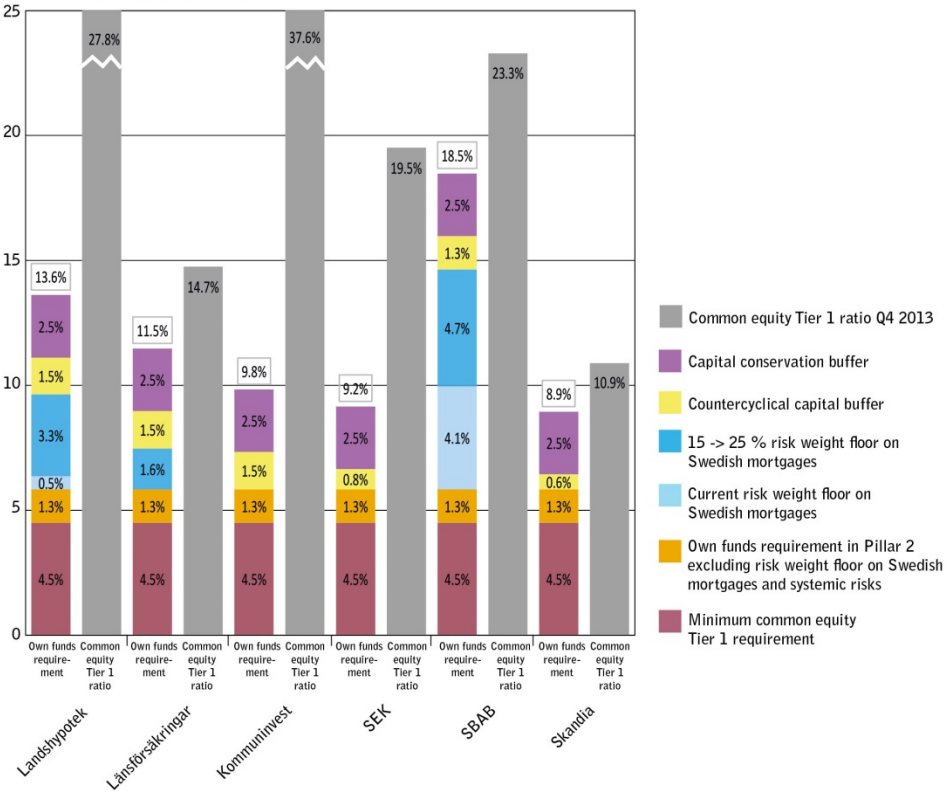
7.2 Total capital requirement, other six firms, standardised value for Pillar 2



7.3 Common equity Tier 1 capital requirement, four major banks, standardised value for Pillar 2



7.4 Common equity Tier 1 capital requirement, other six firms, standardised value for Pillar 2



In the table below, the various capital need components are expressed in Swedish kronor. The basis of the calculations is the same as for the diagrams above.

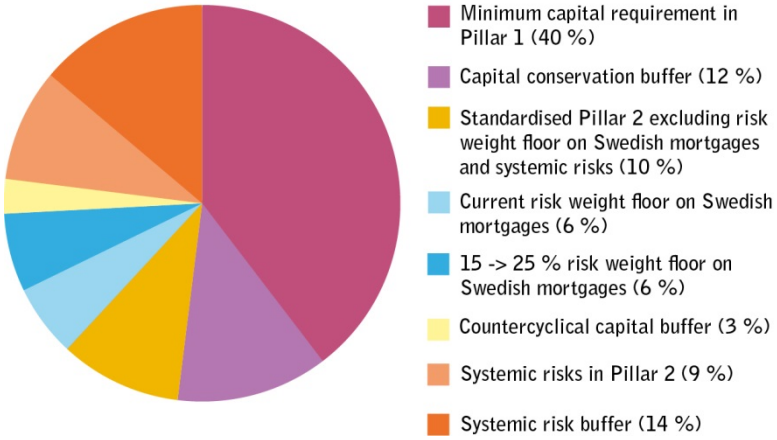
7.1 The components of the 10 firms' capital need in SEK million

