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# Economic Commentaries

## The major banks' Pillar 1 requirements will increase

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Banks that are active in Sweden have for a long time needed to meet various types of capital requirement. Today, the banks' capital requirements are often divided up into so-called Pillar 1 and Pillar 2 requirements. This Economic Commentary describes in brief how the major Swedish banks' CET 1 requirements are divided between these different types and how the capital requirements could be designed if Finansinspektionen (the Swedish Financial Supervisory Authority) to a greater extent used Pillar 1 requirements instead of Pillar 2.

The major Swedish banks have for a long time now needed to meet several different types of capital requirement. Today, the banks' capital requirements are often divided up into so-called Pillar 1 and Pillar 2 requirements. Recently,[1] Finansinspektionen's board decided that the current Pillar 2 requirement commonly known as "the risk weight floor for Swedish mortgages" will become a Pillar 1 requirement with effect from 31 December 2018, a move welcomed by the Riksbank[2].

In addition, there is currently a comprehensive legislative project within the EU that is commonly referred to as the "banking package". When this work is complete, it will entail a number of changes to the framework governing European banks' capital requirements. Even if the banking package has not yet been formally decided by the European Parliament, it is probable that its contents will involve further changes in the major Swedish banks' Pillar 1 and Pillar 2 requirements going forward.

In this Economic Commentary we describe how major Swedish banks' Common Equity Tier 1 (CET 1) requirements in Pillar 1 and Pillar 2 may change and how the major banks' CET 1 capital ratios may also be affected by these changes. The main message can be summarised as below.

- The conversion of the Pillar 2 requirement "risk weight floor for Swedish mortgages" to a Pillar 1 requirement will *not* change the major Swedish banks' *total* CET 1 capital requirement or the CET 1 capital ratios when measured as a percentage of the banks' total assets or in SEK, on the other hand, the percentage of Pillar 1 requirements will increase.
- When the Pillar 2 requirement "risk weight floor for Swedish mortgages" is converted to a Pillar 1 requirement, the banks' average risk weights will increase, which means that their risk-weighted assets will also increase[3]. This means that the major banks' capital ratios, when measured as a percentage of their risk-weighed assets, will decline. At the same time, the banks' capital requirements, measured as a percentage of risk-weighted assets, will decline[4].
- When the Pillar 1 requirements increase, the major banks will face automatic restrictions on share dividends and limits to bonus payments to

[1] Finansinspektionen's decision "Risk weight floor for Swedish mortgage exposures", reference number 18-6251.
[2] See, for instance, the Riksbank's "Remissyttrande om Förslag till förändrad metod för tillämpning av riskviktsgolvet för svenska bolån", (Consultation response to propose in change of method for applying risk weight floor to Swedish mortgages) DNR 2018-00349 for further information on the grounds for this.
[3] The fact that the banks' average risk weights will increase is a result of the Swedish Pillar 2 requirements having no effect at all on the risk weights that are used to calculate the banks' risk-weighted assets.
[4] The major banks' total capital requirements, measured in SEK, will *not* change, but when the capital requirements are described as a percentage of risk-weighted assets, this percentage will *decline* as the risk-weighted assets *increase*.

employees at an earlier stage than would otherwise have been the case on condition that they do not increase their capital ratios.

## What is the difference between Pillar 1 and Pillar 2 requirements?

The Basel Committee on Banking Supervision, which develops and agrees on regulatory frameworks for internationally active banks' capital requirements, has for some time distinguished between so-called Pillar 1 and Pillar 2 requirements. Although the formal difference between these different types of capital requirement can be complex to take in, to put it simply, the Pillar 1 capital requirements are ones that all internationally-active banks are expected to fulfil. The smallest permitted size for these requirements has been agreed by the Basel Committee on Banking Supervision. In addition to this, the levels of the banks' Pillar 1 requirements shall be public[5] and when a bank does not meet the requirements, it shall face automatic restrictions limiting dividends paid to shareholders and bonus payments to employees.