	Nordea	SEB	Swed-bank	SEB	SBAB	SEK	Länsför-säkringar	Skandia	Lands-hypotek	Kommun-invest	**Sum**
Minimum capital requirement Pillar 1 (8%)	114 411	47 000	35 902	39 033	3 292	6 002	4 036	2 859	1 223	357	**254 115**
Capital conservation buffer (2.5%)	35 753	14 688	11 219	12 198	1 029	1 876	1 261	893	382	111	**79 411**
Standardised value Pillar2, ex. risk weight floor and systematic risk (2%)	28 603	11 750	8 975	9 758	823	1 501	1 009	715	306	89	**63 529**
Current risk weight floor on Swedish mortgages (15%)	6 273	4 936	14 135	9 995	2 396	0	0	0	113	0	**37 849**
15 -> 25 % risk weight floor on Swedish mortgages (to 25 %)	6 467	6 709	13 141	9 979	2 721	0	1 166	0	708	0	**40 893**
Countercyclical capital buffer guide (1.5%)	4 535	3 394	4 329	3 418	549	613	757	216	226	67	**18 105**
Systemic risks in Pillar 2 (2 %)	28 603	11 750	8 975	9 758	0	0	0	0	0	0	**59 086**
Systemic risk buffer (3%)	42 904	17 625	13 463	14 637	0	0	0	0	0	0	**88 630**
Total own funds requirement	**267 549**	**117 853**	**110 140**	**108 778**	**10 810**	**9 992**	**8 230**	**4 683**	**2 958**	**624**	**641 618**

Note: Calculated using data per Q1, 2014 for the four major banks, data per Q4, 2013 för the other six firms.

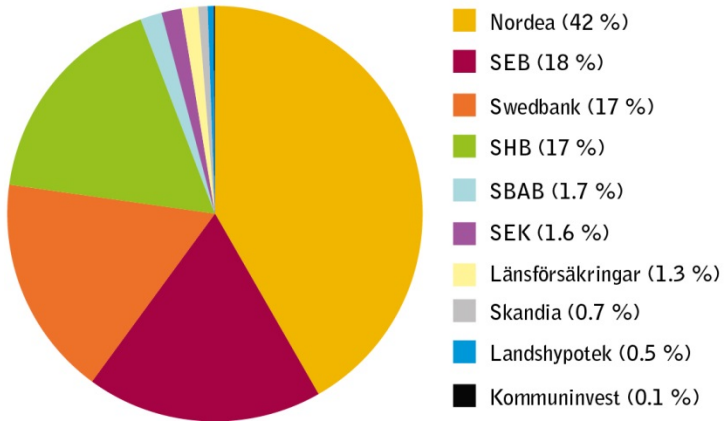
The minimum total capital requirement according to Pillar 1, excluding buffer requirements, equalled 40 per cent of the combined total capital need of the 10 largest Swedish banking groups. The two parts of the risk weight floor for Swedish mortgages equalled 12 per cent on the whole, while the countercyclical capital buffer would have accounted for just shy of 3 per cent of the combined total capital need. The minimum total capital requirement amounts to just over SEK 250 billion on the whole for the ten firms, while the various buffer requirements and capital need, according to the standard for Pillar 2, contributes a further amount of just over SEK 390 billion to the capital need. Hence, on the whole the total capital requirement amounts to just over SEK 640 billion.

7.5 Breakdown of the components of the 10 largest firms' combined total capital need



The total capital need of the four major banks equalled just over 94 per cent of the sum total of the ten largest Swedish credit firms. Nordea's capital need accounted for almost 42 per cent of the sum total.

7.6 Breakdown of the combined total capital need between the 10 firms



7.2.3 Adaptation of the firms

The question as to how higher capital levels in the banking sector might perceivably affect the banks' capital cost, funding cost and, ultimately, the cost for their customers, is important yet difficult. According to financial theory, the capital structure of a firm should not affect its value because the firm's total funding cost is not affected by the relationship between capital and liabilities. [58]

Because higher capital levels reduce risk for lenders, the banks' loan financing cost is reduced. However, this theory is based on certain assumptions and does not take account of, for instance, the tax benefits of loan financing compared with equity. Furthermore, it is less applicable to credit firms due, for instance, to the Government's implicit and explicit guarantees for the liabilities of the banking system. New regulations, not least the Crisis Management Directive[59], also provide new conditions for both lenders of and investors in own fund instruments, so the funding strategies of banks might hence change.

The firms concerned only have a short space of time to adapt their capital planning and hence their capital targets to the total capital requirements. In FI's opinion, the firms affected will be able to meet the requirements. At the same time, because of the need for continuing adaptation, certain firms still need to be conservative in their capital planning and show restraint in measures that weaken their resilience, such as profit distribution and share buybacks.