Pillar 2 requirements, on the other hand, are intended to be more specific for individual banks and their size is often determined by the national financial supervisory authorities. At present, there is no global agreement that the banks' Pillar 2 requirements shall be made public as in the case for Pillar 1 requirements. In many countries it is therefore unclear to other agents than banks and financial supervisory authorities exactly which Pillar 2 requirements actually apply. In Sweden, however, Finansinspektionen has chosen to publish the major Swedish banks' Pillar 2 requirements on a quarterly basis. In addition, any breaches of Pillar 2 requirements are managed differently in different countries. Generally, there are no automatic restrictions for dividends to shareholders and bonus payments to employees, which shall come into force in case of a breach against the Pillar 1 requirements.

A development where internationally active banks' capital requirements to a greater degree consist of Pillar 1 requirements could thus make it simpler to compare different banks, contribute to greater transparency regarding which capital requirements the banks really need to fulfil and greater clarity regarding what happens if a bank does not meet the requirements.

## How large are the Swedish banks' CET 1 capital requirements?

The major Swedish banks' CET 1 capital requirements are of different sizes and also vary over time. This is partly because the banks have different sized balance sheet totals and different types of lending, but there are also other factors affecting the size of the capital requirements.

In addition to the division into Pillar 1 and Pillar 2 requirements, there are different ways of presenting the size of the banks' CET 1 capital requirements. In this Economic Commentary we have chosen to present the major Swedish banks' total CET 1 capital requirements and CET 1 capital ratios both in relation to their total assets[6] and in relation to their risk-weighted assets. The banks' risk-weighted assets are a measure of how risky their operations are assessed to be and this calculation includes so-called risk weights. If the risk weights increase, the size of the banks' risk-weighted assets increases.

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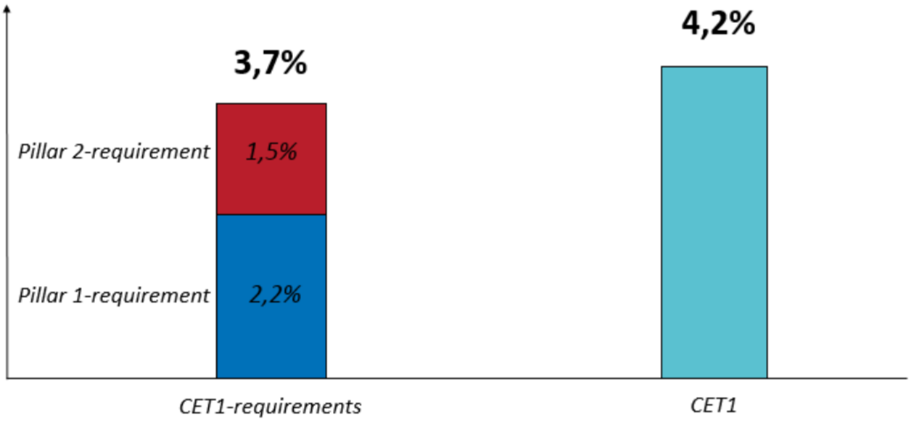
[5] In several cases, the levels of Pillar 1 requirements are specifically stated in the text of the law.

[6] By total assets is meant total exposures in terms of leverage ratio, that is, assets on the balance sheet and some parts of off-balance sheet assets. The banks' capital ratios and the capital requirements made of the banks are generally *worded* as a percentage of their risk-weighted assets, even if there are several ways of *presenting* these ratios and requirements.

At present, the four[7] major Swedish banks' total CET1 capital corresponds to around 3.7 per cent of their total assets. Slightly less than half of this is comprised of Pillar 2 requirements. More specifically, 1.5 percentage points of the 3.7 per cent are Pillar 2 requirements, while the remaining 2.2 percentage points comprise Pillar 1 requirements. At the same time, the banks have a total CET 1 capital ratio corresponding to 4.2 per cent of their total assets[8]. In other words, the major banks together have a capital *ratio* of 4.2 per cent of their total assets, while their total CET 1 capital *requirements* amount to 3.7 per cent of their total assets.

This is illustrated in the diagram.