7.3 Consequences for competition and the market

FI has, in its dialogue with the banks, emphasised for a long time the necessity of forward-looking capital planning, that allows for the higher levels that would ensue from new regulations. In cases where the current capital level does not cover the capital need, FI is of the opinion that capital reinforcement can mainly be achieved by means of restraint in dividends and share buybacks, rather than reducing operations. Also, several firms are able to increase their total own funds by issues of own fund instruments that may be included in Tier 1 or Tier 2 capital.

According to the new buffer structure, the capital requirements vary between different types of banks, as shown above. The ensuing greater difference between e.g. larger and smaller firms might in itself be positive for competition in that it counteracts the effect of implicit government guarantees for systemically important firms. Another aspect of the new buffer structure is the increased cyclical feature of the capital requirements.

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[58] See e.g. Modigliani, F.; Miller, M. (1958). "The Cost of Capital, Corporation Finance and the Theory of Investment". *American Economic Review* 48 (3): 261–297.

[59] The Directive of the European Parliament and of the Council establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC, 82/891/EC, 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EC and regulation (EU) no. 1093/2010.

At the same time, the introduction of stricter requirements brings greater incentives for firms to adapt their operations with the purpose of reducing the requirements. When capital requirements for mortgages rise, the alternative of securitisation might appear more profitable than keeping the loans on the balance sheet. When the requirements increase in Sweden, the possibilities of expansion abroad might also appear more attractive.

On the whole, FI believes that the effects on competition and the market will be limited, but probably positive, particularly as a result of the reduced uniformity in capital levels between larger and smaller institutions. An important task for FI will be to monitor, in its supervision, the effects of the regulations on the operations and risk management of firms.

7.4 Consequences for non-financial corporations and households

When the banks adapt to higher capital requirements, the funding cost might rise because capital is usually a more expensive form of funding than loans, as described in section 7.1. It is difficult to evaluate the effects of the regulation on lending volumes and interest rates for households and non-financial corporations. This is due to the uncertainty surrounding the consequence for the capital and funding cost of the credit firms, and to the latter making business decisions on grounds other than regulations alone, and to the banks reacting to events on the funding market. In cases where regulation brings increased costs for the credit firms, it can affect households and non-financial corporations in the form of lower lending volumes or higher lending rates, which can in turn lead to reduced consumption and investment.

In terms of the effects on mortgages specifically, it can be ascertained that the increase to the risk weight floor from 15 per cent to 25 per cent involves an appreciable increase to the capital requirement. Firms authorised to use the IRB approach for Swedish mortgages, and which are hence covered by the floor, dominate the Swedish mortgage market. FI believes that the higher share of capital required for mortgage operations increases the marginal cost of the credit firms for new mortgages, and will hence limit supply, all else equal.

7.5 Consequences for the economy

7.5.1 Introduction

The forthcoming capital adequacy regulations force the banks to hold a large amount of capital of better quality, and can lead to economic costs in the form of effects on lending rates for households and non-financial corporations. It is, however, important to bear in mind that this does not necessarily involve reduced economic benefit.

7.5.2 Higher capital costs have a negative effect on GDP

The assumptions made regarding the allocation of costs between the banks' owners and customers affect the assessment of how the rules will affect the economy. There are therefore several different assessments of the scope of the effects. The Riksbank has, for example assessed that loan margins will increase by 0.13 per cent if common equity Tier 1 capital as a share of risk-weighted assets in Swedish banks increases by 1 percentage point. Such an increase is expected to give rise to 0.06–0.16 per cent lower GDP over time.[60] The effects calculated by the Ministry of Finance suggest that the GDP level will decrease by around 0.3 per cent when the capital level increases by one percentage point.[61] Uncertainty in the assessments is substantial, however, one reason being that the increase to loans is affected by assumptions about risk weights, the return requirements of shareholders, etc. More stable banks and other credit firms should, as previously mentioned, also be able to obtain better terms from their creditors. Swedish credit firms currently have sound resilience, and because of that they have access to funding on decent terms.

7.5.3 Higher capital requirements increase resilience and reduce the risk of financial crises

The regulation of banks' capital chiefly aims to make the financial system more stable and reduce the risk of future banking and financial crises, and also potentially their scope. Because such crises tend to have major negative effects on the economy, reducing the probability of them occurring is important. On top of that, higher capital requirements reduce the risk of having to use public funds to prop up financial institutions in crisis.

There are a number of channels through which banking and financial crises affect the real economy. Crises can for instance give rise to negative wealth effects, credit contraction, reduced scope for investments and consumption, and ultimately also lead to sovereign debt crises. According to the calculations of the International Monetary Fund (IMF), the costs of the crisis for European banks during 2007– 2010 amounted to almost EUR 1,000 billion, or 8 per cent of the EU's GDP.

The negative effects of banking and financial crises also tend to be protracted, and in certain cases permanent. For example, it is assumed that the crisis in Sweden of the 1990s and the 2008 financial crisis have had a long-term negative effect on the Swedish economy.[62]

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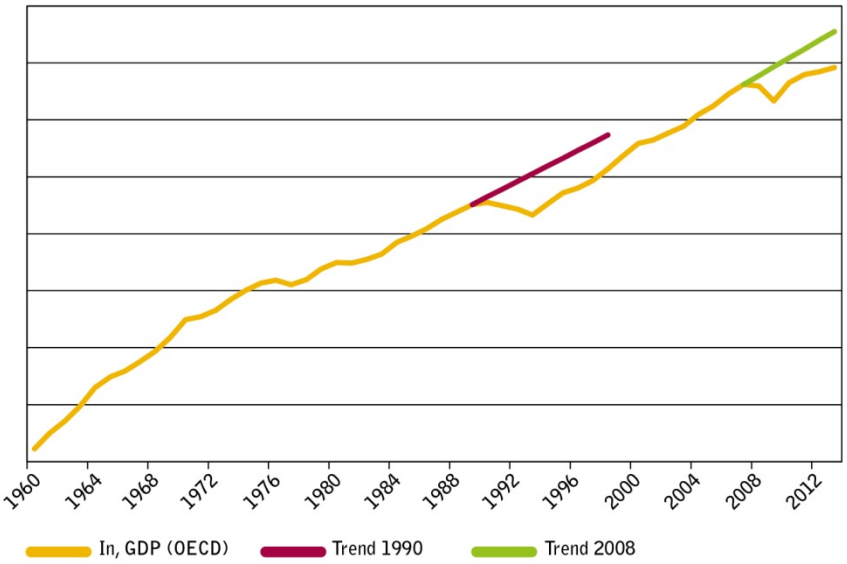
[60] See Appropriate capital ratio in major Swedish banks – an economic analysis, December 2011, the Riksbank.

[61] Note to the proposal to the Council on Legislation, page 260.

[62] The Swedish Economy, March 2010, *the National Institute of Economic Research*.

7.7 The impact of financial crises on GDP (logarithmised)



Note: Schematic overview to illustrate the potential effect of a financial crisis

Source: Ecowin and FI's calculations

On top of the forthcoming capital adequacy requirements, regulatory work is currently in progress, as mentioned above, with the aim of improving the possibilities of the Government to prevent, deflect and manage banking crises with the purpose of reducing the risks for taxpayers and costs to the economy. For example, the Crisis Management Directive enables bail-in (the ability to impair the liabilities of banks). The effects of these future rules are hard to evaluate today, however.

7.5.4 Appropriate capital levels with respect to the economy

Given that the regulations have the intended effect and reduce the risk of future banking and financial crises, there is thus reason to believe that higher capitalisation in the banking system can have a positive long-term effect on GDP. However, quantifying the effect of a more stable banking sector requires a number of assumptions, and is associated with a high degree of uncertainty. In 2010 the Basel Committee was of the opinion that a 1 percentage point lower risk of a banking crisis increases expected GDP by 0.6–1.6 per cent over time.[63]

A number of studies have attempted to assess appropriate capital levels with respect to the economy based on weighing the costs associated with higher capital costs against a reduced risk of financial crises. Several studies indicate optimal common equity Tier 1 capital levels of 10–20 per cent.[64] In the 2011 study referred to previously, the Riksbank also made an estimation of the

[63] See An assessment of the long-term economic impact of stronger capital and liquidity requirements, August 2010, *Basel Committee on Banking Supervision.*

[64] Bank of England (2010), Macroeconomic Assessment Group (2010), Institute of International Finance (2011), LEI report (2010), Miles et al. (2011).

effect of the regulations on the probability of a banking crisis in Sweden. In the study, it is ascertained that a higher capital adequacy ratio reduces the risk of such crises, but the effect wanes when the original capital level is high. Raising the capital adequacy ratio of banks that are already well-capitalised thus has less of an effect than increasing the capitalisation of banks with low capital adequacy ratios. The studies do not address, however, the positive effect of reduced distortions on the economy. A reduction in the Government's implicit guarantees reduce the misplaced incentives they create, which represents an efficiency gain for the economy.