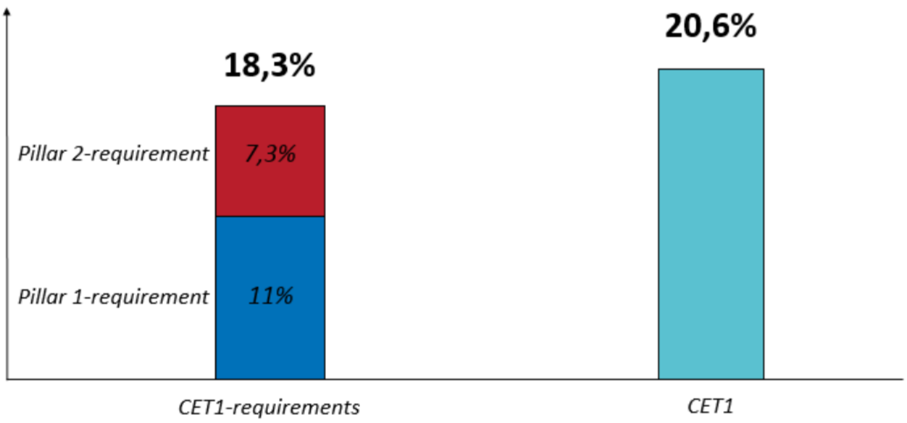
**Diagram 1. The major Swedish banks' total CET 1 capital requirements broken down into Pillar 1 and Pillar 2 requirements and the major Swedish banks' total CET 1 capital (per cent of total assets, second quarter 2018).**




Source: Finansinspektionen, the Riksbank and the major banks' interim reports.

The corresponding figures for the banks' CET 1 capital requirements and CET 1 capital ratios in relation to their risk-weighted assets are illustrated in the diagram below.

**Diagram 2. The major Swedish banks' total CET 1 capital requirements broken down into Pillar 1 and Pillar 2 requirements and the major Swedish banks' total CET 1 capital (per cent of risk-weighted assets, second quarter 2018).**




Source: Finansinspektionen, the Riksbank and the major banks' interim reports.

[7] In this Economic Commentary we describe the four major banks Nordea, SEB, Swedbank and Svenska Handelsbanken. If Nordea is excluded from the description, the figures in this Economic Commentary will only change marginally.
[8] In some cases these 4.2 per cent are described as the banks' leverage ratio.

## What are the different parts of the CET 1 capital requirements?

In addition to the breakdown into Pillar 1 and Pillar 2 requirements, the major Swedish banks CET 1 capital requirements are usually divided into different elements depending on what type of risk these parts are intended to cover.

The CET 1 capital requirements in Pillar 1 consist of what is usually termed a minimum requirement and various buffer requirements.

The Pillar 2 requirements for the major Swedish banks consist of several different parts. The largest Pillar 2 requirements are those usually termed "systemic risk" and "risk-weight floor for Swedish mortgages". The latter is the Pillar 2 requirement that Finansinspektionen's board recently decided to convert into a Pillar 1 requirement. A complete account of the elements of the CET 1 capital requirements can be found in the table below.

**Tabell 1. The major Swedish banks' total capital requirements broken down into their different parts**
2018 Q2

| Type of CET 1 capital requirement | Pillar 1 requirement, percentage of total assets | Pillar 2 requirement, percentage of total assets | Pillar 1 requirement, percentage of risk-weighted assets | Pillar 2 requirement, percentage of risk-weighted assets |
|---|---|---|---|---|
| Systemic risk | | 0.41 % | | 2.0 % |
| Capital requirement, Norwegian mortgages | | 0.05 % | | 0.2 % |
| Risk-weight floor for Swedish mortgages | | 0.56 % | | 2.7 % |
| Other Pillar 2 requirements | | 0.22 % | | 1.1 % |
| Maturity adjustments in IRB models | | 0.06 % | | 0.3 % |
| Pension risk | | 0.05 % | | 0.3 % |
| Interest rate risk in the banking book | | 0.06 % | | 0.3 % |
| Credit-related concentration risk | | 0.09 % | | 0.4 % |
| Countercyclical capital buffer | 0.20 % | | 1.0 % | |
| Capital conservation buffer | 0.51 % | | 2.5 % | |
| Systemic risk buffer | 0.61 % | | 3.0 % | |

| **Type of CET 1 capital requirement** | **Pillar 1 requirement, percentage of total assets** | **Pillar 2 requirement, percentage of total assets** | **Pillar 1 requirement, percentage of risk-weighted assets** | **Pillar 2 requirement, percentage of risk-weighted assets** |
|---|---|---|---|---|
| Minimum requirement CET 1 capital | 0.92 % | | 4.5 % | |
| Total CET 1 capital requirement | 2.2 % | 1.5 % | 11 % | 7.3 % |

Source: Finansinspektionen.

## What happens when the risk-weight floor for Swedish mortgages is converted from a Pillar 2 requirement to a Pillar 1 requirement?

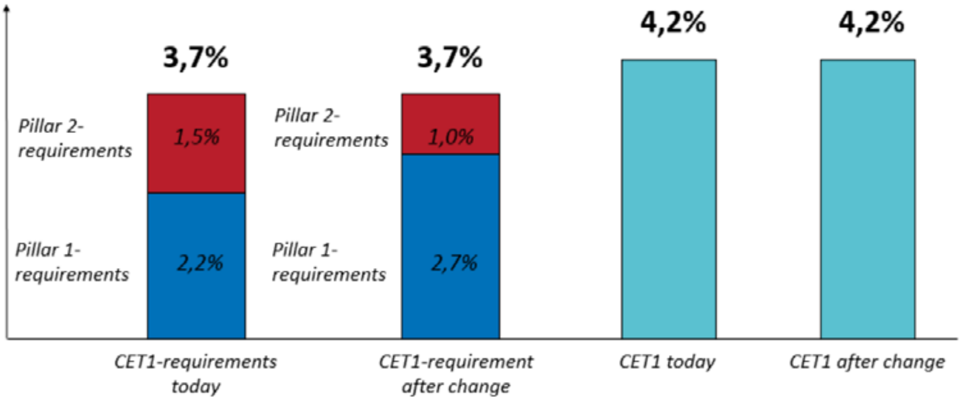
When the risk-weight floor for Swedish mortgages is converted from a Pillar 2 requirement to a Pillar 1 requirement, the major banks' capital requirements and capital ratios will be affected in different ways, depending on whether these are presented as a percentage of total assets or as a percentage of risk-weighted assets.

If the major banks' capital requirements and capital ratios are stated as a percentage of their total assets, the conversion of the risk-weight floor for Swedish mortgages will entail *no* change in the major banks' total CET 1 capital requirements or their CET 1 capital ratios. On the other hand, the percentage of Pillar 1 requirements will increase at the same time as the percentage of Pillar 2 requirements declines.

If the risk-weight floor for Swedish mortgages were to be converted today from a Pillar 2 requirement to a Pillar 1 requirement, it would entail an increase in the major banks' total Pillar 1 requirements of around half a percentage point, measured as a portion of their total assets. At the same time, the major banks' total Pillar 2 requirements will decline with the corresponding percentage.

The changes described above are illustrated in the diagram below.

**Diagram 3. The major Swedish banks' total CET 1 capital requirements broken down into Pillar 1 and Pillar 2 requirements prior to and after the risk-weight floor for Swedish mortgages has been converted from a Pillar 2 requirement into a Pillar 1 requirement and the major Swedish banks' total CET 1 capital ratios prior to and after this change (per cent of total assets, second quarter 2018).**




Source: Finansinspektionen, the Riksbank and the major banks' interim reports.

This means, for instance, that the distance between the banks' CET 1 capital ratios and their CET 1 capital requirements in Pillar 1 will decline on condition that the banks do not increase their CET 1 capital ratios. This means that banks which do not fulfil the capital requirements in future will face automatic restrictions on share dividends and limits to bonus payments to employees at an earlier stage than would otherwise have been the case.