7.6 Conclusion

The November Accord reflects the view of Swedish authorities of the major Swedish banks and the Swedish banking system having specificities that motivate a higher capitalisation interval for them. In FI's opinion, the overall requirements create sound resilience in the Swedish banking sector. This ought to lead to a lower risk of financial crises and reduced distortion as a result of Government guarantees. However, it is crucial to continually monitor the effects of the requirements, which FI intends to do in its supervision and address in forthcoming stability reports.

On the whole, the implementation of the strengthened capital adequacy rules involves a clear tightening of capital requirements for Swedish banks, particularly the systemically important major banks. At the same time, it can be ascertained that international efforts to further strengthen the capitalisation of the banking system are progressing. For example, a leverage ratio measure will be introduced, potentially as a compulsory requirement as of 2018. The Basel Committee is also working on preparing proposals to standardise risk weight calculations with the aim of limiting the disparities between the internal models of different banks. Another important aspect is how the Crisis Management Directive will be implemented and applied, since it might involve requirements being imposed on the loss-bearing capacity a systemically important bank must have in the event of it succumbing to resolution.

Appendix 1: Description of the credit measure

Description of the credit measure

The Basel Committee believes that as broad a measure as possible for aggregate lending should be used to calculate the credit gap. Lending to the private sector can be divided into loans to households and corporations, respectively. Household lending primarily consists of traditional bank loans and other loans[65] from monetary financial institutions (MFI). On top of such loans, which cover around 90 per cent of the total debt of households, the loan stock also consists to a certain extent of loans granted from creditors other than MFIs. Because that type of loan covers a relatively small share of household debt, and the individual loans are also generally smaller in size with a shorter maturity than traditional bank loans, they are less relevant to studying the build-up of systemic risks. Such types of loan have therefore been excluded from the credit measure.

In terms of the borrowings of the corporate sector, there are two identifiable sources of credit. One of them, like for households, is traditional bank loans through MFIs. The other source consists of interest-bearing securities traded on the market, i.e. though issuing certificates and corporate bonds. The same limitation for loans other than those issued through MFIs has been done for the corporate sector. The credit measure for total lending to the private sector in Sweden is thus defined as:

$$Credit_t^{Nominal} = Credit_t^{HH} + Credit_{MFI}{}_t^{NFC} + Market_t^{NFC}$$

Where HH = households, including non-profit organisations NFC = non-financial corporations , MFI = monetary financial institutions.

The time series is in nominal terms on a quarterly frequency and starts in the fourth quarter of 1980. The statistics used to calculate the credit measure are issued by The Financial Accounts according to Statistics Sweden, and Financial Markets Statistics according to the Riksbank. The measure thus includes all lending to corporations and households issued by MFIs, and the corporations' total market financing defined as the value of all outstanding corporate bonds and certificates traded on the fixed-income market.

[65] For example, unsecured loans, which are loans without underlying collateral.

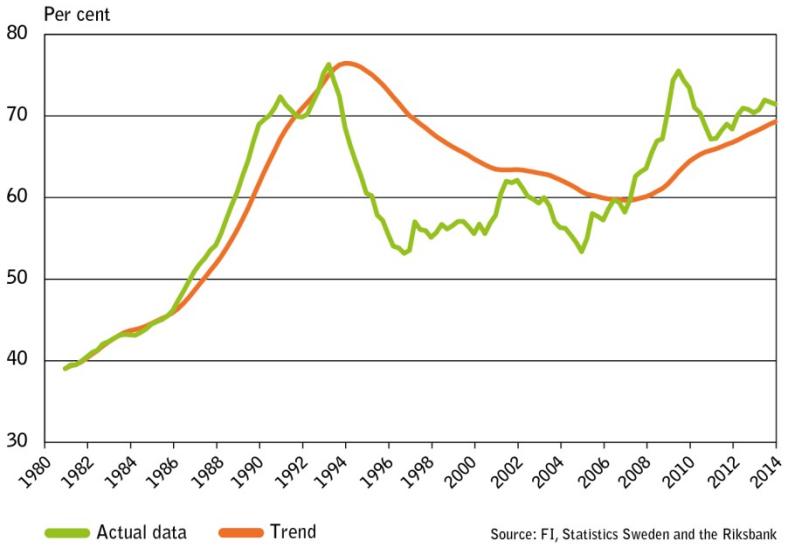
Appendix 2: Calculation of the credit gap

Swedish aggregate lending in relation to GDP is derived as:

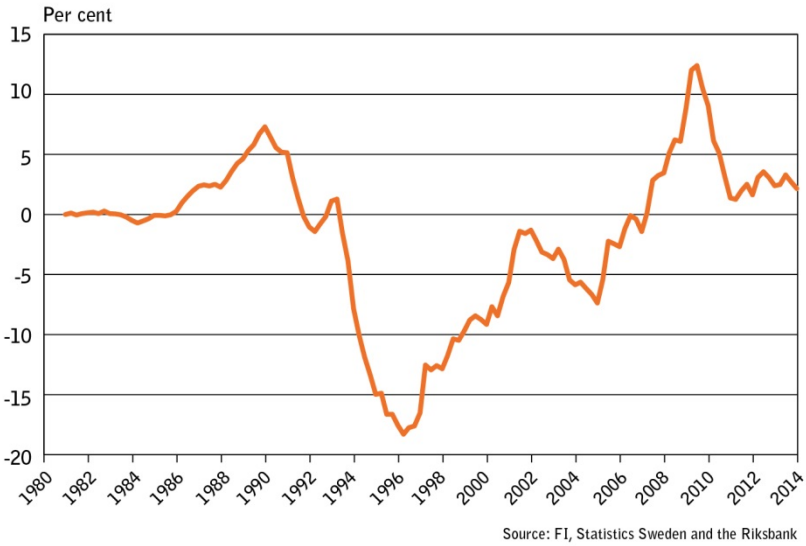
$$\frac{Credit_t^{Nominal}}{\sum_{j=(t-3)}^{t} GDP_j^{Nominal}} * 100$$

GDP is summed up over four quarters to calculate the value of production in Sweden in the past year. The credit measure is a stock variable and is hence given as the value of total lending at the end of each period. For the ratio given above, a trend is then calculated using a one-sided HP filter (see section 5.4.2 for more information on HP filters). The trend is subsequently subtracted from actual data to obtain the credit gap. When the credit gap has been calculated, the level of the countercyclical capital buffer stands in relation to the gap according to the linear function shown in diagram 5.1.

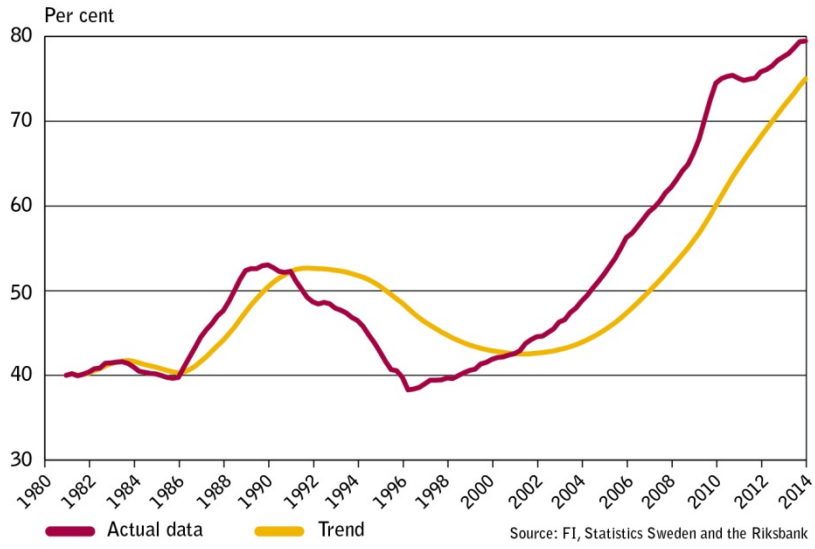
B 2.1 Credit to corporations in relation to GDP, actual data and trend



B 2.2 Credit gap corporations



B 2.3 Credit to households in relation to GDP, actual data and trend



B 2.4 Credit gap households

Source: FI, Statistics Sweden and the Riksbank

The credit gap for the household and corporate sectors, respectively, is derived in the same way as the total credit gap, except for the calculations being made using household and corporate credits, respectively.