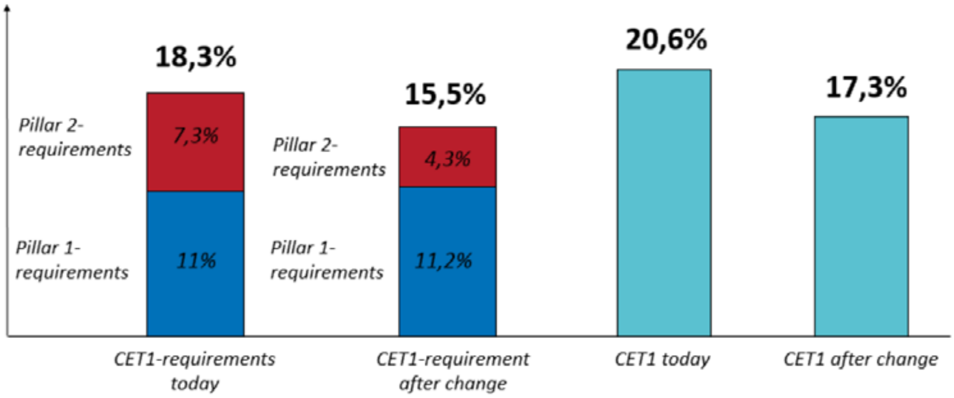
When the major banks' total CET 1 capital requirements and CET 1 capital ratios are presented in relation to their risk-weighted assets, the picture is somewhat different. When the risk-weight floor for Swedish mortgages is converted from a Pillar 2 to a Pillar 1 requirement, this means that some of the risk weights the banks use to calculate their risk-weighted assets will increase[9] as a result of the conversion. As mentioned at the start, the major banks' risk-weighted assets will then increase in size, which will lead to their CET 1 capital ratios declining when measured as a share of their risk-weighted assets.

All in all, this means that if the major banks' total CET 1 capital requirements and their CET 1 capital ratios are presented in relation to their new risk-weighed assets, after the risk-weight floor for Swedish mortgages has become a Pillar 1 requirements, these quantities will be less[10] than they are today. This is illustrated in the diagram below.

[9] The major banks' risk weights, which are used in the calculation, related to Swedish mortgages will increase from on average 6 per cent to on average 25 per cent.

[10] As the CET 1 capital ratio in relation to risk-weighted assets is the ratio *CET 1 capital in SEK/risk-weighted assets* expressed in per cent, an increase in the risk-weighted assets entails a reduction in the ratio on condition that the CET 1 capital in SEK remains unchanged. The same applies to the ratio *CET 1 capital requirement in SEK/risk-weighted assets.*

**Diagram 4. The major Swedish banks' total CET 1 capital requirements broken down into Pillar 1 and Pillar 2 requirements prior to and after the risk-weight floor for Swedish mortgages has been converted from a Pillar 2 requirement into a Pillar 1 requirement and the major Swedish banks' total CET 1 capital ratios prior to and after this change (per cent of risk-weighted assets, second quarter 2018).**




Source: Finansinspektionen, the Riksbank and the major banks' interim reports.

## Could further Pillar 2 requirements be converted into Pillar 1 requirements?

As mentioned above, it is the Basel Committee on Banking Supervision that sets the standard for how the regulatory framework for internationally active banks' capital requirements should be designed. With regard to Sweden, these agreements are partly incorporated into Swedish legislation through EU regulations and EU directives. This has had the result that if Finansinspektionen now wishes to convert some of the major banks' Pillar 2 requirements into Pillar 1 requirements, consent is required from the European Commission. Finansinspektionen has recently received such consent with regard to converting the risk-weight floor for Swedish mortgages.

Although the content in the above-mentioned banking reform package has not yet been decided on, it is possible that the Pillar 2 requirement termed systemic risk is no longer allowed to be a Pillar 2 requirement after the changes in the banking reform package have come into force. Finansinspektionen can then choose either to allow the Pillar 2 requirement of systemic risk to be cancelled or to convert this Pillar 2 requirement to a Pillar 1 requirement. If the latter happens, the size of the major banks' total CET 1 capital requirements and CET 1 capital ratios will be retained in relation to their total assets. Only the distribution between the major banks' Pillar 1 and Pillar 2 requirements will change.

A conversion of the Pillar 2 requirement systemic risk to a Pillar 1 requirement would not affect the major banks' risk-weighted assets, unlike the risk-weight floor for Swedish mortgages becoming a Pillar 1 requirement. The reason for this is that the regulatory framework is designed in such a way that this change will only increase the percentage of Pillar 1 requirements without changing the banks' risk-weighted assets. A conversion of the Pillar 2 requirement systemic risk to a Pillar 1 requirement thus means that the major banks' total capital requirements and capital ratios, measured as a percentage of risk-weighted assets will remain unchanged.

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